

**On approval of the list of productions, works, professions of workers involved in jobs with harmful working conditions, in whose favor compulsory professional pension contributions are made by agents for the payment of compulsory professional pension contributions at their own expense**

***Invalidated***
***Unofficial translation***

Decree of the Government of the Republic of Kazakhstan № 1562 dated December 31, 2013. Abolished by the Decree of the Government of the Republic of Kazakhstan dated 30.06.2023 No. 528

      *Unofficial* *translation*

      Footnote. Abolished by the Decree of the Government of the Republic of Kazakhstan dated 30.06.2023 No. 528 (effective from 07/01/2023).

      Footnote. The title is in the wording of Decree of the Government of the Republic of Kazakhstan No. 603 dated September 29, 2017 (shall be enforced from the date of its first official publication).

      Footnote. The title is in the wording of Decree of the Government of the Republic of Kazakhstan No. 988 dated 10.12.2015 (shall be enforced from 01.01.2016).

      In accordance with subparagraph 6) of article 6 of the Law of the Republic of Kazakhstan dated June 21, 2013 "On pension provision in the Republic of Kazakhstan", the Government of the Republic of Kazakhstan **HEREBY DECREES AS FOLLOWS**:

      1. That the attached list of productions, works, professions of workers involved in jobs with harmful working conditions, in whose favor compulsory professional pension contributions are made by agents for the payment of compulsory professional pension contributions at their own expense shall be approved.

      Footnote. Paragraph 1 as amended by Decree of the Government of the Republic of Kazakhstan No. 603 dated September 29, 2017 (shall be enforced from the date of its first official publication).

      2. This resolution shall becomes effective from January 1, 2014 and shall be subject to official publication.

|  |  |
| --- | --- |
|
*Prime Minister* *of the Republic of Kazakhstan*
 |
*S. Akhmetov*
 |

|  |  |
| --- | --- |
|   | Approved by Decree of the Government of the Republic of Kazakhstan No. 1562 dated December 31, 2013 |

 **The list of productions, works, professions of workers involved in jobs with harmful working conditions, in whose favor compulsory professional pension contributions are made by agents for the payment of compulsory professional pension contributions at their own expense**

      Footnote. The list is in the wording of the Resolution of the Government of the Republic of Kazakhstan dated 30.11.2021 No. 855 (shall be enforced upon expiry of ten calendar days after the day of its first official publication).

 **Section 1 Mining operations Chapter 1. Extraction of mineral resources. Exploration work. Construction, reconstruction, technical re-equipment and overhaul of mines, coal producers, gravel mines, subways, underground channels, tunnels and other underground structures**

      1. Underground works in mines, coal producers and gravel mines for the extraction of mineral resources; in geological exploration; in drainage mines; in the construction of mines, coal producers, gravel mines:

      1) employees engaged in underground works for at least 80% of their working time:

      Workers:

      dispensing operator;

      sewage water treatment operator;

      coal preparation operator;

      bunkering operator;

      borehole drill operator;

      mine lighter;

      nozzle operator man;

      miner;

      screener;

      dosimetrist;

      road worker;

      crusher;

      cable jointer;

      timberman;

      lamp maker;

      chute tapper;

      drilling rig operator;

      vibroloading installation operator;

      pumping unit operator;

      load-haul-dump machine operator;

      loading machine operator;

      underground self-propelled machine operator;

      lifting machine operator;

      scraper winch operator;

      oversized rock mass destruction machine operator;

      electric locomotive operator (mine);

      lifting mechanic operator;

      mineral resources geophysical testing operator;

      dumper;

      sampling operator;

      shaft miner;

      distributor of explosive materials;

      mechanic for maintenance and repair of equipment;

      deckman;

      electrician (senior) for equipment repair;

      electrician for maintenance and repair of equipment.

      Employees:

      Employees providing control and management of the activities of sites, services, storage of explosive materials in underground warehouses, as well as ensuring safety and labor protection in mines, sites, services, workshops, industries, including:

      geologist;

      hydrogeologist;

      chief mechanical engineer;

      chief power engineer;

      dispatcher;

      safety and labor protection engineer;

      mining engineer;

      energy engineer;

      mining surveyor;

      master (senior);

      workers and employees engaged in the installation, dismantling, repair and adjustment of equipment;

      employees (of all categories) for the supervision of stationary mine installations;

      technician of all types (categories 1-2 and without categories);

      time-study engineer;

      electrician (senior);

      electrical engineer (senior);

      power engineer (senior);

      2) all employees of other enterprises and organizations and their branches, performing work in underground conditions, engaged in underground works for at least 80% of the working time.

      2. Underground works in construction, reconstruction, technical re-equipment, and overhaul, at mines, subways, underground channels, tunnels, and other underground structures:

      Workers engaged in underground works for at least 80% of the working time:

      Workers:

      fitter;

      concrete worker;

      borehole driller;

      mine lighter;

      operator of a car (dump truck);

      miner;

      insulator;

      timberman;

      winch operator;

      bulldozer operator;

      drilling rig operator;

      crane operator (craner);

      locomotive operator;

      pumping unit operator;

      loading machine operator;

      underground self-propelled operator;

      operator of the lifting machine employed on "blind" trunks;

      hoisting and mobile scaffolding operator;

      tunneling complex machinist;

      scraper operator;

      scraper winch operator;

      single-bucket excavator operator engaged in sinking;

      electric locomotive operator (mine);

      mining equipment installer engaged in sinking;

      ventilation installation operator, engaged in sinking;

      shaft man;

      distributor of explosive materials;

      signaller;

      deckman;

      transporter;

      substation maintenance electrician engaged in sinking;

      electric fitter;

      electrical fitter-installer of underground mining equipment.

      Employees:

      Employees providing control and management of the activities of the sites, including:

      surveyor;

      mountain master;

      mechanic;

      electromechanic;

      site power engineer.

      3. Sections (quarries) and mines for the extraction of minerals with a depth of 150 meters and below:

      Workers engaged in underground works for at least 80% of their working time in cuts, quarries and mines (except for workers employed on the surface).

      4. Production of mountain wax (lignite wax) and ozocerite:

      Employees employed at least 80% of working time:

      mountain wax production operator;

      master (senior);

      filling machine operator;

      Workers engaged in pouring ozocerite by hand.

      5. Mine rescue units (stations):

      Workers employed at least 80% of working time:

      a supplier of fixing materials to the mine;

      respirator.

 **Chapter 2. Open-pit mining of coal, ore, shale, ozokerite, talc, kaolin, graphite, dolomite, quartzite, limestone, marl, magnesite, gypsum, borates, piezoquartz, agate, borites, phosphorite, apatite, sulfur, diamonds, marble, granite, andesite, chalk, precious and non-ferrous metals from sands, diabase, granodiorite, basalt, sandstone, mica, asbestos, salt and other non-metallic minerals containing harmful substances of hazard classes 1-3. Construction of mines, coal producers, cuts, quarries, mines, dredges, subways, tunnels, underground channels and other underground structures. Mining works on land reclamation, drilling of technical wells, prevention and extinguishing of underground fires, fires on waste heaps and rock dumps**

      6. Open-pit mining and works on the surface of cuts, quarries, mines, hydraulics, dredges, flushing devices, works on the surface of mines, ore mines and drainage shafts. Works on industrial sites for the construction of mines, ore mines, cuts, quarries, mines, dredges, subways, tunnels, underground channels and other underground structures. Mining works on land reclamation, drilling of technical wells, prevention and extinguishing of underground fires, fires on waste heaps and rock dumps. Drilling and blasting operations:

      Employees employed at least 80% of working time:

      Workers:

      mountain wax production operator;

      bunkering operator;

      hole driller;

      the trolley of the air-cable car;

      trolley operator;

      mine lighter;

      loader operator engaged in loading rock mass;

      dump unloading operator;

      hydromonitor;

      miner;

      screener;

      a loader engaged in loading, unloading the minerals and rocks listed above;

      terminal unit;

      drillsmith

      a supplier of fixing materials to the mine;

      dredger;

      drainage specialist for mirabilite mining;

      crusher;

      coal cutter;

      digger engaged in overburden and sewage works;

      stone sawer;

      stonecutter;

      ditcher;

      splitter of plates and blocks;

      fastener;

      blacksmith-driller;

      lampmaker;

      winch operator;

      belt cleaner employed in quarries and cuts;

      hatch;

      dredge sailor;

      the operator (assistant) of the drilling rig;

      locomotive operator (assistant);

      operator (assistant) of the traction unit;

      operator (assistant) of the excavator;

      motor grader operaor employed in cuts, quarries and dumps;

      a bulldozer operator, including those engaged in extinguishing and dismantling burning waste heaps and rock dumps of mines, cuts, processing and briquette factories;

      operator of a straightening- lining-finishing machine;

      operator of a of the straightening and straightening machine;

      track renewal train machine;

      road vehicle operator engaged in quarries, opencasts, in averaging warehouses and dumps;

      dredge operator;

      crushing and loading unit operator;

      crushing unit operator;

      machinist of a stone-cutting machine;

      dredging floating non-self-propelled projectile operator;

      dredging pump operator;

      stone cutting machine operator;

      conveyor operator;

      kratzer operator;

      mill operator;

      locomotive operator;

      pumping unit operator engaged in drainage works;

      overburden spreader operator;

      dump bridge operator;

      spreader plough operator;

      delivery mechanism operator;

      winding machine operator;

      track shifting machine operator;

      track-raising machine operator

      wide gauge track-laying operator, engaged in cuts, quarries and dumps;

      straightening machine operator;

      scraper operator;

      scraper winch operator;

      mica-ledge making machine operator;

      a snow-removal and track-driving machine operator engaged in open pits and quarries;

      sorting operator;

      machine operator for drilling mine shafts with a full section;

      operator of the vehicle processing plant, engaged in cuts and quarries;

      the operator of the installation for the destruction of oversized rock mass, engaged in quarries and cuts;

      mica splitting machine operator;

      milling machine operator;

      hopper-doser operator, engaged in cuts, quarries and dumps;

      tamping machine operator, engaged in cuts, quarries and dumps;

      machine operator of a crushed stone cleaning machine, engaged in cuts, quarries and dumps;

      mining equipment installer;

      track repair operator;

      mechanical shovel operator;

      metal extraction trammel operator;

      minder of a flushing device for metal extraction;

      hewer;

      ruffler of mine workings

      commodity operator engaged in ozocerite production;

      dumper;

      sampler;

      small-capacity dredge sampler;

      washer of geological samples;

      scrubber-pump operator;

      sorter;

      surface deckman;

      tractor operator;

      cementer of hydrocopper plant;

      polisher;

      straker;

      electrician of dispatching equipment and teleautomatics;

      electrician of the contact network;

      electrician of linear telephone and radio installations;

      electrician for the repair of overhead power lines;

      communication electrician;

      electrician of signaling, centralization and blocking devices.

      Employees:

      Workers providing control and management of the activities of the sites, including:

      geologist;

      geophysicist;

      hydrogeologist;

      mining engineer (leading, 1-2 categories and without categories);

      surveyor;

      master (senior);

      mechanic;

      electrician;

      electromechanic;

      power engineer.

      7. Works on the surface for underground coal gasification:

      Employees engaged in sites (workshops) of desulphurization, gas generating, blowing and drilling for underground coal gasification for at least 80% of the working time.

      8. Extraction, processing and transportation of filling material:

      Employees engaged for at least 80% of working time:

      Workers:

      bunkering operator;

      rope railway truck operator;

      mine lighter;

      operator of a car (truck) engaged in quarries;

      miner;

      screener;

      proportioner;

      crusher;

      air hammer operator;

      hewer;

      winch operator;

      chute tapper;

      motor grader operator;

      mill operator;

      hydraulic filling plant operator;

      excavator operator.

      Employees:

      shotfirer

      master of a crushing factory, site, workshop.

      9. Production of inert dust:

      Employees engaged for at least 80% of working time:

      dust unloader;

      a miner engaged on a haulage;

      crusher;

      master (senior) of the workshop (crushing, grinding and drying);

      drilling rig operator;

      conveyor operator;

      mill operator;

      lifting machine operator;

      dryer operator;

      coal hewer and loader;

      sampler.

      10. Production of mountain wax (brown coal wax), reagents based on brown coal:

      Employees engaged for at least 80% of working time:

      Workers:

      operator for the production of ozocerite and ozocerite products;

      reagent production operator;

      a loader engaged in work with raw materials and fuel;

      crusher;

      dryer operator;

      electric furnace steelmaker;

      founding core maker

      sling operator;

      dryer;

      hand molder;

      sludge-poolman;

      puncher.

      Employees:

      master (senior);

      mechanic.

 **Section 2 Ore preparation, enrichment, sintering (agglomeration, briquetting, pelletizing), roasting of ores and non-metallic minerals Chapter 3. Agglomeration plants, factories, workshops, departments, installations. Pellets production. Concentrating factories and installations for the enrichment of ore, coal, shale, as well as other non-metallic minerals containing harmful substances. Briquetting. Production of weights. Sorting in mines, cuts (quarries). Roasting ores, non-metallic minerals. Enrichment (finishing) factories, workshops, installations for the enrichment of ore, sand in the extraction of non-ferrous, precious metals, diamonds. Dehydration of coal. Factories of granulated coal powder and pulverized coal**

      11. Employees engaged for at least 80% of working time:

      Workers:

      agglomerator;

      solvent extraction operator;

      dosing operator;

      gold ore enrichment operator;

      thickener operator;

      drying operator;

      operator-hydrometallurgist engaged in autoclaves and solvent extraction;

      foreman at the main production sites;

      bunkering operator;

      rope railway truck operator;

      cupola worker;

      operator of a car engaged in building up dams of tailing dumps, in transporting sludge, rock and waste of enrichment and briquetting;

      loader operator engaged in loading rock mass;

      hot sinter unloader;

      dump unloader;

      dust unloader;

      an exhibitor involed in the production of briquettes from waste coal;

      gasman;

      hydromonitor engaged at the dump (dams) and at the tailing facility;

      hearth for agglomeration and roasting;

      miner;

      screener;

      roar rabbler;

      a loader engaged in the work with raw materials, sand, fuel, reagents, non-ferrous metal concentrates;

      diamond-containing concentrates finisher;

      proportioner;

      crusher;

      grinding media loader;

      loader-unloader of cupolas and furnaces;

      supervisor in the production of ferrous metals, engaged in hot work sites;

      enrichment products controller;

      concentration unit operator;

      sludge spotter;

      winch operator;

      belt cleaner engaged in dust cleaning;

      chuteman;

      machinist (burner) of rotary kilns;

      motor grader operator employed at tailings dumps;

      briquette press operator;

      bulldozer operator engaged in the technological process, slurry and rock systems, coal loading, as well as tailings;

      wagon dumper operator;

      operator of the ventilation and aspiration installation, including those engaged in the maintenance of smoke exhausters;

      operator of crushing-grinding-sorting mechanisms;

      loading mechanism operator;

      operator of a floating non-self-propelled dredger, engaged in pumping sludge, pulp and reagents;

      dredger operator, engaged n pumping sludge, pulp and reagents;

      coke loading machine operator;

      conveyor operator;

      crane operator (crane operator);

      truck crane operator employed at tailings dumps;

      kratzer operator;

      mill operator;

      mixer operator;

      pumping unit operator engaged in the pumping of sludge, pulp, middlings and reagents;

      pelletizing operator;

      material handling operator, engaged in cleaning filters and dust deposition apparatuses;

      dropper;

      air transport operator engaged in dust transportation and metering devices;

      silo and coal tower maintenance operator;

      lifting machine operator;

      washing machine operator, engaged in the maintenance of all types of enrichment plants;

      packing machine operator;

      ore-sweeping machine operator;

      skip lift operator;

      scraper operator engaged in loading coal;

      scraper winch operator;

      mixing drum operator;

      dryer operator;

      pipe-laying operator engaged in tailings facility;

      operator of enrichment and briquetting plants;

      exhauster operator;

      excavator operator engaged in the technological process and in slurry and rock systems, including concentrate loading;

      installer of crushing and grinding equipment and equipment for sorting and enrichment;

      installer of metallurgical plants equipment engaged in the repair of metallurgical equipment;

      installer of technological pipelines engaged in the repair and maintenance of equipment;

      track fitter engaged on access roads of production with harmful working conditions;

      burner;

      graphite enricher;

      refractory worker engaged in hot work;

      operator for maintenance of dust and gas trapping installations;

      operator of the control panel, engaged in the production of weighting agents, briquettes, preparations and concentrates, including coal;

      a carpenter arranging wooden pipelines for a tailings dump;

      sampler;

      small-capacity dredge sampler;

      powder sifter on a mechanical sieve;

      tailings controller;

      a locksmith for instrumentation and automation, engaged in the maintenance and repair of instrumentation and automation directly at their installation sites;

      locksmith-repairman;

      filterer;

      flotation plant operator;

      electrician for the repair and maintenance of electrical equipment.

      Employees:

      Workers providing control and management of the activities of sections, workshops, departments, including:

      master (senior);

      mechanic;

      technician;

      electrician;

      power engineer (site, workshop).

      12. Professions of workers engaged for at least 80% in the blending of ore and non-metallic minerals (including blending in the production of pellets) containing 2% or more crystalline (free) silicon dioxide in dust, including:

      bunkering operator;

      screener;

      proportioner;

      crusher;

      conveyor operator;

      mill operator;

      dropper operator;

      шихтовщик.

      13. Professions of workers engaged for at least 80% in crushing, grinding, chopping, sorting and enrichment of ferrous metal ores, non-metallic minerals and mining-chemical raw materials containing 2% or more crystalline (free) silicon dioxide in dust, including:

      bunkering operator;

      screener;

      proportioner;

      crusher;

      conveyor operator;

      mill operator;

      dropper operator engaged in the supply of dry raw materials;

      reagent solvent;

      tailings facility controller;

      loader, engaged in the production of briquettes from waste coal;

      separator (dry grinding);

      a separator engaged in the wet enrichment cycle;

      scrubber-pumpman;

      fitter-repairman;

      sorter;

      dryer;

      briquette remover;

      tractor operator engaged in the tailing dump;

      transporter;

      stacker-packer;

      filterer;

      flotation plant operator;

      nozzle operator;

      centrifuge operator;

      cleaner engaged in cleaning drums, hoppers, ramps, counter tables and aspiration systems;

      charge maker;

      sludge-poolman;

      polisher;

      sluicekeeper;

      electrician for the repair and maintenance of electrical equipment;

      electrician for maintenance and repair of equipment.

 **Chapter 4 Enrichment of ores and sands during the extraction of non-ferrous, precious metals and diamonds**

      14. Professions of workers engaged for at least 80% of working time:

      solvent extraction operator;

      gold ore enrichment operator;

      operator-hydrometallurgist, engaged in the autoclave and solvent extraction;

      screener engaged in a crushing site (department);

      door closer;

      reagent proportioner;

      proportioner engaged in the preparation of xanthate;

      crusher employed at the crushing site (department);

      loader of crushing and grinding equipment;

      dropper operator engaged in crushing;

      operator of the drying installation;

      burner;

      smelter;

      a sampler engaged in sampling containing cyanides or crystalline (free) silicon dioxide;

      reagent solvent operator.

      15. Workers and employees of assay and assay-analytical laboratories, engaged for at least 80% of the working time in works with the use of cyanide, as well as gold mining and gold recovery organizations.

      16. Workers (technological and maintenance personnel), engaged for at least 80% of the working time in works with the use of cyanide solutions.

      17. Professions of workers engaged for at least 80% of their working time in enrichment for crushing, grinding, chopping and blending of ore and non-metallic minerals containing 2% or more crystalline (free) silicon dioxide in dust, including:

      proportioner;

      conveyor operator;

      mill operator engaged in dry grinding;

      sludge treatment worker;

      reagent solvent operator engaged in the preparation and use of xanthate;

      separator;

      dryer engaged in drying and quartering concentrates;

      charge maker.

 **Section 3. Metallurgical production (ferrous metals) Chapter 5 Domain production**

      18. Employees engaged in works for at least 80% of working time:

      Workers:

      bunkers foreman;

      filling machine foreman;

      foreman of the ore yard;

      bunkerer of blast furnaces;

      car operator, engaged in moving slag in hot work areas;

      loader operator;

      operator of electric and autocart, employed at the ore yard;

      blast furnace plumber;

      casting beater;

      dump unloader;

      blast furnace gasman;

      gas rescuer during work with the use of gas protection equipment;

      blast-furnace keeper of cast iron desulfurization;

      hearth blast furnace keeper;

      blast-furnace slag granulator;

      loader employed at the ore yard;

      defectoscopist for x-ray and gamma graphy;

      crusher;

      gear cutter;

      bucket operator;

      controller in the production of ferrous metals, engaged in hot work areas;

      boilermaker engaged in the repair of metallurgical equipment;

      boilermaker;

      chemical analysis laboratory assistant;

      bulldozer operator employed at the ore yard;

      operator of the scale car, engaged in tunnels and bunker rooms;

      wagon dumper operator;

      operator of the crushing and loading unit, employed at the ore yard;

      conveyor operator employed at the ore yard;

      crane operator of metallurgical production;

      filling machine operator;

      skip lift operator;

      telfer operator engaged in hot works;

      charge operator;

      excavator operator employed at the ore yard;

      electric locomotive operator of a metallurgical workshop, engaged in tunnels;

      assembler of metallurgical plants equipment, engaged in the repair of metallurgical equipment;

      installer of sanitary-technical equipment engaged in the repair of blast furnaces;

      installer of technological pipelines engaged in the repair of metallurgical equipment;

      track fitter employed on access roads;

      chopper;

      refractory worker;

      operator of the control post of the charge supply system;

      preparer of filling, refractory materials and thermal mixtures;

      granulation pool worker;

      worker and foreman at slag heaps and slag mining;

      a worker of repair services engaged in the repair of equipment at the places of its installation at sites (workplaces) of existing industries;

      ferroalloy breaker;

      skip operator;

      a locksmith for instrumentation and automation, engaged in the maintenance and repair of instrumentation and automation directly at their installation sites;

      locksmith of the evaporative cooling system;

      sling operator;

      tractor operator engaged in the supply of charge at the ore yard;

      waste cleaner of metallurgical production;

      refractory installer

      charge maker;

      slag maker;

      electrode operator;

      electrician for the repair and maintenance of electrical equipment;

      electrician for maintenance and repair of equipment.

      Employees:

      Workers providing control and management of the activities of the shift, sections, including;

      master (senior);

      mechanic;

      electrician;

      power engineer (site, workshop).

 **Chapter 6. Production of steel and ferroalloys. Preparation of compositions and pile works. Repair of metallurgical furnaces. Dolomite and lime roasting**

      19. Employees engaged in works for at least 80% of working time:

      Workers:

      foreman at the main production sites;

      foreman of a charge yard in steelmaking and ferroalloy production;

      bunker operator engaged in supplying materials to the converter;

      driller of holes engaged in cutting scrap and slag;

      cupola worker;

      pitch cooker engaged in cooking the resin and drying the bottoms;

      weigher employed at the charge yard;

      mine lighter engaged in the cutting of scrap and slag;

      car operator engaged in the movement of slag in hot work areas;

      loader operator engaged in the transport of refractory materials in hot work areas;

      lime unloader from furnaces;

      dump unloader;

      gasman;

      gas rescuer during works with the use of gas protection equipment;

      blast-furnace keeper of ferroalloy furnaces;

      loader engaged in the charge yard and loading phosphate slags;

      proportioner;

      crusher;

      charge loader;

      hot metal stamping machine operator;

      bucket operator;

      controller in the production of ferrous metals, engaged in hot work areas;

      pile operator for cutting scrap and metal waste;

      boilermaker engaged in the repair of metallurgical equipment;

      winch operator;

      marker engaged in marking hot metal;

      bulldozer operator engaged in slag loading and breaking masonry furnaces;

      wagon dumper operator;

      distributor operator;

      filling machine operator;

      refueling machine operator;

      crane operator of metallurgical production;

      operator of the fire cleaning machine;

      mill operator;

      operator of pumping units, engaged in pumping tar, fuel oil to open-hearth furnaces;

      loader operator;

      filling machine operator;

      skip lift operator;

      scraper operator (scraper) engaged in cutting scrap and metal;

      telfer operator engaged in hot works;

      excavator operator engaged in loading slag and breaking the brickwork of furnaces;

      electric locomotive operator of a metallurgical workshop;

      hot metal transport operator;

      mixer operator;

      installer of equipment of metallurgical plants, constantly engaged in the repair of metallurgical equipment;

      installer of sanitary-technical equipment, permanently engaged in the repair of metallurgical equipment;

      installer of technological pipelines engaged in the repair and maintenance of equipment;

      track fitter working on driveways and slag dumps;

      block filler;

      stacker of stoppers;

      calcination operator engaged in ferroalloy production;

      metal surface defect processor;

      refractory worker engaged in hot works;

      converter loading operator;

      operator of a continuous casting machine engaged in hot works (bottling console, gas cutter, main post, harvesting mechanisms);

      operator for maintenance of dust and gas trapping installations, engaged in dust collection, slag grinding and preparation of filling materials;

      operator of the control post of the charge supply system;

      operator of the control post, engaged in the finishing of hot metal;

      operator of hydraulic and cooling systems of a continuous casting machine;

      melter of deoxidizers;

      melter of synthetic slags;

      ferroalloys melter;

      assistant of a vacuum furnace steelworker;

      assistant of a converter steelworker

      assistant of a steelmaker of the installation of out-of-furnace steel processing;

      assistant of a steelmaker of the electroslag remelting unit;

      assistant of a steelmaker of the electric furnace;

      scrap and metal waste presser;

      preparer of filling, refractory materials and thermal mixtures;

      calciner;

      operator of an electric smelting furnace;

      worker for the movement of raw materials, semi-finished products and finished products in the production process;

      worker engaged in slag dumps and in the mining of slag;

      worker of repair services engaged in the repair of equipment at the places of its installation at the sites (workplaces) of existing production facilities, leading the technological process;

      worker engaged in the roasting and unloading of burnt dolomite and lime;

      ferroalloy breaker;

      metal scrap and waste separator;

      caster of steel;

      cold metal cutter;

      separator engaged in cutting slag;

      evaporative cooling system fitter;

      mechanical technician engaged in hot repairs of ferroalloy furnaces for the smelting of ferromanganese and ferrovanadium;

      mechanical technician;

      mixer engaged in the preparation of the electrode mass;

      sorter engaged in sorting burnt dolomite;

      steelmaker of vacuum furnace;

      steelmaker of a converter;

      steel maker of out-of-furnace steel processing unit;

      steelmaker of electroslag remelting unit;

      steelmaker of electric furnace;

      sling operator engaged in hot work areas;

      sling operator, engaged in cutting of scrap metal;

      dryer engaged in drying ferroalloys;

      rolling and pipes thermist;

      transporter engaged in hot work areas;

      electrode paste molder;

      atomizer;

      ferroalloy cleaner;

      batch operator;

      slag man;

      electrode operator;

      electric welder of manual welding, engaged in building casings of ferroalloy furnaces for smelting ferromanganese and ferrovanadium;

      electrician for maintenance and repair of equipment.

      Employees:

      Workers providing control and management of shift activities, sections, workshops, including:

      Mechanic;

      electrician;

      power engineer (of a site, shop).

 **Chapter 7 Rolling, wheel-rolling, bandage-rolling, scovensrolling, tin-plate, tinning, galvanizing and lead-plating productions. Production of rail fasteners. Heat treatment, punching and stripping of hot metal. Production of calibrated metal**

      20. Workers engaged for at least 80% of working time:

      aluminizer;

      crystallization unit operator engaged in the production of vitriol;

      neutralization unit operator engaged in works with hydrochloric acid;

      regeneration unit operator engaged in works with hydrochloric acid;

      centrifugation operator engaged in the production of vitriol;

      operator of electrolytic degreasing;

      foreman at the main production sites;

      sizing mill roller engaged in hot rolling;

      mill roller for assembly and transshipment of stands;

      roll forming unit operator;

      hot rolling mill operator;

      cold rolling mill operator;

      pitch cooker;

      gasman;

      gas cutter engaged in cutting the ends of rolled products in a hot state;

      gas rescuer when performing works with the use of gas protection equipment;

      loader of thermal furnaces;

      annealer, including the one engaged in the electric hardening of the rail;

      annealer engaged in manual loading;

      metal laying operator;

      acid-resistant ware gumming operator;

      controller in the production of ferrous metals, employed in hot work areas;

      hot metal stamping machine operator engaged in manual branding or branding at the end of the workpiece;

      hot metal stamping machine operator;

      inspector in the production of ferrous metals, engaged in hot work areas;

      inspector in the production of ferrous metals, engaged in operational control on units of continuous pickling, tinning, galvanizing, aluminum galvanizing, lead plating;

      baths correction operator;

      boiler-cleaner engaged in cleaning furnaces and tunnels;

      blacksmith puncher;

      blacksmith puncher on rotary machines;

      varnisher of tin and pipes;

      metal plate breaking operator;

      electrolytic method tinnig operator (galvanizer);

      hot method tinning operator;

      marker engaged in works with hot metal;

      machinist of leading rolling mill motors;

      machinist of loading mechanisms engaged in hot work areas;

      crane operator of metallurgical production;

      fire clearing machine operator;

      machinist on hammers, presses and manipulators;

      operator of a steam engine and a locomobile, engaged on the main drives of rolling mills;

      press machinist engaged in hot works;

      machine operator of reversible steam engines of rolling mills, engaged in hot rolling;

      machine operator of ingot breakers;

      telpher operator engaged in hot works;

      assembler of equipment of metallurgical plants, engaged in the repair of metallurgical equipment;

      assembler of technological pipelines engaged in the repair and maintenance of equipment;

      stacker of packages of sheets and pipes;

      metal heater;

      metal surface defect processing operator;

      refractory worker engaged in hot works;

      refractory operator;

      rail finishing line operator;

      operator of the control station for units of continuous etching, degreasing, tinning, galvanizing, varnishing, and annealing, engaged in pickling, tinning, aluminum galvanizing, lead, galvanizing compartments;

      hot rolling mill control station operator;

      cold rolling mill control station operator;

      operator of the control post engaged in hot works;

      operator of roll forming units;

      lead plating operator;

      annealer for precision steels and alloys;

      hot dipped galvanizer;

      secondary tin smelter;

      batch plater of polymeric materials on metal;

      cold rolling mill operator assistant;

      hot rolling mill operator assistant;

      polisher engaged in works using chromium oxide;

      metal loader;

      flattener of rolled products and pipes, engaged in straightening hot-rolled pipes;

      straightener of rolled products and pipes;

      presser of wheels and tires engaged in hot works;

      presser- stitcher of rail fasteners;

      varnishes, paints, and gesso preparation operator;

      worker and foreman in the finishing and sorting of metal and finished products;

      worker and foreman engaged in the acceptance, delivery, packaging and packing of metal and finished products;

      worker and foreman engaged in the movement of raw materials, semi-finished products and finished products in the production process;

      worker of repair services engaged in the repair of equipment at the places of its installation at sites (workplaces) of existing industries;

      worker engaged in forging, bending and hot riveting of tubes;

      package breaker;

      rolled scriber engaged in marking hot metal;

      hot metal cutter;

      metal cutter on scissors and presses, engaged in cutting rail fasteners on a press;

      cold metal cutter;

      evaporative cooling system fitter;

      locksmith-conductor;

      lubricator;

      sling operator engaged in hot work areas;

      talc operator of sheets and tapes;

      rolling and pipes thermist;

      etcher;

      transporter engaged in hot works areas;

      hot metal cleaner;

      waste cleaner of metallurgical production, engaged in cleaning scale during hot rolling of metal;

      rolled stock stacker engaged in hot works;

      nozzle operator;

      slag man;

      stamper engaged in cold stamping;

      electrician for maintenance and repair of equipment.

 **Chapter 8 Pipe production (pipe rolling, pipe welding, electric pipe welding, pipe drawing, pipe foundry, fitting, balloon) and galvanizing workshops**

      21. Workers engaged at work for at least 80% of working time:

      crystallization machine operator apparatchik engaged in the production of vitriol;

      centrifugation machine operator engaged in the production of vitriol;

      pipe asphalter;

      foreman of hammer units;

      foreman engaged in the acceptance, delivery of pipes and cylinders;

      foreman-adjuster of pipe electric welding mills;

      cupola worker;

      rolling calibration mill operator;

      rolling machine operator;

      pipe hot rolling mill operator;

      rolling mill operator for furnace pipe welding;

      pipe cold rolling mill operator;

      pipe-forming mill operator roller;

      pipe drawer;

      gasman;

      pipe bender;

      burring operator;

      charge loader in cupolas and furnaces;

      welder of pipes and cylinders;

      metal filler;

      pipe-casting technician;

      sand mixer;

      press pipe calibrator;

      annealer;

      tilter-stacker engaged in heating furnaces;

      hot metal stamping machine operator;

      inspector in the production of ferrous metals, engaged in hot work areas;

      pile operator for cutting scrap and metal waste, engaged in laying out pipes;

      blacksmith-puncher;

      loading mechanisms machine operator engaged in hot works;

      crane operator of metallurgical production;

      machinist on hammers, presses and manipulators;

      machine operator of pumping units, engaged in pumping resin and fuel oil to the heating devices of rolling mills;

      telpher operator engaged in hot work areas;

      electric locomotive operator of a metallurgical workshop;

      machinist-transporter of hot metal;

      assembler of equipment of metallurgical plants, constantly engaged in the repair of metallurgical equipment;

      assembler of technological pipelines engaged in the repair and maintenance of equipment;

      typesetter of packages of sheets and pipes;

      metal heater;

      metal surface defect processor;

      cutter engaged in the processing of emery and manual castings (with hammers, chisels, pneumatic tools);

      refractory worker engaged in hot works;

      operator of the control post engaged in hot works;

      lead plating operator;

      hot dipped galvanizer;

      smelter;

      assistant of the operator of cold-rolled pipes mill;

      assistant of the operator of hot-rolled pipes mill;

      metal loader;

      straightener of rolled products and pipes;

      hot pipe presser engaged on piercing presses;

      worker and foreman engaged in finishing and sorting metal and finished products;

      worker and foreman engaged in the movement of raw materials, semi-finished products, and finished products in the production process;

      worker of repair services engaged in the repair of equipment at the places of its installation at sites (workplaces) of existing industries;

      worker engaged in cooling installations;

      worker engaged in the acceptance and delivery of pipes and cylinders;

      hot metal cutter;

      cutter of pipes and blanks;

      cylinder assembler;

      welder of furnace pipe welding;

      driller engaged in the finishing of pipes and cylinders;

      sling operator engaged in hot work areas;

      dryer of coating components and fluxes;

      thermist of rolled products and pipes;

      etcher;

      transporter engaged in supplying materials to the cupolas;

      pipe molder;

      hot metal cleaner;

      waste cleaner of metallurgical production, engaged in cleaning of slag from heating furnaces;

      rolled stock stacker engaged in hot works;

      rolled metal stacker engaged in laying pipes in packages;

      fluxing agent;

      nozzle operator;

      pipe cleaner;

      slag maker;

      electric polisher engaged in polishing pipes;

      electric pipe welder at the mill;

      electrician for maintenance and repair of equipment.

 **Chapter 9 Coke, pitch-coke, thermoanthracite and coke production**

      22. Coke, pitch-coke and thermoanthracite production:

      Employees engaged at works for at least 80% of working time:

      Workers:

      operator of all types, except for those engaged in coal preparation and gas purification;

      barillette;

      gasman of coke ovens;

      pusher-side doorman;

      loader-unloader of thermoanthracite furnaces;

      caban-tilter;

      chute tapper;

      coke machine operator;

      coke loading machine operator;

      crane operator of metallurgical production, engaged in hot work areas;

      bridge loader operator engaged in hot work areas;

      dry coke quenching machine operator;

      operator of an electric locomotive extinguishing car;

      refractory worker engaged in hot work areas;

      a worker of repair services engaged in the repair of equipment at the places of its installation at sites (workplaces) of existing industries;

      ramper;

      sling operator engaged in hot work areas;

      tunnel worker;

      skip hoist tunnel-minder;

      cleaner engaged in the cleaning of coke-pitch equipment.

      Employees:

      foreman (senior) engaged in hot work areas;

      control foreman (site, workshop), engaged in hot work areas.

      23. Coke-chemical production:

      Employees engaged at work for at least 80% of working time:

      Workers:

      operators of all types, including those engaged in gas desulphurization, in the production of products in the presence of harmful substances of 1 or 2 hazard classes, as well as carcinogens in the air of the working area;

      foreman at the main production sites;

      crusher engaged in crushing in the presence of harmful substances of hazard classes 1 and 2, as well as carcinogens, in the air of the working area;

      crane operator of metallurgical production, engaged in hot work areas;

      worker on the mechanisms of chemical production, engaged in works in the presence of harmful substances of 1 or 2 hazard classes, as well as carcinogens in the air of the working area;

      worker of repair services engaged in the repair of equipment at the places of its installation at sites (workplaces) of existing industries;

      pourer of chemical products in the presence of hazardous substances of 1 or 2 hazard classes, as well as carcinogens in the air of the working area;

      scrubber-pumper engaged in works in the presence of harmful substances of 1 or 2 hazard classes, as well as carcinogens, in the air of the working area;

      pourer-bottler engaged in works in the presence of hazardous substances of 1 or 2 hazard classes, as well as carcinogens, in the air of the working area;

      sling operator engaged in hot works areas;

      cleaner engaged in cleaning equipment.

      Employees:

      foreman (senior) engaged in hot works areas;

      mechanic.

      24. Coke, pitch-coke, thermoanthracite and coke production. Coal preparation:

      Employees engaged in works for at least 80% of working time:

      Workers:

      operators of all types, engaged in coal preparation and gas purification;

      sewage treatment operator engaged in biochemical installations;

      foreman at the main production sites;

      bunkering operator;

      weigher;

      operator of a car engaged in the removal of waste from coke production;

      loader operator engaged in transporting coal to coal preparation;

      gas rescuer when working with the use of gas protection equipment;

      loader engaged in loading and unloading raw materials, fuel and coke-chemical products;

      proportioner;

      crusher;

      cabestan;

      inspector in the production of ferrous metals, engaged in hot work areas and in works with harmful working conditions;

      belt conveyor cleaner;

      bulldozer operator engaged in the technological process of coal preparation;

      wagon dumper operator;

      conveyor operator;

      crane operator (craner);

      bridge loader operator;

      operator of pumping units, including those engaged in extinguishing towers;

      dropper operator;

      operator of silo and coal tower maintenance;

      washing machine operator;

      defrosting machine operator;

      dryer operator;

      installer of equipment for coke-chemical production, constantly engaged in the repair of production equipment;

      installer of technological pipelines engaged in the repair of coke-chemical equipment;

      refractory worker;

      coke sorting operator;

      carpenter engaged in the repair of coke-chemical units;

      worker engaged in the mechanisms of chemical production;

      pourer of chemical products;

      separator;

      scrubber-pumpman;

      pourer-bottler;

      oiler;

      coke sorter;

      transporter;

      transporter engaged in the transportation of coal, coke and chemical products;

      waste cleaner of metallurgical production, engaged in coke production;

      stacker-packer engaged in the packaging and loading of chemical products;

      filterer;

      flotation plant operator;

      centrifuge operator;

      cleaner employed in cleaning bunkers;

      charge maker;

      sludge truck operator;

      electrician for the maintenance and repair of equipment.

      Employees:

      Employees providing control and management of the activities of departments, shifts, sections, including:

      master (senior);

      electrician;

      power engineer (site, workshop).

 **Chapter 10 Manufacture of silica products**

      25. Workers engaged in works for at least 80% of the working time in crushing, chopping and grinding non-metallic minerals containing 2% or more crystalline (free) silicon dioxide in dust.

 **Chapter 11 Direct reduction of iron and production of ferrous metal powders**

      26. Employees engaged in works for at least 80% of working time:

      Workers:

      operators of all types;

      mix muller operator;

      shaft furnace plumber;

      shaft furnace gasman;

      gasman;

      shaft-type furnace operator;

      screener;

      crusher operator;

      charge loader;

      operator of wagon-scales;

      operator of crushing-grinding-sorting mechanisms;

      conveyor operator;

      crane operator (craner);

      mill operator;

      pelletizing operator;

      skip lift operator;

      mixing drum operator;

      burner;

      refractory operator;

      furnace reduction of iron oxides;

      furnace annealing of iron powders;

      assistant of steelmaker of direct reduction iron furnaces;

      separator;

      skipper;

      steelworker of the furnace of iron direct reduction;

      dryer;

      transporter;

      stacker-packer engaged in the packaging of the powder;

      cleaner;

      charge maker.

      Employees:

      Employees providing control and management of the activities of the shift, sections, including:

      master (senior);

      mechanic;

      electrician;

      power engineer (of a site, workshop).

 **Section 4. Metallurgical production (non-ferrous metals) Chapter 12. Preparation of raw materials and charge. Briquetting at copper-sulphur plants and factories**

      27. Employees engaged in works for at least 80% of working time:

      Workers:

      autoclave operator at the park of briquettes;

      operator of briquette mixture preparation;

      bunkering operator;

      loader engaged in unloading raw materials;

      proportioner;

      crusher;

      charge loader;

      inspector of non-ferrous metallurgy products, engaged in hot work areas;

      briquette press operator;

      crane operator (craner);

      mill operator;

      reloaders operator;

      sifting machine operator;

      telfer operator;

      excavator operator;

      sampler;

      reagent solvent;

      separator;

      slinger operator engaged in the unloading of raw materials;

      briquette remover;

      transporter;

      charge maker.

      Employees:

      Employees providing control and management of the activities of departments, sections, workshops, including:

      master (senior);

      technologist;

      electrician;

      electromechanic;

      power engineer (of a site).

 **Chapter 13 Roasting and rolling**

      28. Employees engaged in works for at least 80% of working time:

      Workers:

      operator-hydrometallurgist;

      bunkering operator;

      proportioner;

      crusher;

      charge loader engaged in hot works;

      loader-unloader of kilns, engaged in hot works;

      inspector of non-ferrous metallurgy products, engaged in hot work areas;

      operator (stoker) of the boiler room;

      operator of gas-blowing machines of the roasting department;

      crane operator (craner) engaged in hot work areas;

      mill operator, engaged in the grinding of cinder;

      dropper operator;

      hoist operator engaged in hot work areas;

      installer;

      burner;

      refractory worker engaged in hot work;

      weltz kiln operator;

      nickel powder restoration kiln operator;

      sampler;

      worker of repair services engaged in the repair of equipment at the places of its installation at sites (workplaces) of existing industries;

      oiler;

      sling operator engaged in hot work areas;

      transporter;

      transporter engaged in hot works and maintenance of elevators;

      nozzle operator;

      charge maker.

      Employees:

      Employees providing control and management of the activities of departments, sections, workshops, including:

      master (senior);

      mechanic;

      technologist;

      electrician;

      electromechanic;

      power engineer (of a site).

 **Chapter 14. Sintering of charge and industrial products**

      29. Employees engaged in works for at least 80% of working time:

      Workers:

      agglomerator;

      hot sinter unloader;

      hearth for agglomeration and roasting;

      screener;

      rabbler-screener;

      hot return proportioner;

      crusher;

      charge loader;

      inspector of non-ferrous metallurgy products;

      crane operator (craner) engaged in hot work areas;

      mill operator;

      dropper operator;

      telpher operator engaged in hot work areas;

      exhauster operator;

      burner;

      secondary sludge processor;

      calcination operator;

      worker of repair services engaged in the repair of equipment at the places of its installation at sites (workplaces) of existing industries;

      mixer;

      sling operator engaged in hot work areas;

      transporter engaged in the return of hot sinter;

      slag and recycled materials cleaner;

      nozzle operator;

      charge-maker engaged in the charge of the agglomerate.

      Employees:

      Employees providing control and management of the activities of departments, sections, workshops, including;

      master (senior);

      site mechanic;

      technologist;

      electrician;

      electromechanic;

      power engineer (of a site).

 **Chapter 15 Drying of charge and industrial products**

      30. Employees engaged in works for at least 80% of working time:

      Workers:

      bunkering operator;

      loader;

      inspector of non-ferrous metallurgy products, employed in hot work areas;

      stoker of technological furnaces;

      hoist operator engaged in hot work areas;

      sampler;

      worker of repair services engaged in the repair of equipment at the places of its installation at sites (workplaces) of existing industries;

      dryer;

      transporter;

      nozzle operator;

      charge maker.

      Employees:

      Employees providing control and management of the activities of departments, sections, workshops, including:

      master (senior);

      mechanic;

      technologist;

      electrician;

      electromechanic;

      power engineer (of a site).

 **Chapter 16 Production of metal by smelting and electrothermal methods**

      31. Employees engaged in works for at least 80% of working time:

      Workers:

      bunkering operator;

      loader operator;

      operator of an electric and autocart, engaged inside the workshops;

      hot sinter unloader;

      unloader on dumps, engaged in the transportation of hot slag;

      crusher engaged in crushing crusts, feinstein, stein, revolutions and slag;

      crusher;

      charge loader;

      converter;

      inspector of non-ferrous metallurgy products;

      stoker of technological furnaces;

      briquette press operator;

      crane operator (craner) engaged in hot work areas;

      dropper operator engaged in workshops;

      filling machine operator;

      skip lift operator;

      electric locomotive operator of a metallurgical workshop;

      installer of sanitary equipment employed at the furnaces;

      refractory worker engaged in hot works;

      smelter;

      sampler engaged in hot works;

      worker of repair services engaged in the repair of equipment at the places of its installation at sites (workplaces) of existing industries;

      pourer of non-ferrous metals and alloys;

      electrode adjuster;

      sling operator engaged in hot work areas;

      transporter;

      transporter engaged in the transportation of hot metal;

      transporter engaged in the transportation of the charge;

      slag and recycled material cleaner engaged in the transportation of hot slag;

      product cleaner engaged in the purification of silicon;

      cleaner engaged in cleaning buckets;

      charge maker;

      slag maker;

      electrode operator engaged in electric furnaces and sedimentation tanks.

      Employees:

      Employees providing control and management of the activities of departments, sections, workshops, including:

      master (senior);

      mechanic;

      technologist;

      electrician;

      electromechanic;

      power engineer (of a site).

 **Chapter 17 Refining of metals**

      32. Employees engaged in works for at least 80% of working time:

      Workers:

      bunkering operator;

      crusher;

      charge loader;

      inspector of non-ferrous metallurgy products, engaged in hot work areas;

      stoker of technological furnaces;

      crane operator (craner) engaged in hot work areas;

      mill operator;

      telpher operator engaged in hot work areas;

      burner;

      smelter;

      sampler;

      a worker of repair services engaged in the repair of equipment at the places of its installation at sites (workplaces) of existing industries;

      pourer of non-ferrous metals and alloys;

      sling operator engaged in hot work areas;

      transporter;

      transporter engaged in the transportation of metal;

      nozzle operator;

      slag maker.

      Employees:

      Employees providing control and management of the activities of departments, sections, workshops, including:

      master (senior);

      control foreman at hot work sites;

      equipment mechanical technician;

      mechanic;

      technologist.

 **Chapter 18 Hydrometallurgy, leaching, production of cadmium and vitriol**

      33. Employees engaged in works for at least 80% of working time:

      Workers:

      autoclave operator;

      operator for the manufacture of artificial scheelite;

      crystallization operator;

      operator-hydrometallurgist, engaged in agitators and thickeners, on percolation, precipitation and filtration;

      fitter;

      viniplaster;

      proportioner;

      charge loader;

      alkali loader;

      acid-resistant gummer;

      inspector of non-ferrous metallurgy products, engaged in hot work areas;

      chemical analysis laboratory assistant;

      briquette press operator;

      crane operator (craner);

      mill operator engaged in dry grinding;

      operator of pumping installations;

      burner;

      secondary sludge processor;

      refractory worker;

      kiln operator for the production of zinc sulfate;

      smelter;

      sampler;

      worker engaged in the dosage of acids, alkalis and salts;

      worker engaged in the repair of equipment;

      repulpator;

      transporter engaged in the transportation of acids, alkalis and salts;

      stacker-packer engaged in packaging;

      filterer;

      chlorinator;

      cementer;

      centrifuge operator;

      charge maker;

      sludge truck operator;

      electrolysis operator of aqueous solutions.

      Employees:

      Employees providing control and management of the activities of departments, sections, workshops, including;

      master (senior);

      mechanic;

      technologist;

      electrician;

      electromechanic;

      power engineer (of a site).

 **Chapter 19 Production of carbon materials, masses, and products from them**

      34. Employees engaged in works for at least 80% of working time:

      Workers:

      mix muller operator;

      loader operator;

      gasman;

      loader engaged in loading raw materials and finished products;

      proportioner;

      crusher;

      loader-unloader of roasting and graphite furnaces;

      anode pourer;

      inspector of non-ferrous metallurgy products, engaged in hot work areas;

      crane operator (craner), engaged in roasting, calcining and graphitization;

      mill operator;

      operator of pumping installations;

      screening machine operator;

      telpher operator, engaged in roasting, calcining and graphitization;

      burner;

      refractory worker engaged in hot repairs;

      operator for maintenance of dust and gas trapping installations;

      control panel operator;

      pitcher;

      presser of electrode products;

      sampler engaged in calcination, roasting, and graphitization;

      calcination operator;

      impregnator;

      locksmith of electrode products;

      mixer;

      sorter;

      machine operator for mechanical processing of electrode products;

      standman;

      slinger operator engaged in calcining, roasting and graphitization;

      transporter;

      electrode paste molder;

      furnace nozzle operator;

      electrode mass chlorinator;

      product cleaner;

      cleaner engaged in the internal cleaning of equipment;

      charge maker;

      electrode stacker.

      Employees:

      Employees providing control and management of the activities of departments, sections, workshops, including:

      master (senior);

      mechanic;

      technologist;

      electrician;

      electromechanic;

      power engineer (of a site).

 **Chapter 20 Alumina production**

      35. Employees engaged in works for at least 80% of working time:

      Workers:

      agglomerator;

      carbonization operator;

      heating operator of heating carriers;

      operator-hydrometallurgist, engaged in autoclaves and agitators, classifiers, decomposers, filtration, pulp preparation, causticizers;

      operator-hydrometallurgist, engaged in evaporation, diffusers, carbonization of aluminate solution;

      fitter;

      bunkering operator;

      hot sinter unloader;

      screener;

      loader engaged in the loading of cement, soda, caustic and alumina;

      proportioner;

      crusher;

      charge loader;

      inspector of non-ferrous metallurgy products, engaged in hot work areas;

      stoker of technological furnaces;

      crane operator (craner);

      mill operator;

      operator of pumping installations;

      loader operator;

      dropper;

      skip lift operator;

      exhauster operator;

      burner;

      refractory worker engaged in hot repairs;

      operator for maintenance of dust and gas trapping installations;

      operator for maintenance of dust and gas trapping installations;

      sampler;

      calcination operator;

      repulpator;

      separator;

      transporter;

      filterer;

      flotation plant operator;

      nozzle operator;

      centrifuge operator;

      cleaner engaged in cleaning equipment;

      charge maker;

      sludge truck operator.

      Employees:

      Employees providing control and management of the activities of departments, sections, workshops, including:

      master (senior);

      mechanic;

      electrician;

      power engineer (of a site, shop).

 **Chapter 21 Obtaining metal by electrolytic method in a molten metal**

      36. Employees engaged in works for at least 80% of working time:

      Workers:

      aluminum production anode operator;

      operator-hydrometallurgist in the processing of lead dust;

      loader operator;

      operator of electric and auto trucks, engaged in the transportation of molten metal, fluoride salts, alumina and chlorination products;

      metal pourer;

      loader engaged in unloading and loading charge, alumina, fluorosalts and anode paste;

      crusher engaged in crushing the electrolyte;

      anode pourer;

      cathode operator;

      inspector of non-ferrous metallurgy products, engaged in the production of aluminum;

      non-ferrous metal casting technician;

      compressor unit operator engaged in the pumping of chlorine;

      crane operator (craner) engaged in hot work areas;

      mill operator;

      loader operator;

      pneumatic transport operator;

      filling machine operator;

      hoist operator engaged in hot work areas;

      pin crane operator engaged in the maintenance of electrolyzers;

      bathtub repair installer

      assembler of equipment of metallurgical plants, constantly engaged in the repair of metallurgical equipment;

      smelter;

      worker of repair services engaged in the repair of equipment at the places of its installation at sites (workplaces) of existing industries;

      pourer of non-ferrous metals and alloys;

      metal cutter on scissors and presses;

      carver on saws, hacksaws and machine tools;

      sling operator for loading and storing waste from metallurgical production;

      sling operator engaged in hot work areas;

      tractor operator engaged in the delivery of hot metal;

      transporter;

      electrode paste molder;

      bathtubs repair refractory installer;

      chlorinator;

      chlorine plumber;

      charge maker;

      electrolyte bath slurry operator;

      molten salts pot operator;

      electrical fitter (locksmith) on duty and equipment repair;

      contact electrician.

      Employees:

      Employees providing control and management of the activities of departments, sections, workshops, including:

      master (senior);

      mechanic;

      technologist;

      electrician;

      electromechanic;

      power engineer (of a site, workshop).

 **Chapter 22 Production of fluoric acid and its salts**

      37. Employees employed at work for at least 80% of working time:

      Workers:

      absorption operator;

      operator in the production of salts;

      cooking operator;

      evaporation operator;

      dosing operator;

      wet classification operator;

      neutralization operator;

      settling operator;

      gas cleaning operator;

      operator for the preparation of alumina sulphate;

      decomposition operator;

      drying operator;

      filtration operator;

      centrifugation operator;

      operator-hydrometallurgist;

      bakelite (impregnator) operator;

      bunkering operator;

      operator of the electric and autocart, engaged in the removal of the cinder;

      dump unloader;

      metal products gumming operators, except for those engaged in the workshops of protective coatings;

      reagent proportioner;

      crusher operator;

      furnace loader-unloader;

      loader-unloader;

      acid-resistant-vinyl plaster;

      acid-resistant ware gumming operator;

      inspector of non-ferrous metallurgy products;

      stoker of technological furnaces;

      chemical analysis laboratory assistant;

      marker;

      operator (stoker) of the boiler room;

      operator of ventilation and aspiration installations;

      crane operator (craner) engaged in hot work areas;

      mill operator;

      operator of pumping installations

      burner;

      refractory worker;

      operator for maintenance of dust and gas trapping installations;

      plumber;

      presser;

      instrument operator;

      sampler;

      worker of repair services engaged in the repair of equipment at the places of its installation at sites (workplaces) of existing industries;

      repulpator;

      locksmith for instrumentation and automation, engaged in the maintenance and repair of instrumentation and automation directly at their installation sites;

      pourer-bottler engaged in spilling acid;

      sling operator engaged in hot work areas;

      transporting operator;

      transporter;

      stacker-packer engaged in the capping of acid and fluorosalts;

      flotation plant operator;

      cleaner engaged in cleaning the main equipment and gas ducts.

      Employees:

      Employees providing control and management of the activities of departments, sections, workshops, including:

      master (senior);

      mechanic;

      electrician;

      power engineer (of a site, workshop).

 **Chapter 23 Obtaining metal by electrolytic method in solutions of salts and alkalis**

      38. Employees engaged in works for at least 80% of working time:

      Workers:

      operator for the preparation of chemical solutions, engaged in the preparation of hypochlorite;

      electrolyte preparation operator;

      drying operator;

      operator-hydrometallurgist engaged in the preparation of sulfuric acid solutions and cleaning of industrial sections by precipitation in the production of electrolytic foil;

      cathode operator;

      acid-resistant ware gumming operator;

      inspector of non-ferrous metallurgy products, engaged in hot work areas;

      operator of loading mechanisms;

      crane operator (craner);

      mill operator;

      operator of pumping installations;

      telpher operator engaged in hot work areas;

      matrix sheet processor;

      smelter;

      sampler engaged in hot work areas;

      worker of repair services engaged in the repair of equipment at the places of its installation at sites (workplaces) of existing industries;

      worker engaged in the repair of bathtubs;

      pourer of non-ferrous metals and alloys;

      sling operator engaged in hot work areas;

      transporter engaged in the hauling of trolleys with cathode and anode metal, raw materials, pitch;

      filterman;

      bathtubs repair refractory installer;

      cementer;

      product cleaner engaged in cathode cleaning;

      slimmer of electrolyte baths, engaged in washing raw materials and scrap;

      electrolyzer of aqueous solutions;

      electric welder of manual welding, engaged in the manufacture of anodes and cathodes;

      electrician-contacter.

      Employees:

      Employees providing control and management of the activities of departments, sections, workshops, including:

      master (senior);

      site mechanic;

      technologist;

      electrician;

      electromechanic;

      power engineer (of a site, workshop).

 **Chapter 24 Production of non-ferrous metal powders**

      39. Employees engaged in works for at least 80% of working time:

      Workers:

      operator in the production of metal powders;

      gas generator engaged in the production of zinc powder;

      inspector of non-ferrous metallurgy products, engaged in hot work areas;

      kiln operator in the production of zinc dust;

      sampler;

      stacker-packer engaged in works with powder products;

      stacker-packer engaged in the packaging of dusts obtained by a metallurgical method;

      molder of refractory products engaged in the manufacture of carborundum products;

      ingot milling machine operator;

      electrolyzer of aqueous solutions.

      Employees:

      Employees providing control and management of the activities of departments, sections, workshops, including:

      master (senior);

      mechanic;

      electrician;

      power engineer (of a site, workshop).

 **Chapter 25 Obtaining anodes and wirebars**

      40. Employees engaged in works for at least 80% of working time:

      Workers:

      charge loader;

      inspector of non-ferrous metallurgy products, engaged in hot work areas;

      caster of non-ferrous metals;

      crane operator (craner) engaged in hot work areas;

      filling machine operator;

      smelter;

      worker of repair services engaged in the repair of equipment at the places of its installation at sites (workplaces) of existing industries;

      pourer of non-ferrous metals and alloys;

      greaser engaged in lubricating molds;

      sorter engaged in the selection of copper and slag;

      product cleaner.

      Employees:

      Employees providing control and management of the activities of departments, sections, workshops, including:

      master (senior);

      mechanic;

      technologist;

      electrician;

      electromechanic;

      power engineer of a site.

 **Chapter 26 Dust collection and gas cleaning**

      41. Employees engaged in works for at least 80% of working time:

      Workers:

      gas generator;

      inspector of non-ferrous metallurgy products, employed in hot work areas;

      operator of ventilation and aspiration installations;

      loader operator;

      exhauster operator;

      operator for maintenance of dust and gas trapping installations;

      sampler;

      worker of repair services engaged in the repair of equipment at the places of its installation at sites (workplaces) of existing industries;

      conveyor operator engaged in the maintenance of pneumatic transport;

      stacker-packer engaged in the packaging of dusts obtained by a metallurgical method;

      cleaner engaged in cleaning dust collectors, stoves, flues and grates.

      Employees:

      Employees providing control and management of the activities of departments, sections, workshops, including:

      master (senior);

      mechanic;

      technologist;

      electrician;

      electromechanic;

      power engineer of a site.

 **Chapter 27 Sludge processing**

      42. Employees engaged in works for at least 80% of working time:

      Workers:

      operator in the production of titanium and rare metals;

      leaching operator;

      dissolution operator;

      operator-hydrometallurgist engaged in leaching;

      burner;

      smelter;

      worker of repair services engaged in the repair of equipment at the places of its installation at sites (workplaces) of existing industries;

      pourer of non-ferrous metals and alloys;

      dryer;

      transporter engaged in the transportation of charge, metal and concentrates;

      filterer;

      harge maker .

      Employees:

      Employees providing control and management of the activities of departments, sections, workshops, including:

      master (senior);

      mechanic.

 **Chapter 28 Coal dust preparation**

      43. Employees engaged in works for at least 80% of working time:

      Workers:

      crush operator;

      inspector of non-ferrous metallurgy products, engaged in hot work areas;

      mill operator;

      dropper;

      scraper operator (scraper);

      exhauster operator;

      operator for maintenance of dust and gas trapping installations;

      sampler;

      oiler;

      transporter;

      cleaner engaged in cleaning equipment.

      Employees:

      Employees providing control and management of the activities of departments, sections, workshops, including:

      master (senior);

      mechanic.

 **Chapter 29 Obtaining rare metals, calcium, magnesium, titanium and tantalum by metallurgical and chemical-metallurgical methods**

      44. Employees engaged in works for at least 80% of working time:

      Workers:

      agglomerator engaged in batch sintering;

      operator of all kinds;

      loader operator;

      operator of electric and autocarts;

      titanium sponge beater;

      proportioner;

      loader-unloader;

      inspector of non-ferrous metallurgy products, engaged in hot work areas;

      stoker of technological furnaces;

      оператор прецизионной резки, занятый на доводке полупроводниковых материалов, кроме занятых в производстве эпитаксиальных структур;

      briquette press operator;

      air separation unit operator;

      compressor unit operator;

      crane operator (craner) engaged in hot work areas;

      mill operator;

      screening machine operator;

      telpher operator engaged in hot work areas;

      installer for the repair of furnaces;

      reaction equipment installer;

      refractory worker engaged in hot works;

      precision cutting operator engaged in the finishing of semiconductor materials, except for those employed in the production of epitaxial structures;

      kiln operator for iodine refining;

      kiln operator for restoration and distillation of titanium and rare metals;

      kiln operator for thermal recovery method;

      kiln operator for processing titanium-containing and rare-earth materials;

      kiln operator for the production of antimony trioxide;

      barium electrolyte smelter;

      electron beam melter;

      melter;

      semiconductor materials charge preparer engaged in doping of semiconductor materials, except for those engaged in the production of epitaxial structures;

      sampler;

      calcination operator;

      titanium sponge separator;

      mechanical technician;

      sinterer of hard-alloy products;

      sling operator engaged in hot work areas;

      dryer;

      transporter;

      stacker-packer;

      filterman;

      nozzle operator;

      chlorinator;

      centrifuge operator;

      charge maker.

      Employees:

      Employees providing control and management of the activities of departments, sections, workshops, including:

      master (senior);

      mechanic;

      technologist;

      electrician;

      electromechanic;

      electrician for the repair and maintenance of electrical equipment;

      electric and gas welder;

      manual welding electric welder;

      power engineer of a site.

 **Chapter 30 Processing and recycling of non-ferrous and precious metals**

      45. Employees engaged in works for at least 80% of the working time in the smelting industry:

      Workers:

      foundry grease cooker;

      operator of electric and autocarts;

      metal pourer;

      mold assembler;

      inspector of non-ferrous metallurgy products, engaged in hot work areas;

      non-ferrous metal casting technician;

      crane operator (craner) engaged in hot work areas;

      mill operator engaged in the grinding of quartz and magnesite;

      operator of sifting installations, engaged in sifting slags and litter;

      installer for the repair of furnaces;

      sanitary equipment installer, refractory worker engaged in hot works;

      smelter;

      scrap and metal waste presser;

      sampler engaged in hot work areas;

      pourer of non-ferrous metals and alloys;

      carver on saws, hacksaws and machine tools, engaged in cutting hot metal;

      sling operator engaged in hot work areas;

      hand molder;

      ingot miller engaged in the processing of hot ingots;

      non-ferrous metal scraper engaged in the processing of hot ingots;

      kiln charge maker.

      Employees:

      Employees providing control and management of the activities of departments, sections, workshops, including:

      master (senior);

      mechanic;

      electrician;

      power engineer (of a site, workshop).

      46. Employees engaged in works for at least 80% of the working time in the production of silver nitrate, refining and obtaining chemical pure precious metals and their processing:

      Workers:

      operator in the production of precious metals;

      operator in the production of hard alloys and refractory metals;

      mill operator;

      operator for the maintenance of dust and gas trapping installations;

      non-ferrous metal annealer;

      smelter;

      worker engaged in the production of silver nitrate and chemical pure precious metals;

      dryer;

      thermist at high frequency installations;

      charge maker;

      electrolyzer of aqueous solutions.

      Employees:

      Employees providing control and management of the activities of departments, sections, workshops, including:

      mechanic.

      47. Employees engaged in works for at least 80% of the working time in obtaining zinc dust and zinc oxide:

      Workers:

      sifting machine operator;

      stacker-packer engaged in the packaging of zinc dust and zinc oxide.

      Employees:

      Employees providing control and management of the activities of departments, sections, workshops, including:

      master (senior);

      mechanic.

      48. Employees engaged in works for at least 80% of the working time in rolling production:

      Workers:

      cold metal roller;

      foil laminator-dyer;

      inspector of non-ferrous metallurgy products, engaged in hot work areas;

      stoker of technological furnaces;

      crane operator (craner);

      non-ferrous metal heater;

      adjuster of technological equipment engaged in setting up mills;

      non-ferrous metal annealer;

      roll rewinder;

      product planner;

      straightener by hand;

      straightener on machines, engaged in straightening hot metal;

      scrap and metal waste presser;

      presser on hydraulic presses, engaged in the pressing of lead;

      sampler;

      hot metal roller;

      hot metal cutter;

      metal cutter on scissors and presses, engaged in cutting hot metal;

      carver on saws, hacksaws and machine tools, engaged in cutting hot metal and lead;

      cold metal cutter engaged in cutting lead;

      sling operator;

      foil etcher;

      transporter;

      nozzle operator;

      product cleaner engaged in cleaning metal with metal brushes;

      grinder engaged in dry grinding.

      Employees:

      Employees providing control and management of the activities of departments, sections, workshops, including:

      master (senior);

      mechanic;

      electrician;

      power engineer (of a site, workshop).

      49. Employees engaged in works for at least 80% of the working time in the pipe-pressing, pressing and drawing industries:

      Workers:

      wire dragger;

      non-ferrous metal dragger engaged in hot drawing;

      rolling machine operator engaged in rolling hot pipes;

      inspector of non-ferrous metallurgy products, engaged in hot work areas;

      stoker of technological furnaces;

      crane operator (craner);

      non-ferrous metal heater;

      adjuster of cold forging equipment;

      operator of ultrasonic installations;

      non-ferrous metal annealer;

      polisher of dies from diamonds and superhard materials;

      hydraulic press operator;

      sampler;

      profiler;

      sling operator;

      pipe-roller engaged in hot rolling;

      nozzle operator;

      non-ferrous metal scraper;

      grinder of diamonds and superhard materials;

      grinder engaged in grinding matrices and heads;

      emulsoid operator.

      Employees:

      Employees providing control and management of the activities of departments, sections, workshops, including:

      master (senior);

      mechanic;

      electrician;

      power engineer (of a site, workshop).

      50. Employees engaged in works for at least 80% of the working time on zinc polishing works:

      master (senior);

      polisher of sheets and tapes;

      planer engaged in planing zinc;

      stacker-packer;

      grinder.

 **Chapter 31 Production of hard alloys and refractory metals**

      51. Employees engaged in works for at least 80% of working time:

      Workers:

      operator in the production of metal powders, engaged in grinding and screening;

      operator in the production of hard alloys and refractory metals, engaged in the production of salts of tungsten, cobalt, chromium, molybdenum, nickel and sodium sulfide;

      operator for the manufacture of artificial scheelite;

      carbidization operator;

      operator for the preparation of mixtures and solutions;

      molybdenum waste oxidation operator;

      distillation operator;

      recovery furnace operator;

      electrolysis operator;

      operator-hydrometallurgist engaged in the production of salts of tungsten, cobalt, chromium, molybdenum, nickel and sodium sulfide;

      borehole driller;

      cold metal roller;

      mine lighter;

      non-ferrous metal dragger engaged in hot dragging (rough dragging);

      proportioner;

      crusher;

      inspector of non-ferrous metallurgy products, engaged in hot work areas;

      blacksmith-puncher on rotary machines;

      crane operator (craner) engaged in hot work areas;

      mill operator;

      operator of sifting installations;

      burner;

      carbide worker;

      electron beam melter;

      smelter;

      polisher of dies from diamonds and superhard materials;

      hard alloy presser;

      sampler;

      calcination operator;

      hot metal roller;

      impregnator;

      powder sifter on mechanical sieves;

      welder of products from refractory metals;

      sinterer of hard-alloy products;

      dryer engaged in drying finished products;

      dryer engaged in drying powders and mixtures;

      machine molder;

      hand molder;

      centrifuge operator;

      charge maker;

      grinder of diamonds and superhard materials;

      grinder of products from hard alloys and refractory metals;

      puncher;

      electrolysis operator of aqueous solutions;

      electrolysis operator of molten salts.

      Employees:

      Employees providing control and management of the activities of departments, sections, workshops, including:

      master (senior);

      mechanic;

      electrician;

      power engineer (of a site, workshop).

 **Chapter 32 Production of mercury, elemental sulfur, xanthate, arsenic, chromium salts, sodium sulfide, ammonium molybdate, stalinite and their compounds. Refining gold, silver, platinum and platinum group metals, as well as the production of precious metals**

      52. Employees engaged in works for at least 80% of working time:

      Workers:

      operator in the production of precious metals;

      mine lighter;

      membrane-insulation worker;

      inspector of non-ferrous metallurgy products;

      matrix sheet processor;

      smelter;

      auxiliary worker;

      employee of assay, analytical, spectral, research, control and measurement and other laboratories;

      worker of household plants, premises, showers;

      worker on acceptance, drying, washing and repair of workwear;

      worker engaged in the technological process and in the repair of equipment;

      worker engaged in the processing of industrial solutions and wastewater, transportation of raw materials, acids, intermediates and finished products, laying and packaging of raw materials, acids, intermediates and finished products;

      worker engaged in the maintenance of these industries;

      worker engaged in the acceptance, delivery, testing and processing of raw materials, intermediates, finished products and waste;

      worker engaged in the production of carbon black;

      product cleaner;

      electrolysis operator of aqueous solutions.

      Employees:

      Employees providing control and management of the activities of departments, sections, workshops, including:

      master (senior);

      mechanic;

      electrician;

      power engineer (of a site, workshop).

 **Chapter 33 Production of products by powder metallurgy in the presence of hazardous substances in the air of the working area of at least hazard class 3**

      53. Employees engaged in works for at least 80% of working time:

      Workers:

      cathode operator;

      converter;

      operator of sifting installations;

      adjuster of forging and pressing equipment;

      winder of electrical machines;

      solderer on the lead (lead solderer);

      furnace annealing of iron powders;

      presser of all kinds;

      impregnator;

      powder sifter;

      mixer;

      sinterer;

      transporter;

      charge maker.

      Employees:

      Employees providing control and management of the activities of departments, sections, workshops, including:

      foreman (senior) for equipment repair;

      mechanic;

      enrichment technologist.

 **Section 5. Metalworking Chapter 34 Foundry production**

      54. Employees engaged in works for at least 80% of working time:

      Workers:

      fittingsman;

      cupola worker;

      roller of the hot rolling mill;

      foundry grease cooker;

      mine lighter engaged in a charge yard;

      driver of a car, including a special one (except for a fireman);

      loader driver engaged in the transportation of liquid metal;

      smuggler;

      vulcanizer engaged in hot vulcanization of rubber compounds;

      beater of castings;

      gasman engaged in the gas industry;

      gas cutter performing work on cutting profits and pilots in the hot state;

      electroplating;

      shaft-type furnace operator;

      crusher engaged in roasting and crushing dolomite;

      furnace charger in the cupola furnace and the furnace;

      pourer of metal and alloys on injection molding machines;

      metal pourer;

      sharpener;

      farmer;

      frame manufacturer engaged in the manufacture of cast frames;

      bucket operator;

      mold assembler;

      inspector in the foundry, engaged in the areas of melting, pouring (casting) of metal, knocking out and trimming of castings;

      controller in the production of ferrous metals;

      pile operator;

      stoker of technological furnaces, engaged at smelting furnaces;

      vacuum, centrifugal, vacuum and centrifugal casting technician, working with centrifugal machines;

      casting technician of metals and alloys;

      casting technician on injection molding machines;

      hot method tinning operator;

      balm making operator;

      filling machine operator;

      crane operator (craner) engaged in the molding, core, land preparation, trimming ,and cleaning departments, in the charge yard;

      crane operator engaged in hot areas;

      mill operator engaged in magnesite grinding;

      mixer operator;

      pattern maker of smelted models;

      epoxy pattern maker, engaged in coating, sprinkling and drying resins;

      installer of sanitary-technical equipment engaged in melting furnaces;

      retaining mechanism gatherer;

      metal heater;

      emery polishing operator;

      foundry machine adjuster, engaged in setting up casting machines for automatic production lines and molds on injection molding machines;

      burner;

      bucket coater;

      metal surface defect processor;

      chopper;

      refractory worker engaged in the repair of ladles and furnaces in a hot condition;

      foundry operator on automatic machines and automatic lines;

      shaped castings sawdust operator;

      pollinator of forms with metal-sulphur powder;

      wax, halowax melter;

      melter of metal and alloys;

      melter engaged in servicing tuyeres;

      preparer of steel pouring ditches;

      metal planter;

      sand sifter;

      employee engged in testings in full-scale pipes and in testings of aircraft engines at test facilities;

      worker engaged in spraying molds with solutions of fluoride additives;

      worker engaged in precision casting:

      worker engaged in cutting metal at the charge yard;

      worker engaged in the transportation of charge;

      steel pourer;

      form assembler;

      compiler of fluoride additives;

      steelmaker of a vacuum furnace and his henchman;

      steelmaker of the out-of-furnace steel processing installation and his assistant;

      steelmaker of an electric furnace and his assistant;

      machine forming rod maker;

      hand-formed rod maker;

      slinger engaged in the stumping, molding, rod compartments and at the knockout sites;

      slinger engaged in shooting cargo from the molding boxes;

      dryer of rods, molds and molding materials from molding boxes;

      transporter engaged on conveyors transporting hot land;

      transporter engaged in the maintenance of conveyors at smelting furnaces;

      transporter in the foundry, engaged in cutting, molding, core and knock-out work areas;

      janitor in foundries;

      moulder;

      nozzle operator;

      cleaner of metal, castings, products and parts;

      charge maker engaged in the charge yard;

      metal stacker.

      Employees:

      foreman (senior) of the section, engaged in the manufacture and processing of lead-zinc, lead stamps and products.

      foreman engaged in testings of turbojet marine engines and marine and diesel engines and diesel generators with a gas turbine supercharging with a capacity of 800 horsepower or more and a turbine speed of 17 thousand revolutions per minute;

      craftsman engaged in hand forging.

 **Section 6. Chemical production Chapter 35 Employees of enterprises of the chemical and petrochemical industries, engaged for at least 80% of their working time in the following industries and works**

      55. Activated carbon; alumogel; airgel; aldehydes and their derivatives; amines, their compounds; ammonia (including raw gas); activated pyrolusite; asbovinyl; white soot, bromine, its compounds; vanadium and antimony compounds; sulfur smelting regardless of the method; halide derivatives of ethylene, their polymers and copolymers; geratol; hopcalita; graphite-collide preparations; guanidines and their derivatives; manganese dioxide; detergents; dimethyl sulfate; desulfurizer; diproxide; inhibitors; ion-exchange resins and intermediates for them; iodine, its compounds; caustic soda; caprolactam; camphor; calcium carbide; carburetors; catalysts; ketones, their derivatives; coagulant; creolin; paint and varnish products using organic solvents; varnishes and their mixtures; mercaptans; metallic sodium, potassium, their oxides; metal powders by chemical means; mineral and organic acids, their compounds, derivatives, including regeneration, denitration and concentration; mineral salts; mineral fertilizers; mipore separators; urea; arsenic and its salts; antifouling compounds and toxins to them; nitro mixtures; nekalya, thiokola; enrichment of arsenic, apatite-nepheline, sulfur ores; organic and inorganic reagents; oxides, peroxides, hydroperoxides and their compounds; ethylene oxide and products based on it; organic products synthesized on the basis of organic fatty, aromatic and heterocyclic raw materials, including products for the synthesis of dyes, pigments and varnishes; ossein; pyrolysis of petroleum hydrocarbons, purification, compression, separation of pyrogas, cracking of gas, natural gases; plasticizers; plastics based on: phenols, cresols, xylenols, resorcinol, total phenols, melamine, aniline, furfural, thiourea, isocyanates, polyamides, polyurethanes, polyester resins, cellulose ethers and esters; continuous and staple fiberglass (excluding heat-insulating fiberglass), as well as products from it and fiberglass; polydiene; polyvinylpyrrolidone; polymers and copolymers of acrylic and methacrylic acids and their derivatives; vinyl ether polymers; polyethylene terephthalates, butadiene, polyisobutylene, isoprene, latexes, film and other materials based on them; polyphosphates; polycarbonate film; poroplasts; porophore; pressing materials; derivatives of benzene, benzoyl, naphthalene, their homologues; simple, complex esters; mercury devices and preparations; rubber, rubber and tire workshops: preparatory, preparation of raw materials, vulcanization, production of adhesives for rubber; light compositions; lead, mercury, chromium, their oxides, products of compounds; selenium, tellurium, selenium, copper, zinc compounds; carbon disulfide; silica gel; synthetic rubbers; synthetic vitamins (for the chemical and pharmaceutical industry).

      56. Synthetic dyes, pigments, their grinding, drying; synthetic resins, varnishes; compounds of barium, titanium; alcohols, their derivatives; styrene, its derivatives; polymers, copolymers; sulfocoal; scintillation materials; heat-sensitive paints, pencils; technical, feed phosphates; technical carbon, materials based on it; hydrocarbons, their compounds; urotropine; phenol, its compounds; ferromagnetic, foaming powder, flotation reagents; formal glycol; phosphorus, phosphoric acid, their derivatives; freons of all classes; frigits; fluorine, its compounds; organochlorine compounds; chemicals: for rubber, rubber, agriculture, horticulture, medicines, gasolines, lubricants, transformer oils for dust control, flotation reagents, plastics, artificial fibers, for color, black and white film, paper for the film and photo industry; chemical means of plant protection, disinfectants, repellents, preparations based on them; chemical absorber; chlorine, its compounds; vinyl chloride, its polymers, copolymers; cellosolves; cyanide, thiocyanate compounds; cyanates, diisocyanates, their derivatives; extralin; organoelement compounds; enamels, preparations from precious metals; emulsions of fatty mixtures, their softeners; ethyl liquid; pesticides.

      57. Asphalt, pitch materials, asphalt masses and products from them; bitumen and bituminous materials; excipients for textile and other industries; alumina; decorative, emulsion, grated, artistic, ceramic, dry paints, paints on natural drying oil; iodine-bromine water (extraction and preparation); products made of polyethylene, compositions based on polyethylene and products made from them; products made of polymers and copolymers based on organofluorochlorine compounds; products by hot method: from plastics, composite materials based on plastics, vinyl plastic, polyvinyl chloride plastic compounds, phenolic and urea plastic compounds, plastics based on polyamides, polymethacrylic compounds, styrene and its copolymers, organic glass products; alum; synthetic corundum; mineral fillers; winding products; plastics based on acrylic and methacrylic compounds; plastic leather and artificial leather on a fibrous basis, artificial astrakhan fur: department of chemical fiber preparation; natural and cage soda (mining); impregnation and processing of fabrics, extraction of natural sulfate and thenardite; rubber, rubber technical and tire:

      1. In workshops (sections): on calendering, assembly, sleeve, transport tapes, belts, auto-chamber, molded and non-molded equipment (with the exception of processing rubber molded and non-molded parts), rubber shoes (with the exception of sorting and packaging areas), cutting spreading, dipped products, ebonite and products from it, aeronautical and engineering property, spongy products, chemical protection products, rubberized fabrics, gumming of closed containers and chemical equipment, shafts and other products, regenerate (except for areas of old rubber and preparatory workshops), gutta-percha.

      2. At the sites: preparatory, preparation of raw materials, vulcanization, production of adhesives for rubber; grinding, drying diatomaceous earth; rubber parts of shoes and rubber products; lead tubes; iron sulfide; laminated plastics; salt brine and brine; textolite; technical and raincoat fabrics with polyvinyl chloride, rubber, oil and nitro coatings, with the exception of work on the preparation of fabrics, non-woven base, knitwear and other types of

      58. In the workshops (departments, sections) of processing and disposal of solid, liquid and gaseous wastes from all industries listed in List No. 1, approved by Decree of the Government of the Republic of Kazakhstan No. 1930 dated December 19, 1999 "On Approval of List No. 1 of Industries, Works, Professions, Positions and Indicators in Underground and Opencast Mining, in the Works with Especially Harmful and Especially Difficult Working Conditions" (hereinafter-List No. 1) on the regeneration of silver-containing waste from film and photo materials, recovery and rectification of solvents; during the work in gas generating workshops and technological stations; on cleaning tanks, containers and chemical equipment, washing and handling returnable containers from harmful chemical products listed in List No. 1.

      59. On the neutralization and treatment of industrial wastewater, the neutralization of harmful vapors and gases; on grinding, drying, mixing, dissolving, preparing, packaging, bottling, packing, loading, unloading in bulk, packaged in paper (plastic) bags of chemical products listed in List No. 1; on the rubberizing of closed containers and pipelines; on the recovery of gasoline; repair, evacuation, testing of chlorine cylinders and cylinders from other harmful chemical products listed in List No. 1.

      60. Worker and foreman, senior foreman, mechanic and power engineer, engaged in the repair, prevention, maintenance of technological and electrical equipment in the industries listed in List No. 2, approved by Decree of the Government of the Republic of Kazakhstan No. 1930 dated December 19, 1999 "On Approval of List No. 2 Productions, Works, Professions, Positions and Indicators on the Works with Harmful and Difficult Working Conditions" (hereinafter-List No. 2) of instrumentation and ventilation of chemical industries listed in List No. 1 and List No. 2; workers engaged in the repair of high-rise structures of chemical enterprises with the rope method of work:

      Workers:

      agglomerator;

      deactivator;

      isolator;

      boilermaker;

      machinist for washing and repairing workwear, engaged in washing workwear contaminated with toxic substances;

      gas station operator;

      operator of technological installations;

      commodity operator;

      filter presser;

      cleaner;

      Employees:

      employee of gas generating, ammonia-refrigeration and mercury-rectifying plants, paramilitary and other gas rescue units;

      employee of workshops and productions laboratories;

      employee of the technical control department working in the above mentioned industries;

      employee of the workshop, departments, section of anti-corrosion compounds and coatings;

      employee engaged in special productions (including cleaning of tanks, containers, washing, repair and processing of containers for special productions and from toxic substances) and in laboratories with chemical special substances;

      employee engaged in the control of the air environment during the application of protective coatings;

      employee engaged in filling cylinders and containers with chlorine, as well as in the spill of chlorine in the production of chlorine;

      worker, foreman (senior foreman), mechanic and power engineer of the workshop, engaged for at least 80% of the working time in the repair, preventive maintenance of process equipment and electrical equipment (except for instrumentation and ventilation), communications, degassing of industrial sewage and tunnels in the above mentioned industries and divisions;

      workers engaged for at least 80% of their working time in the production of rongalite and sulphated fatty products;

      workers engaged for at least 80% of their working time in rubber, rubber-technical and tire industries, in preparatory areas, preparation of raw materials, vulcanization, production of glue for rubber.

 **Chapter 36 Manufacture of products: inorganic chemicals, fertilizers, polymers, plastics (including composite materials, fiberglass and polyurethane, including by spraying), rubber, paint and varnish, household chemicals, organic synthesis, synthetic dyes, petrochemical, rubber and asbestos, chemical reagents, high-purity substances in individual workshops, departments, sites and installations in the presence of hazardous substances of 1 or 2 hazard classes, as well as carcinogens in the air of the working area**

      61. Employees engaged for at least 80% of the working time in the technological process:

      Workers:

      deactivator;

      insulator;

      controller engaged in the technical control department;

      roofer;

      operator of technological installations;

      commodity operator;

      instrument operator for the maintenance of instrumentation and automation;

      worker and foreman engaged in the repair and maintenance of technological equipment and electrical equipment in the listed industries;

      worker engaged in the repair, prevention and maintenance of instrumentation and automation and communications in the following workshops, sections and departments in the preparatory (preparatory), textile, spinning, weaving, hardware, stuffing, auto-tractor parts, auto-molded parts, spiral wound gaskets, cardboard and filters, paranitic, roller tape (elastic material), experimental, industrial equipment;

      filter presser;

      cleaner.

      Employees:

      foreman (senior) for the repair of equipment (except for instrumentation and ventilation);

      power engineer engaged in the above mentioned workshops, sites and departments.

 **Chapter 37. Production of explosives, initiating substances, gunpowders and ammunition equipment**

      62. Production of sulfuric, nitric acids of their salts, oxidizers for liquid rocket fuels based on strong nitric acid, selenium, denitration and concentration of spent acids, recovery of acids in the production of explosives and gunpowder:

      workers engaged for at least 80% of the working time in the technological process and in repairs during the development and production of these products.

      63. Development and manufacture of explosives, including industrial explosives:

      workers engaged at least 80% of their working time in the technological process and in repairs during the development of new explosives, as well as in the production of all types of explosives.

      64. Development of new and production of all types of gunpowders, solid fuel charges, pyrotechnic gasless and low-gas compositions, fire mixtures, fire-driving and detonating cord, charges, burning cartridges, oxidizers for liquid rocket fuels based on strong nitric acid, as well as semi-finished products and compositions based on them:

      workers engaged for at least 80% of the working time in the technological process and in repairs during the development and production of these products (with the exception of workers engaged in the manufacture of metal shells for igniters).

      65. Production of cotton cellulose, pyroxylin and colloxylin:

      1. Employees engaged for at least 80% of the working time in the technological process of production of colloxylin, except for workers engaged in bleaching, drying, washing lint, neutralizing water and preparing water softening solutions.

      2. Employees engaged for at least 80% of the working time in the technological process of production and repair, in the preparation of pyroxylin, hypochlorite solutions, grinding, washing, bleaching and drying.

      66. Sulfur distillation and sulfur melting production:

      workers engaged for at least 80% of the working time in the technological process and repair in the specified production.

      67. Production of ether, collodion, recuperation and distillation of solvents:

      workers engaged for at least 80% of the working time in technological processes and repair in these industries.

      68. Assembly, disassembly, equipment, demilitarization, repair of all types of ammunition, combat units, equipped solid rocket engines, pyrotechnic products, means of initiation, other components containing products specified in paragraphs 63 and 64 of this subsection.

      69. Utilization and destruction of missiles, ammunition and their elements, equipped with solid fuels, gunpowder, explosives and pyrotechnic compositions:

      1. Employees engaged for at least 80% of the working time in the technological process and repair in these industries, as well as in the development of new technologies in these industries.

      2. Employees engaged in the utilization and destruction of missiles, ammunition and their elements equipped with solid fuels, gunpowder, explosives and pyrotechnic compositions.

      70. Production of metol, selective solvent, sodium and ammonium dinitrocresolators:

      Employees engaged for at least 80% of the working time in technological processes and repair in these industries.

      71. Testing of all types of ammunition, warheads, equipped (powder, jet liquid, solid propellant) rocket engines, their units, propulsion systems and rocket blocks, pyrotechnic products, means of initiation and other components, as well as products specified in paragraphs 63 and 64 of this subsection:

      workers engaged for at least 80% of their working time in the preparation and conduct of testings at ranges, training grounds and stands.

 **Chapter 38 Production of phosphorus, thermal phosphoric acid, their derivatives**

      72. Employees engaged for at least 80% of their working time in the repair, prevention and maintenance of instrumentation and automation and communications in the production of phosphorus and thermal phosphoric acid:

      Workers:

      agglomerator;

      operator of all kinds;

      forklift operator;

      loading-unloading operator;

      crusher operator;

      cable maker;

      quality controller of raw materials, products and production wastes;

      boilermaker;

      bulldozer operator;

      conveyor operator;

      crane operator;

      operator of pumping installations;

      loader operator;

      exhauster operator;

      excavator operator;

      installer of sanitary equipment;

      adjuster of welding and gas equipment;

      laundry operator;

      impregnator of electrical products;

      locksmith of mechanical assembly works;

      tractor operator;

      charge maker;

      electrician for the repair and maintenance of lines and structures of telecommunications, telephone communications;

      electrician for the repair of windings and insulation of electric machines;

      electrician for maintenance and repair of electric machines.

      Employees:

      Employees providing control and management of the activities of departments, sections, workshops, including:

      master (senior);

      mechanic;

      technologist.

 **Chapter 39 Production of extraction acid and mineral fertilizers based on it**

      73. Employees engaged for at least 80% of the working time in this production:

      Workers:

      evaporation operator;

      neutralization operator;

      operator for the preparation of raw materials, issuance of semi-finished products and finished products;

      decomposition operator;

      sieving operator;

      drying operator;

      bunkering operator;

      insulator on thermal insulation;

      acid-resistant gummer;

      compressor unit operator;

      operator of pumping installations;

      installer of equipment for the chemical and petrochemical industry;

      refractory operator;

      laundry operator;

      worker engaged in the repair, prevention and maintenance of instrumentation and automation and communications in the production of extractive phosphoric acid and mineral fertilizers;

      lead soldering iron operator;

      emergency repair worker;

      refractory installer (acid- proofing operator);

      lining worker (acid-resistant);

      electrician for the repair and maintenance of lines and structures of telecommunications, telephone communications;

      electrician for the repair of windings and insulation of electrical machines.

      Employees:

      Workers providing control and management of the activities of departments, sections, workshops, including:

      master (senior);

      mechanic;

      technologist.

 **Chapter 40 Production of feed defluorinated phosphates**

      74. Employees engaged for at least 80% of the working time in this production:

      Workers:

      absorption operator;

      granulation operator;

      firing operator;

      operator for the preparation of raw materials, issuance of semi-finished products and finished products;

      boiler operator;

      mill operator;

      operator of pumping installations;

      reloader operator;

      workers on the enameling and firing of products, in vacuum works and in works to produce hydrogen;

      a worker engaged in the repair, prevention and maintenance of technological and electrical equipment;

      mechanic for the repair and maintenance of technological equipment.

      Employees:

      Employees providing control and management of the activities of departments, sections, workshops, including:

      master (senior);

      mechanic;

      technologist.

 **Chapter 41 Production of carboxymethyl cellulose, brizol and relin**

      75. Employees engaged for at least 80% of the working time in the technological process of production of celluloid and products from it during hot pressing, artificial leather, nitromastics, nitro-lacquers, nitro-enamels, dried-rolled paste, nitrolinoleum and other products based on nitrocellulose.

 **Chapter 42 General professions of the main and pilot productions of explosives, gunpowder, pyrotechnics, smoke and initiating substances**

      76. Employees engaged for at least 80% of their working time in production workshops (sites) refueling rocket and space technology with liquid rocket fuel components.

      77. Workers engaged for at least 80% of their working time in cleaning containers, chemical apparatus and equipment, washing and processing returnable containers from toxic products.

      78. Workers engaged for at least 80% of the working time in the neutralization and purification of industrial waters; for the disposal of solid, liquid and gaseous wastes, as well as gas rescue operations.

 **Chapter 43. Laboratories (sections) of enterprises and organizations. Liquidation bases, workshops (sites, laboratories, stations) for refueling rocket and space assets, neutralization and dismantling of rocket weapons contaminated with liquid rocket fuel components**

      79. Employees engaged for least 80% of their working time in dismantling, neutralizing missile weapons, rocket and space equipment and personal protective equipment contaminated with rocket fuel components.

 **Section 7. Nuclear industry Chapter 44 Extraction of raw materials containing radioactive substances and beryllium**

      80. Works on the mine surface:

      1. Workers engaged for at least 80% of their working time in loading, unloading, drying, sorting and packaging raw materials containing radioactive substances and beryllium;

      2. Workers and employees engaged for at least 80% of their working time in the repair of mining plants and mine equipment contaminated with radioactive substances and beryllium.

      81. Open pit mining:

      workers engaged for at least 80% of their working time at operational sites for the open-pit mining of radioactive, beryllium raw materials, gold-bearing ores, as well as the method of underground and heap leaching of radioactive raw materials under conditions of radiation hazard.

      82. Enrichment of radioactive raw materials:

      workers engaged for at least 80% of the work in conditions of radiation hazard during loading and unloading of radioactive raw materials, in technological processes for the enrichment of these raw materials, as well as in the repair of equipment contaminated with radioactive substances (including at enterprises of this profile abroad).

      83. Production of radioactive substances; manufacture of products from radioactive substances and their compounds:

      employees engaged for at least 80% of their working time in the technological process of production of radioactive substances, in the manufacture of products from radioactive substances and their compounds, as well as in the repair and maintenance of equipment contaminated with radioactive substances.

      84. Lithium production by the mercury method:

      workers engaged for at least 80% of their working time in the technological process, in production laboratories, in the repair of equipment, as well as in the degassing of equipment in production facilities and protective equipment.

      85. Production of fluoric acid from radioactive and beryllium raw materials; regeneration of acetic acid from radioactive or beryllium compounds:

      workers engaged for at least 80% of their working time in the work in conditions of radiation or beryllium hazard, as well as in the repair and maintenance of technological equipment contaminated with beryllium or radioactive substances.

      86. Work at industrial nuclear reactors, at nuclear power plants and nuclear heat supply stations:

      workers engaged for at least 80% of their working time in the operation, repair and commissioning of technological equipment, ventilation, control systems, technological and radiation control devices, in decommissioning of nuclear reactors for various purposes and nuclear power plants in conditions of radiation hazard.

      87. Radiochemical production of plutonium:

      workers engaged for at least 80% of their working time in the production of plutonium, as well as in the repair of technological equipment, in conditions of radiation hazard.

      88. Metallurgy and mechanical processing of plutonium:

      workers engaged for at least 80% of their working time at works in conditions of radiation hazard, as well as in the repair of technological equipment contaminated with radioactive substances.

      89. Production of uranium fluoride compounds:

      workers engaged for at least 80% of their working time in the production and processing of uranium fluoride compounds, fluorides, in the repair of technological equipment, in conditions of radiation hazard.

      90. Centrifugal and diffusion production of uranium-235; works on testing benches for the adjustment of centrifugal and diffusion machines for the separation of radioactive uranium isotopes, operating on radioactive gas; works on electromagnetic installations for the separation of radioactive isotopes:

      workers engaged for at least 80% of their working time in the production of uranium-235, in the workshops for the revision of machines, chemical workshops and experimental workshops, in the operation, testing, adjustment and repair of installations, stands and machines, means of control and automation in conditions of radiation hazard.

      91. Production of radium and polonium and manufacture of products from them:

      Employees engaged for at least 80% of their working time in conditions of radiation hazard, in the production of radium and polonium, and in the manufacture of products from them, as well as in the repair of technological equipment.

      92. Production, equipping and testing of neutron sources:

      Workers engaged for at least 80% of their working time in conditions of radiation hazard.

      93. Manufacture, assembly (disassembly) and testing (including detonation) of products using uranium, thorium, plutonium, tritium:

      1. Employees of enterprises, scientific departments of research organizations, engaged for at least 80% of their working time at works in conditions of radiation hazard, in the repair of technological equipment contaminated with radioactive substances.

      2. Employees engaged for at least 80% of the working time at the test sites for driving and preparing adits and wells for testing special products.

      94. Production of tritium, equipping and testing products of special high-voltage tubes and chambers using tritium, production of parts from hydride, lithium containing tritium:

      workers engaged for at least 80% of their working time in works with tritium and products containing tritium, as well as in the repair of technological equipment contaminated with radioactive substances.

      95. Works in the laboratories of enterprises and in the industries listed in paragraphs 80 - 82 and paragraphs 84 - 93 of this section:

      workers engaged for at least 80% of their working time in works with radioactive substances and sources of ionizing radiation in conditions of radiation hazard in the premises where works of classes 1 and 2 are carried out, as well as in the repair and maintenance of equipment and mechanisms contaminated with radioactive substances and beryllium.

      96. Works in warehouses and storages of radioactive substances at the enterprises and in industries listed in paragraphs 80 - 82 and paragraphs 84 - 93 of this section:

      employees engaged for at least 80% of their working time in loading, unloading, sorting, repacking, packaging and storage of radioactive substances and sources of ionizing radiation in conditions of radiation hazard, as well as in the repair and maintenance of technological equipment contaminated with radioactive substances.

      97. Works on decontamination and dust removal of overalls and equipment, in sanitary inspection rooms (shower rooms) at the enterprises and in the industries listed in paragraphs 80 - 82, paragraphs 84 - 88 and paragraph 89 (in chemical and metallurgical workshops for revision and regeneration, condensation and evaporation plants ) and in paragraphs 90 - 93 of this section:

      1. Employees engaged for at least 80% of their working time in the acceptance, sorting, cleaning, transportation, washing, repair of overalls (safety shoes) contaminated with radioactive substances.

      2. Employees engaged for at least 80% of their working time at the works in special laundry rooms, sanitary inspection rooms (shower rooms), repairing equipment, cleaning premises and washing radioactive contamination.

      3. Employees engaged for at least 80% of their working time decontaminating equipment, premises and materials contaminated with radioactive substances.

      98. Installation, dismantling and repair and construction works inside industrial buildings and structures contaminated with radioactive substances:

      Employees engaged for at least 80% of the working time, performing works in conditions of radiation hazard.

      99. Works on the collection, disposal, transportation and disposal of radioactive substances in the industries listed in paragraphs 82, 84 - 93 of this section:

      employees engaged for at least 80% of their working time in the collection, loading, unloading, processing, disposal, transportation and disposal of waste and contaminated equipment or servicing vehicles contaminated with radioactive substances.

      100. Enrichment of beryllium raw materials; production of beryllium and its compounds, products from beryllium and its compounds:

      workers engaged for at least 80% of their working time in the production of beryllium and its compounds, in the repair and maintenance of technological equipment, in conditions of beryllium hazard and in production laboratories, as well as in the collection, transportation and disposal of production waste.

      101. Production of emeralds:

      workers constantly engaged in the works for manufacture of emeralds from beryllium raw materials.

      102. Works in industrial premises in conditions of beryllium hazard:

      1. Employees engaged for at least 80% of their working time in assembly, dismantling and repair and construction, adjustment, research work in conditions of beryllium hazard.

      2. Employees engaged for at least 80% of their working time on cleaning equipment and production facilities.

      103. Works in sanitary inspection rooms (showers), special laundry rooms for cleaning and dedusting workwear:

      1. Workers engaged for at least 80% of the working time on the acceptance, sorting, cleaning, transportation, washing, repair of overalls (safety shoes) contaminated with beryllium.

      2. Employees of special laundry, sanitary inspection rooms (shower rooms), engaged for at least 80% of the working time on the repair and maintenance of equipment, cleaning premises in conditions of beryllium hazard.

      104. Works in the conditions of radiation and beryllium hazard:

      employees of workshops, mines, pits and industries, engaged for at least 80% of the working time in the organization and conduct of the technological process, as well as repair, maintenance, adjustment and reconstruction of technological equipment.

 **Section 8. Works with radioactive substances, sources of ionizing radiation, beryllium, tantalum, niobium and rare earth elements Chapter 45 Works at enterprises, research institutes, laboratories, engineering and experimental design design organizations and medical institutions**

      105. Employees engaged for at least 80% of the working time in conditions of radiation or beryllium hazard at experimental, pilot production, production and enlarged laboratory facilities, in experimental, production workshops for testing or improving technological processes of industrial production, processing of radioactive raw materials, industrial use of nuclear energy, industrial or experimental production of radioactive substances, beryllium, tantalum and niobium and products from them.

      106. Employees engaged for at least 80% of their working time in works with radioactive substances with activity at the workplace of at least 0.1 millicurie of radium-226 or an equivalent amount of radioactive substances and in the repair and maintenance of equipment, premises in these conditions.

      107. Employees engaged for at least 80% of their working time in the production of beryllium, products from beryllium and its compounds, tantalum, niobium and products from them, in the production of products from metal-ceramic beryllium, including repair, maintenance of equipment in conditions of special hazard.

 **Chapter 46 Works at research, transport, experimental-industrial nuclear reactors, on their prototypes and critical assemblies and pulsed reactors, experimental thermonuclear facilities and powerful isotope irradiation facilities with gamma-irradiator activity of 5x10 curie squared and higher**

      108. Employees engaged for at least 80% of their working time in operational, repair, adjustment and experimental workы in conditions of radiation hazard.

      109. Employees engaged for at least 80% of their working time in the works on the purification of technological water from induced radioactivity and radioactive fragments, as well as in the repair of technological equipment of treatment devices in conditions of radiation hazard.

      110. Employees engaged for at least 80% of their working time inside buildings, structures, ships in storage of technological equipment and equipment of nuclear power plants, where works of classes 1 and 2 are carried out.

 **Chapter 47 Work in storages and warehouses of radioactive substances, beryllium and its compounds**

      111. Employees engaged for at least 80% of their working time in conditions of radiation hazard, in receiving, repacking, packaging, storing and issuing radioactive substances, sources with an activity of more than 10 millicuries of radium-226 or an equivalent amount of radioactive substances, beryllium and its compounds in terms of radiotoxicity.

 **Chapter 48 Production of rare earth elements by chemical method**

      112. Employees engaged for at least 80% of the working time in the specified technological process and in the repair of equipment.

 **Chapter 49 Geological exploration works on the surface associated with radioactive substances**

      113. Employees engaged for at least 80% of their working time in the works with radioactive ores.

 **Chapter 50 Works in industrial and sanitary laboratories, laboratories at enterprises, organizations, medical institutions and inspections of gospromatomnadzor (supervision of safe conduct of works in industry and nuclear power) and departmental radiation safety services**

      114. Employees engaged for at least 80% of their working time in the maintenance of nuclear reactors, nuclear power stations and production of radioactive substances and beryllium, tantalum, niobium in conditions of special hazard.

 **Chapter 51 Works on accelerator plants, neutron generators with a neutron yield of 10 to the ninth degree of neutrons per second or more**

      115. Employees engaged for at least 80% of their working time in conditions of radiation hazard during experimental and operational work.

      116. Employees engaged for at least 80% of the working time in the repair of equipment.

 **Chapter 52. Works on the transportation, burial of radioactive substances, beryllium and its compounds; works on decontamination, degassing and dust removal of overalls, equipment, production surfaces contaminated with radioactive substances and beryllium**

      117. Employees engaged for at least 80% of their working time in loading, unloading, transportation, collection, processing, storage and disposal of radioactive substances, radioactive waste, beryllium and its compounds and waste, as well as decontamination and degassing of equipment, premises, vehicles, collection, repair, decontamination and dedusting of overalls in conditions of special hazard.

      118. Workers of sanitary checkpoints (showers), engaged for at least 80% of the working time.

 **Chapter 53 Other works**

      119. Employees engaged for at least 80% of working time:

      locksmith of instrumentation and automation of the radioisotope laboratory;

      thermist engaged in hot works at furnaces;

      employees engaged in portable installations of radioisotope flaw detection (gamma flaw detection) for transillumination of materials and products in industry and construction;

      employees engaged in x-ray installations in industry and medical institutions, as well as their adjustment and commissioning.

 **Section 9. Drilling, production and processing of oil, gas and gas condensate, coal processing Chapter 54 Drilling**

      120. Employees engaged for at work for at least 80% of working time:

      Workers:

      melting operator;

      carbon black compaction operator;

      bunkering operator;

      workover driller;

      driller of a floating drilling unit in the sea;

      driller of operational and exploratory drilling of wells for oil and gas;

      mine lighter;

      vulcanizer;

      rig installer;

      rig welder;

      rig electrician;

      gas generator;

      deactivator;

      operator of units for maintenance of oil and gas equipment;

      drilling rig operator;

      gas blower operator;

      plastic granulation operator;

      compressor unit operator;

      crane operator (craner);

      operator for cementing wells;

      operator of the lift for testing wells;

      flushing unit operator;

      operator of technological pumps;

      operator of a stacking machine;

      extruder operator;

      drilling unit operator;

      cementing unit operator;

      cement-sand-mixing unit operator;

      underground well repair operator;

      oil and gas production operator;

      well sampling (testing) operator;

      reservoir pressure maintenance operator;

      operator for chemical treatment of wells;

      operator of technological installations;

      commodity operator;

      well workover driller assistant;

      assistant driller of a floating drilling unit at sea;

      assistant driller for operational and exploratory drilling of wells for oil and gas;

      scrubber- pump operator;

      locksmith for installation and repair of foundations for offshore drilling and racks;

      drilling rig maintenance locksmith;

      locksmith for the repair of technological installations;

      locksmith-repairman engaged in the repair of equipment directly on the drilling rigs;

      filter presser;

      centrifuge operator;

      electrician for the repair and maintenance of electrical equipment, engaged directly on drilling rigs.

      Employees:

      Employees providing control and management of the activities of a drilling rig, oil and gas exploration (batch) of deep (structural-search) drilling; workshops for sampling (testing) wells, including:

      drilling engineer (drilling operations);

      foreman (assistant) of drilling rig;

      foreman (senior);

      mechanic (senior) engaged in well workover in production processes for drilling wells, in rigging, sampling (testing) wells;

      manufacturer of tower construction works.

 **Chapter 55 Production of oil, gas and gas condensate**

      121. Employees engaged in works for at least 80% of working time:

      Workers:

      wells workover driller;

      driller of a floating drilling unit in the sea;

      driller of operational and exploratory drilling of wells for oil and gas;

      mine lighter;

      ADC operator;

      logger;

      operator of units for maintenance of oil and gas equipment;

      drilling rig operator;

      drilling rig operator for oil and gas;

      gas blower operator;

      plastic granulation operator;

      crane operator (craner);

      operator of the pumping station for pumping the working agent into the reservoir;

      operator of a steam mobile dewaxing plant;

      steam generator operator for steam injection into oil reservoirs;

      operator of a mobile compressor;

      operator for cementing wells;

      logging station lift operator;

      lift operator;

      washing machine operator;

      process pump operator;

      stacking machine operator;

      extruder operator;

      operator of a cement-sand-mixing unit;

      operator of the cementing unit;

      operator of the dewatering and desalination plant;

      hydraulic fracturing operator;

      oil and gas production operator;

      well survey operator;

      operator for preparation of wells for capital and underground repairs;

      operator for preparation of wells for capital and underground repairs;

      reservoir pressure maintenance operator;

      underground wells repair operator;

      operator for chemical treatment of wells;

      assistant driller of major well repairs;

      worker of field and geophysical parties and detachments performing geophysical surveys in wells;

      mechanic for instrumentation and automation, engaged in the installations for the complex preparation of hydrogen sulfide-containing (more than 1.5%) gas in the fields;

      locksmith for installation and repair of foundations for offshore drilling and racks;

      mechanic for the repair of technological installations;

      rigger;

      linear pipeline operator engaged in servicing pipelines transporting hydrogen sulfide containing gas and condensate from the field to the plant;

      electrician for the repair and maintenance of electrical equipment, directly employed at oil, gas and gas condensate production facilities.

      Employees providing control and management of the activities of the workshop, operational and production services for the production of oil, gas and gas condensate (oil and gas fields), including:

      foreman (senior) engaged in the works for extraction of oil, gas and gas condensate (in oil and gas fields), in the works of underground and workover of wells, maintenance of reservoir pressure, secondary methods of oil, gas and gas condensate production, enhanced oil recovery;

      foreman engaged in works at a temporary storage site for radioactive waste, in a complex for processing oil-contaminated soil, in a facility for preparing a killing fluid;

      mechanic (senior), engaged in oil, gas and gas condensate production (at oil and gas fields), underground and major well repairs, reservoir pressure maintenance, secondary methods of oil, gas and gas condensate production, and enhanced oil recovery.

 **Chapter 56 Processing of oil, gas, gas condensate and coal**

      122. Employees engaged in works for at least 80% of the working time in the distillation, cracking of sour oil and the production of oil products from them; catalytic reforming; distillation of shale and coal tars; pyrolysis of sour oil products; rectification of aromatic hydrocarbons; compression and fractionation of gases containing hydrogen sulfide and carbon monoxide; sulfuric acid alkylation, gasoline ethylation; acid, selective hydrotreatment and dewaxing of petroleum products and artificial liquid fuels; dephenolation of waters; paraffin; ceresin, mercaptans; catalysts, additives to oil products; coke; synthetic products from petroleum; semi-coking of solid fuel; purification of gases from sulfur compounds, carbon monoxide; hydrogenation of solid fuels and sour oil products; synthesis of hydrocarbons; processing of hydrogenation products, synthesis, semi-coking, coking and gasification of solid fuels; deoiling and deacidification of alkaline waste; electrical desalination and dehydration, stabilization, hydrotreatment of hydrogen sulfide-containing oil and gas condensate, production of elemental (gas) sulfur; carbon black production:

      operator of all kinds;

      gas collecting main operator;

      deactivator;

      crusher;

      insulator;

      coke cleaner;

      coke unloader engaged in manual work;

      chemical analysis laboratory assistant;

      bulldozer operator engaged in loosening and loading elemental (gas) sulfur;

      engine fuel test engineer working with leaded gasoline;

      process pump operator;

      excavator operator engaged in the loading of elemental (gas) sulfur;

      operator of technological installations;

      worker engaged in unloading and draining ethyl liquid;

      rampman;

      mechanic for the repair of technological installations;

      filter presser;

      cleaner.

      123. Employees engaged for at least 80% of working time in the following industries: distillation, cracking and catalytic reforming of oil and oil products, pyrolysis of oil products, preparation of crude oil, regeneration of solutions and oils, production of natural gasoline, liquefied gases; condensation, capture of gas gasoline; conversion of natural, water gas; alkaline cleaning of oil products, artificial liquid fuel; fuel preparation, fuel supply, enrichment of solid fuels, production of bitumen, greases, as well as repair and maintenance of process equipment and communications of the main industries, industrial sewerage, ventilation, tank farms and communications for oil products and gas, overpasses for draining and loading oil products and reagent facilities:

      Workers:

      operator of all kinds;

      gas collecting main operator;

      bunkering operator;

      well workover driller;

      driller of a floating drilling unit in the sea;

      driller of operational and exploratory drilling of wells for oil and gas;

      mine lighter;

      vulcanizer;

      rig installer;

      rig welder;

      rig electrician;

      gas generator;

      deactivator;

      crusher;

      coke cleaner;

      coke unloader;

      boilermaker engaged in the repair of boilers;

      operator (assistant) of all types;

      operator for washing and repairing workwear contaminated with toxic substances;

      mechanical engineer;

      worker engaged in unloading and down

      loading, crushing, splitting, packing and transporting raw materials, semi-finished products, finished products, reagents, absorbents, catalysts and fuel, oil traps and drying chambers.

      locksmith for installation and repair of foundations for offshore drilling and racks;

      drilling rig service locksmith;

      locksmith for the repair of technological installations;

      locksmith-repairman directly engaged in the facilities of oil, gas and gas condensate production;

      tunnel worker;

      transporter;

      linear pipeliner;

      stacker-packer;

      filterer;

      filter presser;

      centrifuge operator.

      Employees:

      Employees providing control and management of the activities of a shift, installation (drilling, gas-and-gasoline, oxygen, enrichment, regeneration, etc.), workshop (technological), including:

      engineer (engaged in shifts);

      foreman (senior);

      device operator engaged in the maintenance and repair of instrumentation and automation directly at their installation sites.

      124. Employees engaged in the preparation and processing of oil, gas, gas condensate and coal for at least 80% of the working time (in the accounting period):

      Workers:

      melting operator;

      carbon black compaction operator;

      boilermaker engaged in the repair of boilers;

      gas blower machine operator engaged in installations of pyrolysis, catalytic cracking, synthetic alcohol, polyethylene, gas compression and fractionation, mineral sulfuric acid, and industrial wastewater treatment plants;

      plastic granulation machinist;

      compressor unit operator;

      crane operator (craner), engaged in the production of pyrolysis and in the production of ethanol;

      operator for washing and repairing workwear contaminated with toxic substances;

      process pump operator;

      plastic granulation operator;

      operator of spreading machines engaged in the production of synthetic fibers and products from it;

      operator of a stacking machine engaged in the production of polyethylene;

      operator extruder engaged in the production of synthetic products from petroleum feedstock;

      pyrometrist;

      device operator engaged in the production of gas purification from sulfur compounds, carbon monoxide, electric desalination and dehydration, stabilization, hydrotreatment of hydrogen sulfide-containing oil and gas condensate, production of elemental (gas) sulfur and post-treatment of exhaust gases, purification of liquefied gases and production of mercaptans;

      device operator engaged in the maintenance and repair of instrumentation and automation directly at their installation sites;

      worker engaged in loading and unloading, crushing, splitting, packing and transporting raw materials, semi-finished products, finished products, reagents, absorbents, catalysts, oil traps and drying chambers fuel;

      scrubber-pump operator;

      mechanic for the repair of technological installations;

      tunnel worker;

      transporter;

      stacker-packer engaged in the packaging of carbon black;

      filterer;

      filter presser;

      centrifuge operator .

      Employees:

      Employees providing control and management of the activities of the shift, section, including:

      equipment repairman;

      mechanic (senior).

      125. Employees of workshop laboratories for the production of gas carbon black, employed at least 80% of the working time.

      126. Gas rescue service:

      workers engaged at works for at least 80% of the working time.

 **Section 10. Production of building materials Chapter 57 Production of cement**

      127. Employees engaged at works for at least 80% of working time:

      aspirator;

      bunkering operator;

      shaft furnace unloader;

      gasman;

      a loader engaged in the loading of cement;

      dosing operator of raw materials, engaged in the dosage of cement;

      auger- mixing operator;

      loader of furnaces (mine);

      stoker of drying drums;

      foreman (senior) engaged in workshops, in the areas of grinding cement, coal, dry raw materials;

      operator (burner) of rotary kilns;

      operator (burner) of shaft furnaces;

      operator of screw pumps (fuller);

      calcination operator;

      crane operator (craner) engaged in hot works (crinker warehouses);

      pneumatic installation operator;

      packing machine operator;

      scraper winch operator;

      raw mill operator;

      coal mill operator;

      cement mill operator;

      stacking machine operator;

      cement proportioner;

      assistant operator (roaster calciner) of rotary kilns;

      assistant operator (roaster burner) of shaft furnaces;

      assistant of operators of raw mills;

      assistant of operators of coal mills;

      assistant of operators of cement mills;

      locksmith-repairman engaged in the repair and maintenance of technological and dedusting equipment;

      locksmith- electrician for the repair of electrical equipment, engaged in the grinding, aspiration and grinding workshops of raw materials by dry method;

      silo flour mixing operator;

      hot clinker conveyor;

      cement packer;

      refractory installer -stoneman;

      cleaner for cleaning sludge pools and talkers;

      cleaner for cleaning dust chambers;

      sludge truck operator;

      electrician for the repair and maintenance of electrical equipment (technological and dedusting).

 **Chapter 58 Production and processing of mica**

      128. Employees engaged for at least 80% of the working time:

      mica crusher;

      crusher-grinder;

      mikalex mass harvester;

      mica calibrator;

      glue maker of mikanites;

      mica ringer;

      lacquer;

      winder of electrical insulating products;

      micanite and mikalex presser;

      impregnator of mica-plastic materials, working with aluminopromphosphate;

      mica cutter;

      repairman engaged in the repair and maintenance of crushing and grinding sections of mica, quartz and pegmatite;

      sorter of raw materials and products from mica, constantly busy sorting mica;

      mica thermist;

      stacker-packer engaged in packaging mica;

      electrician for the maintenance of electrical equipment, engaged in the maintenance of electrical equipment of crushing and grinding sections of mica, quartz, pegmatite.

      Employees:

      Employees providing control and management of the activities of a shift, a site in quarries and on mountain dumps, including:

      foreman (senior).

 **Chapter 59 Asbestos production**

      129. Employees engaged at works for at least 80% of working time:

      Workers:

      borehole driller;

      mine lighter;

      railcar operator;

      a forklift operator engaged in asbestos loading, manual loading of asbestos, and bulk loading of asbestos, and waste from processing plants;

      loader operator engaged in loading asbestos, manually loading asbestos and loading in bulk asbestos, by-products and waste from enrichment plants;

      loader operator, constantly engaged in quarries;

      dust unloader;

      screener;

      loader engaged in works with asbestos;

      crusher;

      hewer;

      laboratory assistant for physical and mechanical testings, engaged on control devices in workshops (sites) of enrichment;

      operator (stoker) of the boiler room;

      bulldozer operator engaged in the warehouses of dry ore processing plants;

      drilling rig operator;

      operator of ventilation and aspiration installations, engaged at aspiration installations;

      operator of ventilation and aspiration installations, engaged at semi-industrial installations of enrichment plants;

      straightening-tamping-finishing machine operator;

      operator of crushing-grinding-sorting mechanisms;

      compressor unit operator engaged in open pit mining and processing plants;

      conveyor operator engaged in processing plants;

      crane operator (craner) engaged in the premises of technological workshops of concentrating factories;

      moldboard plow operator;

      feeder operator;

      operator of the transporter

      elevator operator;

      broad gauge tracklayer operator;

      packing machine operator;

      traction unit operator and his assistant;

      hopper-proportioner operator;

      tamping machine operator;

      stacking machine operator;

      excavator operator engaged in the shipment and storage of by-products of asbestos ore enrichment and waste from processing plants;

      installer for the installation and dismantling of asbestos concentration equipment, engaged in the main workshops of asbestos concentration plants;

      track fitter;

      auxiliary worker engaged in concentrating workshops (sites);

      receiver of ore and asbestos;

      sampler engaged in the selection and processing of samples at processing plants;

      worker engaged in mountain dumps;

      adjuster of asbestos processing equipment;

      locksmith-repairman engaged in the repair of asbestos-concentrating equipment;

      lubrication operator engaged in lubricating equipment in concentrating workshops (sites);

      sorter;

      dryer;

      electric and gas welder engaged in the technological workshops of concentrating plants;

      electrician of all kinds, engaged in the technological workshops of concentrating plants;

      electrician-locksmith (locksmith) on duty and equipment repair.

      Employees:

      foreman (senior);

      mechanic of the technological workshop of concentrating plants.

 **Chapter 60 Asbestos-cement, asbestos-silite production and production of asbestos cardboard**

      130. Workers engaged for at least 80% of working time:

      mix muller operator;

      bunkering operator;

      waver of asbestos-cement sheets;

      groats rolling machine operator;

      primer of asbestos-cement and asbestos-silite products, engaged in works with the use of harmful substances of at least hazard class 3;

      asbestos proportioner;

      crane operator (craner), engaged in the supply of cement and asbestos;

      sheet-forming machine operator;

      pipe machine operator;

      mixer and agitator minder;

      presser of asbestos-cement products;

      carver of asbestos-cement and asbestos-silite products;

      paper, cardboard and pulp cutter;

      locksmith-repairman engaged in the main workshops (sections);

      sorter;

      dryer of asbestos-cement products;

      dryer;

      turner for the processing of asbestos-cement pipes and couplings;

      stacker-packer;

      grinder of asbestos-cement and asbestos-silite plates;

      stamper engaged in the production of asbestos cardboard;

      electrician (locksmith) on duty and equipment repair.

 **Chapter 61 Production of basalt fiber, mineral wool and products from them**

      131. Employees engaged in works for at least 80% of working time.

 **Chapter 62 Manufacture of clay bricks, tiles and ceramic blocks**

      132. Employees engaged at works for at least 80% of working time:

      bitumen worker;

      cupola worker;

      exhibitor;

      master (senior);

      adjuster of technological equipment;

      kiln operator of wall and binding materials, engaged in firing bricks in ring kilns, as well as in solid fuel tunnel kilns;

      equipment conveyor line operator;

      fiberization plant operator;

      loader;

      sorter (packer) of heat-insulating products;

      dryer of heat-insulating products;

      device operator of heat-insulating products, except for those engaged in the firmware of mats;

      membrane operator;

      stone casting molder;

      molder of heat-insulating products;

      charge product operator;

      charge maker.

 **Chapter 63 Production of lime (dolomite) and sand-lime brick**

      133. Workers engaged for at least 80% of working time:

      aspirator;

      lime unloader from kilns;

      lime crusher;

      loader-unloader of raw materials, fuel and wall products, engaged in loading and unloading furnaces;

      operator of screw pumps (fuller);

      lime miller;

      lime burner;

      lime sorter;

      lime transporter;

      nozzle operator engaged in lime kilns.

 **Chapter 64 Manufacture of reinforced concrete and concrete products**

      134. Workers engaged for d at least 80% of working time:

      reloader operator engaged in cement reloading;

      worker engaged in an underground gallery.

 **Chapter 65 Manufacture of products from pitch, bitumen and resins**

      135. Workers engaged for at least 80% of working time:

      operator at impregnating units;

      bitumen dehydration operator;

      bitumen oxidation operator;

      asphalt mass cooker;

      bitumen maker;

      boiler loader;

      boiler cleaner;

      tube furnace operator;

      turbomixer operator;

      sprinkling and cooling unit operator.

 **Chapter 66 Stone casting production**

      136. Employees engaged for in works for at least 80% of working time:

      Workers:

      car operator engaged in the transportation of rock mass in the technological process;

      casting technician;

      lime quencher;

      crusher;

      stone casting operator;

      sand mixer;

      stonemaker;

      inspector of stone products;

      vibroloading machine operator;

      refractory operator;

      boiler operator;

      operator of the control panel in the production of wall and binding materials for 2- and 3-chamber batchers;

      operator of drying equipment, drying installations stove-maker;

      preparation of solutions and masses;

      wall materials steamer;

      worker engaged in the liquid additives workshop;

      worker engaged in an underground gallery;

      worker engaged in the dismantling and removal of products at hot work sites;

      tunnel worker;

      stone casting molder;

      charge maker;

      proportioner-charge maker.

      Employees:

      foreman (senior) engaged in hot work areas;

      mechanic (senior) of the workshop.

 **Section 11. Pulp and paper and woodworking industries Chapter 67 Pulp and paper production**

      137. Production of cellulose and regeneration of sulfuric acid and alkali liquors:

      Workers engaged for at least 80% of working time:

      turpentine plant operator;

      tall installation operator;

      chemical wood pulp maker;

      pulp maker;

      liquor evaporator;

      cellulose diffuser;

      sulfate loader;

      mixing unit operator;

      cellulose washer;

      sulfur dioxide regenerator;

      rotary furnace tender.

      pulp washer;

      sulfuric acid regenerator;

      soda maker.

      138. Pulping, washing and bleaching of cellulose:

      Employees engaged for at works for at least 80% of working time:

      leading chemical engineer;

      electronic engineer of copier equipment;

      banknote workshop master;

      employees providing control and management of the banknote workshop.

      139. Manufacture of pulp, paper and cardboard:

      Employees engaged at works for at least 80% of working time:

      lime slaking operator;

      electrolysis operator;

      bunkering operator;

      rag maker;

      cotton maker;

      electroplating operator;

      wood-steaming boiler operator;

      pyrite crusher operator;

      glue boiler operator;

      color matcher;

      chemical analysis laboratory assistant engaged in the production of synthetic adhesive resins;

      operator of a paper-making (cardboard-making) machine (networker);

      pumping unit operator engaged in the production of synthetic adhesive resins;

      presspath operator (networker);

      reel-operator of paper-making (cardboard-making) machine;

      reel-operator of gluing and drying machine;

      reel-operator of machines for covering paper with polyethylene film;

      presspath reel operator;

      roving machine winder;

      boiler operator;

      treatment equipment operator;

      shaft manufacturing operator;

      bleacher;

      printer of the orel press;

      presser of a paper (cardboard) machine;

      pressman of the paper ( cardboard ) machine;

      cardboard and fiber presser;

      presser of the glue-drying machine;

      presspat presser;

      roving machine presser;

      saturator;

      dryer of paper, cardboard, fiber and products from them;

      dryer of a paper-making (cardboard-making) machine;

      dryer of the gluing-drying machine;

      dryer of long staple paper machine;

      presspat dryer;

      roving machine dryer;

      weaver of metal and synthetic nets;

      chlorine operator.

      140. Manufacture of parchment, bitumen paper, fiber and paper bags:

      Workers engaged for at least 80% of working time:

      evaporation operator;

      fiber leaching operator;

      operator for the preparation of chemical solutions;

      bitumen cooker;

      bitumen machine operator;

      parchment machine operator;

      pipe machine operator (pipemaker);

      fiber washer;

      parchment machine operator;

      cardboard and fiber coloring agent;

      fiber sawmill;

      parchment machine presser;

      impregnator of paper and paper products;

      diffuser unloader;

      parchment machine dryer;

      fibermaker.

      141. Paper processing (manufacture of technical and colored paper, wallpaper and typewriter ribbons):

      Workers engaged for at least 80% of working time:

      valve manufacturer;

      loader-unloader;

      patternmaker-cutter;

      glue-maker;

      gluer;

      gluer of paper, cardboard and products from them;

      colorist;

      paint compiler engaged with aniline dyes, ammonia and chromium salts;

      colour grinder;

      paper dyeing machine operator (dyer), working with aniline dyes, ammonia and chromium salts;

      operator of a gluing and drying machine (adhesive);

      graph paper printer;

      emulsion preparation operator;

      impregnator of paper and paper products;

      tape unwinder;

      paper sorter.

 **Chapter 68 Preparation of synthetic adhesives, resins and paints**

      142. Employees engaged for at least 80% of their working time in the preparation of synthetic adhesives, resins and paints.

 **Chapter 69 Preparation of vanillin from sulfite liquors**

      143. Workers engaged for at least 80% of working time:

      vanillin bisulfitization operator;

      dosing operator;

      oxidation operator;

      distillation operator;

      extraction operator.

 **Chapter 70 Hydrolysis and sulfite-alcohol production**

      144. Workers engaged for at least 80% of working time:

      operator of all kinds;

      boiling operator;

      acid operator;

      glue-maker;

      chemical analysis laboratory assistant engaged in the production of synthetic adhesive resins;

      mill operator engaged in lignin, furfural and distillation plants;

      pumping unit operator engaged in the production of synthetic adhesive resins;

      cellulose washer;

      worker engaged in lignin, furfural and distillation plants;

      a worker engaged in the cleaning of tanks from chemical products;

      reactor engineer;

      locksmith-repairman engaged in the production of synthetic adhesive resins;

      lining (acid-proofing) operator.

 **Chapter 71 Wood chemical production**

      145. Workers engaged for at least 80% of the working time in the production of formalin:

      boiling unit operator;

      dehydrogenation operator;

      pouring sorter.

      146. Workers engaged for at least 80% of the working time in the production of methanol:

      distillation operator;

      operator for the preparation of raw materials and the release of semi-finished products and products.

      147. Workers engaged for at least 80% of the working time in the production of camphor.

      148. Employees engaged for at least 80% of the working time in the production of calcium acetate powder, acetates, carburizer and tar-dispersing production:

      operator of all kinds;

      gas generator;

      craftsman engaged in pulping and bleaching of pulp, camphor, formalin, methanol, acetates, vinegar production and regeneration of sulfuric acid and liquors.

      cleaner.

 **Chapter 72 Woodworking production**

      149. Workers engaged for at least 80% of their working time in the production of plywood on hydraulic presses using synthetic adhesives containing phenol, formalin, urea and their derivatives:

      bakelite film production operator;

      valve hydraulic press operator;

      forming machine operator;

      veneer impregnator;

      collector;

      dryer.

      150. Workers engaged for at least 80% of their working time in other woodworking jobs:

      operator for impregnating facing materials, engaged in the production of decorative films;

      galvanotypist, engaged in the manufacture of gravure printing cylinders;

      finisher of wood products, working with the use of paints and varnishes containing harmful substances of at least hazard class 3;

      pressing operator of wood and fire boards, engaged in hot pressing of wood chipboards with the use of harmful substances of at least hazard class 3;

      etcher.

 **Section 12. Production of medicines, medical and biological preparations and materials Chapter 73. Chemical-pharmaceutical and pharmaceutical production**

      151. Employees engaged for at least 80% of their working time in the production of medicines and intermediates belonging to the groups of adamantane, acridine, barbituric acid, benzene, benzoxazine, hydrazine, halogenated compounds, diazepine, imidazole, indole, coumarin, organometallic compounds, morpholine, naphthalene, piperazine, piperidine, pyrazine, pyrazolone, pyridazine, pyridine, pyrimidine, pyrrolidine, pteridine, purine, sydnon, sulfur compounds, steroids, sulfonamides, sulfones, thiadiazine, phenol, phenothiazine, furan, quinazoline, quinoline, quinoxaline, quinone, quinuclidine, cyanide compounds.

      152. Employees engaged for at least 80% of their working time in the production of heterocyclic five-membered compounds with two or more heteroatoms, spiro compounds, organic compounds of sulfur, phosphorus and arsenic, acetoacetic and diethyl ethers, unsaturated hydrocarbons.

      153. Employees engaged for at least 80% of their working time in the production of alkaloids and glycosides, which are potent substances, prostaglandins, antitumor antibiotics and preparations, synthetic hormones.

      154. Employees engaged for at least 80% of their working time at works with the use or production of: azo- and azo-compounds, hydrazine, dimethyl sulfate, isocyanates, halides and their organic compounds, nitro-, nitroso- and amino products, cyanide salts and cyan-containing compounds, carbon disulfide, phosgene, ethylene oxide, azides and nitrites, thionyl chloride, oxy- and sulfochlorides of phosphorus; lead, mercury, manganese, nickel, cadmium and their compounds, diethyl ether:

      operator of all kinds;

      proportioner of medicines;

      capillary;

      ampoule filler;

      biosynthetic therapeutic drug manufacturing operator;

      locksmith-repairman engaged in the repair, prevention and maintenance of technological equipment in the industries listed in this subsection;

      sterilizer of materials and preparations;

      electrician for the repair and maintenance of electrical equipment engaged in the repair, prevention and maintenance of technological equipment in the industries listed in this subsection.

 **Chapter 74 Production of human immunodeficiency virus and hepatitis B diagnostic kits, as well as bacterial and viral preparations using pathogenic microorganisms and poisons of biological origin belonging to pathogenicity groups I-II**

      155. Workers engaged in boxes and box rooms for at least 80% of the working time.

 **Chapter 75 Production of vitamin B12, sodium benzoate, hydroperite, calcium sulfate, urodan, calcium chloride, terpinhydrate, validol, collargol, nitrous oxide, Dorogov antiseptic stimulator, tanalbin, mustard plasters, adhesive plasters, glutamic acid, ethyl acetate, hexachlorane emulsions, bacterial preparations, packaging of muscle-adenyl preparations, ointments and emulsions containing volatile, potent fillers, peloidin, barium hydroxide, production of preparations associated with the use of harmful organic solvents below hazard class 3, production of finished medicinal products (forms)**

      156. Workers engaged at works for at least 80% of the working time in the technological process of these industries:

      operators of all kinds;

      roller;

      spreader.

 **Chapter 76 Production of antibiotics and medical products obtained by microbiological synthesis**

      157. Workers engaged at works for at least 80% of the working time in the technological process of these industries:

      operators of all kinds;

      preparator for the production of biosynthetic medicinal products;

      reviewer of medical products, engaged in the production of finished products of antibiotics.

 **Chapter 77 Production of non-medical products and preparations obtained by microbiological synthesis in workshops, departments, sites and individual installations in the presence of hazardous substances in the air of the working area of at least hazard class 3**

      158. Workers engaged for at least 80% of the working time in the technological process of the specified production.

 **Chapter 78 Production of suture material from animal raw materials**

      159. Workers engaged at works for at least 80% of the working time in the technological process of the specified production:

      operator for the preparation of chemical solutions;

      layer of surgical suture material;

      catgut manufacturer;

      winder of materials and semi-finished products;

      fixing operator;

      grinder of medical devices.

 **Chapter 79 Production of veterinary biological, chemical-pharmaceutical preparations and biological plant protection products obtained at bio-enterprises, in production laboratories, workshops, departments, sites and individual installations when working with microorganisms of 1-3 pathogenicity groups and harmful substances of at least hazard class 3**

      160. Employees engaged at works for at least 80% of the working time in the technological process of these industries:

      Workers:

      operators of all kinds;

      bacteriologist, including workshop laboratories;

      biochemist;

      granulator;

      proportioner of medicines;

      dragger;

      tablet coating machine operator;

      ampoule sealer;

      capillary operator;

      inspector of medical products, including the technical control department (at interoperational control);

      laboratory assistant of all types, including workshop laboratories;

      tablet unit operator;

      washer of dishes and ampoules (chrome mixture, acid and alkali);

      ampoule filler;

      auxiliary worker;

      preparator for the production of biosynthetic medicinal products;

      sifter;

      workers engaged in the processing, disposal of solid, liquid, gaseous waste, cleaning containers, chemical equipment, washing, processing containers from hazardous chemicals, neutralization, industrial wastewater treatment, degassing, neutralization of harmful vapors and gases; lining and thermal insulation, rubberizing of closed containers;

      worker engaged in the boxes;

      pourer of sterile solutions;

      cutter of ampoules and tubes;

      drainer-bottler (acids and alkalis);

      sterilizer of materials and preparations;

      transporter;

      stacker-packer engaged in capping;

      stacker-packer engaged in the packaging of open preparations;

      molder of medical preparations, semi-finished products and products.

      Employees:

      Employees providing control and management of activities (departments, sections, workshops), shifts, installations (drilling, gasoline, oxygen, enrichment, regeneration, etc.), including:

      master (senior);

      mechanic;

      microbiologist (senior);

      technologist;

      pharmacologist, including workshop laboratories;

      chemist engaged in production and workshop laboratories.

 **Section 13 Health, social welfare and cultural institutions**

      161. Employees engaged for at least 80% of their working time in healthcare, social welfare and cultural institutions:

      ballet dancer;

      doctors, medical (middle and junior) personnel in departments and chemotherapy rooms of oncological organizations (subdivisions);

      medical workers directly serving patients in anti-tuberculosis organizations (departments, offices), leper colonies;

      medical workers of pathoanatomical bureaus and departments;

      employees of healthcare organizations who constantly and directly work with radioactive substances;

      medical workers working in departments (offices) of radiation diagnostics and therapy;

      employees of organizations working with microorganisms of 1-3 pathogenicity groups.

 **Section 14 Transport Chapter 80 Railway transport**

      162. Employees engaged for at least 80% of the working time:

      Workers:

      operator for the preparation of chemical solutions;

      bandagist;

      foreman (released) for the current maintenance and repair of tracks and artificial structures, employed on sections of mainline railway networks with heavy train traffic;

      foreman (released) of railway transport enterprises, employed at washing and steaming stations (trains, points);

      lead- tin alloy pouring operator;

      operator (assistant) of a diesel train;

      locomotive operator (assistant);

      operator (assistant) of an electric locomotive;

      operator (assistant) of an electric train;

      track fitter engaged in the current maintenance, repair of the track and artificial structures on sections of the main railway networks;

      wagon inspector employed at the points of technical maintenance of wagons of stations of out-of-class, first and second classes of main railway networks;

      inspector-repairer of wagons engaged at the points of technical maintenance of wagons of stations of out-of-class, first and second classes of main railway networks;

      cargo and baggage acceptance officer employed at loading and unloading points for sour oil and caustic substances;

      washer-steamer of tanks, engaged in the processing of tanks from oil products and chemical products;

      wagon speed controller;

      repairman of artificial structures, engaged in areas with heavy traffic of trains of the main railway networks;

      rolling stock repairman engaged in the repair of tanks from oil products and chemical products;

      rolling stock repairman who repairs, refuels and changes tank valves;

      train compiler;

      electrician of the contact network, engaged on the main railway networks.

      Employees:

      train dispatcher;

      duty officer at the railway station of out-of-class and first class, engaged in the reception, departure and passage of trains on sections of the main railway networks with heavy train traffic;

      master of the washing and steaming station (train, point).

 **Chapter 81 Marine and river fleet**

      163. Employees who are part of the ship personnel and engaged for at least 80% of the working time:

      engine crew of service-auxiliary fleet vessels and port fleet vessels permanently operating in the port water area (except for service-roaming, suburban and intra-city traffic):

      stoker of a vessel running on liquid fuel;

      operator of all titles;

      mechanic (chief, senior), (assistant);

      machinist of all titles;

      Employees:

      electrician (senior), his assistant.

      164. Workers included in the coastal staff and engaged at works for at least 80% of the working time:

      mine lighter;

      painter engaged in painting and scraping ships at the docks;

      bilge motorist.

 **Chapter 82 Civil aviation**

      165. Employees (dispatcher, instructor, senior dispatcher, flight manager) who directly control air traffic in the areas of airports, air hubs in airfield control towers, auxiliary centers and their sectors, local dispatching centers with the highest intensity or complexity of traffic, employed at least 80% working time.

      166. Members of flight crews of civil aircraft (flight engineer, flight operator, flight radio operator, flight attendant, flight attendant instructor, pilot, navigator) subject to at least 500 flight hours per year.

 **Section 15. Production of hardware Chapter 83 Production of wire and calibrated metal**

      167. Employees engaged at works for at least 80% of working time:

      operator of all kinds, engaged in the production of iron sulfate;

      foreman at the main production sites, engaged in drawing;

      wire drawer;

      wire drawer engaged in drawing gauge metal;

      abrasive tester;

      annealer;

      master (senior);

      crane operator (craner), engaged in etching, heat treatment and drawing;

      rope winding operator;

      metal washer dryer;

      wire and cable winder;

      welder on contact (press) welding machines;

      locksmith-repairman engaged in hot work areas and in areas with harmful working conditions;

      grinder engaged in in abrasive grinding by a dry method.

 **Chapter 84 Production of heavy-coated and high-quality electrodes and fluxes for welding**

      168. Employees engaged at works for at least 80% of working time:

      briquetting machine operator;

      coating component crusher operator;

      master (senior);

      squeezing press operator;

      calcination operator on furnaces;

      silicate block welder;

      locksmith-repairman engaged in hot work areas;

      electrode sorter;

      coating compiler;

      dryer of coating components and fluxes;

      electrode dryer;

      fluxer;

      electrode operator;

      electrician for the repair and maintenance of electrical equipment, engaged in hot work areas.

 **Section 16. Light industry Chapter 85 Textile industry**

      169. Workers engaged at works for at least 80% of working time:

      dressing operator;

      caustication operator;

      mercerization operator;

      padding operator (when working on black aniline dyes);

      impregnation operator;

      fabric heat treatment operator;

      operator of chlorination and stanning;

      dressing cook;

      shives rakeman;

      knitter of knitwear, linen, directly engaged in the manufacture of artificial fur;

      procurer of chemical solutions and paints;

      fabric steamer;

      steamer of woolen products;

      acidifier;

      dyer;

      washing machine operator, engaged in washing tubs, brushes, boxes and utensils used in the preparation of dyes;

      operator of pile equipment engaged in the finishing production of technical felts;

      operator of all types of carding equipment (unit, machine);

      needle-punched equipment operator;

      singeing equipment operator engaged in singeing yarn and fabric (except natural silk yarn);

      shearing equipment operator directly engaged in the finishing of artificial fur;

      an operator of carding and knitting equipment directly engaged in the manufacture of artificial fur;

      bleacher;

      decoder;

      pile finisher directly engaged in the finishing of artificial fur;

      polisher;

      assistant foreman, engaged in the maintenance and adjustment of bleaching equipment, maturing and steaming, dyeing, dyeing equipment, carbonization equipment and finishing production of technical cloths;

      technical cloth washer;

      worker engaged in the production of glued non-woven materials;

      worker engaged in chromium plating and copper plating of shafts;

      waste developer;

      fiber mixing unit operator;

      fuller;

      drying operator (refueling machine) engaged in dryers of printing machines;

      dryer engaged in the finishing production of technical cloths and in work in chamber dryers;

      shaft etcher;

      stacker-selector of wet goods and yarn manually;

      knitwear shaper, engaged in the formation of hosiery and gloves;

      cleaner-grinder of carding machines.

 **Chapter 86 Cotton and cotton production**

      170. Workers engaged at works for at least 80% of working time:

      fluff and waste raker;

      drum stripper (manually);

      worker engaged in loosening and scutching units and in the preparation of a mixture of raw materials in carbon monoxide spinning and in cotton factories in the production of clothing wool.

 **Chapter 87 Linen and hemp-jute production**

      171. Workers engaged at works for at least 80% of working time:

      tow raker;

      impregnation equipment operator;

      fiber finisher (linen production);

      foreman's assistant, engaged in the maintenance of carding equipment and hackling machines and in wet spinning;

      waste compactor;

      fiber preparer;

      preparation of the impregnating composition;

      spinner engaged in wet spinning;

      worker engaged in carding equipment and hackling machines;

      wet waste collector;

      weaver engaged in wet spinning.

 **Chapter 88 Wool production**

      172. Workers engaged at works for at least 80% of working time:

      carbonizer;

      operator of a loosening-scutching machine, engaged in scutching waste and unwashed wool.

 **Chapter 89 Silk and silk-winding production**

      173. Workers engaged at works for at least 80% of working time:

      cooker of chemical compositions for cooking waste;

      cocoon steamer;

      cocoon winder;

      circular machine operator;

      cocoon waste boiler;

      squeezer engaged in squeezing cocoon waste;

      raw material washer;

      developer of cocoon waste;

      raw materials developer;

      cutter of materials and products, engaged in cutting cocoons and their waste;

      waste dryer;

      raw material humidifier engaged in moistening cocoon waste.

 **Chapter 90 Primary treatment of unwashed and factory wool, bristles and hair**

      174. Worker engaged at works for at least 80% of working time:

      operator of water-chemical treatment;

      separation and flotation operator;

      conservator of leather and fur raw materials;

      operator of carding and metal machines;

      scourer;

      wool washer engaged in washing unwashed wool;

      washer of bristles and hair;

      scavenger working with unwashed wool;

      skins processor with a hair-cutting mixture;

      operator of a loosening and scutching machine;

      finished product and waste presser;

      waste breaker;

      wet waste collector;

      a sorter of products, semi-finished products and materials, engaged in the primary sorting of unwashed bristles and hair by type;

      unwashed wool sorter.

 **Chapter 91 Leather and fur production, primary processing of leather and fur raw materials**

      175. Employees engaged at works for at least 80% of working time:

      operator of water-chemical treatment;

      tapping operator;

      tanning operator (tannery and raw leather production);

      tanning operator (fur production);

      ashing operator;

      operator for softening leather semi-finished products and fur skins;

      degreasing operator;

      operator of deashing, softening;

      rollback operator;

      operator for the preparation of tanning extracts;

      varnish preparation operator;

      operator for the preparation of skin glue;

      operator for washing the skin, wool, bristles and hair;

      finisher;

      fur-bearing shred operator;

      liner of leather and fur raw materials and pelt;

      fat-liquoring operator;

      measuring instrument operator of leather and fur raw materials and materials (leather raw materials and raw materials of fur and fur coat sheepskin);

      furrier of saddlecloth and technical leather;

      colorist;

      conservator of leather and fur raw materials;

      inspector of fur raw materials and semi-finished products in the raw-dye production, employed in the shops (sections) for the preparation and primary processing of raw materials, raw materials, dyeing, formalin shops (sections);

      inspector of raw materials and semi-finished products, employed in the soaking-ash, tanning-dyeing-grease shops (sections);

      leather dyer;

      dyer of fur and sheepskin coats;

      leather varnisher;

      foreman of production sites, engaged in soaking-ash and raw materials, preparation and primary processing of raw materials, tanning-dyeing-greasing, formalin workshops (sites), in workshops (sites) of primary processing of leather and fur raw materials;

      twinning machine operator;

      crane operator (craner) engaged in the soaking-ash and tanning-dyeing-greasing workshops (sites);

      operator of squeezing equipment (leather production and primary processing of leather and fur raw materials);

      washing machine operator;

      winding machine operator;

      scourer;

      wool and shred washer;

      leather and fur raw material processor;

      fur skin processor;

      skins processor with a hair-cutting mixture;

      material trimmer engaged in manual cutting of a wet semi-finished product in the soaking-ash, tanning-dyeing-greasing and finishing workshops (sites);

      rite of raw materials;

      scorching equipment operator;

      sewage treatment plant operator engaged in the leather industry;

      finisher of fur skins, engaged in breaking up skins, finishing fur with ursol and aniline dyeing, and spreading fur skins with a luster solution;

      squeezer;

      carrier of raw materials, semi-finished products, chemical materials and production wastes in the soaking-ash, tanning-dyeing and greasing workshops (sites), in the workshops (sites) for the primary processing of leather and fur raw materials;

      carrier of raw materials, semi-finished products, chemical materials and production wastes in raw materials, tanning and dyeing and formalin workshops (sites), and in workshops (sites) for the preparation and primary processing of raw materials;

      fur skins and tailoring correction operator;

      leather presser;

      receiver of materials, semi-finished products and finished products, engaged in the receipt and delivery of leather and fur raw materials (with laying and shifting);

      worker engaged in the processing of fur with formalin and urotropine, as well as rubber with strong sulfuric acid in the shoe industry;

      leather breeder;

      cutter of leather raw materials;

      unpacker of raw materials (sheepskin);

      stretcher of leather and sheepskin on frames;

      comber of fur skins (ursol and aniline dyeing and undyed fur skins);

      mechanic-repairman engaged in soaking-ash, raw materials, preparation and primary processing of raw materials, tanning-dye-greasing and formalin shops (sites) and shops (sites) of primary processing of leather and fur raw materials, including those on duty;

      sorter of leather and fur raw materials;

      compiler of finishes, emulsions and varnishes;

      compiler of chemical solutions;

      plane operator leather and fur raw materials and semi-finished products;

      dryer of raw materials, semi-finished products and products, employed in hand-operated chamber dryers for drying leather, fur, bristles, wool and hair;

      thermo-dressing operator of fur skins, engaged in finishing skins after lustring and processing them with formalin and urotropine;

      a transporter engaged in the transportation of raw materials, semi-finished products, chemical materials and production wastes in the soaking-ash, raw materials, preparation and primary processing of raw materials, tanning-dye-greasing, formalin shops (sites), in shops (sites) for the primary processing of leather and fur raw materials;

      cleaner of industrial premises, engaged in soaking-ash, raw materials, preparation and primary processing of raw materials, tanning-dyeing-greasing, formalin workshops (sites), in workshops (sites) of primary processing of leather and fur raw materials;

      stacker-packer engaged in laying leather and fur raw materials;

      cleaner of fur skins with gasoline;

      cleaner engaged in cleaning tanks, launches, drums, septic tanks and sewers (including sewage treatment plants);

      grinder of products, semi-finished products and materials, engaged in polishing leather;

      epilator of fur skins.

 **Chapter 92 Production of synthetic tanning agents**

      176. Employees engaged at works for at least 80% of working time:

      operator of evaporators for obtaining a solid product;

      condensing unit operator;

      neutralizing unit operator;

      operator-sulphurizer;

      sulfitation operator;

      loader of chemical raw materials into apparatuses;

      acid preparing operator;

      master;

      melter of naphthalene and phenols;

      transporter;

 **Chapter 93. Production of chemical products and products from it for the light and textile industries**

      177. Workers engaged at works for at least 80% of working time:

      dosing operator;

      firing operator;

      polymerization operator;

      mixing operator;

      drying operator;

      colorist working with nitro and organic solvents;

      proportioner;

      colour grinder;

      employee engaged in the production of glued non-woven materials;

      employee engaged in the production of chemical protection means;

      employee engaged in the preparation of adhesives and rubber compounds in the shoe industry;

      shoe maker engaged in the assembly of shoes and the manufacture of component parts for them by hot vulcanization and molding from plastics;

      compiler of finishes, emulsions and varnishes;

      compiler of chemical solutions.

 **Chapter 94 Felting and felt production**

      178. Workers engaged at works for at least 80% of working time:

      steaming operator engaged in manual loading and unloading;

      fuller;

      manufacturer of the basis of felting and felt products, working with pre-compaction on hot felting machines;

      carbonizer;

      acidifying operator;

      dyer;

      shoe nozzle operator;

      operator of the washing equipment, busy filling the felt manually;

      operator of the loosening and scutching machine, engaged in the scutching of unwashed wool;

      finisher of felting and felt products, engaged in the removal of pile;

      skin mordant operator;

      worker engaged in the vulcanization of the bottom of felted shoes: a roller of rubber compounds; gluer of rubber, polymer parts and products; presser-vulcanizer;

      worker engaged in rolling, multi-roll and hot felting machines;

      spreader of felt products, engaged in manual work;

      repairman engaged in the repair and maintenance of hammer machines;

      fibers mixing operator;

      dryer engaged in drying in non-mechanized chambers and fire dryers;

      remover of shoes from blocks;

      cleaner-grinder of carding machines.

 **Chapter 95 Primary processing of secondary textile raw materials**

      179. Workers engaged at works for at least 80% of working time:

      operator of a loosening and scutching machine;

      presser of finished products and waste;

      raw materials developer;

      sorter of raw materials, materials and products, engaged in sorting secondary textile raw materials.

 **Section 17 General professions**

      180. Employees engaged at works for at least 80% of working time:

      battery assembler

      lime slaking operator;

      operator for the preparation of chemical reagents;

      operator of chemical water treatment stations;

      bakelite (impregnator) engaged in the impregnation of parts and products with compounds containing harmful substances of at least hazard class 3;

      rubber mix mill operator engaged in the manufacture and repair of soft tanks and at tire repair enterprises;

      diver and other professions of workers engaged in work under water;

      gas generator engaged at acetylene stations;

      gas cutter engaged at works inside reservoirs, tanks, tanks and compartments of ships;

      gas cutter engaged in plasma cutting;

      gas welder engaged at works inside reservoirs, tanks, cisterns and compartments of ships;

      lime suppressor;

      acetylene plant generator;

      hydrosandblaster;

      flaw detector for ultrasonic testing;

      pourer with compounds, working with the use of harmful substances of at least hazard class 3;

      insulator;

      coagulation agent operator;

      caisson worker of all kinds;

      stoker of technological furnaces, engaged in productions;

      blacksmith on hammers and presses;

      blacksmith - puncher;

      varnisher of electrical insulating products and materials engaged in works with varnishes containing harmful substances of at least hazard class 3;

      plastic casting technician;

      hot method tinning operator;

      painter engaged in works with the use of hazardous substances of at least hazard class 3;

      foreman (senior) for the repair of oil-filled equipment of the substation;

      operator (stoker) of the boiler room;

      operator of onshore pumping stations;

      compressor unit operator when working with hazardous substances of at least hazard class 3;

      boiler operator;

      washing machine operator;

      operator of the pumping station for pumping the working agent into the formation;

      steam turbine operator;

      engineer of technological compressors engaged in the maintenance of gas compressors (except for air compressors);

      refrigeration unit operator for soil freezing;

      refrigeration unit operator servicing ammonia refrigeration units;

      operator of the central thermal control panel for boilers;

      operator of the central thermal control panel for turbines;

      power unit operator;

      ash removal operator;

      operator-crawler for boiler equipment;

      operator-crawler for turbine equipment;

      coppersmith;

      metallizer;

      washer;

      mechanic of automated fuel supply;

      parts spreader engaged in the manufacture of soft tanks and at tire repair enterprises;

      balloon filler;

      lime burner;

      crawler of the route of hydrosol removal and ash dumps;

      refractory worker engaged in hot work areas;

      cutter of adamants into diamonds;

      operator of conveyor furnaces engaged in firing, enamel;

      settling tank operator;

      operator of sandblasting plants;

      operator of the chlorination plant;

      lead plating operator;

      solderer and tinker in a hot way, engaged in soldering and tinning products with solders containing lead, as well as solders containing harmful substances of hazard classes 1-2 or carcinogens;

      vinyl plastic brazing operator;

      lead brazing operator(lead solderer);

      presser for plastic products;

      presser-vulcanizer;

      impregnator of lumber and wood products, engaged in works with the use of harmful substances of at least hazard class 3;

      employee of the boiler and turbine shop;

      employee engaged in the production of devices and products containing mercury (directly at work with metallic mercury), as well as in the repair and maintenance of devices and apparatus at work with open metallic mercury;

      employee engaged in the internal cleaning of reservoirs, tanks, cisterns, compartments and tanks of ships and inside shot-blasting chambers when working in space suits or gas masks;

      employee employed in the processing of metal with abrasive wheels in a dry way;

      employee directly engaged in unloading, loading, forming and rolling coal and shale piles with a free silicon dioxide content of 5% or more;

      employee directly performing works with microorganisms of 1-2 hazard groups;

      employee (forensic doctor, nurse, laboratory assistant, orderly) directly engaged in the production of forensic examinations and research;

      employee directly engaged in works with microorganisms of the 1st group, against which effective means of prevention and treatment have not been developed;

      employee permanently engaged in sea trials of armored vehicles on the road;

      worker at dust-collecting installations, engaged in cleaning equipment from hot dust and its collection, release, loading and transportation;

      workers and a foreman directly engaged in the production of ceramic decals with materials containing lead;

      worker and employee who is constantly engaged in works with sources of ultrashort, ultrahigh-frequency, microwave radiation, the performance of which requires the mandatory use of personal protective equipment against these radiations;

      worker engaged in the internal cleaning of reservoirs, cistern tanks, ship tank compartments from oil products and chemicals;

      worker, foreman (senior) of the site engaged in the production of organosilicon compounds;

      worker directly engaged in the preparation and application of thermal insulation coatings to rockets and space objects (in the manufacture of mixtures, impregnation, molding and pressing of products);

      worker who is constantly engaged in the mechanical processing of products made of asbestos cement and asboselite;

      worker who is constantly engaged in the mechanical processing of fiberglass and fiberglass products;

      used oil regenerator;

      rubber products repairman engaged in vulcanization;

      assembler-riveter (riveter);

      celluloid spectacle frames gluer- dyeing operator;

      emergency repair fitter and foreman, constantly engaged in underground sewer networks;

      pourer-bottler engaged in draining and spilling harmful substances of at least hazard class 3;

      senior engineer of boiler equipment;

      senior operator of turbine equipment;

      sling operator;

      thermist;

      turner engaged in the processing of abrasive products in a dry way;

      etcher engaged in etching metal in solutions containing harmful substances of hazard classes 1-2 or carcinogens;

      cleaner of metal, castings, products and parts, engaged in cleaning metal, metal parts and products with dry quartz sand;

      electric and gas welder engaged in cutting and manual welding, on semi-automatic machines, as well as on automatic machines using fluxes containing harmful substances of at least hazard class 3;

      electrician for cable networks, constantly engaged in soldering lead-lined cables and cables with polyethylene and polyvinyl chloride sheaths;

      electrician for the repair and installation of cable lines, constantly engaged in soldering lead-lined cables and cables with polyethylene and polyvinyl chloride sheaths;

      electric welder on automatic and semi-automatic machines, engaged in welding in a carbon dioxide environment, at works using fluxes containing harmful substances of at least hazard class 3, as well as on semi-automatic machines;

      electric welder on automatic and semi-automatic machines, engaged on semi-automatic machines to work inside reservoirs, tanks, cisterns and compartments of ships;

      electric welder of manual welding;

      electrical fittere for the repair of electrical equipment of power plants (oil-filled substation equipment).

 © 2012. «Institute of legislation and legal information of the Republic of Kazakhstan» of the Ministry of Justice of the Republic of Kazakhstan