

**On approval of the Unified tariff and qualification reference book of jobs and professions of workers (issue 37)**

*Unofficial translation*

Order of the Minister of Labor and Social Protection of the Population of the Republic of Kazakhstan dated January 16, 2020 No. 13.  
Registered with the Ministry of Justice of the Republic of Kazakhstan on January 17, 2020 No. 19889

Unofficial translation

In accordance with subparagraph 16-1) of article 16 Labour code of the Republic of Kazakhstan dated November 23, 2015  
ORDER:

1. Approve the Unified tariff and qualification directory of workers' jobs and professions (issue 37) in accordance with the Appendix to this order.
2. The Department of Labour and Social partnership of the Ministry of Labour and Social protection of population of the Republic of Kazakhstan in the manner prescribed by law to provide:
  - 1) state registration of this order in the Ministry of justice of the Republic of Kazakhstan;
  - 2) placement of this order on the Internet resource of the Ministry of Labour and social protection of the population of the Republic of Kazakhstan after its official publication;
  - 3) within ten working days after the state registration of this order with the Ministry of justice of the Republic of Kazakhstan, submit to the Department of legal service of the Ministry of Labour and social protection of the population of the Republic of Kazakhstan information on the implementation of measures provided for in subclauses 1) and 2) of this paragraph.
3. To declare invalid the order of the Ministry of Labour and Social protection of population of the Republic of Kazakhstan of August 14, 2012, № 323-a-m "On approval of the Unified tariff and qualification directory of works and professions of workers (issue 37)" (registered in the Register of state registration of regulatory legal acts for No. 7893 published on 29 October 2012 in the Collection of acts of Central Executive and other Central state bodies of the Republic of Kazakhstan No. 22).
4. Control over the implementation of this order is entrusted to the Vice-Minister of Labour and social protection of the population of the Republic of Kazakhstan Sarbasova A. A.
5. This order shall be enforced upon the expiration of ten calendar days after the date of its first official publication.

Appendix  
to the order of the  
Ministry of Labour  
and Social protection  
of the population  
of the Republic of Kazakhstan  
dated January 16, 2020 No. 13

## **Unified tariff and qualification directory of workers' jobs and professions (issue 37)**

### **Chapter 1. Introduction**

1. The unified tariff and qualification directory of workers' jobs and professions (issue 37) (hereinafter – UTQD (issue 37) contains works on:

- timber rafting;
- logging operations;
- logging industry (General professions);
- subtraction of the forest;
- harvesting and processing of reeds.

2. UTQD (issue 37) was developed by the Ministry of Labour and social protection of the population of the Republic of Kazakhstan.

3. Tariff and qualification characteristics are applied when charging work and assigning qualification categories to workers in organizations, regardless of their form of ownership and organizational and legal forms, where there are productions and types of work specified in this UTQD (issue 37).

### **Chapter 2. Tariff and qualification characteristics of workers' professions by categories for wood-melting works**

#### **Paragraph 1. Winchman, 4th category**

4. Characteristic works:

- control of the winch when rafting wood on the water, onshore rafting, dumping on the water, unloading from the water and stacking, dismantling creases, forming rafts and loading and unloading operations;

maintenance and maintenance of the winch, motor and rope-block system;  
carrying out preventive and routine repairs of the winch and rope-block system;  
participation in the installation and dismantling of the winch and rope-block system, splicing of ropes and slings.

5. should know:

device, rules of technical operation and management of the winch when rafting wood on water, onshore rafting, dumping on water, unloading from water and stacking, analysis of creases, formation of rafts and loading and unloading operations;  
methods of moving and fixing the winch in the workplace;  
design of guide blocks;  
lifting capacity of ropes and blocks;  
methods for detecting malfunctions in the operation of the winch and rules for their elimination;  
methods of splicing ropes and slings.

## **Paragraph 2. Unloader, 3rd category**

6. Characteristic works:

preparation of wood for unloading from the water, hooking bundles, logs and whips during mechanized unloading;  
removal of bindings and flight kits;  
stacking wood or feeding it to transversal and longitudinal transporters;  
dumping wood from a wood Transporter into swimming pools or stacking it;  
unloading short wood, moving it and putting it in woodpiles;  
the rise of drift wood from the bottom of the river, laying it on the pontoon or on the shore of the stack manually using the;  
clearing ice from snow, knocking out and unloading wood on ice with stacking on gaskets and forming a stack;  
cutting gaskets and arranging the stack head.

7. should know:

device of unloading mechanisms, adaptations, tools used;  
working methods for unloading wood from water and lifting firewood;  
rules for stacking wood;  
forest sorting systems and state standards for them.

### **Paragraph 3. Riverhog, 3rd category**

#### **8. Characteristic works:**

dumping of wood from bank slopes and shallows, ensuring the passage of wood along the river;  
passing timber through dams and obstacles;  
implementation of river reclamation works and maintenance of reclamation structures during the period of wood melting;  
the service bills in the period of driftwood;  
raft maintenance, protection of timber and rigging, repair of sleepers and elimination of other malfunctions and breakdowns during the raft's movement, raft management on the way, mooring of the raft to the shore for Parking;  
stuffing and binding of purses;  
construction and installation of barriers in spans;  
brood rafts from Parking areas to the river mainline, teach and secure rafts at stops and install them at their final points;  
construction and repair of booms, sealed and support tiles of various structures and other floating structures up to two rows;  
production of Rey, shields, preparation of boat hooks;  
manufacturing, installation and fixing of small towns;  
install the spacers with the laying of the towns;  
the spreading (panelling) bridges;  
setting up ladders;  
installation of coastal supports for harbors and other structures;  
stacking and cleaning of slates, disassembly of stacks, installation and repair of gates of various designs;  
maid of groundsel, disassembly of the main corridor;  
towing of floating structures;  
cleaning of raft cars;  
setting up moth traps.

#### **9. should know:**

techniques and methods of driving rafts, manual and mechanized dumping of wood on the water, mole rafting;  
methods of installation and rearrangement of floating structures;  
measures to prevent and generate congestion;

purpose, arrangement of certain types of structures required for rafting;  
rules for work on strengthening the banks and slopes of rivers;  
the purpose of log jams and their types;  
types of booms, yards, and supports used in timber rafting;  
structures of coastal supports for harbors and other floating structures and methods of their manufacture;  
types of cable used for fixing floating structures and methods of working with it.

#### **Paragraph 4. Raftsman, 4th category**

10. Characteristic works:

elimination of accidents on the alloy manually and by mechanized means;  
manual and mechanized removal of congestion, creases and wadding in reception rooms, over exposure and General storage areas;  
control of the driving unit during self-melting and traction using lots, chains, anchors;  
construction and repair of sealed and support tiles, structural booms and other floating structures over two rows;  
production booms longitudinal and transverse log jam main corridor, sorting and forming meshes, offsets;  
production and sealing of rods to anchors, sealing of seam on anchors and irons;  
dropping and lifting anchors;  
installation of anchor locks on booms;  
laying of the bed on booms with fastening in locks;  
setting up cohesive machines;  
cleaning of booms, sorting and forming structures and ditches.

11. should know:

techniques for performing work manually and using mechanisms to eliminate or prevent accidents on the alloy;  
conditions for the formation of wads in log jam;  
design of wadding devices and their installation schemes in the riverbed;  
ways to deal with congestion, creases, and wads;  
rules of raft rafting in a floating pool, dimensions and design of rafts;  
installation of tiles for cross bunks, structural booms and other floating structures over two rows;  
schemes and methods of setting up and cleaning floating structures;

purpose of equipment and rigging on a raft;

methods of attachment with tackle and rope and methods of working with tane rigging (lots, anchors).

#### **Paragraph 5. Raft shaper, 2nd category**

12. Characteristic works:

beam separation from fusion machines;

sorting bundles by sorting elements;

beam bypass to raft formation sites;

pinning beams at the point of formation.

13. should know:

methods and techniques for moving bundles;

marking of timber products.

#### **Paragraph 6. Raft shaper, 3rd category**

14. Characteristics of works:

transportation and adjustment of rigging to raft formation areas;

bag boom stick feed;

drilling and joining the raiser with chains and wire to send him to the forest parking;

screen clutch;

reception of rafts with their installation at the points of unloading;

uncoupling and disassembly of rafts with removal of rigging.

15. Should know:

types of rigging used on the alloy and the rules for handling it;

rules of acceptance and methods of forming rafts.

#### **Paragraph 7. Raft shaper, 4th category**

16. Characteristics of works:

transfer and sorting of bundles and other units with their formation into rulers and Paragraphs under the rafting machines;

bypassing rulers and small Paragraphs to the place of raft formation;  
preparation of a raftsman, formation of rafts and leading units, formation of rafts in formation yards, installation of anchors, lots, cast-off of rafts and other works on the complete equipping of rafts;  
the device of stumps, backlogs;  
manufacture of upper equipment for rafts (racks, rocker arms);  
loading of wood into cuts, backlogs, cages, felt, bundles with rolling, lining and shaping them;  
interception of rafts during transfer, mooring at river mouths during mooring and raft rafting;  
reorganization and dismantling of rafts on transit routes of rafting and points of timber unloading.

17. Should know:

types and designs of rafts and driving units;  
technology of formation, reorganization and disbandment of rafts of various types;  
methods of work on their equipment;  
rules for sorting rafting units by assortment and wood species;  
organization of forming, re-forming and dismantling works;  
charging ray;  
rules for mooring rafts;  
technical conditions for the formation and equipment of rafts.

#### **Paragraph 8. Raft shaper, 5th category**

18. Characteristics of works:

formation of lake rafts and cigar rafts;  
device of leading units, queens, Zaitsev tiles;  
loading wood into cigars, tightening and training of lake rafts and cigar rafts.

19. Should know:

types and designs of lead units, lake rafts and cigar rafts;  
technology of forming rafts and methods of work on their equipment;  
types of equipment and rigging used;  
acceptable standards of its suitability.

**Paragraph 9. Water-based wood sorter, 2nd category**

20. Characteristics of works:

moving timber along the main sorting corridor, sorting yards, supply corridors, hydrolot and pool courtyards.

21. Should know:

ways and techniques of moving timber on water.

**Paragraph 10. Water-based wood sorter, 3rd category**

22. Characteristics of works:

feeding (fitting) wood to the sealed gates and passing through them;

sorting wood on sorting yards;

fitting and putting the beams into the corridor of the grinding machine;

milling of bundles with removal of wire or rope strapping;

water supply of wood to unloading mechanisms;

sorting of logs in the pool into two adjacent diameters when feeding into sawing.

23. Should know:

methods and techniques for moving timber;

timber assortments and state standards for them;

marking of timber;

the principle of operation of devices and tools for grinding;

rules for supplying timber to unloading mechanisms.

**Paragraph 11. Driver of the rafting (sorting) machine, 4th category**

24. Characteristics of works:

control of a rafting (sorting) machine when rafting (sorting) timber;

ensuring uninterrupted operation of the rafting (sorting) machine units, inspection, lubrication and preventive and current repairs;

preparation of defective statements for the overhaul of a rafting (sorting) machine.

25. Should know:

rules for sorting timber, bundles of bundles and technical conditions for them;  
device and rules for the technical operation of the rafting (sorting) machine, the procedure for replacing worn-out parts;  
types, properties, categories of fuel and lubricants.  
With participation in the average and overhaul of the rafting (sorting) machine - 5th category.

#### **Paragraph 12. Ravager , 3rd category**

26. Description of works:

for navigational rafting - brush set and alignment , signal supply, removal of finished beams during mechanized rafting of wood on water;

a raft of flat single and multi-row raft units, layering of raft units;

for coastal rafts - rolling wood from piles, a set of packs, grinding , holding with chokers, working with slings and a hauling rope.

27. Should know:

types and designs of rafting units;

rules for rafting timber on water and coastal rafting;

assortments of forest materials;

rules for bundling bundles and technical requirements for bundling material;

splitting norm validity and binding devices rigging and ropes, prisluzhnogo timber (props);

types and causes of marriage during rafting, measures to prevent and eliminate it.

#### **Paragraph 13. Raider , 4th category**

28. Description of works:

linkage of beams for mechanized rafting of wood on water and coastal rafting;

the device of stumps, backlogs;

preparation of strapping wire;

end alignment of beams with an end leveler .

29. Should know:

technology and devices for bundling strapping;

technical requirements for the strapping material.

### **Chapter 3. Tariff and qualification characteristics of workers' professions by category for logging work**

#### **Paragraph 1. Operator of the automated forest transporter , 4th category**

##### 30. Characteristics of works:

control of an automated sorting of a timber transporter when determining the purpose of round timber, distribution to logs when sorting timber by assortment;

monitoring the movement of timber along the sorting front and dumping by various dumping devices into specified logs ;

monitoring the operation of individual units, electrical and light and sound systems of an automated forest transporter ;

regulation and adjustment of the units of the automated forest transporter ;

participation in the repair and testing of an automated forest transporter .

##### 31. Should know:

basic information about tree species;

defects of wood;

technical requirements for harvested assortments, state standards and technical conditions for them;

methods of sorting round timber by species and categories;

device, principle of operation, rules for the technical operation of units and systems;

technical conditions for the regulation of the mechanisms of an automated timber transporter .

#### **Paragraph 2. The driver of the forestry machine, category 7**

##### 32. Characteristics of works:

control of logging machines of various systems when performing felling, picking and skidding trees in felling areas; clearing trees from branches and bucking logs at logging areas, loading points, upper and intermediate warehouses; uprooting, selection of stumps and resin in cutting areas;

regulation of mechanisms and equipment of forestry machines, identification and elimination of their malfunctions;

maintenance of forestry machines, trailed and hinged devices and participation in all types of their repair.

##### 33. Should know:

the design of forestry machines, trailed and mounted devices;

the principle of operation of the engine of a logging machine and the rules for its regulation;  
the device of electrical, pneumatic and hydraulic equipment of the logging machine;  
rational methods and technology for performing logging operations;  
rules of movement and transportation of goods in felling areas;  
main types of fuel and categories of fuels and lubricants;  
methods of detecting and eliminating malfunctions of mechanisms and equipment of forestry machines;  
technical conditions and state standards for technological chips, timber assortments.

34. Requires technical and vocational (secondary specialized, secondary vocational) education.

### **Paragraph 3. Logging machine operator, 8 category**

35. Description of works:

control of logging machines of various systems, equipped with an electronic control system, when performing a complex of operations: gripping, cutting, felling trees, delimbing, marking and crosscutting logs by varieties and assortments, taking into account the maximum output of business assortments;

the use of an automatic fire-fighting system, a cubature program for a measuring computer when performing logging operations;  
regulation of mechanisms and control systems of a logging machine;  
identification and elimination of malfunctions of mechanisms and equipment of forestry machines;  
maintenance of units, mechanisms and control systems of logging machines, participation in all types of their repair;  
refueling of mechanisms and equipment of logging machines with fuel and lubricants.

36. Should know:

design of units, mechanisms, equipment and control systems of forestry machines;  
the principle of operation of the engine of a logging machine and the rules for its regulation;  
fundamentals of electronics and electrical engineering;  
the device of pneumatic, hydraulic and electrical equipment of the logging machine;  
technical conditions for the regulation of units, mechanisms and control systems of forestry machines;  
rational ways of performing logging operations;  
technical requirements for harvested assortments, state standards and technical conditions for them;  
methods of rational cutting of tree-lengths into assortments;

traffic rules and traffic on felling areas;

main types of fuel and categories of fuels and lubricants.

37. Requires technical and vocational (secondary specialized, secondary vocational) education.

#### **Paragraph 4. Log splitter, 2nd category**

38. Characteristics of works:

splitting firewood and logs manually with an ax using wedges, a sledgehammer and other devices at all production sites, except for cutting areas, upper and lower warehouses;

sawing firewood with hand saws;

transportation, sorting and stacking of firewood;

sharpening and dressing of axes and hand saws.

39. Should know:

manual splitting and sawing techniques;

main tree species;

the size of firewood and the order of their laying;

rules for point and dressing ax and hand saws.

#### **Paragraph 5. Log splitter, 3rd category**

40. Description of works:

splitting of firewood, logs, blocks, balance and pitch on mechanical splitter of all types, sawing of wood on saws with a mechanical or electric drive;

starting, stopping, adjusting, current repair of a mechanical splitter and saws with a mechanical or electrical drive;

transportation, sorting and stacking of timber products.

41. Should know:

methods of mechanized splitting of firewood;

device, operating rules for mechanical cleavers and saws with a mechanical or electrical drive;

ways to lubricate their mechanisms;

state standards for forest products.

## **Paragraph 6. Lumberjack, 2nd category**

42. Characteristics of works:

clearing shrubs and clearing snow around trees before felling;  
clearing felling areas from felling residues after winter logging;  
collection into heaps and shafts, incineration of felling residues;  
collection of resin in the cutting area with cleaning from the ground;  
stacking the resin in heaps;  
hilling stumps after uprooting;  
collection and laying of brushwood on the roadway of the logging mustache;  
backfilling and leveling of holes from under stumps when harvesting pneumatic resin ;  
protection of the hazardous area during blasting operations.

43. Should know:

rules for cutting down shrubs, clearing snow around trees and collecting tar;  
blasting rules.

## **Paragraph 7. Lumberjack, 3rd category**

44. Description of works:

preparation of floatable props - vics , rums , purples , kokor and nokura , stakes for hoops;  
chopping of firewood at logging areas, upper and lower warehouses;  
hilling longitude and laying short, chopped assortments, firewood and other blanks in woodpiles;  
keeping the cutting tool in good condition, sharpening and straightening it.

45. Should know:

methods of procurement of floating props;  
rules for chopping and stacking firewood, short, chopped assortments in woodpiles, hilling longitude ;  
rules for sharpening and dressing a logging tool.

## **Paragraph 8. Lumberjack, 4th category**

46. Characteristics of works:

cutting stumps flush with the ground, harvesting brushwood and bushes using gasoline-powered saws;  
preparation of the workplace near the trees to be cut;  
assistance to the feller in the felling of trees in cases stipulated by the relevant safety and labor protection rules.

47. Should know:

rules for preparing a workplace when felling trees, harvesting brushwood;  
gasoline saw device;  
rules for its operation and sharpening of saw chains.

#### **Paragraph 9. Feller of timber, 2nd category**

48. Description of works:

loading planks, beams, sleepers, sleeper cuttings, bark, pine foot, pine needles and other timber on a trolley or conveyor;  
regulation of uniform supply and placement of timber on the conveyor;  
elimination of blockages and congestion;  
removal of foreign objects from the conveyor;  
moving wood and slab to cutting and laying sites;  
stowage of resin after bucking into woodpiles, semi-rigid slings with tie-downs or containers in cutting areas or lower warehouses;  
stacking of resin in piles after unloading in bulk with preparation and laying of gaskets, thrust stakes and risers;  
moving wood from woodworking machines, dropping (dumping) from forest transporters , carts and laying wood;  
inspection and cleaning of the timber transporter .

49. Should know:

the device of transportation means used in the processing and cutting of wood;  
assortments of wood and state standards for them;  
rules for stacking timber in warehouses;  
rules for laying stumps and tar in piles and woodpiles.

#### **Paragraph 10. Feller of timber, 3rd category**

50. Description of works:

performing preparatory operations during mechanized loading (laying in semi-rigid slings or containers, forming a pack, trailer of chokers or slings) of resin, wood chemical products, stumps, logging waste for technological chips, as well as logs, trees and round timber and other timber individually and in packs up to 10 cubic meters for linkages of narrow-gauge railways, timber trucks with dismantling trailers, transport vehicles for transporting logging waste, feeding conveyors for chippers , trolleys, sledges and other rolling stock of timber roads in the forest, in upper warehouses or loading yards and lower warehouses;

stowage and lashing of cargo on rolling stock;

movement of cargo to the place of loading;

preparation of racks, gaskets and their installation;

uncoupling of chokers, slings during mechanized unloading of wood, resin, stumps, wood chemical products, logging waste and other timber from the rolling stock of forest roads and stowage of cargo in a pile, woodpiles;

sorting pieces of resin into standard and non-standard ones, cleaning it from soil, rot, burning, stones with laying standard pieces in woodpiles;

unrolling of a stack and piecewise supply of round timber from piles and wagons to timber transporters , to debarking and sleeper cutting machines, sawmills (loading onto a carriage, turning and fixing the tulle in the machine, sawmill in the process of making sleepers and sawn timber);

moving wood to the place of its heating (open Paragrappal cooking basin);

manual transfer of timber along the transmitting timber transporters ;

supply of wood raw materials to the Paragrappal pool with sorting by size and category;

laying sleepers and sawn timber by type and category;

moving wood from woodworking machines, dropping (dumping) from forest transporters , carts and laying wood.

51. Should know:

rules for loading, unloading and stacking goods in stacks;

rules for supplying wood to production;

methods of loading, unloading timber;

rules for marking and branding of timber;

assortments of wood and state standards for them;

purpose and arrangement of devices, tools used for loading, unloading, stacking and supplying wood raw materials.

### **Paragraph 11. Feller-feller of timber, 4th category**

52. Characteristics of works:

pulling ropes, forming a bundle, slinging , fastening racks when loading tree- lengths and trees in large packs of 10 cubic meters on the couplings of narrow-gauge railways and timber trucks with a trailer-dismantling using a tractor or winch, creating interoperational and seasonal stocks of wood at loading points and warehouses ;

fastening racks;

uncoupling of slings when unloading timber;

pruning tops and branches from submerged whips or trees;

participation in the assembly and disassembly of loading facilities;

participation in laying a package of whips and trees on the rolling stock;

execution of work on the formation and rolling of a pile of wood;

slinging bundles during stacking with a winch.

53. Should know:

rules and techniques for loading large-sized logs and trees;

lifting capacity of ropes and blocks;

ways of cutting and splicing ropes;

loop device;

methods of fastening blocks and ropes;

fixing masts with guy wires;

rules for the formation, stacking and rolling of the stack.

### **Paragraph 12. Forest Carrier, 3rd category**

54. Characteristics of works:

removal from the forest by carts, sleighs, horse-drawn carts, along timber roads to loading and terminal points of timber, resin, wood chemical products, tar, stumps, carro equipment with their loading, linking (hitching), unloading (dumping), uncoupling and stacking in stacks or heaps;

repair of carts, sledges, carts and harnesses;

horse care.

55. Should know:

norms of load on a horse, carts, sleigh carts;

methods of loading, lashing and unloading cargo;

layouts of stacks in warehouses and rules for stacking timber in them;

horse care rules;

horse feeding rates and times;

basics of veterinary medicine.

### **Paragraph 13. Feller, 6th category**

56. Characteristics of works:

felling trees, harvesting brushwood, firewood and other assortments from small forests and shrubs using gasoline-powered saws of various types in accordance with the established state standards and specifications;

cutting down trees and stumps flush with the ground during preparatory work on the laying of skid trails, logging mustaches to felling areas, arrangement of logging points and upper timber warehouses;

execution of a set of works in felling areas with the help of gearless gasoline-powered saws on single felling of trees, branching, marking, crosscutting logs and hilling assortments;

maintenance and current repair of various types of gasoline-powered saws, hydraulic felling wedge and other auxiliary tools, replacement of saw chains, cleaning, lubrication and refueling;

with a single felling of trees - preparation of the workplace near the trees to be cut.

57. Should know:

device and operating rules for gasoline-powered saws of various types and hydraulic felling wedge;

rules and schemes for the organization of mechanized harvesting areas;

rules for selecting trees for felling;

technical requirements for the harvested assortments;

methods of rational cutting of tree-lengths into assortments;

rational methods of performing a complex of works on felling trees, pruning branches, marking and crosscutting logs, hilling assortments;

state standards and technical conditions for timber;  
point rules for saw chains and other cutting tools;  
rules for the preparation of workplaces in the cutting area.

#### **Clause 14. Timber stacker , 3rd category**

58. Characteristics of works:

haulage of logs from the place of crosscutting of logs, rolling them onto a trolley, chain, conveyor belt , elevator;  
transportation of logs to stacks, sorting them by categories and sizes, dumping logs from a trolley, forest transporter , hauling and stacking them;  
alignment of ends of logs (assortments) in a stack and a logger .

59. Should know:

assortments of round timber and state standards for them;  
conventional signs (brands) designating assortments.

#### **Paragraph 15. Timber stacker , 4th category**

60. Characteristics of works:

execution of work on the formation and rolling of a pile of wood;  
cutting gaskets and stacking head device;  
slinging bundles when rolling out a stack using a winch;  
stacking stumps and resin in bays and woodpiles;  
device slopes.

61. Should know:

rules for the formation, stacking and rolling of the stack;  
stack stability conditions;  
rules for laying stumps and tar in piles and woodpiles.

#### **Paragraph 16. Winchman for piling and loading timber, 4th category**

62. Characteristics of works:

control of the winch when piling , pulling bundles to the hydraulic chute and conveyor, when unloading wood from water, rolling wood into water and loading and unloading operations;

maintenance and repair of the winch;

splicing of ropes and slings;

participation in the installation and dismantling of the serviced equipment.

63. Should know:

the device and rules for controlling the winch when loading, unloading, stacking , unloading wood from water and rolling wood into water;

ways of moving and fastening the winch at the workplace;

the design and capacity of the ropes and guide blocks of the winch;

methods of detecting malfunctions in the operation of the serviced equipment and their elimination;

methods of splicing ropes and slings.

#### **Paragraph 17. Winchman on skidding forest, 5<sup>th</sup> category**

64. Description of works:

management, maintenance, maintenance, installation, dismantling, testing of various types of skidding winches driven by an electric motor or an internal combustion engine during skidding (transportation, descent from the mountains) from logging sites to upper warehouses, loading points for trees, logs and assortments;

regulation, start and stop of the skidding winch drive mechanisms, identification and elimination of their faults;

maintenance and current repair of skidding winches;

installation and dismantling of skidding winches and their testing;

keeping a log of the work performed.

65. Should know:

purpose, device, principle of operation, rules of movement and fastening, methods of troubleshooting, installation and dismantling of various types of skidding winches driven by an electric motor or an internal combustion engine;

scheme for the development of cutting areas.

#### **Paragraph 18. Winchman on the forest skid, 6th category**

66. Description of works:

management, maintenance, maintenance, installation and dismantling, testing of various types of aggregate winches driven by an electric motor or an internal combustion engine during skidding (transportation, descent from the mountains) from logging sites to upper warehouses, loading points for trees, logs, assortments, etc. loading them onto timber transport vehicles (couplings on narrow-gauge railways, cars with trailers and dismantling, sledges and others);

regulation, starting and stopping of drive mechanisms of aggregate winches, identification and elimination of their faults;

maintenance and current repair of aggregate winches;

assembly and disassembly of aggregate winches and their testing;

keeping a log of the work performed.

67. Should know:

purpose, device, principle of operation, rules of movement and fastening, methods of troubleshooting, installation and dismantling of aggregate winches of various types driven by an electric motor or an internal combustion engine;

scheme for the development of cutting areas.

#### **Paragraph 19. Toolman , 3rd category**

68. Characteristics of works:

sharpening, setting, jointing, straightening, trimming, notching and forming hand saw teeth;

manufacture, adjustment, assembly of bow saw frames;

saw soldering;

straightening, sharpening, repair of topostrugs (scrapers), debarking shovels.

69. Should know:

basic properties of metals and abrasive materials for the manufacture of hand-held logging tools;

device, operating rules of machines for sharpening and straightening logging tools.

#### **Paragraph 20. Toolman, 4th category**

70. Description of works:

sharpening, straightening and repair of saw chains;

sharpening, straightening, wiring, installation of saws of crosscutting units and installations;

repair, installation and adjustment of machines for sharpening saw chains and saws of crosscutting units and installations.

71. Should know:

rules for sharpening, straightening, straightening, routing saw chains and saws for crosscutting units and installations;  
the main properties of metals used for the manufacture of saw chains and saws of crosscutting units and installations;  
the device of machines for sharpening saw chains, saws and the rules for their installation.

**Paragraph 21. Sawyer, 3rd category**

72. Characteristics of works:

marking and longitudinal sawing of logs by hand into beams and boards;  
sharpening and straightening saws for longitudinal sawing of logs.

73. Should know:

rules for longitudinal sawing of logs;  
technical conditions for timber;  
rules for sharpening and straightening saws for longitudinal sawing of logs.

**Paragraph 22. Special assortment hack , 4th category**

74. Characteristics of works:

production of rifle and small-caliber blanks, saddle plates, barrel linings, special-purpose rims using adze and other tools;  
cutting and extrusion of artillery bar , pincer and ski blanks, oak jambs for the rim, export sleepers .

75. Should know:

special assortment manufacturing technology ;  
properties of wood species and wood defects;  
technical conditions for manufactured products.

**Paragraph 23. Delimbing Operator, 4th Category**

76. Description of works:

pulling a pack of trees and feeding it at an angle to the axis of the delimber;  
division of a pack of trees by a manipulator, piecewise feeding into a delimber;  
passing tree trunks through the installation;

regulation of the speed of pulling through and control of the cutting elements of the installation;  
control of the mechanism for pushing the cut branches into the tray;  
removal of branches from a pack of trees with a cutting device of a stationary delimber of a bunker type;  
maintenance in good condition and correct operation of the mechanisms and units of the delimbing plant;  
logging of the delimbing installation.

77. Should know:

the purpose and principle of operation of the mechanisms and units of the delimbing plant, its electrical circuit;  
the principle of blocking and electrical protection;  
fundamentals of hydraulics and electrical engineering.

When performing work on the regulation and adjustment of units and repair of units of the delimbing installation - 5th category.

#### **Paragraph 24. Branch cutter, 3rd category**

78. Characteristics of works:

manually chopping branches and tree tops with an ax;

felling of forest damaged during felling, undergrowth and undergrowth;

collecting in heaps and shafts of chopped off branches and tops, felled undergrowth and undergrowth, laying and burning them  
with simultaneous chopping off branches;

sharpening and dressing the ax.

79. Should know:

rules and techniques for branching;

rules for sharpening and dressing an ax;

technical conditions and state standards for timber;

techniques for the safe burning of branches.

#### **Paragraph 25. Branch cutter, 4th category**

80. Characteristics of works:

pruning of branches and tops of trees with gasoline and electric saws and delimiters;

cutting off damaged forest, undergrowth and undergrowth during felling;

collection in heaps and shafts of cut branches and tops of trees, undergrowth and undergrowth, laying on drags and burning them with simultaneous delimbing with chain saws and delimiters;

drawing up a fuel mixture and filling it with a gasoline saw and a delimeter;

maintenance of the equipment used in good condition and carrying out its current repair.

81. Should know:

the device of petrol and electric motor saws, loppers and the rules for their operation;

rules for maintaining the equipment used in good condition and carrying out its current repair;

technical conditions and state standards for timber;

techniques for the safe burning of branches.

#### **Paragraph 26. Brusher, 2nd category**

82. Characteristics of works:

removal of birch bark and bast, preparation of needles and coniferous legs from chopped off branches, sorting, packing into bundles, stacking bundles;

preparation of a rod and stakes (sticks) by hand, sorting them, bundling them into bundles, carrying and stacking them;

debarking a rod and stakes with a hand tool;

production of birch (bath) brooms and birch brooms;

production of reclamation fascines;

weaving shields and mats;

stacking timber products;

moss harvesting;

preparation of sorghum for the manufacture of brooms;

sharpening and dressing of hand tools.

83. Should know:

technical conditions and state standards for the procurement of birch bark, bast, pine needles, pine paws, twigs and stakes (sticks), brooms, brooms, fascines, shields, mats, moss;

methods for their preparation, processing, packaging and storage;

rules for using hand tools.

**Paragraph 27. Brusher, 3rd category**

84. Description of works:

removing bark from growing and felled trees;

collection, sorting, drying, stacking and pressing of bark into bales;

making a bast (soaking, separating the bast from the bark, drying, sorting and tying into bundles);

harvesting coniferous legs and needles from growing and fallen trees;

production of brooms from sorghum.

85. Should know:

technical conditions and state standards for harvesting bark, bast, pine paws and for making sorghum brooms;

ways and methods of harvesting, processing bark and bast.

**Paragraph 28. Brusher, 4th category**

86. Characteristics of works:

procurement (collection, sorting, drying, packaging and storage) of medicinal raw materials from shrubs and growing trees, medicinal herbs, fruits, berries, mushrooms.

87. Should know:

technical conditions and state standards, methods and methods of procurement, processing, packaging, storage of medicinal raw materials, medicinal herbs, fruits, berries, mushrooms.

**Paragraph 29. Spudder, 3rd category**

88. Description of works:

debarking of roundwood, sawnwood, bars, and lagging prolyska roundwood dookorka sleepers manual and mechanized debarking tool.

89. Should know:

rules for sharpening debarking tools;

requirements for the quality of timber debarking by state standards;

device and rules for the operation of a power tool.

### **Paragraph 30. Spudder, 4th category**

90. Characteristics of works:

debarking of round wood in short and long range in bunker, drum bark peeling plants and on disk machines;  
finishing of sleepers on sleeper straightening machines;  
supervision over the operation of serviced machines and installations, replacement of their working bodies;  
inspection of the equipment used with the elimination of breakdowns;  
Shift maintenance of installations and machines used for debarking round timber, participation in all types of their repair.

91. Should know:

purpose, device and principle of operation of the applied installations and machines;  
rules for removing and installing their working bodies;  
requirements for the quality of debarking round timber.

### **Paragraph 31. Spudder, 5th category**

92. Characteristics of works:

debarking of round timber in longitude and short length on rotary debarkers of various systems;  
return of timber for additional barking ;  
control of the rotary debarker during its operation;  
replacement of working bodies (knives, scraper , cutters) of debarking machines;  
regulation, adjustment, elimination of defects in the units of the rotary debarker;  
maintenance and participation in all types of repair of the rotary debarker.

93. Should know:

purpose, device and principle of operation of the rotary debarker;  
rules for regulating, checking and installing the working bodies of a rotary debarker;  
fundamentals of mechanics, electrical engineering and hydraulics;  
requirements for the quality of debarking round timber;  
operating mode of rotary debarkers.

### **Paragraph 32. Tilting saw operator, 5th category**

#### 94. Description of works:

marking and crosscutting of logs into assortments on crosscutting installations (except for multi-sawing machines), taking into account the maximum output of business assortments;

maintenance in good condition and proper operation of the mechanisms for unloading and feeding the logs, crosscutting units, sorting, trimming and dumping devices;

monitoring the operation of individual units, hydraulic, pneumatic and electrical systems of the crosscutting unit, as well as electrical and other systems for marking the logs;

participation in the repair of the crosscutting plant.

#### 95. Should know:

basic information about tree species, wood defects;

technical requirements for the harvested assortments, state standards and technical conditions for them;

ways of rational crosscutting of logs into assortments;

arrangement of mechanisms, units and systems of the crosscutting installation;

fundamentals of electro , mechanics, pneumatic , hydraulic and electric drives.

### **Paragraph 33. Tilting saw operator, 6th category**

#### 96. Characteristics of works:

division of a bundle of tree-lengths and their piece-by-piece supply to the feeding conveyor, marking and crosscutting of tree-lengths into assortments on cross-cutting multi-sawing installations, taking into account the maximum output of business assortments;

regulation and adjustment of the crosscutting unit units, elimination of defects identified during its adjustment;

participation in the repair and testing of the crosscutting machine.

#### 97. Should know:

basic information about tree species, wood defects;

technical requirements for harvested assortments, state standards and technical conditions for them;

ways of rational crosscutting of logs into assortments;

the design of the mechanisms, units and systems of the crosscutting plant;  
fundamentals of electrical engineering, mechanics, pneumatic , hydraulic and electric drive;  
technical conditions for the regulation of knots and assemblies of the crosscutting plant, their operational data;  
techniques for assembling and regulating the mechanisms of the crosscutting installation;  
measures to prevent deformation of parts.

**Paragraph 34. Bucker, 3rd category**

98. Characteristics of works:

cross-cutting (crosscutting) of longitude on short lengths after preliminary marking on circular saws, circular saws according to specified dimensions and assortments in accordance with state standards;  
monitoring the serviceability of the circular saw and replacing saws.

99. Should know:

technical conditions and state standards for timber;  
basic information about tree species;  
devices, principle of operation, rules of regulation and adjustment of the equipment used.

**Paragraph 35. Bucker, 4th category**

100. Characteristics of works:

crosscutting with electric or gasoline-powered saws or saws of other designs of whips and logs into round assortments in accordance with state standards, taking into account the maximum output of business assortments;  
butt trimming;  
marking and sawing of logs (logs) with electric saws, chainsaws and saws of other structures into blocks for the production of plywood, matches, coils, ski and stock blanks, balances, ore racks and other assortments in the log;  
cross - cutting of resin , spruce and oak stumps and logging waste with electric or gasoline-powered saws, marking and cross-cutting of pneumatic resin on slasher installations;  
sharpening, installation and replacement of saws and saw chains;  
drawing up a fuel mixture and refueling a petrol saw;  
maintenance in good condition and correct operation of saws, saw chains, working cable, maintenance of saws of various designs.

101. Should know:

defects and properties of wood;

technical requirements for the harvested assortments, state standards and technical conditions for them;

methods of rational cutting of tree-lengths into assortments;

rules for preparing a fuel mixture and refueling gasoline saws.

**Paragraph 36. Manipulator operator, 4th category**

102. Characteristics of works:

separation of a bundle of logs and their piece-by-piece supply to the supplying conveyor of the crosscutting machine using a hydraulic manipulator;

control over the uniformity of feeding the whips;

control, maintenance in good condition and correct operation of the hydraulic manipulator mechanisms;

monitoring the operation of the hydraulic system, electrical equipment of the braking device, the reliability of the fastening of the hydraulic manipulator units;

participation in the adjustment and repair of the hydraulic manipulator.

103. Should know:

principle of operation and rules of technical operation of mechanisms and systems of a hydraulic manipulator.

**Paragraph 37. Lay plan marker, 4th category**

104. Description of works:

marking of tree-lengths, taking into account the maximum output of business assortments and in accordance with the requirements of state standards for them;

participation in the crosscutting of large and most valuable logs.

105. Should know:

basic information about tree species, wood defects;

technical requirements for timber, state standards for them;

rules for rational cutting of whips.

### **Paragraph 38. Skidder and loading equipment installer, 4th category**

106. Characteristics of works:

installation of sorting tracks and arrangement of loading and cutting areas;

equipment for masts and other skidding, loading, unloading, sorting and rafting devices;

installation of a rope-block system for winch skidding, loading timber, unloading timber rolling stock, rafting and rolling out timber from water;

preparation and movement of ropes;

repair of blocks of skidding winches and pulley blocks.

107. Should know:

device and principle of operation of assembled units and devices of skidding and loading equipment, technical conditions for their installation;

the purpose of the used mounting and measuring tool;

rational methods of performing installation work;

ways of unwinding ropes from coils and drums;

lifting capacity of ropes and blocks of skidding winches.

### **Paragraph 39. Skidding and loading equipment installer, 5th category**

108. Characteristics of works:

installation of units and equipment for skidding and loading air-skidding installations, rope (cable) cranes, skidding, loading installations and equipment for sorting, stacking, rolling wood into water, rafting and rolling wood out of water;

checking the loading dock, loading facility, timber transporter;

installation of stationary winches;

installation of mobile winches and power plants;

fastening ropes, splicing ropes and slings;

pulling carrying ropes to the design size;

tensioning and fastening of cable guides of intermediate supports of the supporting cable of the masts of skidding and loading installations and winches.

109. Should know:

design features of assemblies and devices;

technical requirements for timber yards, loading and cutting areas, sorting tracks, fastening of ropes, installation of winches, installation of mobile power plants;

rules for testing, running in, starting, adjusting and comprehensive testing of the installed equipment.

#### **Paragraph 40. Skidder driver, 6th category**

110. Description of works:

control of skidders (tractors, tractors) of various systems, equipped with attachments or trailed equipment, when performing individual or complex operations for felling, packing, picking and skidding packages of trees, stumps, resin, wood chemical products in felling areas, pruning at logging sites and upper logging areas, uprooting and selection of stumps at logging areas, upper and intermediate logging areas, skidding roads with leveling and preparation of areas;

regulation, start and stop of mechanisms and equipment of skidders, identification and elimination of their malfunctions;

maintenance and participation in the repair of the skidder and the equipment used;

refueling the skidder with fuel and lubricant.

111. Should know:

device and design of skidders (tractors, tractors) of various systems, attachments and trailed equipment;

the principle of operation of engines of skidders and the rules for their regulation;

fundamentals of electrical engineering;

arrangement of pneumatic, hydraulic and electrical equipment of the skidder;

technical conditions for the regulation of nodes and mechanisms of skidders, their operational data;

ways of performing logging operations, traffic rules;

main types of fuel and categories of fuels and lubricants;

methods of identifying and eliminating malfunctions of skidders and equipment used.

#### **Paragraph 41. Skidder, 3rd category**

112. Characteristics of works:

skidding (transportation) of timber, stumps and pneumatic resin on horses to intermediate warehouses using various types of trailed equipment;

loading (bulk), hitching, unloading (dumping), uncoupling and stacking of wood during skidding;

current repair of skidding equipment and harnesses;

horse care.

113. Should know:

ways of performing work when skidding wood;

horse load norms;

types of skidding equipment;

timber assortments and their symbols (brands);

layouts of stacks in upper warehouses and rules for stacking wood in them;

horse care rules;

veterinary minimum.

#### **Paragraph 42. Skidder, 4th category**

114. Characteristics of works:

skidding (descent) of wood from the mountains along the earthen slope, portable trays, wooden log slopes and water trays;

manual clearing of the timber slope;

maintenance of timber slopes, trays in good condition and their current repair.

115. Should know:

methods of performing work on lowering timber from the mountains;

rules for the maintenance of forest slopes and measures to prevent accidents and downtime;

methods of current repair of forest slopes and trays.

#### **Paragraph 43. Choker , 4th category**

116. Characteristics of works:

feeding rope and chokers to whips, assortments, trees, stumps and pitch, putting on chokers on trees, whips, assortments, stumps and pitch, attaching them to a winch or tractor pulling rope;

cutting off branches and tops of trees that interfere with choker and collection of a pack of wood;  
uncoupling and removal of chokers from whips, trees and assortments;  
rope feed and hooks of whips, trees and assortments during their turn;  
participation in the assembly and dismantling of skidding and loading installations.

117. Should know:

methods and sequence of work when choking ;  
alarm system;  
lifting capacity of rope and blocks;  
methods of splicing ropes, chokers and slings;  
methods of fastening and moving the guide blocks of the winch.

#### **Paragraph 44. Deliver of export timber, 3rd category**

118. Characteristics of works:

delivery of loaded export timber to the command of foreign ships and execution of accompanying documentation in Russian and foreign languages;  
determination by appearance of the assortment of round, sawn and sheet timber, wood species, their purpose, quality (category) and standard sizes in accordance with the current state standards and specifications;  
completion of consignments of bill of lading and specification accounting of export timber when loading them on sea and river vessels in accordance with loading instructions and a plan for loading vessels with timber and parking areas for loading (cargo plan);  
checking the correctness of filling in the loading list.

119. Should know:

wood species and defects with specific characteristics for various assortments of round, sawn and sheet timber;  
classification, purpose and brands of timber;  
allowances, permissible deviations and limit sizes in assortments for various purposes;  
technical conditions for export timber of various assortments, for their marking, measurement technique, accounting;  
determination of the volume of timber and methods of packing them;  
rules for loading timber of various assortments on sea and river vessels;  
forms of accompanying documentation in the state and foreign languages.

## **Chapter 4. Tariff and qualification characteristics of general professions of workers by categories for work in logging production**

### **Paragraph 1. Locksmith for the repair of forestry equipment, 5th category**

#### 120. Characteristics of works:

maintenance, repair, dismantling, assembly, regulation, adjustment, testing: aggregates, assemblies, electrical and hydraulic equipment and engines of forestry and logging devices, instrumentation and special tools, machines for forestry and logging operations (tractors, forestry machines, winches, delimbing machines, loaders and cranes), chippers, mobile power plants, road construction machines, units on the coastal timber raft, stationary and mobile maintenance equipment, crosscutting and delimbing plants of various brands and other used machinery and equipment;

adjustment and regulation of the equipment used, electrical mechanisms, machine tools, sorting devices directly at production sites, during forestry work, logging, timber rafting, timber handling and forest tapping.

#### 121. Should know:

device and design features of forestry, logging and road-building machines, used devices, control and measuring and special tools;

rules for setting up and regulating serviced mechanisms, machines and equipment;

methods and modes of testing logging machines and equipment, ways to identify and eliminate their malfunctions;

installation of test stands, diagnostic equipment;

rules for scheduled maintenance and routine repair of forestry machines and equipment.

### **Paragraph 2. Locksmith for the repair of forestry equipment, 6th category**

#### 122. Characteristics of works:

maintenance, repair, dismantling, assembly, adjustment, regulation, testing of complex units and assemblies of machines for forestry, logging operations (tractors, forestry machines, winches, delimbing machines, loaders, cranes), chippers, stationary and mobile maintenance equipment, rafting units, crosscutting and delimbing installations of various brands and other logging equipment directly at production sites, during forestry operations, at logging, timber floating, timber handling and timber tapping;

maintenance and long-term storage of forestry machines, equipment, tractors and rafting units;

repair, assembly, restoration, regulation, comprehensive testing of forestry machines and equipment at landfills, commissioning in accordance with technical requirements;

diagnostics, repair and regulation of electrical equipment, units and assemblies, used machines;  
registration of acceptance documents.

123. Should know:

device, design features, kinematic and electrical diagrams of harvesting machines, technological and diagnostic equipment;  
methods for assessing the technical condition of logging machines and equipment, methods for restoring and strengthening worn parts;  
methods of diagnostics, maintenance and repair of logging machines and equipment, staging them for long-term storage.

### **Paragraph 3. Controller of logging and timber rafting**

124. Characteristics of works:

determination, in accordance with the current state standards and technical conditions, of the purpose, quality, category, size, quantity and volume of round, chopped, hewn and sawn timber, tar, logs, trees, sap, barras , resin, technological chips, wood waste, coal, bark, birch bark, bast, woody greenery, products of small wood chemistry and their marking;  
determination of the average volume of trees and whips;  
maintaining accounting records for the acceptance and delivery of timber and other products.

125. Should know:

basics of taxation and forestry;  
vices and wood species;  
current state standards and technical conditions for products of logging production and timber rafting;  
basic terms of delivery of timber and other products;  
requirements for export timber and assortments for special orders;  
rules for the use of control and measuring tools and tables for determining the volume of timber, trees and logs.

When performing work on the receipt and delivery of coal, bark, birch bark, bast, tree greenery, products of small wood chemistry  
- 3rd category.

When carrying out work on the acceptance and delivery of trees and whips, technological chips, resin, resin, barras , resin, chipped, hewn and sawn timber, wood waste, round timber obtained by cutting longitude into short lengths; acceptance and delivery of timber during their loading onto vehicles, sorting on timber rafting and unloading timber from water - 4th category.

When performing work on the acceptance and delivery of timber obtained by bucking logs - 5th category.

#### **Paragraph 4. Auxiliary worker in logging, timber rafting and tapping, 1st category**

126. Characteristics of works:

knitting of brooms and brooms, harvesting moss;

weaving mats;

cleaning of cutting areas and rafts from bark, scraps, debris and snow;

snow removal from stacks;

cleaning of waste when cutting round timber, tree stumps for resin , sleepers and other works;

waste collection in a designated place, stacking in heaps and incineration;

production of bags for packaging ammonite from kraft paper or paper bags, patronizing ammonite in bags;

alarm when descending the forest from the mountains;

execution of all kinds of simple auxiliary and preparatory work on timber rafting;

performance of other logging, timber floating works under the guidance of an auxiliary worker at logging, timber floating and tapping of timber of a higher qualification.

127. Should know:

methods of knitting brooms, brooms, harvesting moss, weaving mats, carrying out auxiliary work on timber rafting;

rules for cleaning waste generated during logging and timber floating works, cleaning stacks of snow;

technical conditions for the manufacture of bags for packing ammonite;

rules for cutting down bushes and cutting sights;

rules for using the working tool used.

#### **Paragraph 5. Auxiliary worker in logging, timber rafting and tapping, 2nd category**

128. Description of works:

loading, unloading, moving manually and on carts (trolleys) and stowage of goods requiring careful handling (bottles with liquid, flammable, poisonous and other substances) and pulverized materials (loose cement, ground lime, gypsum, pesticides), their transportation on wheelbarrows , as well as on carts and sleighs using horse traction;

manufacture and repair of carro equipment and wooden pegs;

transportation of carro equipment through the forest areas designated for tapping, removal at the end of work and delivery to storage points;

decoction karrooborudovaniya ;

refueling of a water-oil heater , preparation of firewood, heating water and oil for refueling and refueling of used machines in the cold season, maintenance of a water-oil heater at logging sites.

129. Should know:

methods of loading, unloading, moving and stowing cargo requiring careful handling and dusty materials;

procedure for issuing accompanying documents when accepting goods;

the order of cargo sorting;

technical conditions for the manufacture and repair of carro equipment .

#### **Paragraph 6. Tractor driver on the preparation of cutting areas, skidding and hauling of timber, 5th category**

130. Characteristics of works:

control of tractors, tractors and rafting units of various systems with an engine power of up to 73.5 kilowatts (100 horsepower ) during the preparation of cutting areas, during the transportation of all types of cargo (including special and other oversized cargo) at logging areas, logging points, upper, intermediate and lower warehouses, for hauling timber from cutting areas, upper and intermediate warehouses; loading and stacking timber (with butt alignment) and resin at timber loading points, upper and intermediate warehouses; on clearing felling areas from felling residues, branches and tree tops; on the clearing of routes for skidding trails, timber mustaches and areas for timber loading points, upper and intermediate warehouses; at the device of timber loading points and upper warehouses; on the coastal raft of timber and dumping of timber into the water;

control of mobile chippers and transport machines based on tractors of various systems, regardless of engine power, not equipped with waste loading mechanization means;

regulation, starting and stopping of used machines, mechanisms and equipment, identification and elimination of their malfunctions;

maintenance of tractors, tractors, chippers , rafting units;

participation in all types of repair of tractors, tractors, chippers , rafting units, their trailed and mounted devices.

131. Should know:

device and design of tractors, tractors, chippers , rafting units, their trailed and mounted devices;

device, principle of operation and rules for regulating engines, electrical, pneumatic and hydraulic equipment of tractors, tractors, chippers and rafting units;

the most rational ways to perform logging operations;

ways of uprooting stumps;

rules of movement and transportation of goods in felling areas;

main types of fuels and categories of lubricants;

methods of detecting and eliminating malfunctions of used forestry machines, mechanisms and equipment;

alarm system;

rules for installing knives on chippers ;

technical conditions and state standards for technological chips.

When operating tractors of the engine capacity over 73.5 kW (100 hp forces) in the preparation of felling sites, stump extraction for production of osmolarity on the felling and independently of engine power to the hauling trees (whips and assortments), stumps and pneumonia daubed with cutting areas, on a shuttle bus self-loading of logging waste; when controlling mobile chippers based on tractors of various systems, regardless of engine power, equipped with means of mechanization of loading waste, participating in choking tree- lengths and trees - 6th category.

### **Paragraph 7. Huntsman, 3rd category**

132. Characteristics of works:

protection of wild animals and forest plantations in a fixed bypass, wildlife sanctuary, hunting farm, production area from poaching ;

the implementation of the preparation of feed;

verification of documents for the right to hunting and fishing, tracking the movement of game in the lands, keeping feeding grounds in proper order, notices;

registration of wild animals;

checking documents for the right to harvest timber, graze livestock, hay and other types of collateral forest use;

control over the implementation of the established rules;

participation in work on extinguishing forest fires;

participation in the department of cutting areas, areas for haymaking, pasture and other types of use, indication in kind when carrying out forest management of borders, boundary marks, quarter clearings, viziers;

participation in the allotment and taxation of felling areas, survey of felling sites, harvested timber, forest plantations, for tapping, forestry work performed;

registration of hunters within the bounds of a fixed detour, a wildlife reserve, a hunting farm, a production site;

drawing up protocols for violators of the rules and timing of hunting and persons guilty of forest violations ;

taking measures to stop illegal logging, grazing and other illegal forest use;

ensuring the safety of bridges, fire towers, telephone networks, restrictive, forest management and forestry signs;

timely notification of the forestry about the detection of harmful insects, forest diseases, windblows, windbreaks, drying out of stands and other phenomena that can damage forestry while bypassing foci.

133. Should know:

the boundaries of the entrusted bypass, wildlife sanctuary, hunting farm, production site;

hunting rules, instructions, orders, orders for proper forest management and hunting management;

organization and technology of work on sowing and planting forests, caring for forest cultures, harvesting forest seeds and forest seed material;

fire safety rules in the forest and practical methods of extinguishing forest fires;

safety and labor protection rules during hunting;

agrotechnics and technology of work in forestry.

#### **Paragraph 8. Huntsman, 4th category**

134. Description of works:

protection of wild animals and forest plantations in a fixed bypass, wildlife sanctuary, hunting farm, production area from poaching ;

the implementation of the preparation of feed;

keeping a daily record in a phenological diary;

verification of documents for the right to hunting and fishing, tracking the movement of game in the lands, keeping feeding grounds in proper order, notices;

registration of wild animals;

verification of documents for the right to harvest timber, graze livestock, hay-making and other types of collateral forest use, monitor the implementation of established rules;  
participation in work on extinguishing forest fires;  
carrying out forestry and silvicultural works;  
participation in the department of cutting areas, areas for haymaking, pasture and other types of use, indication in kind when carrying out forest management of borders, boundary marks, quarter clearings, viziers;  
participation in the allotment and taxation of felling areas, survey of felling sites, harvested timber, forest plantations, for tapping, forestry work performed;  
registration of hunters within the bounds of a fixed detour, a wildlife reserve, a hunting farm, a production site;  
drawing up protocols for violators of the rules and timing of hunting and persons guilty of forest violations ;  
explanatory work among hunters and the local population on hunting legislation, forest conservation and protection;  
taking measures to stop illegal logging, grazing and other illegal forest use;  
ensuring the safety of bridges, fire towers, telephone networks, restrictive, forest management and forestry signs; timely notification of the forestry about the detection of harmful insects, forest diseases, windblows, windbreaks, drying out of stands and other phenomena that can damage forestry while bypassing the outbreaks.

135. Should know:

normative legal acts in the field of protection of reproduction and use of flora and fauna;  
the boundaries of the entrusted bypass, wildlife sanctuary, hunting farm, production site;  
hunting rules, instructions, orders, orders and other materials on proper forest management and hunting management;  
organization and technology of work on sowing and planting forests, caring for forest cultures, harvesting forest seeds and forest seed material;  
fire safety rules in the forest and practical methods of extinguishing forest fires;  
norms of responsibility for violation of forestry legislation;  
rules for training and driving hunting dogs;  
safety and labor protection rules during hunting;  
agrotechnics and technology of work in forestry.

**Paragraph 9. Huntsman, 5th category**

136. Description of works:

protection of wild animals and forest plantations in a fixed bypass, wildlife sanctuary, hunting farm, production area from poaching ;

- the implementation of the preparation of feed;
- carrying out the whole range of biotechnical measures;
- keeping a daily record in a phenological diary;
- verification of documents for the right to hunting and fishing, tracking the movement of game in the lands, keeping feeding grounds in proper order, notices;
- registration of wild animals;
- verification of documents for the right to harvest timber, graze livestock, hay and other types of collateral forest uses,
- control over the implementation of established rules;
- leadership and participation in work on extinguishing forest fires;
- carrying out forestry and silvicultural works;
- participation in the department of cutting areas, areas for haymaking, pasture and other types of use, indication in kind when carrying out forest management of borders, boundary marks, quarter glades, viziers;
- participation in the allotment and taxation of felling areas, survey of felling sites, harvested timber, forest plantations, for tapping, forestry work performed;
- registration of hunters within the bounds of a fixed detour, a wildlife reserve, a hunting farm, a production site;
- drawing up protocols for violators of the rules and timing of hunting and persons guilty of forest violations ;
- explanatory work among hunters and the local population on hunting legislation, forest conservation and protection;
- taking measures to stop illegal logging, cattle grazing and other illegal forest uses;
- ensuring the safety of bridges, fire towers, telephone networks, restrictive, forest management and forestry signs;
- control over the sanitary state of the bypass and timely notification of the forestry about detection of harmful insects, forest diseases, windblow, windbreak, drying out of forest stands and other phenomena that can damage forestry while bypassing foci.

137. Should know:

- normative legal acts in the field of protection of reproduction and use of flora and fauna;
- the boundaries of the entrusted bypass, wildlife sanctuary, hunting farm, production site;
- hunting rules;

instructions, orders, orders and other guidance materials on proper forest management and hunting management;  
organization and technology of work on sowing and planting forests, caring for forest cultures, harvesting forest seeds and forest seed material;  
technical conditions and state standards for the procurement of seeds, food products, medicinal plants and technical raw materials, tree greenery;  
fire safety rules in the forest and practical methods of extinguishing forest fires;  
norms of responsibility for violation of forestry legislation;  
rules for training and driving hunting dogs, safety and labor protection during hunting;  
agrotechnics and technology of work in forestry.

#### **Paragraph 10. Crane operator**

138. Characteristics of works:

control of loading machines or cranes of all types, self-propelled loaders of various systems, mounted on the basis of tractors, when pulling , loading onto timber transport, unloading timber, wood chemical products, stumps and resin from the timber rolling stock, piling wood in warehouses with direct participation in the implementation of technological the logging process;  
regulation of lifting mechanisms and loading devices;  
checking the reliability of ropes, blocks, chokers, lifting mechanisms and devices;  
participation in all types of maintenance and repair of used mechanisms and machines;  
identification and elimination of malfunctions of the serviced lifting mechanisms, machines and devices.

139. Should know:

device, design features, operating rules, purpose and principle of operation of loading machines, cranes of all types, self-propelled loaders of various systems;  
methods of regulating pumps, valves of used machines and mechanisms during operation;  
ways of performing work on transportation, loading, piling of wood;  
technical conditions for the operation of ropes;  
control schemes and ultimate loads of cranes and ropes;  
rules for loading cars, trailers, wagons, platforms;  
causes of malfunctions of serviced machines and mechanisms, ways to eliminate them.

When operating loading machines or cranes of all types with a lifting capacity of up to 2 tons - 4th category.

When managing:

loading machines or cranes of all types with a lifting capacity of over 2 to 5 tons;

tower stationary and gantry cranes with a lifting capacity of over 5 to 25 tons for piling , loading, reloading and transportation of timber cargo and other similar cargo using flexible slings and in packages at lower warehouses - 5th category.

When managing:

self-propelled loaders of various systems, mounted on the basis of tractors, loading machines and cranes of all types with a lifting capacity of over 5 to 7 tons;

tower stationary and gantry cranes with a lifting capacity of over 25 tons, equipped with various load-gripping devices;

when performing work on loading, unloading, stacking , reloading and transporting timber and other similar goods;

stationary tower cranes and gantry cranes with a lifting capacity of up to 5 tons, equipped with grabs, in lower warehouses, when piling , loading, unloading, reloading and transporting timber cargo;

cable cranes with a lifting capacity of over 10 tons when performing all types of work - 6th category.

When driving: self-propelled loaders of various systems, mounted on the basis of tractors, loading machines and cranes with a lifting capacity of more than 7 tons, tower stationary and gantry cranes with a lifting capacity of over 5 tons, equipped with grabs, in lower warehouses, during piling , loading, unloading, reloading and transportation of timber cargo - 7th category.

#### **Paragraph 11. Woodgrower, 2nd category**

140. Description of works:

preparatory and auxiliary work on planting forest crops, laying plantations, nurseries;

manual setting of seedlings after machine planting of the forest, monitoring the correct embedding of seedlings, manual watering of crops in nurseries;

selection and temporary digging of plowed (dug out) seedlings;

making wattle fence, mechanical protection from ready-made brushwood, stakes and other materials;

fencing of nurseries and plantations, making and laying crossings and bridges over the drainage (irrigation) network;

preparatory work for forest protection works;

cleaning of felling sites, harvesting of coniferous paws, sorting, cleaning and packing in packs;

preparation of raw materials from bast, bast, bast, production of brooms, brooms, products from matting.

141. Should know:

methods and methods of production of forest crops;  
the basics of forestry;  
joinery and carpentry work;  
agricultural techniques for planting seedlings and seedlings;  
rules and methods for preparing planting material for planting;  
standards for seedlings of tree and shrub species, requirements for planting quality;  
rules for digging in planting material;  
rules for cleaning forest felling sites;  
harvesting methods and standards for the preparation of a coniferous foot;  
rules for the procurement of raw materials;  
the technology of making matting products;  
advanced methods and rules of safety and labor protection when performing work;  
tools and rules for their use.

**Paragraph 12. Woodgrower, 3rd category**

142. Characteristics of works:

inspection and preparation of equestrian and hand-held implements, tools and necessary material;  
soil preparation for forest crops, nurseries, plantations;  
manual and horse-manual care of forest cultures, seedlings, seedlings;  
preparation of planting material;  
collection, processing and preparation for sowing seeds of tree and shrub species;  
digging, sorting, loading and unloading seedlings and seedlings;  
preparation of seed and planting material for winter storage;  
promoting natural regeneration (removal of ground cover and soil loosening);  
mineralization of the soil during preventive fire-fighting works;  
loading of aircraft with pesticides;  
accounting of the results of chemical pest and disease control;

survey of the soil for the population of entomofauna (digging trapping pits), setting up barrage and trapping ditches, laying glue rings on trees, oiling egg-laying, laying trapping trees;  
harvesting bark, ax wood, weaving baskets;  
collecting seeds by hand from shrubs and growing trees;  
collecting cones from growing coniferous trees;  
harvesting branches with fruits from felled trees;  
drying harvested branches under a canopy, beating or stripping fruits from branches, winding , sifting, drying and packing seeds, carrying them to the storage site;  
filling cones of conifers into drying chambers;  
heating furnaces of drying chambers;  
unloading the opened cones from the chamber, packing the seeds, handing over the seeds for storage;  
tedding seeds on shelves during storage;  
cleaning of pine dryers and storage facilities for seeds, whitewashing and disinfection.

143. Should know:

fundamentals of soil science (mechanical composition, structure, basic soil properties), forestry, forest seed business, forest commodity science, forest protection works;  
agricultural technology for soil cultivation and care for forest crops, seedlings, seedlings, tree species;  
terms of ripening and collection of seeds, the procedure for processing cones;  
rules for storing seeds, harvesting agricultural technology;  
rules for sorting, storage and standards for planting material, fruits, cones, acorns, seeds;  
temperature regime for drying cones;  
technical conditions and standards for timber;  
rules and methods for performing forestry work, caring for horses, using various tools, tools and devices;  
safety and labor protection rules when performing work.

### **Paragraph 13. Woodgrower, 4th category**

144. Characteristics of works:

checking and preparing for work trailed implements, tools and devices, caring for them during the work shift, preparing seed and planting material;  
planting seedlings, seedlings, cuttings, sowing seeds;  
mechanized care of forest crops, seedlings and seedlings;  
application of mineral fertilizers, laying and shaping tree crowns, preparation of material for grafting;  
forest protection works using pesticides: introduction of pesticides into the soil, preparation of solutions, emulsions, poisoned baits;  
spraying of seedlings, seedlings, natural young trees of trees, herbaceous vegetation;  
plowing seedlings, soil mineralization, promoting natural renewal and other work using horse plows and mechanisms;  
a set of works on the allotment of cutting areas and the production of forest management works, including with a motorized tool:  
laying test plots, recounting trees, measuring testes, cutting, cleaning and measuring sighting devices, quarter clearings and boundary lines, manufacturing and setting quarter, sighting and allotment posts, felling model trees;  
preparation of pits for soil and forest pathological surveys.

145. Should know:

fundamentals of forestry, forest management, soil science, reforestation, forest protection, forest exploitation and forest commodity science;  
agricultural technology for soil cultivation, planting seedlings, seedlings, cuttings, sowing seeds, caring for crops, planting and forest crops;  
ways and methods of planting formation;  
wood defects, pests and forest diseases;  
the device and rules for the operation of trailed and mounted tractor and horse machines and implements, motorized tools;  
safety and labor protection rules when performing work.

#### **Paragraph 14. Woodgrower, 5th category**

146. Characteristics of works:

preparation of tree planting machines, horse and hand tools and tools, technical care for them during the shift;  
a set of works on growing planting material with a closed root system, mechanized planting of seedlings and seedlings;  
grafting of cuttings, budding in fruit and tree schools and plantations;  
watering nurseries with sprinklers, motor pumps;

a complex of forest protection works using manual knapsack, horse and tractor sprayers, generator sets;  
extinguishing forest fires using motor pumps, tractor, horse and hand sprayers;  
a set of works on the allotment of cutting areas and forest management.

147. Should know:

the basics of forestry, reforestation, forest management, soil science, forest protection, forest exploitation and forest commodity science;  
methods, methods, technology for growing planting material, including those with a closed root system;  
rules for the preparation of substrates, methods and techniques for grafting coniferous and deciduous species, characteristics of pesticides;  
rules for the preparation of solutions, emulsions of pesticides, technology for forest protection works and methods for recording the results of chemical control ;  
methods and methods of fighting forest fires;  
felling technology;  
ways to care for the forest;  
methods for determining wood defects, diseases and forest pests;  
device, rules of operation and maintenance of trailed and mounted tractor machines and implements, stationary flow-mechanized lines for planting forests, protection from diseases and insect pests ;  
safety and labor protection rules in the course of work.

#### **Paragraph 15. Woodgrower, 6th category**

148. Characteristics of works:

preparation of motorized implements, tools and devices necessary for the performance of work, routine repairs and care for them during the work shift;  
caring for young animals with mechanized tools;  
preparation of pits with the help of hand-held motorized tools when laying forest fruit and berry plantations, growing and planting forest cultures with large-sized planting material;  
drilling holes for ammonal charges when creating fire strips using the explosive method;

chemical treatment of forest areas, forest crops, nurseries in order to combat unwanted vegetation, insect pests and forest diseases with the help of hand-held motorized tools.

149. Should know:

forestry, reforestation, soil science, mechanization of forestry work;

device, rules of technical operation and maintenance of motorized guns, aerosol generators based on a gasoline engine ;

basic requirements of agricultural technology and production technology;

advanced methods of performing forestry, silvicultural , forest protection and other works performed in forestry;

rules for the preparation of solutions, emulsions of pesticides;

methods of recording the results of chemical control;

consumption rates of fuels and lubricants, measures to save them;

safety and labor protection rules, industrial sanitation and fire protection during the operation of these mechanisms and the handling of fuels and lubricants, chemicals and explosives.

#### **Paragraph 16. Smokejumper, 6th category**

150. Characteristics of works:

extinguishing forest fires using hand tools and technical fire extinguishing means (fire extinguishers, motor pumps, gasoline-powered saws, explosives, fire retardants, chemicals);

ensuring constant readiness for work, serviceability and safety of the parachute, descent device, parachute and field equipment and technical fire extinguishing equipment assigned to the firefighter;

parachuting and descending using descenders from an airplane or helicopter to extinguish forest fires to unprepared sites;

providing radio communication with neighboring air fire groups, with the crew of the aircraft (helicopter), the air department ;

improvement of physical, theoretical and practical training, the implementation of training and experimental parachute jumps and descents using a descent device;

in the absence of forest fires during the fire hazardous season and in the off-season period - duty in the aviation department, performance of economic and construction works, repair of parachute and field equipment, technical fire extinguishing equipment;

participation in fire prevention activities, identifying the causes of forest fires and identifying those responsible for their occurrence

151. Should know:

methods and methods of fighting forest fires using hand tools, technical means of fire extinguishing and blasting operations;  
manuals and instructions regulating the work of a paratrooper (paratrooper) -firefighter of an air- fire group;

the material part, the rules for the operation, storage and repair of parachutes, launching devices, technical means of fire extinguishing and the rules of safety and labor protection when working with them;

rules for stowing and assembling cargo parachutes used in the aviation department ;

organization and technology of aviation security works.

152. Technical and vocational (secondary specialized, secondary vocational) education is required.

When supervising mobilized workers or workers of the operational group during extinguishing forest fires, economic and construction work, and so on, while ensuring control over their compliance with safety rules, as well as organizing work to introduce new equipment and technology in extinguishing forest fires - 7th category.

Note:

firefighters using descent devices from helicopters when descending into forest fires are called "Paratrooper Firefighter".

## **Chapter 5. Tariff and qualification characteristics of workers' professions by category for tapping wood**

### **Paragraph 1. Blaster in forestry, 4th category**

153. Characteristics of works:

preparation of pneumatic resin by fire and electric blasting methods;

receipt and delivery of explosives from the consumable warehouse to the workplace;

production of live cartridges and preparation of workings necessary for blasting operations when removing stumps;

checking the number and location of holes, their depth and direction;

determination of the required amount of charges and the suitability of explosives for use, charging blastholes when lifting stumps;

determination of the boundaries of the safe zone and the placement of cordon posts;

installation of an explosive network and checking its serviceability and resistance;

signaling;

bottomhole inspection and elimination of non-exploded charges;

crushing large stumps with external charges;

holding ispy and destruction of obsolete explosives;

accounting for the consumption of explosives and the delivery of residues to the warehouse.

154. Should know:

device and principle of operation of explosive machines and electrical measuring instruments;

the procedure for loading and blasting holes;

safety rules and methods of blasting operations;

properties of explosives and explosives;

consumption rates and methods of testing explosives;

basic methods of blasting operations;

connection diagrams for electric explosion ;

rules for storage, accounting and transportation of explosive materials;

methods and rules for eliminating failed charges;

the procedure for preparing and conducting blasting operations;

rules for receiving and carrying explosive materials;

methods of drilling holes and their location depending on geological and technical conditions.

## **Paragraph 2. Blaster in forestry, 5th category**

155. Characteristics of works:

preparation of pneumatic resin near power lines and hydraulic structures, in thickets and on rough terrain, during the construction of roads and paths in mountainous conditions by fire and electric blasting;

felling timber, clearing frozen wood out of ice, eliminating jams on timber floating, when performing work to eliminate the consequences of natural disasters: hurricanes, floods, forest fires and other works related to the protection of people and property;

blasting operations using the "contour" explosion method;

maintenance of the installation for recording the number and power of explosions;

definition of a seismically hazardous zone;

management of blasting operations with the rights of technical management of blasting operations.

156. Should know:

features and rules for the safe conduct of blasting operations near power lines and hydraulic structures, in thickets and in mountainous conditions, when clearing frozen wood from ice, clearing jams on timber floating, when performing work to eliminate the consequences of natural disasters;

methods for calculating the mass of charges for blasting operations.

### **Paragraph 3. Charcoal Burner, 2nd category**

157. Characteristics of works:

burning coal from wood in heaps;

preparation of currents;

device of lining , tires and barriers;

transportation of wood to the heap;

laying wood, lighting a fire;

replenishment of the heap with parsing and fixing the tire;

putting out a fire;

breaking a heap;

crushing large pieces of coal into pieces of standard sizes;

cleaning of loose coal, waste, garbage, wood chips, bark;

screening of coal waste on a screen;

knocking down carbon deposits in charcoal kilns;

cleaning the hearth of the furnace;

transfer of technological cars with coal from several quenchers to a special site.

158. Should know:

heap filling rules and coal burning process;

the principle of the screen;

tools and devices used in the performance of work and the rules for using them;

technical specifications for charcoal.

### **Paragraph 4. Charcoal Burner, 3rd category**

159. Characteristics of works:

burning coal from wood in charcoal kilns under the guidance of a charcoal burner of a higher qualification;

lighting up and extinguishing the oven;

quenching charcoal after receiving it in charcoal kilns;

shuroka furnace furnaces;

manual sorting of charcoal into fractions;

maintenance of charcoal kilns;

maintenance of serviced furnaces, tools and devices used in good condition;

packing and transportation of coal;

control over carbon content, ash content, moisture content of coal in appearance.

160. Should know:

the principle of operation of charcoal kilns and the rules for their operation;

charcoal oven process;

installation of extinguishers and other serviced equipment;

methods for extinguishing hot coal and sealing extinguishers ;

technical requirements for coal.

#### **Paragraph 5. Charcoal Burner, 4th category**

161. Description of works:

acceptance of raw materials;

preparation and maintenance of the process of burning coal from wood and tree roots in charcoal kilns, as well as raw coal from linden, alder, willow, buckthorn and hazel wood;

sorting of charcoal, raw coal into fractions on a sorting unit;

sampling for quality control;

control over the carbon content, ash content, coal moisture content based on the analysis results and appearance;

regulation of the operating mode of charcoal kilns, monitoring their serviceability and carrying out routine repairs;

packaging, labeling and transportation of charcoal.

162. Should know:

installation of charcoal kilns and sorting equipment;  
charcoal oven process;  
physical and chemical properties of charcoal and technical requirements for its quality;  
sampling methods;  
rules for marking charcoal.

**Paragraph 6. Apparatus operator of the wood chemical plant, 3rd category**

163. Characteristics of works:

conducting the process of thermal decomposition of resin, birch bark, technological raw materials, shuraing the furnace in apparatus under the guidance of a machine operator of a wood chemical plant of higher qualifications;  
loading of raw materials and unloading of products on all devices;  
grinding and drying of chalk in the production of sealing wax;  
crushing of coniferous paws in the production of chlorophyll-carotene paste;  
water supply to refrigerator baths;  
cleaning devices and preparing them for the production cycle.

164. Should know:

the scheme of the technological process at the wood chemical plant and the technology of work;  
temperature regime;  
the main properties of the products obtained.

**Paragraph 7. Apparatus operator of the wood chemical plant, 4th category**

165. Characteristics of works:

conducting the process of thermal decomposition of resin, birch bark, technological raw materials;  
extraction of coniferous paws;  
rosin lacquer cooking and production of other wood chemical products;  
maintenance of the serviced equipment, furnaces, furnaces, chimneys of the wood chemical plant in good condition;  
accounting of received wood chemical products.

166. Should know:

arrangement of equipment used in the production of: resinous binder , alcohol- powder, chlorophyll-carotene paste, fir oil, birch bark tar and other products of wood chemistry (except for secondary);  
flow chart of these industries;  
technological performance of the serviced equipment and rules for working with equipment under pressure;  
properties of the received wood chemical products.

**Paragraph 8. Hack operator , 3rd category**

167. Characteristics of works:

sampling of resin from the receiver;  
cleaning of grooves and crumbs from resin;  
assembly of barras and spruce whip;  
counting carr and installation of carro equipment ;  
release of resin from moisture and litter;  
delivery of resin to collection points and loading it into barrels;  
assembly tool sharpening.

168. Should know:

technology for collecting resin and barras from various types of receivers;  
one-time and discharged collection of resin;  
rules for scheduling the collection of resin;  
device for collecting resin and barras ;  
rules for packing and labeling barrels with resin;  
state standards for resin, the procedure for its storage in the winter.

**Paragraph 9. Hack operator , 4th category**

169. Characteristics of works:

marking and browning carr ;  
groove wiring;  
application podnovok during normal tapping;

sharpening, dressing, adjustment of the cutting tool ( hack ) and assembly devices for tapping.

170. Should know:

forest tapping technology;

the influence of silvicultural, meteorological and technological factors on the yield of resin;

the effect of tapping on the vital activity of a tree;

schemes for laying carr , depending on the timing of tapping, the composition of the resin;

ways to improve the quality of resin;

device, rules for sharpening cutting and assembly tools and devices.

#### **Paragraph 10. Hack operator , 5th category**

171. Description of works:

browning carr with a motorized plow ;

applying podnovok by tapping chemical action: sulfuric acid bleach sulfite-alcohol vinasse, sulfite mash yeast, fodder yeast, their extracts and other similar stimulants smolovydeleniya ;

assembling and setting up a hack ;

maintenance and current repair of a motor-plow , a tank for chemicals, a dispenser and other devices.

172. Should know:

technology of forest tapping using sulphite-yeast mash, sulfuric acid, bleach, sulphite-alcohol stillage, fodder yeast, their extracts and other similar stimulants of resin production ;

formulations of chemical reagents, methods of their preparation and handling;

the dose of adding to the pad ;

types and arrangement of setting tools and equipment;

rules for handling all types of setting tools and their technical care.

### **Chapter 6. Tariff and qualification characteristics of workers' professions by category for work on harvesting and processing cane**

#### **Paragraph 1. Buster, 2th category**

173. Characteristics of works:

detour by motor vehicles and horses of reed thickets allotted for industrial harvesting, flower nurseries and other similar objects in order to protect against fire, cattle damage, mowing and various thefts;  
monitoring the growth of reeds, flowers in production areas and nurseries.

174. Should know:

the boundaries of areas for harvesting cane;  
the device of motor vehicles;  
horse care rules;  
fire safety rules and guard duty;  
ways of orienting on the map and compass.

#### **Paragraph 2. Machine operator for harvesting cane, 4th category**

175. Characteristics of works:

control of tractors and tractors when performing various work on harvesting cane using attachments, mechanisms and devices, transporting cane in bales, bales and sheaves on trailed carts and sleds;  
forming and tying bales from sheaves and individual portions of untied reeds with wire on sledges, special platforms or in the field using a steel cable and pulling devices;  
monitoring the loading, securing and unloading of transported cane;  
maintenance of tractors and tractors, their preventive and current repairs, participation in other types of repairs, refueling with fuels and lubricants.

176. Should know:

device, driving and traffic rules, rules for carrying out maintenance and repair of serviced tractors and tractors;  
rules for carrying out work using trailed and mounted implements, mechanisms, dragging devices and devices;  
requirements for the tightness of the bale and the reliability of tying bales;  
rules for loading, laying, slinging , tying and unloading cane.

#### **Paragraph 3. Machine operator for harvesting cane, 5th category**

177. Characteristics of works:

control of trailed and self-propelled reed harvesters;

regulation of the cutting height of the stems, cutting device and other machine mechanisms, depending on the terrain conditions;  
accumulation and dumping of sheaves or portions of reed and cattail of a specified weight onto vehicles;  
regulation of the work of the binding machine and filling it with twine;  
tractors management and tractors on mowing and formed ;  
control of stackers and clamshell loaders mounted on a tractor, tractor or chassis, when loading and stacking sheaves, bales and cane products on vehicles, in stacks and stacks;  
driving grab loaders and chassis;  
loading cane into the bale chamber with a grab loader with bales tying with sling containers ;  
unloading of bales from the baler pressing device onto stubble or vehicles;  
identification and elimination of malfunctions of serviced machines;  
maintenance of reed harvesters , stackers, balers , grapple loaders and undercarriages.  
178. Should know:  
device, driving rules of reed harvesters, running bases;  
device of boilers , grab loaders, stackers;  
rules for sharpening cutting devices of reed harvesters;  
properties and consumption rates of fuels and lubricants and methods of their storage;  
rules for the maintenance of reed harvesters , stackers, balers , grab loaders and chassis bases;  
rules for stacking stacks and stacks;  
ultimate load of trailed and mounted implements, mechanisms and devices.

#### **Paragraph 4. Harvester of cane, 3th category**

179. Characteristics of works:  
mowing of reeds, cattails and kug with a cutter, mower, urak ;  
bundling into sheaves, removal and stacking of sheaves and untied reeds into heaps, shisha, piles and stacks;  
preparation of a rope from kuga and cattail for bundling sheaves.  
180. Should know:  
signs of reed maturity;  
rules and techniques of manual mowing of reed, cattail and coog;

sizes and methods of knitting sheaves;  
rules for stacking sheaves and untied reeds in heaps, shisha, piles and stacks.

#### **Paragraph 5. Reed board press, 2nd category**

181. Description of works:

pressing of reed boards under the guidance of a more qualified reed board press;  
transportation and cutting of reeds and cattails or trimming them on a cutting machine;  
trimming pressed panels to a specified size;  
sealing of cut ends of wire, twine and board sides;  
loading the cane into the receiving device of the press;  
flashing plates when working on presses not equipped with automatic stitching mechanisms;  
cleaning plates, laying and transporting them to the warehouse;  
elimination of wire breaks, twine on the press;  
participation in the elimination of malfunctions of the press and mechanisms.

182. Should know:

the requirements for the quality of reed, cattail and slabs, the rules for their cutting;  
rules for working on a cutting machine;  
the principle of the press;  
rules for cutting, stripping, edging and storing slabs;  
rules for laying cane in the press;  
device of stitching mechanisms.

#### **Paragraph 6. Reed board press, 3rd category**

183. Characteristics of works:

pressing cane slabs on hand presses;  
pulling the twine and wire on the press;  
selection of reeds and cattails by size;  
knitting and sewing of cane bundles with twine, removing them from the press, rolling into a roll, tying and transportation.

184. Should know:  
 device of hand presses;  
 technical conditions for the production of plates;  
 requirements for the quality of reed, twine, wire and slabs;  
 types of marriage and ways to eliminate it.

**Paragraph 7. Reed board press, 4th category**

185. Characteristics of works:  
 pressing, gluing and cutting of reed slabs on mechanical presses and units, their start-up, stop, regulation and adjustment;  
 identification and elimination of malfunctions of mechanical presses and units.

186. Should know:  
 device of mechanical presses and units;  
 thermal mode of operation of the mechanical unit;  
 state standards for cane slabs.

**Chapter 7. Alphabetical index of workers' occupations**

187. An alphabetical index of the occupations of workers is given in the annex to the UTQR (issue 37).

Appendix  
 to the Unified Tariff  
 and Qualification  
 Reference Book of Workers'  
 Jobs and Professions  
 (issue 37)

**Alphabetical index of workers' occupations**

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42.	Blaster at forestry	4-5	47
43.	Charcoal scorcher	2-4	49
44.	Wood chemical plant operator	3-4	51
45.	Breeder	3-5	52
Harvesting and processing of cane			
46.	Buster	2	53
47.	Reed cutting machine operator	4-5	53
48.	Cane harvester	3	55
49	Cane press operator	2-4	55