



KHARKOVENERGOREMONT

ASSORTMENT OF PROCESS RIGGING, DEVICES AND TOOLS

Kharkov - 2011
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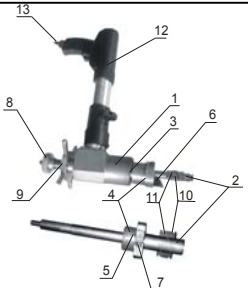
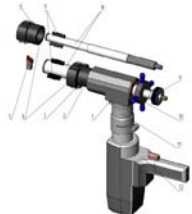
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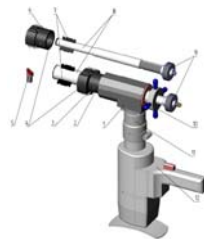
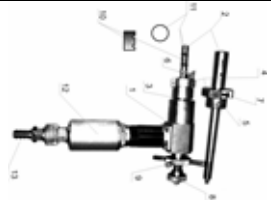


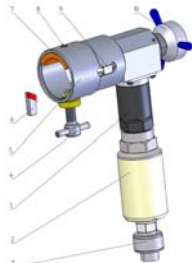
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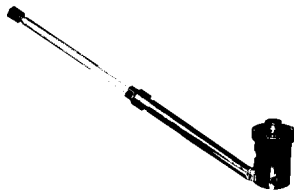
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“Kharkovenergo” Ltd. offers an extended list of special-purpose rigging , devices and tools needed for performing rehabilitation at power-generating units:


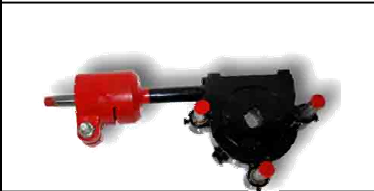



S/ No.	Designation	Purpose	Specification	Photo	
Devices for boiler equipment					
1	Device for lining of pipes K 1201.00.00 K 1201.00.00 K 1201.00.00	Intended for lining of pipes in the course of butt welding			
		diameter 28-32 mm	Diameter of pipes 28-83 mm Height h= 235 mm. 252mm, 259mm Weight – 1,5-5 kg		
		diameter 38-42 mm			
		diameter 60 mm			
		diameter 76 mm			
diameter 83 mm					
2	Chamfering machine with inside bracing for pipes dia. 28 - 60 mm K1738-00-00	Intended for facing pipes with inner diameter from 28 mm to 60 mm for welding on the site	Dia. 28-60 mm		
			Toolhead feed – manual Drive – pneumatic ИП Network air-pressure, atm 6,3 Overall dimensions: length-255 mm width-80 mm weight – 8 kg		
3	Chamfering machine with inside bracing for pipes dia. 28 - 60 mm K1738-00-00	Intended for facing pipes with inner diameter from 28 mm to 60 mm for welding on the site	Dia. 28-60 mm Type of drive electric Power, kW 1,2 Rated voltage, V 220 Current frequency, Hz 50 Freq/ rotation of toolholder, r.p.m. 0~520 Axial movement of cutting tool, mm 15 Overall dimension, mm 490x100x460 Weight, kg 12,7		






4	Chamfering machine with inside bracing for pipes dia. 28 - 60 mm K1738-00-00	Intended for facing pipes with inner diameter from 28 mm to 60 mm for welding on the site	Dia. 28-60 mm Type of drive electric Power, kW 0,86 Rated voltage, V ~36 Current frequency, Hz 200 Freq/ rotation of toolholder, r.p.m 340 Axial movement of cutting tool, mm 15 Overall dimension, mm 510x100x460 Weight, kg 13,5	
5	Chamfering machine with inside bracing for pipes dia. 60 - 102 mm K1738-00-00	Intended for facing pipes with inner diameter from 60 mm to 102 mm for welding on the site	Dia. mm 60 - 102 Cutting head feed – manual Drive – pneumatic power supply Power kW 1,2 Network air-pressure, atm 6,3 Dimensions, mm: 400x385x120 Weight, kg: 12	
6	Chamfering machine with outside bracing for pipes dia. 28-42 mm K1755 K1755-00-00	Intended for facing pipes with outer diameter from 28 mm to 42 mm for welding on the site	Dia. mm 28-42 Spindle Speed: - idling speed, r.p.m. 250 - under load, r.p.m. 200 Cutter axial stroke, mm 15 Cutter feed manual Pneumatic drive: ИП Network air-pressure, atm 6,3 Weight, kg: 8,0	
7	Chamfering machine with outside bracing for pipes dia. 28-42 mm K1755 K1755-00-00	Intended for facing pipes with outer diameter from 28 mm to 42 mm for welding on the site.	Dia. мм : 28...42 Cutting head feed – manual Drive – electric Power, kW 1,2 Dimensions mm: 338 x 400 x 80 Weight, kg: 8	
8	Chamfering machine with outside bracing for pipes dia. 28-60 mm K1755M K1755Д-00-00	Intended for facing pipes with outer diameter from 28 mm to 60 mm for welding on the site.	Dia. мм : 28...60 Cutting head feed – manual Drive – pneumatic power supply Power kW: 1,2 Network air-pressure, atm 6,3 Reduction ratio. 1:106 Freq/ rotation of toolholder, r.p.m 50 Axial movement of cutting tool, mm 15 Dimensions mm: 265x158x120 Weight, kg: 9	





9	Device for preparation of ends of pipelines for welding K-113-00-00 K-208-00-00 K-182-00-00	Intended for chamfering and machining of a pipe for a jar washer 219 – 273 mm 325 – 377 mm 133 – 159 mm	Traverse of the support – 32 mm Groove length– 65 mm Rotation speed– 30 rpm Automatic feed Automatic drive with power 1 kW Rotation speed of the drive – 350 rpm Weight ≈ 54 kg	
Device for turbines and turbine equipment overhauling				
10	Screw hydraulic jack for squashing ends of rivets P=10 ton-force T21-18-00-00	Intended for squashing ends of rivets when blading the turbine.	Power output P - 10 τ Piston stroke– L=15 mm Least distance between rests 140 mm Weight – 3,7 kg	
11	Jack for pressing-out rivets P=32 ton-force T01.53-00-00	Intended for pressing-out ends of turbine disks rivets.	Force output at the lever of the wrench 600 mm applied force 40 kg – 32000 kg Piston stroke – 30 mm Weight – 14,6 kg	
12	Screw hydraulic jack for pressing-out ends of rivets P=15 ton-force T01.80-00.00	Intended for pressing-out ends of turbine disks rivets with distance 90...135 mm.	Force at the output at the length of the handle of the wrench L=300mm and with full force 15 kg - Q=15 ton-force Piston stroke – l= 20mm Allowable hydrostatic pressure - P=500 kg/sm ² Maximal diam. of pressing-out a rivet - Ø 16 mm Weight 13,5 kg	
13	Device for rotor reviving T01-159-00-00	Intended for ease assurance when carrying out assembling, repair and control-and-measuring works with rotors of electrical machines.	Lift type Maximum weight of the load lifted, kg 30000 Piston stroke, mm 20 Maxim. pressure in the hydraulics, kg/sm ² 260 Oil capacity in the hydraulics , L. 0,3 Minimum overall dimension, mm 170x125x170 Max. Overall dimensions, mm 928x700x178	

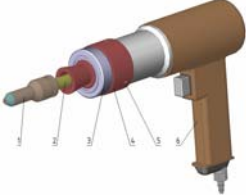
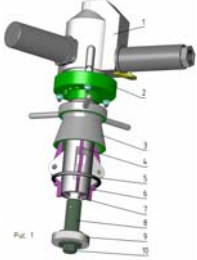
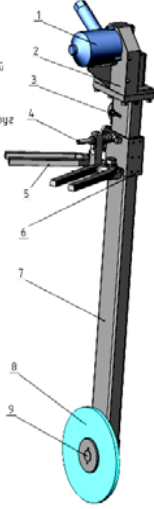
14	Punches pressing-out rivets from disks T25-53-00-00	Intended for pressing-out rivets from disks with the help of hydro-jack.	T25-53-00-00/1 Ltotal=110 Ø18 – L=15; Ø14 – L=40; Ø12 – L=55. T25-53-00-00/2 Ltotal=110 Ø18 – L=15; Ø15 – L=40; Ø12 – L=55. T25-53-00-00/3 Ltotal=150 Ø18 – L=15; Ø14 – L=80; Ø12 – L=55. T25-53-00-00/4 Ltotal=150 Ø18 – L=15; Ø15 – L=80; Ø12 – L=55. T25-53-00-00/5 Ltotal=175 Ø18 – L=15; Ø14 – L=105; Ø12 – L=55.	
15	Punches pressing-out rivets from disks T01-81-00-00	Press is intended for punching the strip beltры in the course of reblading turbine rotor	Slide move – 8 mm Max. power – 20 t Moves per minute. - 10÷15	
16	Press for slotting in binding band T01-52-00-00	Press is intended for punching binding band, width S 1...3 mm in the course of turbine rotors reblading.	Force, kg 6200 Puncheon stroke, mm 6 Overall dimensions, mm 310x190x330 Weight, kg 39,4	
17	Rests for rotors packing (without rollers) Г10-00-00	Intended for packing turbogenerator rotors when carrying out repair works. And the rotor is packed on two rests.	Peak load, kg- 30000 ¹ Overall dimensions, mm.- 970x620x1065 ² Weight, kg - 502,5 ²	


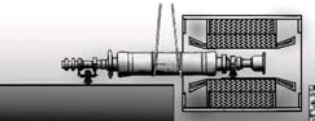

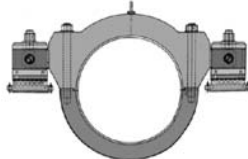
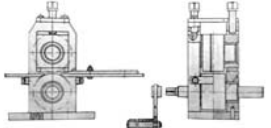
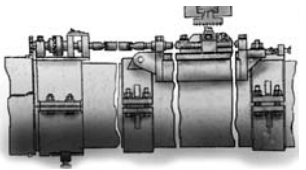
18	Roller support for rotors packing T01-20-00-00	Applied when packing the turbine rotor while carrying out repair works. And the rotor is packed on two feet.	Peak load, 30000 Weight, kg. - 560,7 Overall dimensions, mm. – 1360×850×480	
19	Multipurpose rollers for rotating generators rotors Г10.00.00	Intended for rotating generators rotors.	Diameter of the rotor neck– 300-600 mm Drive – manual through reduction gear Gabarit height– 1065 mm Weight – 250 kg Carrying capacity 23 tons	
20	Device for sealing combs'guyrope T-01-114-00-00	Intended for sealing combs' correction and guyrope.	Strokes per minute. – 460 Electric drill drive ИЭ or other with promptness 400 rpm and power 0,8 kW	
21	Angle device for rotating the broach T01-54-00-00	Intended for reaming the hole after countersinking between disks of the turbine with small distance.	Rotational speed – 76,5 rpm Diameter of the broach bit the smallest - 12 mm Diameter of the broach bit the biggest – 22 mm Fastening of the instrument – square 14x14 Electric drill drive – 0,8÷1 kW Weight – 12 kg	
22	Angle drilling device УСП-3Б T01-41.00.00	Intended for processing holes in turbine rotors disks with forked tails	Drive rotational speed – 500 rpm Spindle rotational speed – 100 rpm Fastening of tools of collets Max. Diam. of the milling cutter – 8 mm Maximum radius of processing - 440 mm Feed – manual Vertical travel- 80 mm Max. angle of rotational traverse – 140degree Drive – pneumatic or electrical, power. 1 kW	




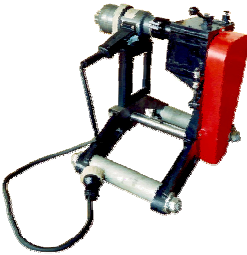
23	Angle drilling-milling device УСФП-2А T01-01-00	Intended for drilling out rivets and processing holes for rivets after installation of blades on the turbine rotor disk	Maximum Ø of the drill – 23 mm Rotational speed – 294 rpm Depth of drilling – 190 mm Longitudinal travel – 120 mm Vertical travel – 65 mm Feed – manual Fastening of the tool– Collet, cone M2 Electric drill drive - 800÷1 kW Weight – 46 kg	
24	Angle drilling head B-35 T01-16-00-00	Intended for drilling out rivets when reblading cascades with small space between discs.	Rotational speed– 350 rpm Diameter of drilling maximum – 12 mm Diameter of drilling minimum – 5 mm Electric speed drive - 800÷1 kW Weight– 12 kg	
25	Tap with adjustable chasers T24-10-00-00	Applied for correcting the thread in the holes of basic parts	Diameter, pitch mm a)M165x6; M160x4; M160x6; M140x4; M140x6; b)M120x6., M120x4; M115x4; c)M90x3;M90x4; M90x6; M100x3; M100x4; M100x6 d)M76x3.,M76x4; M85x3., M85x4; e)M72x3 f)M56x4, M60x4	
26	Dies with adjustable chasers T24-09-00-00	Intended for correction of threads in the basic parts during repair of power plant equipment. Rotate with the special wrench	Diameter, pitch mm M165x4; M160x4; M160x6; M140x4; M140x6; M120x4; M120x6; M100x4; M100x6; M90x4; M76x4; M64x4; M60x4; M56x4 Weight- 5÷10 kg	
27	Special wrench for adjustable die, exec. 2.,3.,4 and 5 T25-20-00-00	Intended for fixing adjustable dies and providing necessary efforts of correcting threads in basic parts when repairing turbogenerators under conditions of the power plant.	Type Overall dimensions mm. Weight, kg T25-00-00 exec.2 210x210x295mm 7,12 T25-00-00 exec.3 170x170x235mm 3,56 T25-00-00 exec.4 125x125x215mm 2,26 T25-00-00 exec.5 110x110x205mm 1,83	

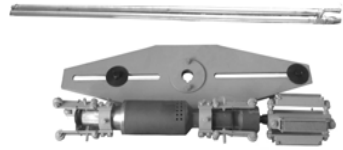


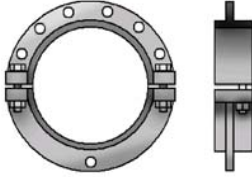


28	Clamps for rotors centring on semi-couplings T29-40-00-00	Intended for centring turbine rotors when repairing and assembling	Clamp T29-40-00-00/3., overall dimensions 160x90x25 mm weight 0,7 kg. Clamp T29-40-00-00/1., overall dimensions 157x70x125 mm weight 3,15 kg. Clamp T29-40-00-00/2., overall dimensions 177x70x130 mm weight 2,65 kg.	
29	Pin for rotor cranking БП-150	Intended for rotor cranking manually when examining or repairing	Weight– 1,1 kg, Overall dimensions – Ø 50x145 mm	
30	Moment weighing machine T935-00-00	Intended for controlling weight of the turbine blade when carrying out repair-and-renewal operations in reblading the turbine rotor and its following balancing adjustment..	Overall dimensions, mm – Ø 500 (Base) x1720 x1200 Weight, kg - 60	
31	Rotor necks' grinding device T01-86-00-00	Intended for grinding necks and thrust collars of turbines and turbogenerators when repairing.	Rotational speed of the motor – 2800 rpm Electromotor capacity – 1,1 kW Cutting speed– 25 m/sec Longitudinal travel – 500 mm Crosscut travel – 150 mm Weight – 85 kg	
32	Support for rotor necks' grinding device T01-85-00-00	Intended for installing the device for grinding necks and thrust collars of turbines and turbogenerators T01-86-00-00 when repairing. Design of the device enables to change and fix rigidly the tilt angle of the grinding head..	Maximum rotational angle, degree. - 30 Overall dimensions, mm 860x540x220 Weight, kg 64,2	




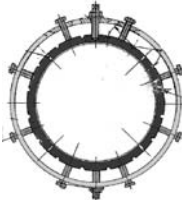
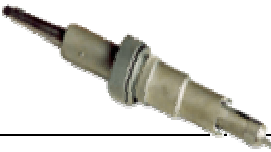

33	Device for drilling-out rivets from blades between disks T24-107-00-00-01	Intended for removal of rivets from blades of turbines in the course of the repair works.	Drilled diameter- 6...17 Head's stroke- 75 mm. Vertical ravel- 55 mm. Horizontal travel - 300 mm. Rotational speed, - 320 rpm. Electrical drive Tool's clip–reaction sleeves with cone Morse № 1, 2. Supply voltage- ~220V Overall dimensions 710×410×180mm. Weight - 44,0 kg.	
34	Device for milling of chases for sealing on the turbine cylinder splits T-01-62-00-00	The device is intended for milling of chases for sealing on the turbine cylinder splits	Rotational speed – 1500 rpm Longitudinal traverse – 1000 mm Cross-cut travel – 200 mm Spindle's vertical travel – 90 mm Drive – pneuma ИП Drive's rotational speed – 4500 rpm Pressure in the network– 5 kg/sm Drive power– 2 kW Weight– 52 kg	
35	Device for milling of shoulders T-01-32-00-00A	The device is intended for milling of shoulders of segments of steam turbine sealing	Drive's rotational speed– 2000 rpm Spindle's rotational speed – 100 rpm Fastening of the instrument– collet Maximum diameter of milling cutter – 8 mm Max. radius of processing - 440 mm Feed – manual Vertical travel - 80 mm Max. Traverse angle of rotation– 140 degree Drive – pneumatic or electrical power. 1 kW	
36	Device for flat bar bending AC2.09.00.00	Intended for bending flat bar on the edge	Drive – manual Overall dimensions – 300×242 Weight – 24 kg	



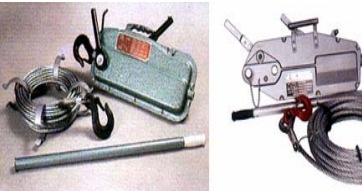


37	Device for grinding of valve seats Dy-10 (ГМ-068А) Dy-20 (ГМ-068) ПРН25.00.00 ПРН25.00.00	Intended for repairing of valve seats of low and high pressure at the seating.	Spindle speed of rotation, rpm - 6000 Instrument - притир Internal diam. of valves in process, mm от 10 до 20 Drive type - pneumatic Working pressure of the manifold, кПа - 5,0 Weight, kg from 2,0 to 2,9 Overall dimensions, mm 300x205x70	
38	Device for grinding of valve seats Dy-50 (ГМ-46А) ПРН25.00.00	Intended for reseating and grinding of valve seats Dy50mm for reseating surfaces Ø42-62 mm without cutting them out of pipeline.	Drive speed of rotation, r.p.m.: 4560 Abrasive wheel rotation speed, r.p.m. 4560 Abrasive wheel ПП 63x13x20 Drive pneumatic Power, kW 1,3 Rated pressure of network compressed air, atm 6 Abrasive wheel idling rotation speed, m/sec 12,5–13,7 Overall dimensions, mm 470x240x270 Weight, kg 8,4	
39	Device for grinding of gate valve seats К-8085М 140.100 Ду100-200мм Ф.115-235 мм К-8085/1М 140.101 Ду200-300 мм ф. 235-360мм	Intended for grinding of gate valve seats, inner diameter Ду 100...200 mm, for work surfaces with diameter from 115 mm to 235 mm without cutting them out of pipeline. Intended for grinding of gate valve seats Ду 200...300 mm for work surfaces with diameter from 235 mm to 360 mm without cutting them out of pipeline.	Spindle speed of rotation, rpm 4560 Abrasive wheel rotation speed, rpm 1520 Reducer 1:3 Rated pressure of compressed air in network, atm 6 Abrasive wheel idling rotation speed, m/sec 7,9–13,7 Abrasive wheels GOST 2424-83: ПП 125x10x32 14А 25СМ2К ПП 200x10x32 14А 25СМ2К ПП 250x10x32 14А 25СМ2К Overall dimensions, mm 315x310 x1260 Weight 25 kg (without abrasive wheels) Abrasive wheels GOST 2424-83: ПП 250x10x76 14А 25СМ2К ПП 300x10x76 14А 25СМ2К ПП 400x10x127 14А 25СМ2К Drive pneumatic 1,3 kW Overall dimensions, mm 440x315x1320 Weight 36kg (without abrasive wheels)	 <p>1 Пневмопривод 2 Редуктор 3 Ролик 4 Болт отжимной 5 Лопы 6 Подшипн 7 Корпус 8 Абразивный круг 9 Вал</p>




40	Machine for milling winding on the turbine cylinder splits T.01.138.00.00	Machine is intended for carrying out milling	Rotational speed of the spindle, rpm – 252 & 500 Longitudinal traverse, mm – 285 Cross-cut travel, mm – 190 Vertical travel, mm – 70 Voltage, V - 380 Electromotor rotational speed, rpm– 3000 Feed – manual Weight, kg – 300 Electric motor power, kW – 2	
41	Device for rotor bushing (outlet) ГР-18.00.00	Intended for providing the outlet of the turbogenerator rotor from the stator	Overall dimensions, mm – 7500x1050x1005 Weight, kg	
42	Device for rotation of rotors and rods T-783	Intended for rotation of rotors and rods during the power equipment repair	Overall dimensions, mm - 1475x960x470 (with drive) Overall dimensions, mm - 1475x960x266 (without drive) Rotational speed, rpm 8...12 torque Kgm - 112 Weight, kg - 91	
43	Rotors pendulum checking device T-2217	Intended for straightening of the turbine rotor in the course of repair-and-renewal works	Diam. of the seat of rotor turbine shaft, mm- 438 Overall dimensions, mm, 200x1048x1222 Weight, kg - 139,7	
	323.487		Diam. of the seat of rotor turbine shaft, mm- 240 Overall dimensions, mm, 200x1048x1222 Weight, kg - 108,0	
44	Manual device for spinning chases AC2.08.00.0	Intended for spinning chases in ribs of oil thrower and overstrip packings	Manual or lathe drive Overall dimensions L=300 mm h=242 mm Weight – 24 kg	
45	Packing ring combs' turning device T21-05-00-00	Intended for processing combs for packing of cylinders of high and average pressure of the turbine K-300-240, but the product can be used on the similar turbines of different types.	Drive type - pneumatic Air pressure in the manifold, MPa - 5,0 Line feed mm/r - 0,1 Radial feed mm/r - 0,098 Longitudinal traverse, mm - 630 Radial travel, mm - 15 Overall dimensions,mm - 2060x400x400	

46	Rotor axial movement device TP-82-388	Intended for providing axial movement of the rotor in the course of carrying-out repair works on rotors of low and high pressure cylinders of the turbines ПБК-150, but it can be used for other turbine types.	Screw travel, mm - 115 Max. power, kg - 8000 Overall dimensions, mm - 570x320x200 Weight, kg - 72	
47	Device for milling (grooving) sealing rings locations T814	Device is intended for mechanical processing of parts when repairing and renewing power plant equipment	Drive pneumatic machine, electric drill 400 rpm Rotational speed on the spindle - 80÷100, 8÷12 rpm Torsional KGM 12; 120 Morse cone in the spindle No. 5 Drilling depth - 135 mm Manual feed Rotation of the head 360 degree. Weight - 84,5 kg	
48	Device for reaming holes in semi-couplings T21-39-00-00	Intended for reaming holes in half couplings of high and low pressure rotors of steam turbines K300-240 (HTGZ and LMZ) with outer diameter of semi-couplings 540 – 600 mm and groove length – 190 mm.	Power supply voltage, 220V Power, kW 1,2 Drive rotation speed, rpm 0÷ 650 Spindle rotation speed, rpm 215 Line feed rate, mm/r 0,03 Free movement speed, mm/min 380 Max.diameter of semi-couplings, mm 700 Diameter of processed holes in semi-couplings, mm 38÷45 Max.length of processed holes, mm 180 Overall dimensions, mm 540x650x400 Weight, kg 70,2	
49	Device for reaming holes in semi-couplings (with the set of spindles) 381005.ГМ.431А.00.00-01	Intended for reaming holes in semi-couplings of rotors turbines K-300 & K-160	Diameter reverse hole. 30...80 mm Length. reverse hole from 200 mm Bar feed 0,06... 0,18 mm/r Electric drive. power. 1 kW Rotational speed 1000 rpm Overall dimensions - 840×500×600 Total weight 48 kg	
	Device for reaming holes in semi-couplings (with the set of spindles) 381005.ГМ.436А.00.00-01	Intended for reaming holes in semi-couplings of turbine rotors ПТ-60, ПТ-80, BK-100, T-100, K-210	Spindle rotation speed (reg) 280/94rpm Cutter feed: -fine 0/ 0,5 mm/r -rough 0/ 19 mm/r Electric drive. power: 1kW 220 V Dimensions, mm: 660x560x590	

50	Device for processing rotor axial passages of turbines φ.95 - 150 ЧКР 3 0-0-0	Intended for processing rotor axial passages with diameter of processed holes from 95 to 150mm	Processed holes diameter, mm 95–150 Device feed – manual Drive pneumatic Drive type - ИП Overall dimensions, mm : l ~ 3635 x dia. ~ 150 Weight, kg - 17,5	
51	Terminal lead-outs of turbogenerators	Used when manufacturing, repair and modernizing turbo- and hydrolic generator stator. When modernizing with replacement of porcelain insulators for FRP	Power up to 500MW Voltage up to 20 kV	
52	Rack stacks for placing diaphragms PT-001-015	Intended for storing and transportation of diaphragms	Weight, kg - 450 Overall dimensions, mm - 554x2180xx1000	
53	Device for outside panels relieving and installation ГР-17-00-00	Intended for providing ease, reliability and safety when carrying out outside panels relieving and installation	External diameter, mm - 684 Internal diameter, mm - 410 Width, mm - 140 Weight, kg - 32	
54	Device for fan centre relieving and installation ГР-20.00.00	Intended for providing ease, reliability and safety of works when relieving, fan centers from rotor fan.	External diameter, mm - 670 Width, mm - 125 Weight, kg	
55	Device for tread ring fit and relieving ГР-19.00.00	Intended for ease and safety of carrying out technologically safe works when fitting and relieving tread rings	Greater ring diameter, mm - 1110 Smaller ring diameter , mm - 1110 Overall dimensions of both rings with ear ends, mm - 1220 Thickness of greater ring, mm - 60 Thickness of smaller ring, mm - 50 Total weight, kg - 19,5	

56	Rotor suspension device ГР-21.00.00	Intended for assembling and carrying out repair-renewal operations when repairing the turbogenerator. Intended for.	Overall dimensions, mm - 1615x865x200 Weight, kg - 115	
57	Wrench for assembling bushings ГР-22.00.00	Intended for tightening electrical bushings of turbogenerators	Overall dimensions, mm - 645x88x40 Weight, kg - 2,05	
58	Clip for slip ring ГР-23.00.00	Intended for installing slip rings on the turbine rotor in the course of repair-and-renewal operations	Contact diameter, mm Ø450 Overall dimensions of the split collar, mm 998x520x100 Overall dimensions, mm 998x520x250 Weight, kg 8,3	
59	Clip for insulation preparation shaft ГР-24.00.00	Intended for even swage of insulation on the turbogenerator rotor bush.	Overall dimensions, mm - Ø460x500 Weight, kg - 150	
60	Device for condenser tube cutting Т-01-91-00-00	Intended for mechanical cutting of tubes surplus, tube plates	Electric drill drive- 0,8÷1 kW Max. rotational speed – 400 rpm Pipes diameter 16mm; 19mm; 21mm Weight – 10 kg with the drive Dia. 28x1	
61	Breaks from 6 to 20 mm Г13-00-00	Intended for aperture piercing in the following materials: cardboard, leather, aluminium, brass, copper, steel with hardness HB ≤150 to 1,5 mm.	Aperture piercing with diam. from 10 mm to 30 mm Weight from 0,1 kg to 1 kg	

62	Mandrel (for pipe squeezing) T29-76-00-00	Intended for squeezing condenser pipes when dismantling	Weight	250 gr	
63	Angle blocks K.1289.00.00 K.1288.00.00 K.1285.00.00	Intended for dismantling and assembling pipe bundles, boilers	Weight from carrying capacity from	3 kg to 15 kg 1 t , 3t, 5 t	
64	Assembly-coupler mechanism MTM-1,6 tons	Intended for lifting and replacing loads	Rope length Weight	12 m. 30,5 kg	
65	Strip-off device AC6.04.00.00	Intended for removing couplings and bearings from shafts of electric motors with capacity of 04kW – 40kWt	Compressed coupling diameter, mm min. Ø90 max. Ø190 Standard size of compressed bearings № 304 – № 314 Max Force of removal, Overall dimensions, mm Weight, kg	1500 350x400x55 8,5	
66	Ejection heater 149-251-00-00	Intended for heating turbine studs with central holes, diameter 20 mm and 35 mm, in the course of repair works.	Working pressure in front of heater kg/sm ² Optimum condition pressure Fuel – Compressed air consumption at pressure of Fuel consumption kg/h - Oxygen consumption kg/h - Dimensions mm, Weight, kg	3 – 6 6 кг/см ² propane butane + oxygen 6 kg/sm ² - m ³ /min 2,5 2 4 1100x200x120 9,3	

67	Kerosene burner T-25-133-00-00	Intended for open-fire heating of parts, knots and separate elements of power generating equipment, as well as heating and annealing of weld joints	Working fuel - kerosene Overall dimensions, mm 1000×120×120 Weight, kg 5,4	
68	Special machine (milling device) K210-00-00A	Intended for machining parts in the course of repair works and reconstruction of power equipment	Max. diameter of mill, mm 18 Drive pneumatic Drive capacity at 6 atm., kW 1,5 Max. move of spindle, mm - longitudinal 200 - transversal 80 - vertical 90 Morse cone of spindle KM2 Milling head angle of turn ±16° Spindle rotation speed, rpm 1500...500 Overall dimensions (without drive), mm - length 690 - width 300 - height 385 Weight, kg 60	
69	Two-spindle friction lapping machine, ДУ 10...65 T-06-15-00-00	Intended for friction of valve seats and armature	Number of strokes per min. – 40 Drive electromotor - АОЛ-12-4 power 0,8 kW speed of rotation 1360 rpm Overall dimensions – 870x450x2000 Weight, kg. – 70	

You can send your response and suggestions regarding the quality and range of our special equipment and original tools to the marketing department of “Kharkovenergoremont”