

LIST OF PDA REGULARLY USED FABRICATION FACTORIES WITH DETAILS

CODE NO	NUMBER OF EMPLOYEES	CAPACITY PER MONTH		DESIGN CAPABILITIES	PRODUCTION PROCESSES						QUALITY CHECKING
		Welding	Machining		Cutting	Bending	Welding	Machining	H Treatment	Coating	
		tons	tons								
FB1	400	1000	750	fabrication of equipment for the power industry, metallurgy, coal mining, minerals mining and processing industry, cement industry, chemical industry, harbor works and others	GAS CUTTING: maximum thickness of the material - 300 mm; max. width of the sheet - 2500 mm. MECHANICAL CUTTING: round sections 500 mm; square sections - 350 mm; beams - No 60. STEEL SHEETS GUILLOTINE CUTTING: maximum thickness of the sheet is 25 mm and length 3150 mm. PLASMA CUTTING: stainless steel and aluminium with thickness up to 25 mm.	SHEET BENDING MACHINE: max. width of work piece - 4 000 mm; max. sheet thickness - 15 mm. ROLL-BENDING MACHINE: maximum width of the sheet - 4 000 mm; maximum thickness of the sheet - for cold sheet up to 130 mm and for hot sheet up to 240 mm	WELDING COLUMN "ESAB": maximum thickness for welding 220 mm; effective thickness of welding - 100 mm; roller stand and manipulator with load capacity 60 t. GAS SHIELDED METAL ARC WELDING: shielding gas - CO ₂ , argon, corgon. Diameter of wire - 0.8, 1.2 and 2 mm	TURNING: machine parts with diameter up to 500 mm and length 2000 mm. MILLING: work pieces with dimensions up to 630 x 2500 mm. CYLINDRICAL GRINDING: work pieces with diameter up to 600 mm and length 2800 mm. INTERNAL GRINDING: work pieces with grinding diameter up to 400 mm and length up to 320 mm. SURFACE GRINDING: work pieces with dimensions up to 400 x 2000 mm. TURNING: work pieces with diameter up to 1600 mm and length 10 000 mm. VERTCAL BORING MACHINE - Maximum turning diameter 10 000 mm and maximum height of the workpiece 4 000 mm; weight of the workpiece up to 100 t. GANTRY TYPE MILLING MACHINE: maximum dimensions of the workpiece - 12 000 x 2 800 x 2 000 mm. HORIZONTAL BORING MACHINES: diameter of spindle mandrel 90, 160, 200 and 250 mm. GANRTY TYPE GRINDING MACHINE: maximum dimensions of the workpiece - 12 000 x 2 000 x 2 000 mm. SPUR GEARS: maximum diameter of the gear 3 800 mm; modulus of the gear minimum 1 mm maximum 30 mm. STRAIGHT-TOOTH BEVEL GEARS: maximum pitch diameter of the gear 1 600 mm; max. modulus 30 mm; max. number of teeth 300	Dimensions of the furnace work space: length - 17 000 mm; width - 5 000 mm; height - 6 000 mm. Load capacity of the trolley - 80 t. Heating furnaces for machine parts with unit weight up to 10t and dimensions of furnace 2600 x 800 x 800 mm. Salt-bath furnaces with dimensions 500 x 500 x 300 mm. Case hardening of machine parts with dimensions of furnace 750 x 750 x 500 mm. Chroming - work space dimensions 1500 x 1000 x 1000 mm. Oxidizing of machine parts - work space 1000 x 1000 x 1000 mm	Non-destructive tests • Radiographic: gamma - ray and X-ray ; ultrasonic test; dye penetrating test; magnetic luminescence surface test and leakage test with Freon leakage detector. Dimensional checks Direct measurement of linear dimensions with accuracy 0.001 mm; angular measurement with accuracy 5 minutes and measurement of longitudinal strokes from 0 to 30 000 mm with HP Laser system	
FB2	250	100		mechanical eccentric presses, hydraulic presses, machinery for Biomass utilization	Gas cutting of carbon steel max thickness 300 mm	Bending L - 1800 mm; δ - 4 mm	Methods: • Manual electric-arc • Semi-automatic • With non-consumable electrode in argon ambient Equipment: ESAB	<ul style="list-style-type: none"> Horizontal lathes till up to Ø1000xL=3000 mm Vertical lathes till up to Ø2000xH=1000 mm and weight of the processed part up to 5 tons Versatile milling machines, horizontal and vertical processing centres Horizontal flaring machines, incl. ones with numeric control of parts with max dimensions 2000 x 2000 mm Gear cutting of cylindrical wheels with straight and inclined dents till m=16 mm and Ø1600 mm Flat grind up to dimensions 1050x4000x700 mm and weight up to 6t of the processed part Grind of rotation surfaces up to Ø350xL=1800 mm Grind of crankshafts up to Ø580 x L = 2500mm Vertical shaping of parts with max.dimensions up to Ø2200 x L=630 mm 	<ul style="list-style-type: none"> Tempering of rolled plates up to Ø100 mm. Hardening, improvements, high and low stress relieving in pit furnaces. Hardening with high frequency current 	Painting chambers: 8000 x 6000 x 10000 mm - 2 units Hot air circulation at temperature 200C	NDT - Non-Destructive Testing VI - Visual Inspection UT - Ultrasonic Testing RT - X-Ray Examination MT - Magnetic Partical Testing PT - Dye Penetrate Testing
FB3	250	100		hydro turbines, valves and gates, pipes and auxiliary hydro power equipment	Gas cutting • Carbon steel - max thickness 300 mm • Stainless steel - max thickness 60 mm	Bending on rolling machine: thickness up to 48 mm, width 4000 mm Bending on pressing machine: thickness up to 14 mm, width 3500 mm	Methods: SMAW, GMAW, GTAW, FCAW, SAW Procedures: 43 - certified according to EN288-3 Welders: certified according to EN287-1 Equipment: ESAB, Lincoln, Fronius	<ul style="list-style-type: none"> Horizontal lathes for parts with max dimensions as follows: Ø 2000 mm, L=5500 mm, G=50 tons and Ø 1000 mm, L=8000 mm, G=10 tons Vertical lathes with CNC for parts with max dimensions as follows: Ø 5000 mm, H=2500 mm, G=75 tons Vertical lathes with for parts with max dimensions as follows: Ø 10000 mm, H=3000 mm, G=100 tons Machine centers with CNC: X=1200 mm, Y=1000 mm, Z=800 mm, G=3 tons Boring machines with CNC: X=2000 mm, Y=2000 mm, Z=1000 mm, G=15 tons Boring machines with numerical control: X=10000 mm, Y=6100 mm, Z=2000 mm, G=80 tons Grinding machine: Ø 630 mm, L=5000 mm, G=5 tons Honing machine: Ø 500 mm, H=2000 mm, G=1,5 tons Milling machine: B=1500 mm, L=5500 mm, H=1200 mm, G=25 tons 	Furnace 6000 x 6000 x 12000 mm, max weight 150 tons, max temperature 860oC	Sand blasting chamber: 8000 x 8000 x 10000 mm Cleaning class: Sa 2,5 according to ISO8501-1 Painting chambers: 8000 x 6000 x 10000 mm - 2 units Hot air circulation at temperature 50oC	NDT - Non-Destructive Testing VI - Visual Inspection UT - Ultrasonic Testing RT - X-Ray Examination MT - Magnetic Partical Testing PT - Dye Penetrate Testing