

LIST OF PDA REGULARLY USED IRON FOUNDRIES WITH DETAILS

CODE NO	NUMBER OF EMPLOYEES	CAPACITY GRADE/TONS/YEAR			TYPICAL CASTINGS			PRODUCTION EQUIPMENT				QUALITY CHECKING		OTHER ACTIVITIES			
		Cast Iron	SG Iron	Steel	Weight	Dimensions	Purpose	Melting	Moulding	Core boxes	Fettling	Metal	Mixture	Patterns	Machining	H Treatment	Coating
	total	tons	tons	tons	kg	mm	specialized	furnaces	method	equipment	equipment	tests	tests	types	types	equipment	method
IS-1	320	1000	4000	N/A	1.5-35	80x100x120 450x350x350	water supply and sewerage systems; spare parts for agricultural machines; battery-driven trucks	induction crucible furnaces, 4 pcs	mechanized, type of the machines: semi-automated production lines moulding boxes clearances: 750x630x250/320; 750x630x250/250; 630x500x160/160 mm	processing techniques: Cold Box; machines, type Röpferwerk - 7 pcs	machine, type Shot blast - 3 pcs	chemical analysis, metallographic analysis, mechanical testing, flaw detection	moisture, compressive strength, tensile strength, gas permeability	wooden patterns, metal patterns, plastic patterns	multipurpose machines, special purpose machines		mechanized
IS-2	30	300	50	500	0.1-40	30-350	fittings production	induction crucible furnaces, type IMSK, 3 pcs	mechanized, type of the machines - Kröning	processing techniques - Hot box	machine, type OWT 1000; OWT 400	metallographic analysis, mechanical testing, flaw detection	compressive strength, tensile strength, gas permeability	metal patterns	multipurpose machines and special purpose machines	furnaces, 3 pcs., tunnel type, maximum temperature 1050° C	manual
IS-3	52	700	600	N/A	1-90	100-800	machine building, hydraulics, sewerage systems	induction crucible furnaces, type AEG 1600, 2pcs	mechanized, type of the machines Foromat, moulding boxes clearances 500x600x150 mm; 630x800x250 mm; 1160x970x250 mm	processing techniques - manual and mechanized; machines, type PS and Röpferwerk up to 16 litres	machine, rotary type and drum type shot blast chambers	chemical analysis, metallographic analysis, mechanical testing, flaw detection	moisture, compressive strength, tensile strength, gas permeability	wooden patterns	N/A	N/A	manual
IS-4	80	410	90	115	0.200-800	130-1200	glass industry, cement industry, machine building	induction crucible furnaces, type PI 600, 3pcs; type PI 250, 2 pcs	manual, moulding boxes clearance from 400x300 mm up to 1500x1400 mm; mechanized, type of the machines - Foromat 20, moulding boxes clearances 500x400 mm	processing techniques - manual; machines for core boxes made of plates sands	machine, type shot blast OWD 100, 2 pcs; shot blast drum - 1 pc	chemical analysis, metallographic analysis, mechanical testing, flaw detection	moisture, compressive strength, tensile strength, gas permeability	wooden patterns, metal patterns, plastic patterns	multipurpose machines and special purpose machines	furnaces, 5 pcs., type PEK 45; PEK 125, maximum temperature 1100 degr. centigrade	manual
IR-5	22	640	N/A	110	0.9-960	40-1200	cellulose-paper industry, mining industry, agriculture, machine building, food industry	induction crucible furnaces type: PI1600 - 1pc; PI600 - 1pc; PI160 - 1pc	manual, moulding boxes clearance: 400/600mm; 600/1200mm; 800/1600mm mechanized	processing techniques - manual, on water glass base	machine, type DOZAMET-OML - 1000A 1pc; type DOZAMET-OWT-400A-1pc; fettling drums Ø 800 - 2pcs	chemical analysis, mechanical testing	moisture, compressive strength, tensile strength, gas permeability	wooden patterns, metal patterns, plastic patterns	multipurpose machines and special purpose machines	ovens - 4 pcs, type PEK-30, PEK-45, PEK-60, SDO-125, maximum temperature 950 degr. centigrade	manual

IS-6	400	8000		N/A	0.100-1000	from 30/30 up to 1000/1000	machine building, motor car industry, hydraulics, decorative	induction crucible furnaces, type 10MT - 4 pcs, 3MT-1pc; 2,5MT- 2pcs	Mechanized, type of the machines: Foromat 20, moulding box clearance 500x600/200 mm; Foromat 40, moulding box clearance 800x1000/4000mm; FBO 5III, moulding boxes clearances 500x600/1200 mm	processing techniques - Cold box; Hot box.; machines, type: Laempe LL20; Röpperwerk H 6,5/h16	machine, passage type 2pcs; drum type - 4 pcs; for internal channel - 1 pc.; semi-automatic device for grinding - 4 pcs; rotating table - 1 pc	chemical analysis, metallographic analysis, mechanical testing, flaw detection	moisture, compressive strength, tensile strength, gas permeability	wooden patterns, metal patterns, plastic patterns	multipurpose machines, special purpose machines		manual; powder painting
IS-7	48	1000	200	N/A	2-1000		machine building	induction crucible furnaces, type PI 600, 2 pcs	manual	processing techniques - CO2 - process; No Bake - process; routine	machine, type Dozamet	chemical analysis, mechanical testing	N/A	wooden patterns, metal patterns and plastic patterns		manual	
IS-8	100	4400	400	N/A	100-5000	1000-8000	metal cutting machines	cupolas, 1pc - 8 MT/hour; induction crucible furnaces, RADINE 5MT / 2,5 MT; AEG - 500 kg - 1pc of each kind	manual, moulding boxes clearance 1500x1000mm; 1300x800mm; mechanized - roller conveyer, type of the machines - moulding boxes with clearances 1800x1500mm	processing techniques - manual - furan mixtures; machines, worm-feeder mixer type	machine, shot blast chamber type COJAME UK	chemical analysis, metallographic analysis, mechanical testing	moisture, compressive strength, tensile strength, gas permeability	wooden patterns	special purpose machines	ovens - 1 pc, chamber type, maximum temperature 1000 degr. centigrade	manual
IS-9	180	750	670	2250	5-8000	4000 x 2500 x 1000	energetics, presses, cut-off valves, oven-making industry, crane-making industry, castings for home appliances, general machine building	induction crucible furnaces, type IP 1600 - 2pcs; electric arc ovens /5MT capacity/- 2 pcs	manual, moulding boxes clearance: 4000x4000mm; mechanized - machines type AMDR8; Foromat 40; moulding boxes clearances 1600x1250x300/300mm; 1000x800x250/250mm; 1500x500x240/240mm	processing techniques: manual and mechanical, machines type KS50; KS25; KS125	machines, shot blast type: RT 1800 drum - 2 pcs; VK3 - chamber - 2pcs	chemical analysis, metallographic analysis, mechanical testing, flaw detection	moisture, compressive strength, tensile strength, gas permeability	wooden patterns, metal patterns, plastic patterns	multipurpose machines	ovens - 4 pcs, liquid fuel chamber type and electric heating chamber type; max. temperature - from 900 up to 1050 degr. centigrade	manual
IS-10	580	50,000	10,000	N/A	50-25,000	400-8,000	machine building, metallurgy, construction	induction crucible furnaces, type IChT-10, 10 pcs; mixers - 1 pc	manual, moulding boxes clearance - big variety of boxes; mechanized - AFL, type of the machines - KW, moulding boxes clearances 1000x800x350 mm	processing techniques - on furan base, Cold box, Hot box; machines, type Röpperwerk	machine, type - shot blast chambers, angle grinders	chemical analysis, metallographic analysis, mechanical testing	moisture, compressive strength, tensile strength, gas permeability	wooden patterns	multipurpose machines	furnaces, 2 pcs, maximum temperature 800 degr. centigrade	manual