STEEL SUPPLIERS INTERNATIONAL

SUPPLIER FOR THE INTERNATIONAL STEEL INDUSTRY FROM A TO Z

01	Raw materials, auxiliary materials and operating materials	16	Furnace and energy technology
02	Raw material pretreatment	17	Refractory technology
03	Iron making	18	Machinery and plant engineering
04	Steelmaking	19	Transport and storage technique
05	Continuous casting	20	Electrical engineering and automation
06	Near net shape casting	21	Measuring and testing technique
07	Hot rolling	22	Materials testing
08	Forging, extrusion	23	Analysis and laboratory equipment
09	Powder metallurgy	24	Environmental protection and disposal
10	Cold rolling	25	Occupational safety and ergonomics
11	Surface treatment	26	Other products
12	Production of bright steel and wire	27	Consulting, planning and services
13	Production of tubes/pipes	28	Steel in civil engineering
14	Sheet metal processing	30	Service concerning steel materials, in general
15	Steel products		

List of Products

01 Raw materials, auxiliary materials and operating materials

01.01. Ores 10

- Chrome ore 20 Iron ores
- 30
- Ores
- 40 Manganese ore
- Steel mill ores 50

01.02. Coal, coke

60	Lignite coke
62	Injection coal
65	Foundry coke
67	Coal / coke conveyor
70	Coke
80	Coke breeze
90	Coke breeze, dry
100	Petroleum coke
110	Hard coal, anthracite
01.03.	Scrap
120	Scrap metal
01.04.	Sponge iron
128	Sponge iron
130	Sponge iron
01.05. 140 150 160 170 180 200 210 220 230 240 250 260 270 280 290 300 310 315 320 330 340 350	Metals and alloys Cermix metal Chromium metal Cobalt Deoxidation alloys Iron granules Iron powder Ferrobor Ferrochrome Ferromanganese Ferromanganese Ferromolybdenum Ferronickel Ferroniobium Ferroniobium carbide Ferroniobium carbide Ferroniob powder Ferroniob powder Ferrosilicon Ferro-selenium Ferro-silicon-magnesium Ferro-silicon-maganese Ferrotitanium Ferrovanadium Ferrotungsten Ferrozinc
380	Alloys
385	Magnesium alloys
390	Manganese metal
400	Metals and alloys
410	Metal powder
420	Molybdenum
420	Molybdenum oxide

- 435 Non-ferrous metals
- 440 Nickel

450	Nickel-based alloys
460	Nickel niobium
470	Niobium, metals and alloys
475	Pure iron
480	Silicon carbide
490	Silicon and silicon alloys
500	Special metals
510	Special alloys
520	Tantalum
530	Titanium and titanium alloys
540	Vanadium metal
550	
560 570	Master alloys Tungsten
570	Tungsten granules for C and S analysis
610	Alloying additions
010	Anoying auditions
01.06.	Additives and fluxes
580	Carburizing agent
590	Fluorspar
600	Lime and limestone
612	
616	Olivine
618	Raw bauxite
01.07.	Gases
620	Acetylene
625	Argon
630	Gases, technical
640	Carbonic acid
650	Oxygen
660	Protective gas
670	Nitrogen
675	Hydrogen
01.08.	Lubricants
680	Coating powder
690	Lubricants
01.00	Composito motoriala
01.09. 678	Composite materials Bimetal for saws
070	Diffetal for Saws
01.10.	Water
691	River water / additional water
01 11	Other
01.11.	Other
695 698	Glass granules Titanium dioxide for hearth protec-
090	tion / repair
02	Raw material
	pretreatment
700	Engineering and technical assistance
703	Engineering and project management

700	Engineering and technical assistance
703	Engineering and project management

02.01. Ore dressing

- Ore and aggregate processing plants 710 720
 - Crushing plants
- Grinding and mixing plants 730
- 740 Mixers / core sand mixers

02.02.Coal preparation Coal grinding plants780Coal grinding plants02.03.Coal burden preparation790Coal burden preparation791Coal burden preparation792Ore preparation plants795Ore preparation plants797Conveying plants for pellets800Pelletizing plants810Pelletizing plants822Sintering plants823Sintering plants824Sintering plants825Grate bars for sinter plants830Briquetting plants830Briquetting plants830Briquetting plants830Briquetting plants851Coke plants858Emission control in coking plants, charging and discharging859Heat-recovery coking plants860Coke plants, general870Coke ovens operating machines900Coke oven operating machines910Coke oven so900Coke oven so900Coke oven so900Coke oven so900Coke oven so900Coke oven so900Scrap processing plants920Scrap processing plants931Jufting magnets942Shredder plants950Heat exchangers968Coil magnets970Lifting magnets981Scrap shears992Scrap magnets993Scrap magnets994Safety equipment for ele	750 760	Screens Screens and screening plants
 790 Coal burden preparation 02.04. Pelletizing plants 795 Ore preparation plants 797 Conveying plants for pellets 800 Pelletizing plants 810 Pelletizing plants 820 Sintering plants 822 Sinter hot material conveyors 826 Grate bars for sinter plants 02.06. Briquetting plants 830 Briquetting plants 830 Briquetting plants 830 Briquetting plants 830 Compacting plants 02.07. Coke plants 858 Emission control in coking plants, charging and discharging 859 Heat-recovery coking plants 860 Coke plants, general 870 Coke ovens 900 Coke oven operating machines 910 Coke oven gas treatment plants 920 Coke oven gas treatment plants 920 Coke ramming and extruding machines 910 Coke oven gas treatment plants 920 Coke ramming and extruding machines 950 Heat exchangers 02.08. Scrap processing plants 968 Coil magnets 970 Lifting magnets 980 Magnetic drums 990 Packing presses 999 Scrap drying plants 1000 Scrap mills, licker-ins 1010 Scrap shears 1021 Safety equipment for electric load lifting magnets 1022 Separation magnets 1030 Chip crusher 02.09. Other equipment 1041 Equipment for granulation of sludges and dusts 	770	Coal preparation plants
 795 Ore preparation plants 797 Conveying plants for pellets 800 Pelletizing plants 810 Pelletizing plants 820 Sintering plants 822 Sinter hot material conveyors 826 Grate bars for sinter plants 830 Briquetting plants 840 Briquetting plants 850 Compacting plants 858 Emission control in coking plants, charging and discharging 859 Heat-recovery coking plants 860 Coke plants, general 870 Coke crushing and screening plants 890 Coke ovens 900 Coke oven operating machines 910 Coke oven gas treatment plants 920 Coke ramming and extruding machines 950 Heat exchangers 920 Coke ramming and extruding machines 950 Heat exchangers 920 Coke ramming and extruding machines 950 Heat exchangers 920 Scrap processing plants 968 Coil magnets 970 Lifting magnets 980 Magnetic drums 990 Packing presses 999 Scrap drying plants 1000 Scrap mills, licker-ins 1010 Scrap shears 1021 Safety equipment for electric load lifting magnets 1022 Separation magnets 1030 Chip crusher 02.09. Other equipment 1041 Equipment for granulation of sludges and dusts 		
 820 Sintering plants 822 Sinter hot material conveyors 826 Grate bars for sinter plants 02.06. Briquetting plants 830 Briquetting plants 840 Briquetting of coal and coke 850 Compacting plants 02.07. Coke plants 858 Emission control in coking plants, charging and discharging 859 Heat-recovery coking plants 860 Coke plants, general 870 Coke ovens 900 Coke oven operating machines 910 Coke oven operating machines 920 Coke oven aga treatment plants 920 Coke ramming and extruding machines 950 Heat exchangers 02.08. Scrap processing plants 968 Coil magnets 970 Lifting magnets 980 Magnetic drums 990 Packing presses 999 Scrap drying plants 1000 Scrap mills, licker-ins 1010 Scrap shears 1020 Shredder plants 1021 Safety equipment for electric load lifting magnets 1022 Separation magnets 1030 Chip crusher 02.09. Other equipment 1041 Equipment for granulation of sludges and dusts 	795 797 800	Ore preparation plants Conveying plants for pellets Pelletizing plants
 830 Briquetting plants 840 Briquetting of coal and coke 850 Compacting plants 02.07. Coke plants 858 Emission control in coking plants, charging and discharging 859 Heat-recovery coking plants 860 Coke plants, general 870 Coke crushing and screening plants 890 Coke ovens 900 Coke oven operating machines 910 Coke oven gas treatment plants 920 Coke ramming and extruding machines 950 Heat exchangers 02.08. Scrap processing plants 968 Coil magnets 970 Lifting magnets 980 Magnetic drums 990 Packing presses 999 Scrap drying plants 1000 Scrap malls, licker-ins 1010 Scrap shears 1015 Scrap shear blades 1017 Scrap magnets 1020 Shredder plants 1021 Safety equipment for electric load lifting magnets 1022 Separation magnets 1030 Chip crusher 02.09. Other equipment 1041 Equipment for granulation of sludges and dusts 	820 822	Sintering plants Sinter hot material conveyors
 858 Emission control in coking plants, charging and discharging 859 Heat-recovery coking plants 860 Coke plants, general 870 Coke crushing and screening plants 890 Coke ovens 900 Coke oven operating machines 910 Coke oven gas treatment plants 920 Coke ramming and extruding machines 950 Heat exchangers 02.08. Scrap processing plants 968 Coil magnets 970 Lifting magnets 980 Magnetic drums 990 Packing presses 999 Scrap drying plants 1000 Scrap mills, licker-ins 1010 Scrap shears 1015 Scrap shear blades 1017 Scrap magnets 1020 Shredder plants 1021 Safety equipment for electric load lifting magnets 1022 Separation magnets 1030 Chip crusher 02.09. Other equipment for granulation of sludges and dusts	830 840	Briquetting plants Briquetting of coal and coke
968Coil magnets970Lifting magnets980Magnetic drums990Packing presses999Scrap drying plants1000Scrap mills, licker-ins1011Scrap shears1015Scrap shear blades1017Scrap magnets1020Shredder plants1021Safety equipment for electric load lifting magnets1022Separation magnets1030Chip crusher02.09.Other equipment for granulation of sludges and dusts	858 859 860 870 890 900 910 920	Emission control in coking plants, char- ging and discharging Heat-recovery coking plants Coke plants, general Coke crushing and screening plants Coke ovens Coke oven operating machines Coke oven gas treatment plants Coke ramming and extruding machines
1041 Equipment for granulation of sludges and dusts	968 970 980 999 1000 1010 1015 1017 1020 1021	Coil magnets Lifting magnets Magnetic drums Packing presses Scrap drying plants Scrap mills, licker-ins Scrap shears Scrap shears Scrap shear blades Scrap magnets Shredder plants Safety equipment for electric load lifting magnets Separation magnets
1050 Ferroalloying plants	1041 1050	Equipment for granulation of sludges and dusts Ferroalloying plants

Lime burning plants

Lime slaking plants

Roasting plants

1058

1060

03 Iron making

- 1080 Engineering and technical assistance
- 1090 Pig iron production plants
- 1100 Smelter reduction plants

03.01. Blast furnaces

- 1105 Energy recovery
- 1107 Expansion turbine
- 1110 Blast furnaces
- 1120 Blast furnace linings
- 1123 Blast furnace hearth protection / repair
- 1125 Blast furnace channel lining
- 1130 Blast furnace hot blast stoves
- 1140 Ceramic burners for hot blast stoves
- 1145 Shaft melting furnaces
- 1150 Heat recovery systems
- 1152 Hot blast stoves

03.02. Direct reduction plants

- 1160 Direct reduction plants1170 Direct reduction plants with coal as reducing agent
- 1172 DRI hot material conveyor
- 1174 Fine ore reduction with coal or gas

03.03. Cupola furnaces

- 1180 Hot blast cupola furnaces
- 1190 Cold blast cupola furnaces
- 1195 Shaft furnaces for metallurgical residues

03.04. Components

- 1200 Valves for blast furnace reheaters
- 1205 Fittings for cupola furnaces
- 1207 Copper fittings for cupolas
- 1210 Slide gate maintenance
- 1220 Gassing systems for blast furnaces, cupolas and steel mills
- 1230 Blow mold changing and nozzle block removal carriages
- 1240 boring bar changing devices
- 1250 Nozzle bars
- 1260 Injection plants for carbon
- 1270 Equipment for injecting coal, oil or gas into the blast furnace
- 1280 Equipment for injecting oil or gas into the blast furnace
- 1285 Blast furnace gas expansion turbines
- 1290 Hood manipulators for use on iron channels
- 1295 Hot gas generators for blast furnace and coke gas
- 1300 Hot blast valves
- 1310 Blast furnace blowers
- 1320 Blast furnace stands and shells1330 Blast furnace burdening / also
- burdening carriages
- 1340 Blast furnace probes
- 1350 Coal grinding, drying and injection systems
- 1351 Copper fittings for cupola furnaces
- 1353 Ladles and mixers, liquid pig iron, engineering and supply
- 1355 Process gas screw compressors
- 1360 Radar level measuring equipment

1380 Pig iron bulk pouring machines 1390 Pig iron mixers 1400 Pig iron ladle, mixer and transfer cars 1410 Slag molds 1420 Slag ladles Hoses for blast furnace cooling 1425 1430 Special fittings for blast furnace cooling 1432 Copper staves for blast furnace cooling 1440 Taphole tamping machines 1450 Tap hole and slag hole drilling machines 1458 Distributor systems for charging burden / ore / coke into the blast furnace 1460 Heat exchangers 1467 Weighing systems for torpedo cars 1470 Wind molds and nozzle stacks 1480 Wind vane 03.05. Blast furnace products for foundries 1490 Foundry pig iron 1500 Hematite pig iron Hematite pig iron for GG 1510 1520 Blast furnace ferro-manganese 1550 Special pig iron for GGG 1560 Mirror Iron Steel iron 1570 03.06. **By-products** 1580 Ferrous sulfate Blast furnace slag 1589 1590 Blast furnace slag as a road construction material 1600 Blast furnace slag and LD slag 1620 Slag lime 1630 Slag Sand 1639 Converter lime 1640 Converter lime057 Thomas lime 1643 LD slag 1650 Thomas phosphate

Rest and shaft cooling plates for blast

1370

furnaces

04 Steelmaking

- 1668 Equipment for steelmaking plants
- 1670 Engineering and technical assistance
- 1680Compact steelmaking equipment1690Second-hand steelmaking plant
- and equipment Steel mill plants and equipment
- 1699 Steel mill equipment
- 1700 Steel mill plants and equipment (stain-
- 1710 Steel mill plants and equipment (complete)

04.01. Hot metal preparation plants

- 1715 Desulfurization plants with slag regeneration
- 1720 Hot metal desulfurization plants

04.02. Converter

- 1730 Blown steelmaking plants
- 1740 KTB (Kawasaki Top Blowing) equipment
- 1745 Combined bottom blowing at converter
- 1750 Converter plants

04.03.Energy optimization furnaces1770Energy optimization furnaces

Setting machines for converter sealing

Converter sealing plugs

04.04. Electric steel plant

Purging stones

plugs

1755

1758

1760

04.04.	Electric steel plant
1780	Charging equipment for electric furnaces
1788	Bottom blowing equipment for electric arc
	furnaces (nitrogen and argon)
1790	Bottom tapping
1795	CO post-combustion
1800	Three-phase arc furnaces
1810	Injection systems for electric furnaces
1820	Electrode holders and contact jaws
	for electric furnaces
1830	Electrode control for electric arc furnaces
	and ladle heating systems
1840	Electrode extruders
1850	Electrode support arms
1855	Aluminum electrode support arms,
	current-carrying (Hot Arms)
1860	Electrode support arms,
	current-carrying (Hot Arms)
1865	Electrode discharge arm insulation
1870	Electric arc furnaces
1875	Electric arc ladle furnaces
1880	Electric arc furnaces with integrated
	scrap preheating (shaft furnaces)
1885	Spare and wear parts, consumables
1890	Direct current arc furnaces
1900	Graphite electrodes
1908	Jet Box Technology
1910	Cooling elements (tube wall
	segments, bay covers, plate coolers)
1920	Oil / 057gas oxygen burners
	(also post-combustion)
1930	Scrap baskets
1938	Scrap dryers
1940	Scrap preheating systems
1945	Poking machines for electric furnaces
1950	Electric tube systems for electric furnaces
1960	Water cooled cables
1970	Water cooling systems
1980	AC arc furnaces
1981	EAF high current insulation
1982	Power supplies for AC arc furnaces
1983	Power supplies for direct current arc
	furnaces
04.05.	Induction furnaces
1990	Induction furnaces
1995	Protection system for induction coils
1996	Induction furnaces \ 057Benairs

- 1996 Induction furnaces \ 057Repairs
- 2000 Water cooled cables

04.06. Vacuum furnaces

2008	High vacuum furnaces
2010	High vacuum furnaces (also electron
	beam melting furnaces)
2020	Vacuum induction melting furnaces
2021	Vacuum pumps, dry running, for vacuum
	furnaces
2025	Vacuum investment casting plants

04.07.

2028	Equipment for chemical heating
2030	Argon purging equipment
2040	Blow and injection conveying systems for
	filter dusts
2042	blowing lances, combined, for RH
2050	CAS, CAS-OB and CAB-plants
2060	Injection plants for metallurgical processes
2070	Electroslag remelting plants
2080	Ladle metallurgical plants
2090	Plasma arc plants
2100	Plasma ladle furnaces
2110	Secondary metallurgical plants
2120	Steel degassing plants
2130	Steel desulfurization plants
2140	T+P lance equipment
2145	Induction stirrers for ladle furnaces
2147	Vacuum degassing plants Vacuum arc furnace
2148	
04.08.	Tertiary metallurgy
2141	
2141	Electroslag remelting plant ESU plant Vacuum arc remelting / VAR plant
2142	Vacuum induction furnace / VIM plant
2143	Vacuum degassing equipment
2144	vacuum ucgassing equipment
04.09.	Components
2150	Deslagging machines
2155	Tap hole sealing equipment for converters
2156	Converter tap hole drilling and setting
	machines
2160	Tapping gate for converters and electric
	arc furnaces
2170	Andromat manipulator
2175	Burning machines for ladles
2180	Break-out machines for electric
	furnaces, converters, ladles, etc.
2182	Burning lances (oxygen) for tundish and
	ladle gate valves
2184	CO injection equipment
2190	Handling equipment for oxygen / carbon
0000	lances
2200	Automatic purging gas dome stations
2210	Heating equipment for ladles, mixers,
0015	converters and tundishes
2215	Feeding equipment for metallurgical plants
2220	Brakes
2230	Charging machines (trough and tongs)
2235	Steam jet vacuum pumps for steel degassing
2240	Dolomite centrifugal machines
2250	Wire spooling machines
2268	Injection plants for argon in ladles
2270	Injection plants for argon
2280	Injection plants for iron carbide dusts
2290	Injection plants for Hy / DRI dusts
2300	Injection plants for lime granules
2310	Injection plants for carbon (electric arc
	furnaces)
2312	Injection plants for alloying materials
2320	Electric heating elements for steel degas-
	sing plants
2340	Electromagnet. Conveying and dosing
0050	troughs for liquid metals
2350	Desulfurization equipment
2360	Oriel tapping fillers, electric arc furnaces
2370	Casting ladles, general

Secondary metallurgy Equipment for chemical heating

2380	Casting ladle heaters
2390	Ladles for steel mills
2400	Casting ladle gates (also slide gate gates)
2410	Pouring stream protection
2420	Casting carriages
2430	Handling equipment
2440	Handling equipment for oxygen /
	carbon lances
2450	Metallurgical and rolling mill hydraulics
2460	Lime-oxygen dosing and injection systems
2480	Tilting chairs for ladles
2490	Coal dust injection lances
2500	Ingot molds and casting molds
	for steel mills
2510	Ingot mold cars
2514	Continuous optical analysis equipment for
	process vessels
2515	Continuous optical temperature measure-
2010	ment for process vessels
0500	Converter blowing lance changing device
2520	
2525	Converter temperature and sampling
	equipment
2530	Lance robots \ 057-manipulators
2540	Alloying equipment for steel mills
2541	Multifunction lances and burners for
	electric furnaces
2542	Ladles and mixers, liquid pig iron, engi-
LOIL	neering and supply
2543	Mixer ladles
2545	Ladle sliders (steel mill ladle
	slider material)
2550	Ladle cars
2560	Robots for cutting slag
2570	Sand feeding devices for ladle tap hole
2580	Oxygen nozzles
2590	Oxygen lances
2600	Oxygen lance equipment
2610	Oxygen tubes, heat protected
2615	Shadow tube manipulators
2618	Slag with space resistant property
2620	Slag bucket
2630	Slag retaining device for converter
2640	Slag carts
2650	Hose reels
2655	Fuses (multifunction) for burners
2660	Special safety oxygen hose reels
	Stone coating agent for ladle gate valves
2665	
2666	Stone coating agents for slide gate
	systems
2668	Poking machines for electric furnaces
2669	Sublances
2670	Immersion tube spraying devices
2680	Torpedo car radar level measuring devices
2686	Vacuum pumps, dry running,
2000	for vacuum furnaces
2600	
2690	Preheating and drying stations
	for ladles and tundishes
2695	Weighing systems for scrap
	and alloying elements
2700	Heat exchangers for steel mills
2702	Flame cutting machines for ladles
2704	Crucibles for remelting furnaces
2705	Process gas analyzer
2,00	
04.10	Stool mill oundies
04.10.	Steel mill supplies
2706	Sealing cords and packings up to 1260°C
2710	Carburizing agents of all kinds

2720	Deoxidizing agent
2730	Deoxidation technology
2735	EBT taphole plugging compound
2740	Dephosphorizing agents
2750	Desulfurization and deoxidation agents
2760	desulfurization agents (also magnesium)
2770	ESU slags
2780	Ferroniob cored wires
2790	Cored wires
2798	Casting heads
2800	Casting powder
2801	Casting powders, granulated and powdered
2810	Graphite Craphite pounder
2820 2825	Graphite powder Heat protection fabric to 1260°C
2825	Insulating covering agents for
2021	tundishes, ladles and troughs
2830	Molds
2840	Mould inserts
2845	Chill putty, -filler up to 1600°C
2850	Ingot mold spray and plate protection
2855	Oxygen nozzles and blowing lances
2860	Blowhole powder
2865	Mats and felts up to 1260°C
2868	Olivine slag conditioner
2870	Ladle covering agent
2871	Ladle covering agents, granulated
0000	and powdered
2880 2885	Ladle slide sand
2000 2888	Rotary slide gate for steel ladles Slag granulation
2890	Slag sands
2900	Slag foaming
2904	Protective blankets made of textile fabric
	up to 1260°C
2905	Special adhesives up to 1200°C
2905 2910	Special adhesives up to 1200°C Steel mill ladle slide material
2910 2915	Special adhesives up to 1200°C Steel mill ladle slide material Crucibles for ESR, VAR and casting rolls
2910	Special adhesives up to 1200°C Steel mill ladle slide material Crucibles for ESR, VAR and casting rolls Tundish covering material, granulated
2910 2915	Special adhesives up to 1200°C Steel mill ladle slide material Crucibles for ESR, VAR and casting rolls
2910 2915 2920	Special adhesives up to 1200°C Steel mill ladle slide material Crucibles for ESR, VAR and casting rolls Tundish covering material, granulated and powdered
2910 2915 2920 04.11.	Special adhesives up to 1200°C Steel mill ladle slide material Crucibles for ESR, VAR and casting rolls Tundish covering material, granulated and powdered Preparation of steel mill materials
2910 2915 2920 04.11. 2930	Special adhesives up to 1200°C Steel mill ladle slide material Crucibles for ESR, VAR and casting rolls Tundish covering material, granulated and powdered Preparation of steel mill materials Processing of used refractory materials
2910 2915 2920 04.11.	Special adhesives up to 1200°C Steel mill ladle slide material Crucibles for ESR, VAR and casting rolls Tundish covering material, granulated and powdered Preparation of steel mill materials Processing of used refractory materials Processing of steel mill dusts, fines and
2910 2915 2920 04.11. 2930 2940	Special adhesives up to 1200°C Steel mill ladle slide material Crucibles for ESR, VAR and casting rolls Tundish covering material, granulated and powdered Preparation of steel mill materials Processing of used refractory materials Processing of steel mill dusts, fines and oil-containing steel mill sludges
2910 2915 2920 04.11. 2930	Special adhesives up to 1200°C Steel mill ladle slide material Crucibles for ESR, VAR and casting rolls Tundish covering material, granulated and powdered Preparation of steel mill materials Processing of used refractory materials Processing of steel mill dusts, fines and oil-containing steel mill sludges Slag preparation (slag transport and
2910 2915 2920 04.11. 2930 2940	Special adhesives up to 1200°C Steel mill ladle slide material Crucibles for ESR, VAR and casting rolls Tundish covering material, granulated and powdered Preparation of steel mill materials Processing of used refractory materials Processing of steel mill dusts, fines and oil-containing steel mill sludges Slag preparation (slag transport and recycling)
2910 2915 2920 04.11. 2930 2940 2950	Special adhesives up to 1200°C Steel mill ladle slide material Crucibles for ESR, VAR and casting rolls Tundish covering material, granulated and powdered Preparation of steel mill materials Processing of used refractory materials Processing of steel mill dusts, fines and oil-containing steel mill sludges Slag preparation (slag transport and
2910 2915 2920 04.11. 2930 2940 2950	Special adhesives up to 1200°C Steel mill ladle slide material Crucibles for ESR, VAR and casting rolls Tundish covering material, granulated and powdered Preparation of steel mill materials Processing of used refractory materials Processing of steel mill dusts, fines and oil-containing steel mill sludges Slag preparation (slag transport and recycling)
2910 2915 2920 04.11. 2930 2940 2950 2954	Special adhesives up to 1200°C Steel mill ladle slide material Crucibles for ESR, VAR and casting rolls Tundish covering material, granulated and powdered Preparation of steel mill materials Processing of used refractory materials Processing of steel mill dusts, fines and oil-containing steel mill sludges Slag preparation (slag transport and recycling) Separation magnets
2910 2915 2920 04.11. 2930 2940 2950 2954 04.12.	Special adhesives up to 1200°C Steel mill ladle slide material Crucibles for ESR, VAR and casting rolls Tundish covering material, granulated and powdered Preparation of steel mill materials Processing of used refractory materials Processing of steel mill dusts, fines and oil-containing steel mill sludges Slag preparation (slag transport and recycling) Separation magnets Services Engineering for steel mill plants and equipment
2910 2915 2920 04.11. 2930 2940 2950 2954 04.12.	Special adhesives up to 1200°C Steel mill ladle slide material Crucibles for ESR, VAR and casting rolls Tundish covering material, granulated and powdered Preparation of steel mill materials Processing of used refractory materials Processing of steel mill dusts, fines and oil-containing steel mill sludges Slag preparation (slag transport and recycling) Separation magnets Services Engineering for steel mill plants and equipment Hydraulic cylinder repair
2910 2915 2920 04.11. 2930 2940 2950 2954 04.12. 2956	Special adhesives up to 1200°C Steel mill ladle slide material Crucibles for ESR, VAR and casting rolls Tundish covering material, granulated and powdered Preparation of steel mill materials Processing of used refractory materials Processing of steel mill dusts, fines and oil-containing steel mill sludges Slag preparation (slag transport and recycling) Separation magnets Services Engineering for steel mill plants and equipment
2910 2915 2920 04.11. 2930 2940 2950 2954 04.12. 2956 2957	Special adhesives up to 1200°C Steel mill ladle slide material Crucibles for ESR, VAR and casting rolls Tundish covering material, granulated and powdered Preparation of steel mill materials Processing of used refractory materials Processing of steel mill dusts, fines and oil-containing steel mill sludges Slag preparation (slag transport and recycling) Separation magnets Services Engineering for steel mill plants and equipment Hydraulic cylinder repair
2910 2915 2920 04.11. 2930 2940 2950 2954 04.12. 2956 2957	Special adhesives up to 1200°C Steel mill ladle slide material Crucibles for ESR, VAR and casting rolls Tundish covering material, granulated and powdered Preparation of steel mill materials Processing of used refractory materials Processing of steel mill dusts, fines and oil-containing steel mill sludges Slag preparation (slag transport and recycling) Separation magnets Services Engineering for steel mill plants and equipment Hydraulic cylinder repair
2910 2915 2920 04.11. 2930 2940 2950 2954 04.12. 2956 2957 2958	Special adhesives up to 1200°C Steel mill ladle slide material Crucibles for ESR, VAR and casting rolls Tundish covering material, granulated and powdered Preparation of steel mill materials Processing of used refractory materials Processing of steel mill dusts, fines and oil-containing steel mill sludges Slag preparation (slag transport and recycling) Separation magnets Services Engineering for steel mill plants and equipment Hydraulic cylinder repair Slag bucket maintenance
2910 2915 2920 04.11. 2930 2940 2950 2954 04.12. 2956 2957 2958	Special adhesives up to 1200°C Steel mill ladle slide material Crucibles for ESR, VAR and casting rolls Tundish covering material, granulated and powdered Preparation of steel mill materials Processing of used refractory materials Processing of steel mill dusts, fines and oil-containing steel mill sludges Slag preparation (slag transport and recycling) Separation magnets Services Engineering for steel mill plants and equipment Hydraulic cylinder repair Slag bucket maintenance
2910 2915 2920 04.11. 2930 2940 2950 2954 04.12. 2956 2957 2958 05 2960	Special adhesives up to 1200°C Steel mill ladle slide material Crucibles for ESR, VAR and casting rolls Tundish covering material, granulated and powdered Preparation of steel mill materials Processing of used refractory materials Processing of steel mill dusts, fines and oil-containing steel mill sludges Stag preparation (slag transport and recycling) Separation magnets Services Engineering for steel mill plants and equipment Hydraulic cylinder repair Slag bucket maintenance Continuous casting Engineering and technical assistance
2910 2915 2920 04.11. 2930 2940 2950 2954 04.12. 2956 2957 2958 05	Special adhesives up to 1200°C Steel mill ladle slide material Crucibles for ESR, VAR and casting rolls Tundish covering material, granulated and powdered Preparation of steel mill materials Processing of used refractory materials Processing of steel mill dusts, fines and oil-containing steel mill sludges Slag preparation (slag transport and recycling) Separation magnets Services Engineering for steel mill plants and equipment Hydraulic cylinder repair Slag bucket maintenance Continuous casting plants of various
2910 2915 2920 04.11. 2930 2940 2950 2954 04.12. 2956 2957 2958 05 2960 05.01.	Special adhesives up to 1200°C Steel mill ladle slide material Crucibles for ESR, VAR and casting rolls Tundish covering material, granulated and powdered Preparation of steel mill materials Processing of used refractory materials Processing of steel mill dusts, fines and oil-containing steel mill sludges Slag preparation (slag transport and recycling) Separation magnets Services Engineering for steel mill plants and equipment Hydraulic cylinder repair Slag bucket maintenance Continuous casting Engineering and technical assistance Continuous casting plants of various designs
2910 2915 2920 04.11. 2930 2940 2950 2954 04.12. 2956 2957 2958 05 2960	Special adhesives up to 1200°C Steel mill ladle slide material Crucibles for ESR, VAR and casting rolls Tundish covering material, granulated and powdered Preparation of steel mill materials Processing of used refractory materials Processing of steel mill dusts, fines and oil-containing steel mill sludges Slag preparation (slag transport and recycling) Separation magnets Services Engineering for steel mill plants and equipment Hydraulic cylinder repair Slag bucket maintenance Continuous casting plants of various designs Flat ingots
2910 2915 2920 04.11. 2930 2950 2954 04.12. 2956 2957 2958 2957 2958 05.01. 2960	Special adhesives up to 1200°C Steel mill ladle slide material Crucibles for ESR, VAR and casting rolls Tundish covering material, granulated and powdered Preparation of steel mill materials Processing of used refractory materials Processing of steel mill dusts, fines and oil-containing steel mill sludges Slag preparation (slag transport and recycling) Separation magnets Services Engineering for steel mill plants and equipment Hydraulic cylinder repair Slag bucket maintenance Continuous casting Engineering and technical assistance Continuous casting plants of various designs
2910 2915 2920 04.11. 2930 2940 2950 2954 04.12. 2955 2958 2957 2958 2950 2960 05.01. 2962 2965	Special adhesives up to 1200°C Steel mill ladle slide material Crucibles for ESR, VAR and casting rolls Tundish covering material, granulated and powdered Preparation of steel mill materials Processing of used refractory materials Processing of steel mill dusts, fines and oil-containing steel mill sludges Slag preparation (slag transport and recycling) Separation magnets Services Engineering for steel mill plants and equipment Hydraulic cylinder repair Slag bucket maintenance Continuous casting plants of various designs Flat ingots Casting platform robot

STEEL + TECHNOLOGY 1 2022

Continuous casting plants for diffe- rent product dimensions Beam-blank continuous casters Continuous slab casters High-speed continuous billet casters Continuous billet casters	33 33 34 34 34 34
Continuous billet casters, horizontal Combined continuous slab casters Round continuous casters Round continuous casting machines, horizontal	34 34 34 34
Continuous bloom casting plants Continuous bloom and slab casters	34
Continuous bloom and billet casting plants Continuous bloom and billet casting	34 34 34
plants, horizontal bloom and round continuous casting	34 34
plants bloom and billet continuous casting plants, horizontal	34 35 35 35
Spray compacting plants	
Spray compacting plants	05. 0 35
Components Al wire injection plants	35
Slab edge adjustment Slab edge heating, inductive Slab cooling plants	35
Slab cooling boiler / heat recovery plants Slab cross-cutting and slitting lines Slab grinding machines	05.(35
Soft slab turning and transporting mag- nets	
Brakes	
Flame removal equipment Flame cutting equipment	35
Slewing ring for water cooled rolls	00
DS stamping machine	06.0
Electromagnetic brakes, EMBR	35
Single material nozzles for continuous casting cooling	35 35
Deburrer	35
Inks for marking equipment	
Paint signing equipment	35
Casting powder feeder Casting stream protection by argon	35
Inductive stirring Cold distribution plates (tundish plates)	35
Marking equipment for slabs, ingots and	06.0
billets	35
Billet grinding machines Billet processing machines	36
Billet sawing machines	36 36
Billet grinding machines	36
Mould flow measuring equipment	36
Reading systems for automatic identifica-	36
tion of impact and directly applied marks Air atomization nozzles for continuous	36

2982

2990

3000

3010

05.02.

3020

3030 3035

3040 3043

3045

3050 3055

3058 3060

3070

3075

3080

3085

05.03.

05.04.

3100

3110

3120

3130 3140

3150

3160

3166

3170

3180 3190

3200

3210

3216

3220

3230

3240

3250

3260

3262

3270

3280

3290

3292 3300

3310

3320

3330 3340

3090

Casting rolls, rollers

Horizontal continuous casting plants

Continuous casting plants, general

Vertical continuous casting plants

3345 casting cooling

3346	Marking machines
3350	Emergency cutting torches
3355	Optical product recognition (OPR)
	for marked billets
3360	Plasma tundish heating
3370	Plate molds
3380	Precision stopper device
3390	Tube molds
3400	Shadow tube manipulators
3405	Safety device for electrolift magnets
3410	Marking colors
3415	Slab magnets
3420	Stamping machines
3422	Stamping machines, hydraulic or pneu-
	matic drive
3429	Continuous casting molds
3430	Continuous casting molds (also made of
	electrographite)
3440	Continuous casting rolls
3450	Tundish heating
3460	Tundish (manifold) plasma heater
3470	Tundish flow control
3480	Tundish gate valve (Tundish gate valve)
3490	bloom and billet adjustments
3500	Heat exchangers
3503	Weighing systems for ladles, tundish etc.
3510	Two-substance nozzles for continuous
	casting cooling
5.05.	Operating materials
3520	Casting powder
3530	Lubricants for continuous casting plants
3535	Welding consumables for regeneration
0000	and against wear
- 00	0
5.06.	Services
3537	Grinding and scarfing of slabs, billets and
	blooms

06 Near net shape casting

3540	Engineering	and	technical	assistance

5.01 Equipment

0.01.	Equipment
3550	Strip casting lines
3560	Thin strip casting plants
3570	Thin slab casting plants
3572	Thin slab casting and rolling lines
	with direct bond
3573	EUROSTRIP strip casting plants
3574	EUROSTRIP direct strip casting
	and rolling lines
3575	Continuous billet casting plants
6.02.	Components
6.02. 3590	Components Flame cutting equipment
3590	Flame cutting equipment
3590 3600	Flame cutting equipment Flame cutting equipment
3590 3600 3610	Flame cutting equipment Flame cutting equipment DS stamping machine
3590 3600 3610 3630	Flame cutting equipment Flame cutting equipment DS stamping machine Thin slab cross and slitting lines
3590 3600 3610 3630 3640	Flame cutting equipment Flame cutting equipment DS stamping machine Thin slab cross and slitting lines Thin slab grinding machines
3590 3600 3610 3630 3640 3670	Flame cutting equipment Flame cutting equipment DS stamping machine Thin slab cross and slitting lines Thin slab grinding machines Color marking equipment

- 3700 Reading systems for automatic identification of impact and directly applied characters
- 3710 Marking inks 3712 Stamping machines, hydraulic
 - or pneumatic drive

06.03. **Operating supplies**

Coolant 3750 3760 Lubricants

07 Hot rolling

3770 Engineering and technical assistance 3780 Second-hand hot rolling mills

07.01. Hot strip mills

- 3773 Flat block plants 3776 Flat block plants for rolling 3790 Thin slab mills
- 3805 Modernization of hot rolling mills
- 3820 Steckel rolling mills, complete
- 3830 Rolling mills, complete
- 3840 Hot rolling mills for slab products

07.02. Heavy plate mills

3850 Hot rolling mills, complete

07.03. Billet and semi-finished product mills

3860 Ingot, billet and plate mills 3861 Ingot, billet and semi-finished product mills

07.04. Section mills

- 3870 Rolling mills for light sectional steel
- 3875 Roll forming mills
- 3880 Special section rolling mills
- 3881 Rail rolling mills 3890 Beam and other section mills

07.05. Bar and wire rod mills

- 3900 Automatic coil handling 3910 Guide equipment for wire rod, bar and fine iron mills 3920 Calibrating mills 3930 Precision rolling systems 3940 Reducing and sizing mills 3944 Reducing and sizing mills 3950 Bar and wire rod mills 3955 Bar and wire rod mills for carbon and stainless steels 3960 Bar mills 3968 Rolling mills for flat products 3970 Rolling mills for long products 3974 Rolling mills for wire rod, rebars and bars 07.06. **Ring rolling mills**
- 3980 Ring rolling machines and plants 3981 Wheel rolling machines and plants

07.07. **Finishing lines**

3990	Finishing	lines
4000	Finishing	machines

4010	Chamfering machines for round and	4520
4017	square billets	4528
4017	Flat block plants for rolling	4500
4020	Flying shears	4530
4030	Hot / cold cut-off grinding machines	4540
4040	Cold circular sawing machines	4550
4050	Profile steel roller straightening machines	4560
4060	Rotary saws	4570
4065	Second-hand finishing lines	4580
4070 4080	Packing lines	4582 4590
4000	Hot straightening and cutting-off machines	4590
07.08.	Rolls for hot rolling mills	
4090	Work rolls	4610
4100	Plate rolls	4630
4110	Ingot rolls	4640
4120	Slab rolls	4650
4128	EcoRolls	
4130	Fine iron and wire rolls	4660
4135	Ferrous cast rolls	4680
4140	Forged rolls	
4160	Chilled cast iron rolls	4690
4170	Tungsten carbide \ 057steel rolls	4700
4180	Caliber rolls	
4190	Billet and semi-finished rolls	
4200	Straightening rolls	4710
4210	Ductile iron rolls	4720
4220	Cast steel rolls	4730
4230	Back-up rolls	4740
4240	Composite casting rolls	4750
4250	Composite casting rolls in high chrome	4760
	and indefinite materials	4770
4260	Composite chilled cast rolls	4780
4270	Composite rolls	4790
4280	Rolls for tube mills	4800
4290	Roll rings	4810 4820
07.09.	Roll machining and machines	1020
4300	EDT systems	4830
4320	High wear resistant coatings on rolls etc.	4840
4330	Caliber processing machines	4850
4340	Caliber groove grinding and milling	4860
	machines	4870
4350	Groove milling machines	4880
4355	Ring expanders	4890
4360	Special machines	4892
4370	Roll machining machines	4893
4380	Roll turning machines	4897
4390	Roll grinding machines	
4395	Roll grinding wheels	07.11.
4400	Roll blasting machines	4900
4410	Lines for roll forming	
4420	Roll surface, services	07.12.
07.10.	Components	4920
4430	Decoilers and rewinders	
4432	Decoiler components	08
4440	Drives, gearboxes and comb mill stands	
4450	Strip cooling equipment	4930
4460	Belt grinding machines	4940
4470	Brakes	
4479	Coil magnets	
4490	Nozzles for descaling	08.01.
4500	Nozzles for roll cooling	4950
4503	Roll cooling (stainless steel)	4960
4510	Electric rolls and roller tables	4970
4515	Scrapers for hot strip lines up to 1000°C	

4520	Descaling systems with solid abrasives
4528	Descaling systems with high pressure water
4530	Descaling systems with liquid abrasives
4540	Colors for marking equipment
4550	Paint marking systems
4560	Grease lubrication systems
4570	Scarfing systems, hot and cold
4580	Scarfing equipment, machines and plants
4582	Scarfing plants, robot controlled
4590	Gear rollers
4600	Semi-finished product testing, sorting and fettling lines
4610	Decoilers
4630	Edging and shifting devices
4640	Marking lines for plates, slabs and tubes
4650	Marking systems for profiles, strips and sheets
4660	Marking lines for slabs and blocks
4680	Compactor and press binding lines for wire rod
4690	Cooling beds
4700	Reading systems for automatic
	identification of impact and directly
	applied marks
4710	Oil-hydraulic setting devices
	Oil and emulsion circulation systems
4720	
4730	Roller tables
4740	Rotating and stationary shear blades
4750	Lubrication systems
4760	Quick change stands
4770	Safety device for electrolift magnets
4780	Marking inks
4790	Marking pins for hot surfaces
4800	Steel strapping
4810	Stamping machines
4820	Stamping machines and stamps for hot
	and cold operation (also fully automatic)
4830	Stamps and tools
4840	Transport equipment for wide strapping
4850	Strapping machines for coils
	Heat exchangers
4860	
4870	Roll transport devices
4880	Roll cooling systems, controllable
4890	Roll matting systems
4892	Roll guides
4893	Roll rings
4897	Weighing systems for coils and bundles
7.11.	Operating fluids
4900	Lubricants for hot rolling mills
	ő
7.12.	Services
4920	High wear resistant coating on rolls etc.
4320	High wear resistant coating on rolls etc.
08	Forging, extrusion
4930	Engineering and technical assistance
4940	Modernization of water hydraulic control
	systems
8.01.	Forging machines
4950	CNC precision forging machines
	Open-die forging lines
4960	

Die forging lines

4990	Hydraulic forging presses	
5000	Cold extrusion presses	

Die spraying plants

- 5020 Presses, general 5030 Pressing and forging machines
- 5040 Radial forging machines
- 5050 Radial and axial die rolling machines and plants

Hot isothermal forging plants (HIF)

5060 Radial forging machines

4980

4985

- 5061 Radial forging machines, hydraulic
- 5070 Ring blank presses
- 5080 cNC precision forging machines
- 5084 Forging rolls
- horizontal forging machines, upsetting 5090 machines

08.02. Extrusion presses

- 5100 Metal pipe and tube extrusion presses
- 5110 Steel pipe extrusion presses
- 5120 Extrusion presses for profiles

08.03. Components

- 5130 Brakes
- 5150 Forging manipulators
- 5155 Forging manipulators, rail-mounted
- 5160 Forging robots
- 5180 Transport manipulators
- 5184 Water hydraulic drive and control technology

08.04. **Operating materials**

- 5190 Lubricants for extrusion presses 5195
- Heat resistant sliding materials

09 **Powder metallurgy**

5200	Engineering and technical assistance
5210	Powder Metallurgy

09.01. Hard alloys

5220 Hard alloys, general 5230 Machinable and hardenable hard alloys

09.02. Hard materials

5290 Tungsten carbide

09.03. Hard metal powders

5300	Iron, steel, alloy powders, non-ferrous
	metal powders
5310	Carbide powder

09.04. **Additives**

5320 Binder metals

- 5330 Organic additives
- 09.05. Machines and equipment for powder production

5340	Machines and equipment for water
	atomization
5350	Machinery and equipment for melt atom-
	ization
5360	Machines and equipment for spray drying
5370	Powder manufacturers

09.06. 5370 5380 5390 5400 5405 5410 5420 5422	Machines and equipment for production of powder metallurgical products Plants, complete Hot and cold isostatic presses and plants Metal powder presses Presses Powder presses, hydraulic, mechanical, hybrid Protective gas furnaces Vacuum furnaces Vacuum pumps, dry running, for vacuum furnaces
09.07. 5430 5432 5440 5450	Powder metallurgy manufactured products PM metals / sintered metals PM rolling rings PM steels Composite materials
09.08. 5460 5470	Further processing of powder metallurgy products Plasma powder cladding Thermal spraying
09.09. 5475 5476	Additive manufacturing 3-D printing Additive manufacturing processes
10	Cold rolling
5480	Engineering and technical assistance
5480 10.01. 5490 5510 5520 5523 5530 5540	
10.01. 5490 5510 5520 5523 5530	Engineering and technical assistance Cold rolling mills Strip, sheet, cold and metal rolling mills cold rolling blocks for wire Cold rolling mills, complete Modernization of cold rolling mills Second-hand cold rolling mills

10.04. Annealing lines

5668Continuous annealing5670Annealing lines

5672	Annealing and pickling lines
5680	Annealing lines, inductive
5682	Annealing plants, continuous
5685	Modernization of annealing
0000	and pickling lines
	and picking intes
10.05.	Rolls for cold rolling mills
5686	Squeeze rolls
5690	Work rolls
5695	Spreader rolls
5700	Dressing rolls
5710	Polishing rolls
5715	Straightening rolls
5720	Straightening rolls
5730	Backing rolls
5750	Nonwoven rolls
5760	Rolls
5763	Roll sealing sleeves
5766	Roll core production and machining
5770	Rolls with polyurethane coating
10.06.	Components
5780	Drives, gears and comb mill stands
5784	Strip guiding
5790	Tape remover
5800	Brakes
5803	Brake felt, stripper felt
5810	Letter and number types for stamping
	machines
E014	
5814	Labeling machines
	for rolled profiles (cold)
5830	Labeling machines
0000	
	Color marking machines
5840	Color marking machines Reel covers
5840 5845	Reel covers
5840	Reel covers Reading systems for automatic identi-
5840 5845	Reel covers Reading systems for automatic identi- fication of impact and directly applied
5840 5845	Reel covers Reading systems for automatic identi-
5840 5845	Reel covers Reading systems for automatic identi- fication of impact and directly applied
5840 5845 5850 5860	Reel covers Reading systems for automatic identi- fication of impact and directly applied characters Marking systems
5840 5845 5850 5860 5860 5870	Reel covers Reading systems for automatic identi- fication of impact and directly applied characters Marking systems Oil circulation systems
5840 5845 5850 5860 5870 5880	Reel covers Reading systems for automatic identi- fication of impact and directly applied characters Marking systems Oil circulation systems Rotating and stationary shear blades
5840 5845 5850 5860 5870 5880 5880 5890	Reel covers Reading systems for automatic identi- fication of impact and directly applied characters Marking systems Oil circulation systems Rotating and stationary shear blades Marking inks for stamping machines
5840 5845 5850 5860 5870 5880 5890 5900	Reel covers Reading systems for automatic identi- fication of impact and directly applied characters Marking systems Oil circulation systems Rotating and stationary shear blades Marking inks for stamping machines Marking devices
5840 5845 5850 5860 5870 5880 5880 5890	Reel covers Reading systems for automatic identi- fication of impact and directly applied characters Marking systems Oil circulation systems Rotating and stationary shear blades Marking inks for stamping machines
5840 5845 5850 5860 5870 5880 5890 5900	Reel covers Reading systems for automatic identi- fication of impact and directly applied characters Marking systems Oil circulation systems Rotating and stationary shear blades Marking inks for stamping machines Marking devices
5840 5845 5850 5860 5870 5880 5890 5900 5910 5920	Reel covers Reading systems for automatic identi- fication of impact and directly applied characters Marking systems Oil circulation systems Rotating and stationary shear blades Marking inks for stamping machines Marking devices Marking pens for metals Steel strapping
5840 5845 5850 5860 5870 5880 5890 5900 5910	Reel covers Reading systems for automatic identi- fication of impact and directly applied characters Marking systems Oil circulation systems Rotating and stationary shear blades Marking inks for stamping machines Marking devices Marking pens for metals Steel strapping Stamping machines and stamps for hot
5840 5845 5850 5870 5870 5880 5890 5990 5910 5920 5930	Reel covers Reading systems for automatic identi- fication of impact and directly applied characters Marking systems Oil circulation systems Rotating and stationary shear blades Marking inks for stamping machines Marking devices Marking pens for metals Steel strapping Stamping machines and stamps for hot and cold operation (also fully automatic)
5840 5845 5850 5860 5870 5880 5890 5990 5910 5920 5930 5932	Reel covers Reading systems for automatic identi- fication of impact and directly applied characters Marking systems Oil circulation systems Rotating and stationary shear blades Marking inks for stamping machines Marking devices Marking pens for metals Steel strapping Stamping machines and stamps for hot and cold operation (also fully automatic) Roller cooling systems for high demands
5840 5845 5850 5860 5870 5880 5890 5900 5910 5920 5930 5930 5932 5932 5940	Reel covers Reading systems for automatic identi- fication of impact and directly applied characters Marking systems Oil circulation systems Rotating and stationary shear blades Marking inks for stamping machines Marking devices Marking pens for metals Steel strapping Stamping machines and stamps for hot and cold operation (also fully automatic) Roller cooling systems for high demands Heat exchangers
5840 5845 5850 5860 5870 5880 5890 5990 5910 5920 5930 5932	Reel covers Reading systems for automatic identi- fication of impact and directly applied characters Marking systems Oil circulation systems Rotating and stationary shear blades Marking inks for stamping machines Marking devices Marking pens for metals Steel strapping Stamping machines and stamps for hot and cold operation (also fully automatic) Roller cooling systems for high demands
5840 5845 5850 5860 5870 5880 5890 5900 5910 5920 5930 5930 5932 5932 5940	Reel covers Reading systems for automatic identi- fication of impact and directly applied characters Marking systems Oil circulation systems Rotating and stationary shear blades Marking inks for stamping machines Marking devices Marking pens for metals Steel strapping Stamping machines and stamps for hot and cold operation (also fully automatic) Roller cooling systems for high demands Heat exchangers Winding coils
5840 5845 5850 5860 5870 5880 5900 5910 5920 5930 5930 5932 5932 5940 5950	Reel covers Reading systems for automatic identi- fication of impact and directly applied characters Marking systems Oil circulation systems Rotating and stationary shear blades Marking inks for stamping machines Marking devices Marking pens for metals Steel strapping Stamping machines and stamps for hot and cold operation (also fully automatic) Roller cooling systems for high demands Heat exchangers
5840 5845 5850 5860 5870 5880 5900 5910 5920 5930 5932 5932 5940 5950 5952	Reel covers Reading systems for automatic identi- fication of impact and directly applied characters Marking systems Oil circulation systems Rotating and stationary shear blades Marking inks for stamping machines Marking devices Marking pens for metals Steel strapping Stamping machines and stamps for hot and cold operation (also fully automatic) Roller cooling systems for high demands Heat exchangers Winding coils Weighing systems for bundles and coils
5840 5845 5850 5860 5870 5880 5900 5910 5920 5930 5930 5932 5930 5950 5952 10.07.	Reel covers Reading systems for automatic identi- fication of impact and directly applied characters Marking systems Oil circulation systems Rotating and stationary shear blades Marking inks for stamping machines Marking devices Marking pens for metals Steel strapping Stamping machines and stamps for hot and cold operation (also fully automatic) Roller cooling systems for high demands Heat exchangers Winding coils Weighing systems for bundles and coils Operating materials
5840 5845 5850 5860 5870 5880 5900 5910 5920 5930 5932 5932 5940 5950 5952	Reel covers Reading systems for automatic identi- fication of impact and directly applied characters Marking systems Oil circulation systems Rotating and stationary shear blades Marking inks for stamping machines Marking devices Marking pens for metals Steel strapping Stamping machines and stamps for hot and cold operation (also fully automatic) Roller cooling systems for high demands Heat exchangers Winding coils Weighing systems for bundles and coils
5840 5845 5850 5860 5870 5880 5900 5910 5920 5930 5930 5932 5930 5950 5952 10.07.	Reel covers Reading systems for automatic identi- fication of impact and directly applied characters Marking systems Oil circulation systems Rotating and stationary shear blades Marking inks for stamping machines Marking devices Marking pens for metals Steel strapping Stamping machines and stamps for hot and cold operation (also fully automatic) Roller cooling systems for high demands Heat exchangers Winding coils Weighing systems for bundles and coils Operating materials
5840 5845 5850 5860 5870 5880 5900 5910 5920 5930 5920 5930 5932 5940 5950 5952 10.07. 5960	Reel covers Reading systems for automatic identi- fication of impact and directly applied characters Marking systems Oil circulation systems Rotating and stationary shear blades Marking inks for stamping machines Marking devices Marking pens for metals Steel strapping Stamping machines and stamps for hot and cold operation (also fully automatic) Roller cooling systems for high demands Heat exchangers Winding coils Weighing systems for bundles and coils Operating materials Lubricants for cold rolling
5840 5845 5850 5860 5870 5880 5900 5910 5920 5930 5930 5932 5930 5950 5952 10.07.	Reel covers Reading systems for automatic identi- fication of impact and directly applied characters Marking systems Oil circulation systems Rotating and stationary shear blades Marking inks for stamping machines Marking devices Marking pens for metals Steel strapping Stamping machines and stamps for hot and cold operation (also fully automatic) Roller cooling systems for high demands Heat exchangers Winding coils Weighing systems for bundles and coils Operating materials
5840 5845 5850 5860 5870 5880 5900 5910 5920 5930 5920 5930 5932 5940 5950 5952 10.07. 5960	Reel covers Reading systems for automatic identi- fication of impact and directly applied characters Marking systems Oil circulation systems Rotating and stationary shear blades Marking inks for stamping machines Marking devices Marking pens for metals Steel strapping Stamping machines and stamps for hot and cold operation (also fully automatic) Roller cooling systems for high demands Heat exchangers Winding coils Weighing systems for bundles and coils Operating materials Lubricants for cold rolling
5840 5845 5850 5860 5870 5880 5900 5910 5920 5930 5920 5930 5932 5940 5950 5952 10.07. 5960	Reel covers Reading systems for automatic identi- fication of impact and directly applied characters Marking systems Oil circulation systems Rotating and stationary shear blades Marking and stationary shear blades Marking inks for stamping machines Marking devices Marking pens for metals Steel strapping Stamping machines and stamps for hot and cold operation (also fully automatic) Roller cooling systems for high demands Heat exchangers Winding coils Weighing systems for bundles and coils Operating materials Lubricants for cold rolling
5840 5845 5850 5860 5870 5880 5900 5910 5920 5930 5932 5930 5932 5940 5950 5952 10.07. 5960 11	Reel covers Reading systems for automatic identi- fication of impact and directly applied characters Marking systems Oil circulation systems Rotating and stationary shear blades Marking and stationary shear blades Marking inks for stamping machines Marking devices Marking pens for metals Steel strapping Stamping machines and stamps for hot and cold operation (also fully automatic) Roller cooling systems for high demands Heat exchangers Winding coils Weighing systems for bundles and coils Operating materials Lubricants for cold rolling Starface treatment
5840 5845 5850 5860 5870 5880 5900 5910 5920 5930 5932 5930 5932 5940 5950 5952 10.07. 5960 11	Reel covers Reading systems for automatic identi- fication of impact and directly applied characters Marking systems Oil circulation systems Rotating and stationary shear blades Marking and stationary shear blades Marking inks for stamping machines Marking devices Marking pens for metals Steel strapping Stamping machines and stamps for hot and cold operation (also fully automatic) Roller cooling systems for high demands Heat exchangers Winding coils Weighing systems for bundles and coils Operating materials Lubricants for cold rolling Sturface treatment Engineering and technical assistance Descaling of sheet metal parts
5840 5845 5850 5860 5870 5880 5900 5910 5920 5930 5932 5930 5932 5940 5950 5952 10.07. 5960 11	Reel covers Reading systems for automatic identi- fication of impact and directly applied characters Marking systems Oil circulation systems Rotating and stationary shear blades Marking and stationary shear blades Marking inks for stamping machines Marking devices Marking pens for metals Steel strapping Stamping machines and stamps for hot and cold operation (also fully automatic) Roller cooling systems for high demands Heat exchangers Winding coils Weighing systems for bundles and coils Operating materials Lubricants for cold rolling Starface treatment
5840 5845 5850 5860 5870 5880 5900 5910 5920 5930 5932 5930 5932 5940 5950 5952 10.07. 5960 11	Reel covers Reading systems for automatic identi- fication of impact and directly applied characters Marking systems Oil circulation systems Rotating and stationary shear blades Marking and stationary shear blades Marking inks for stamping machines Marking devices Marking pens for metals Steel strapping Stamping machines and stamps for hot and cold operation (also fully automatic) Roller cooling systems for high demands Heat exchangers Winding coils Weighing systems for bundles and coils Operating materials Lubricants for cold rolling Sturface treatment Engineering and technical assistance Descaling of sheet metal parts

11.01. Descaling equipment

5990	Bend descaling for strip
6000	Bending descaling for wire

6010 Descaling systems with solid abrasives

010	Desceling systems
6018	Descaling systems with high pressure water
6020	Descaling systems with liquid abrasives
6030	Free blasting systems
6040	Chamber blasting systems
6050	Shot peening systems
6060	Trough belt blast cleaning systems
6070	Roller table systems
11.02.	Pickling plants
6080	Preparation of pickling baths
6088	Pickling lines, exhaust gas free,
	for stainless steel
6090	Pickling lines, complete
6100	Pickling lines for strip and wire
6109	Pickling tanks for high mechanical stress
6110	Pickling tanks and electrolysis cells
0100	for high mechanical stress
6120	Pickling baskets and hooks
6130	Pickling agents
6140	Pickling products for stainless steel
6150	Pickling products for stainless steels
6160	Pickling and surface treatment plants,
0170	general
6170	Pickling and surface treatment
0100	plants for wire
6180	Pickling additives
6190	Contract pickling plants
6192	Pumps for steel and
6000	stainless steel pickling
6200	Regeneration plants for pickling solutions
6203	Push pickling lines
11.03.	Grinding and polishing machines
6210	Belt grinding machines
6230	Centrifugal grinding plants
6240	Polishing plants
6250	Drag grinding plants
11.04.	Surface treatment plants
6260	Coil coating lines
6270	Strip edge trimming
6280	Strip processing and finishing lines
6282	Electrolytic strip pre-cleaning plants
6285	Strip washing lines
6290	Coating plants
6295	Burnishing plants and means
6300	CVD coating plants
6310	Services pickling and electropolishing
	of steel and stainless steel
6320	Oiling machines

- 6320 Oiling machines
- 6330 Electropolishing plants
- 6340 Deburring
- 6350 Deburring machines
- 6360 Color coating machines
- 6370 Paint spraying plants
- 6380 Vibratory finishing machines for surface treatment of metal parts
- 6386 High pressure water jet cleaning technology
- 6390 Shot peening
- 6400 Plastic coating plants
- 6410 Metal working equipment, electrochemical
- 6420 Metal degreasing lines
- 6430 Degreasing lines for metal strip
- 6440 Lines for cleaning and drying of metal
- 6450 Surface treatment, surface technology
- 6460 Surface treatment lines

6470	Surface drying, general	6860
6480	Surface drying, inductive	6865
6490	Surface finishing	6870
6500	Phosphating plants	6880
6510	Phosphating process	6890
6520	Plasma CVD coating systems	6898
6525	Plasma generators, power supply	6900
6527	Blank washing systems	0900
6530	Plating plants	11.00
6540	Plasma CVD systems	11.09.
6550	PVD coating systems	6906
6565	Blasting plants	6910
6570	Pretreatment plants for galvanizing plants	
6580	Water demineralization	11.10.
0000	for surface treatment	6914
		6916
11.05	Aluminizing tip ploting golyopizing	6918
11.05.	Aluminizing, tin plating, galvanizing	6919
6600	Equipment for hot-dip galvanizing	
6600	and aluminizing of strip	12
6603	Equipment for hot-dip galvanizing,	12
0010	tin-plating and aluminizing of strip	
6610	Electrolytic galvanizing equipment	
6620	Electrolytic galvanizing lines	6920
6630	Hot dip galvanizing lines	6925
6640	Hot dip galvanizing lines, accessories	
6642	Hot dip galvanizing lines,	12.01.
0040	zinc bath equipment	6930
6648	Galvannealing	6940
6650	Galvannealing, inductive	6950
6660	High current lines for electrolytic	0000
0070	galvanizing plants	6960
6670	Galvanizing	0000
6675	Tin plating plants	
6680	Tin fusion, inductive	12.02.
		6965
11.06.	Corrosion protection	6970
6690	Linings and coatings	6980
6700	Coatings, inorganic	6990
6702	Coatings, overlays, expert opinions	7000
6710	Burnishing and corrosion protection	1000
6720	Oilers	12.03.
6730	Electrophoretic dip coatings	7010
6740	Rubber coatings	7010
6744	Corrosion protection systems	7020
6750	Corrosion and oxidation protection	7030
6755	Oil felt	1040
6760	Powder coatings	7050
6770	Rust protection paints	7060
6780	VPI / VCI corrosion protection papers	7065
	and films	7070
44.07	0	1010
11.07.	Components	12.04.
6790	Nozzles (also blow-off and descaling	7080
0705	nozzles)	1000
6795	Rubber and PU reel covers	7090
6800	Rubber and PU roller covers for the sheet	7030
	metal finishing industry	7110
6810	Rubber rollers for the sheet	7120
0000	metal finishing industry	7120
6820	Spray pipes	7140
6826	Weighing systems for coils and bundles	7160
44.00		7170
11.08.	Operating materials	7180
6830	Chips and compounds for vibratory	7100
	finishing	1200
6840	Wire grit	

12	Production of bright
6919	Wear protection, general
6918	Wear protection, metallic
6916	Linings and coatings
6914	Ceramic wear protection
1.10.	Wear protection
6910	Contract finishing
6906	Large format surface grinding
1.09.	Services
6900	Blasting media and technology, general
	Steel blasting media
6898	Blasting glass beads
6880 6890	Phosphating agents
6870	Metal cleaners
6865	Bonded coatings

Electrocorundum abrasives

steel and wire

6920 6925	Engineering and technical assistance Second-hand equipment
2.01. 6930 6940 6950	Wire rod mills Wire and fine steel rolling mills Wire stretching machines Guiding equipment for wire rod and fine
6960	iron rolling mills Rolling machines for flat wires and wire profiles
2.02.	Wire, bar and profile drawing
6965	Drawing tools
6970	Wire drawing machines
6980 6990	Wire drawing machines
7000	Bar and profile drawing machines Bar drawing benches
2.03.	Finishing lines for drawing shops
7010	Automatic stirrup bending machines
7020	Combi automatic machines
7030	Wire straightening and cutting machines
7040	Rotary peeling machines for bars and wire
7050	Bar straightening and polishing machines
7060	Peeling machines for bars
7065	Grinding machines
7070	Grinding machines for bars
2.04.	Components
7080	Binding machines for wire rod, concrete and bar steel
7090	Brakes
7100	Seals for rolling mills

- 7110 Wire cooling lines
- Wire coil and coiling machines 7120
- 7140 Wire and bar pointing machines
- Electric rolls and roller tables 7150
- 7160 Colors for marking equipment
- 7170 Ink marking systems
- 7180 Hook web systems
- 7200 Compactor and press binding systems for wire rod

- 7210 Reading systems for automatic identification of impact and directly applied characters
- 7220 Marking systems
- 7230 Marking inks
- 7235 Spools for winding and unwinding, rewinding 7240 Stamping machines and stamps for hot and cold operation (also fully automatic)
- 7250 Heat exchangers

12.05. **Operating supplies**

- 7270 Lubricants and process materials
- 7280 Drawing agents (greases, oils, soaps, etc.)

13 Production of tubes / pipes

7290 Engineering and technical assistance 7295 Second-hand equipment

13.01. **Tube rolling mills**

7300	Expanding mills
7310	Diescher rolling mills
7320	Forming mills
7330	Sizing mills
7340	Reducing mills
7350	Pipe and expander mills
7360	Pipe rolling mills with planetary piercing mill
7370	Pitch rolling mills
7380	Plug rolling mills
7390	Stretch-reducing mills
13.02.	Tube drawing machines
7400	Continuous drawing machines

- 7400 Continuous drawing machines
- 7410 Tube drawing machines 7420 Drum drawing machines
- 7430 Drawing benches

13.03. Pipe welding machines

- 7440 Longitudinal seam pipe welding machines
- 7450 Pipe welding plants
- 7460 Spiral pipe plants

7580

13.04. **Finishing lines for tubes**

7480	Finishing lines
7490	Finishing lines for tubes
7495	Deburring machines for tubes,
	profiles and solid bars
7500	Travelling cut-off machines
7510	Straightening machines for tubes,
	sections and bars
7520	Tube bending machines
7530	Pipe end calibrating and upsetting
	presses
7540	Pipe deburring equipment
7542	Pipe deburring machines
7544	Pipe straightening machines
7550	Pipe straightening presses
7560	Pipe straightening and cutting machines
7570	Pipe grinding machines (internal and
	external)
13.05.	Components

Binding machines

- 7600 Colors for marking equipment
- 7610 Paint signing machines
- 7615 Cleaning machines for tubes,
- profiles and solids
- 7620 Pipe pointing machines
- 7630 Pipe marking equipment
- 7640 Pipe testing equipment
- 7650 Pipe sawing machines
- 7660 Pipe spooling machines
- 7663 Automatic sawing machines
- 7665 Technical brushes

14 Sheet metal processing

- 7690 CAD constructions
- 7700 Spinning of sheet metal parts
- 7710 Spinning of sheet metal parts
- 7720 Engineering and technical assistance
- 7730 Cold forming of sheet metal parts and panels

14.01.	Plants.	presses.	machines

- 7740 Bending machines
- 7750 Strip edge trimming machines
- 7760 Strip straightening machines
- 7765 Strip preparation lines for profilers
- 7780 Sheet metal round bending machines
- 7790 Sheet metal stacking machines, automatic
- 7800 Sheet metal forming
- 7810 Sheet metal working machines, general
- 7820 Flanging machines
- 7825 Pressure joining machines
- 7830 Deburring machines
- 7835 Deburring machines for tubes, profiles and solid bars
- 7840 Die bending presses
- 7845 Hot and cold riveting machines
- 7848 Hydraulic high-pressure sheet metal forming presses and lines
- 7849 Hydroforming (IHU)
- 7850 Hydraulic presses and plants
- 7860 Hydraulic presses for raw forming
- 7868 Internal high pressure forming
- 7870 Cold extrusion presses
- 7880 Cold forming lines
- 7882 Press feeding systems
- 7910 Roller profiling lines
- 7920 Round forming presses (presses)
- 7921 Wobble forming presses
- 7922 Special lines for coil processing
- 7924 Punching and pre-punching lines
- 7926 Dividing levelers
- 7930 Deep drawing presses
- 7940 Pre-rounding presses (presses)7945 Feed straightening machines
- 7947 Roll feeders
- 7950 Roll forming of strip
- 7960 Tooling and sheet metal
- working machines, used

14.02. Slitting lines

STEEL + TECHNOLOGY 1 2022

 7970 Strip slitting lines
 7980 Sheet metal cut-to-length and cut-to-length lines
 7990 Sheet metal cutting, laser cut

- 7995 Slitting blades and accessories
- for slitting lines
- 8010 Fine blanking lines
- 8015 High pressure water jet cutting technology

8450

8470

8480

14.05.

8481

8482

8483

8484

8485

8486

15

15.01.

8489

8490

8500

8510

8520

8530

8540

8550

8560

8570

8580

8590

8600

8610

8620

8630

8640

8650

8660

8670

8672

8680

8690

8700

8710

8720

8740

8750

8760

8769

8770

8780

8790

8795

8800

8810

8820

8830

8831

8840

8850

8860

8870

8880

Cutting and punching tools

Electron and laser beam welding

and sheet metal processing

Water jet cutting of steels

Steel products

Folded profiles, welded

(hot-dip aluminized or roll clad)

Aluminum-zinc coated steel sheet

Coated sheet (painted, foil coated)

Reinforcing steel in coils, cold-rolled

Reinforcing steel in coils, hot rolled

Reinforcing steel in bars and coils

Reinforcing steel in bars

Reinforcing steel (stainless)

Wide strip, cold rolled

Wide-flange beams

Electrical sheet and strip

processed special designs

Thin sheet, surface finished

Sheet products, laser welded

Shaped steel (incl. pit lining)

Heavy plate products, pressed,

Heavy and medium plate, incl. lining plate

Semi-finished products, continuously cast

95

dimpled, bent, edge-finished

Semi-finished products

Semi-finished products,

continuously cast, ingot

Superstructure material

Clad steel sheet

Rails

Semi-finished products for rolling

Semi-finished products for forging

Sheet products, mash-seam welded

Enameled steel sheet

Thin sheet in further

Thin sheet, cold-rolled

Flat steel

Sectional steel

Welded sections

Heavy plate blanks

Heavy plate

Wide flat steel

Cellform beams

Wide strip, organically coated

Wide strip, hot and cold rolled

structural elements

Aluminized sheet

Antiphon sheets

Machined sheet

Reinforcing steel

Container bottoms

Elevator guide rails

Strip steel, hot rolled

Large format surface grinding

Marking pins for metals

Deep drawing tools

Laser cutting of steels

Services

Laser welding

Rolled steel

Tube laser cutting

- 8020 Slitting and cut-to-length lines
- 8030 Slitting and cut-to-length machines
- 8040 Laser cutting systems
- 8050 Plasma cutting systems
- 8070 Cut-to-length lines
- 8072 Shears
- 8075 Shears (standing and flying) for sheet metal working
- 8080 Second-hand laser beam cutting machines
- 8090 Blast machine performance tuning
- 8100 Waste optimization systems

14.03. Welding technology

- 8110 Deposition welding on rollers etc.
- 8115 Fire protection blankets made of textile fabric
- 8120 Strip welding machines
- 8130 Stud welding machines
- 8140 Electron and laser beam welding (service)
- 8150 Electron beam welding machines
- 8170 Gouging machines
- 8180 Lattice girder welding machines
- 8190 Carbon electrodes (welding carbons)
- 8200 Mould welding
- 8205 Laser welding machines
- 8210 Laser beam welding machines8215 Solder protection mats made
- of textile fabric
- 8220 MIG, MAG and TIG \ 057TIG welding torches
- 8230 Peripheral devices for robots
- 8250 Repair of cracks and engravings
- 8257 Rolling seam resistance welding equipment
- 8260 Repair welding
- 8280 Welding, general
- 8288 Welding wire
- 8290 Welding wire, stainless8300 Welding wire and filler metals
- (also from CuAl alloys)
- 8310 Welding electrodes
- 8312 Welding protection blankets made of textile fabric
- Welding protection fabric up to 1250°CWelding protection mats and curtains
- 316 Welding protection mats and curtains made of textile fabric up to 1250°C
- 8318 Welding protection paste up to 1400°C

Welding accessories, general

Butt welding machines, electric

Resistance welding equipment

Sensor systems for automated welding

- 8320 Welding constructions
- 8330 Welding machines, general8340 Welding robots

Wire mesh welding

Components

Plate stretcher

Profile Stretchers

Color marking systems

Laser marking equipment

Rotary shear blades and accessories

Brakes

8350 Welding technology, general

8360

8363

8370

8380

8400

14.04.

8410

8415

8420

8430

8435

8890	Shipbuilding material
8900	Shipbuilding profiles
8910	Forging semi-finished products
8915	Forged bars
	5
8920	Slit strip
8922	Slit strip, surface finished
8930	Cold drawn special steel sections
8940	Special profiles, hot rolled
8950	Special profiles, hot rolled and drawn for
	lift trucks, vehicle, machine and pipeline
	construction
8960	Special profiles, hot extruded
8970	Bar steel (quality, case-hardened, quen-
0970	ched and tempered, spring, free-cutting)
0075	
8975	Bar steel (angle steel)
8976	Steel bars (stainless steel, all dimensions)
8980	Steel sheet piling sections (box piles and
	accessories, driven steel piles)
8981	Steel sheet piling sections (box piles and
	driven steel piles)
8985	Steel sheet pile sections, box piles, steel
	piles, anchoring and accessories
8990	Continuous cast billets
8992	Trapezoidal profiles - PUR and mineral
0992	
	wool, sandwich elements, acoustic
	elements, cassettes
9010	Galvanized steel strip
9020	Galvanized profiled steel sheet
9030	Galvanized steel sheet in sheets and rolls,
	galvanized strip steel
9040	Honeycomb beams, machined beams
9050	Wire rod
9060	Wire rod, flat or round
9070	Wire rod, round
	,
9080	Wire rod in spring steel grades
9090	Wire rod in cold heading grades
9100	Wire rod in welding wire grades
9130	Rolled steel
9140	Hot wide strip
9150	Tinplate and strip, ultra-fine sheet and
	strip, tin-plated sheet and strip, special
	chrome-plated ultra-fine sheet and strip
	(ECCS)
9160	Y-sleepers
15.00	Dinco
15.02.	Pipes
9170	Fittings for pipes, stainless
9180	Large-diameter pipes
9190	Large diameter tubes, spiral welded
9200	Boiler tubes
9220	Flanges, stainless
9230	Oilfield tubes
9260	Clad tubes
9270	Precision steel tubes, welded
9280	Precision steel tubes, seamless and
9200	
	welded (round, oval, square, rectangular
	and as special sections)
9290	Precision steel tubes, seamless and
	welded, with surface finishing such as
	electrogalvanizing, chromating,
	phosphating, etc.
9300	Tubes prematerial (round and square)
9310	Tubes
9320	Tubes made of degussite
9330	Tubes made of cold-tempered steels,
0000	weldable fine-grained steels
9332	Tubes, ceramic
333Z	

9334	Tubes of circular or square cross-section
9335	Tubes, circular or square cross-section,
	hot-dip galvanized
9340	Stainless steel tubes
9345	Pipe parts and components
9350	Tube products (U-tubes, also with
	special radii, coil systems, etc.)
9360	Centrifugally cast tubes
0070	(also made of stainless steel)
9370	Special section tubes, welded, cold-rolled Steel drainage pipes, hot-dip galvanized
9380 9390	Steel pipes, machined
9390 9400	Steel pipes, welded
9410	Steel tubes, seamless
9420	Door reinforcement tubes, welded
9430	Door reinforcement tubes, seamless
9440	Cylinder tubes
15.03.	Forgings
9450	vessels (flanges, nozzles, etc.)
9460	Products for general engineering
	(crankshafts, tools, gears, etc.)
9470	Products for power engineering
0.400	(generator parts, turbine parts, etc.)
9480	Products for aircraft engine construction
9490	(e.g. compressor blades, disks) Products for shipbuilding
9490 9500	Open die forgings, general
9510	Die forgings, general
9520	Seamless rolled rings
9530	Forgings, general
9532	Non-ferrous forgings (copper and copper
	alloys, aluminum alloys)
15.04.	Railroad rolling stock
9540	Axles
	-
9540 9550	Axles Wheel tires
9540 9550 15.05.	Axles Wheel tires Steel in the following delivery forms
9540 9550 15.05. 9560	Axles Wheel tires Steel in the following delivery forms Structural steels, general
9540 9550 15.05.	Axles Wheel tires Steel in the following delivery forms Structural steels, general engineering steels, case-hardening
9540 9550 15.05. 9560	Axles Wheel tires Steel in the following delivery forms Structural steels, general engineering steels, case-hardening steels, quenched and tempered steels,
9540 9550 15.05. 9560	Axles Wheel tires Steel in the following delivery forms Structural steels, general engineering steels, case-hardening
9540 9550 15.05. 9560	Axles Wheel tires Steel in the following delivery forms Structural steels, general engineering steels, case-hardening steels, quenched and tempered steels, surface-hardening steels,
9540 9550 15.05. 9560	Axles Wheel tires Steel in the following delivery forms Structural steels, general engineering steels, case-hardening steels, quenched and tempered steels, surface-hardening steels, low-temperature steels, cold-heading
9540 9550 15.05. 9560	Axles Wheel tires Steel in the following delivery forms Structural steels, general engineering steels, case-hardening steels, quenched and tempered steels, surface-hardening steels, low-temperature steels, cold-heading steels, fine-grained steels, steels resistant to compressed hydrogen Stainless steel special remnants (la and
9540 9550 15.05. 9560 9570 9580	Axles Wheel tires Steel in the following delivery forms Structural steels, general engineering steels, case-hardening steels, quenched and tempered steels, surface-hardening steels, low-temperature steels, cold-heading steels, fine-grained steels, steels resistant to compressed hydrogen Stainless steel special remnants (la and lla quality)
9540 9550 15.05. 9560 9570 9580 9580	Axles Wheel tires Steel in the following delivery forms Structural steels, general engineering steels, case-hardening steels, quenched and tempered steels, surface-hardening steels, low-temperature steels, cold-heading steels, fine-grained steels, steels resistant to compressed hydrogen Stainless steel special remnants (la and lla quality) Stainless steels
9540 9550 15.05. 9560 9570 9580	Axles Wheel tires Steel in the following delivery forms Structural steels, general engineering steels, case-hardening steels, quenched and tempered steels, surface-hardening steels, low-temperature steels, cold-heading steels, fine-grained steels, steels resistant to compressed hydrogen Stainless steel special remnants (la and lla quality) Stainless steels Case hardening steels, foreign standard
9540 9550 15.05. 9560 9570 9580 9580 9590 9600	Axles Wheel tires Steel in the following delivery forms Structural steels, general engineering steels, case-hardening steels, quenched and tempered steels, surface-hardening steels, low-temperature steels, cold-heading steels, fine-grained steels, steels resistant to compressed hydrogen Stainless steel special remnants (la and lla quality) Stainless steels Case hardening steels, foreign standard steels, wear resistant steels
9540 9550 15.05. 9560 9570 9580 9580	Axles Wheel tires Steel in the following delivery forms Structural steels, general engineering steels, case-hardening steels, quenched and tempered steels, surface-hardening steels, low-temperature steels, cold-heading steels, fine-grained steels, steels resistant to compressed hydrogen Stainless steel special remnants (la and lla quality) Stainless steels Case hardening steels, foreign standard steels, wear resistant steels Case-hardened steels, nitriding steels,
9540 9550 15.05. 9560 9570 9580 9580 9590 9600	Axles Wheel tires Steel in the following delivery forms Structural steels, general engineering steels, case-hardening steels, quenched and tempered steels, surface-hardening steels, low-temperature steels, cold-heading steels, fine-grained steels, steels resistant to compressed hydrogen Stainless steel special remnants (la and lla quality) Stainless steels Case hardening steels, foreign standard steels, wear resistant steels Case-hardened steels, nitriding steels, spring steels, foreign standard steels,
9540 9550 15.05. 9560 9570 9580 9580 9590 9600 9610	Axles Wheel tires Steel in the following delivery forms Structural steels, general engineering steels, case-hardening steels, quenched and tempered steels, surface-hardening steels, low-temperature steels, cold-heading steels, fine-grained steels, steels resistant to compressed hydrogen Stainless steel special remnants (la and lla quality) Stainless steels Case hardening steels, foreign standard steels, wear resistant steels Case-hardened steels, nitriding steels, spring steels, foreign standard steels, wear-resistant steels
9540 9550 15.05. 9560 9570 9580 9580 9590 9600	Axles Wheel tires Steel in the following delivery forms Structural steels, general engineering steels, case-hardening steels, quenched and tempered steels, surface-hardening steels, low-temperature steels, cold-heading steels, fine-grained steels, steels resistant to compressed hydrogen Stainless steel special remnants (la and lla quality) Stainless steels Case hardening steels, foreign standard steels, wear resistant steels Case-hardened steels, nitriding steels, spring steels, foreign standard steels, wear-resistant steels ESU remelted steels
9540 9550 15.05. 9560 9570 9580 9590 9600 9610 9618	Axles Wheel tires Steel in the following delivery forms Structural steels, general engineering steels, case-hardening steels, quenched and tempered steels, surface-hardening steels, low-temperature steels, cold-heading steels, fine-grained steels, steels resistant to compressed hydrogen Stainless steel special remnants (la and lla quality) Stainless steels Case hardening steels, foreign standard steels, wear resistant steels Case-hardened steels, nitriding steels, spring steels, foreign standard steels, wear-resistant steels
9540 9550 15.05. 9560 9570 9580 9590 9600 9610 9618 9620	Axles Wheel tires Steel in the following delivery forms Structural steels, general engineering steels, case-hardening steels, quenched and tempered steels, surface-hardening steels, low-temperature steels, cold-heading steels, fine-grained steels, steels resistant to compressed hydrogen Stainless steel special remnants (la and lla quality) Stainless steels Case hardening steels, foreign standard steels, wear resistant steels Case-hardened steels, nitriding steels, spring steels, foreign standard steels, wear-resistant steels ESU remelted steels Spring steel wire, stainless
9540 9550 15.05. 9560 9570 9580 9590 9600 9610 9618 9620 9625	Axles Wheel tires Steel in the following delivery forms Structural steels, general engineering steels, case-hardening steels, quenched and tempered steels, surface-hardening steels, low-temperature steels, cold-heading steels, fine-grained steels, steels resistant to compressed hydrogen Stainless steel special remnants (la and lla quality) Stainless steels Case hardening steels, foreign standard steels, wear resistant steels Case-hardened steels, nitriding steels, spring steels, foreign standard steels, wear-resistant steels ESU remelted steels Spring steel wire, stainless Thin sheets
9540 9550 15.05. 9560 9570 9580 9590 9600 9610 9618 9620 9625 9630	Axles Wheel tires Steel in the following delivery forms Structural steels, general engineering steels, case-hardening steels, quenched and tempered steels, surface-hardening steels, low-temperature steels, cold-heading steels, fine-grained steels, steels resistant to compressed hydrogen Stainless steel special remnants (la and lla quality) Stainless steels Case hardening steels, foreign standard steels, wear resistant steels Case-hardened steels, nitriding steels, spring steels, foreign standard steels, wear-resistant steels ESU remelted steels Spring steel wire, stainless Thin sheets High temperature steels and alloys
9540 9550 15.05. 9560 9570 9580 9590 9600 9610 9618 9620 9625 9630 9635 9638 9640	Axles Wheel tires Steel in the following delivery forms Structural steels, general engineering steels, case-hardening steels, quenched and tempered steels, surface-hardening steels, low-temperature steels, cold-heading steels, fine-grained steels, steels resistant to compressed hydrogen Stainless steel special remnants (la and lla quality) Stainless steels Case hardening steels, foreign standard steels, wear resistant steels Case-hardened steels, nitriding steels, spring steels, foreign standard steels, wear-resistant steels ESU remelted steels Spring steel wire, stainless Thin sheets High temperature steels and alloys Perforated plates Cold rolled sections Stainless bars and tubes
9540 9550 15.05. 9560 9570 9580 9590 9600 9610 9618 9620 9625 9630 9635 9638 9640 9641	Axles Wheel tires Steel in the following delivery forms Structural steels, general engineering steels, case-hardening steels, quenched and tempered steels, surface-hardening steels, low-temperature steels, cold-heading steels, fine-grained steels, steels resistant to compressed hydrogen Stainless steel special remnants (la and lla quality) Stainless steels Case hardening steels, foreign standard steels, wear resistant steels Case-hardened steels, nitriding steels, spring steels, foreign standard steels, wear-resistant steels ESU remelted steels Spring steel wire, stainless Thin sheets High temperature steels and alloys Perforated plates Cold rolled sections Stainless bars and tubes Stainless bars
9540 9550 15.05. 9560 9570 9580 9590 9600 9610 9618 9620 9625 9630 9635 9638 9640	Axles Wheel tires Steel in the following delivery forms Structural steels, general engineering steels, case-hardening steels, quenched and tempered steels, surface-hardening steels, low-temperature steels, cold-heading steels, fine-grained steels, steels resistant to compressed hydrogen Stainless steel special remnants (la and lla quality) Stainless steels Case hardening steels, foreign standard steels, wear resistant steels Case-hardened steels, nitriding steels, spring steels, foreign standard steels, wear-resistant steels ESU remelted steels Spring steel wire, stainless Thin sheets High temperature steels and alloys Perforated plates Cold rolled sections Stainless bars and tubes Stainless bars Special sections, hot rolled,
9540 9550 15.05. 9560 9570 9580 9590 9600 9610 9610 9618 9620 9625 9630 9625 9630 9635 9638 9640 9641 9642	Axles Wheel tires Steel in the following delivery forms Structural steels, general engineering steels, case-hardening steels, quenched and tempered steels, surface-hardening steels, low-temperature steels, cold-heading steels, fine-grained steels, steels resistant to compressed hydrogen Stainless steel special remnants (la and lla quality) Stainless steels Case hardening steels, foreign standard steels, wear resistant steels Case-hardened steels, nitriding steels, spring steels, foreign standard steels, wear-resistant steels ESU remelted steels Spring steel wire, stainless Thin sheets High temperature steels and alloys Perforated plates Cold rolled sections Stainless bars Special sections, hot rolled, hot extruded or drawn
9540 9550 15.05. 9560 9570 9580 9590 9600 9610 9610 9618 9620 9625 9630 9625 9630 9635 9638 9640 9641 9642	Axles Wheel tires Steel in the following delivery forms Structural steels, general engineering steels, case-hardening steels, quenched and tempered steels, surface-hardening steels, low-temperature steels, cold-heading steels, fine-grained steels, steels resistant to compressed hydrogen Stainless steel special remnants (la and lla quality) Stainless steels Case hardening steels, foreign standard steels, wear resistant steels Case-hardened steels, nitriding steels, spring steels, foreign standard steels, wear-resistant steels ESU remelted steels Spring steel wire, stainless Thin sheets High temperature steels and alloys Perforated plates Cold rolled sections Stainless bars and tubes Stainless bars Special sections, hot rolled, hot extruded or drawn Stainless, acid and heat resistant steels
9540 9550 15.05. 9560 9570 9580 9590 9600 9610 9610 9618 9620 9625 9630 9625 9630 9635 9638 9640 9641 9642	Axles Wheel tires Steel in the following delivery forms Structural steels, general engineering steels, case-hardening steels, quenched and tempered steels, surface-hardening steels, low-temperature steels, cold-heading steels, fine-grained steels, steels resistant to compressed hydrogen Stainless steel special remnants (la and lla quality) Stainless steels Case hardening steels, foreign standard steels, wear resistant steels Case-hardened steels, nitriding steels, spring steels, foreign standard steels, wear-resistant steels ESU remelted steels Spring steel wire, stainless Thin sheets High temperature steels and alloys Perforated plates Cold rolled sections Stainless bars Special sections, hot rolled, hot extruded or drawn

	Stainless, acid- and heat-resistant steels
	and alloys, also heating conductor and resistance alloys
9670	High-speed steels
9680	Special structural steels, alloyed, weldable
9685	Engineering steels, alloyed, weldable
9690	Steels with special physical properties
9696	Chromium-plated steels
9700	Pre-machined steels in bars and plates,
	rough milled, fine milled, ground
9710	Rolling bearing steels
9714	Mild unalloyed steels
9718 9720	Tool steels, hardened Tool steels, alloyed and unalloyed
0720	
15.06.	Drawing and cold rolling mill products
9730	Bright steel (including free-cutting bright
	steel, bright steel shafts, bright special
0740	sections)
9740	Spring steel strip
9750 9751	Cold rolled strip Hardened strip steel
9755	Cold rolled strip, coated
9760	Cold rolled strip with bright surface
9770	Cold rolled strip with refined surface
9780	Cold rolled clad strip
9790	Cold rolled profiles from hot rolled
	or cold rolled strip
9800	Cold rolled profiles with refined surface
9810	Body parts
9814	Sheet metal formed parts
9817 9820	Precision strip steel Pressed, stamped and drawn parts
9820 9830	Steel strip for packaging purposes
9838	Tailored beams
9840	Tailored blanks (sheet blanks)
9850	Formed tube and sheet components
	for the automotive industry
9860	Drawing and cold rolling mill products
9870	Cylinder tubes for hydraulics
	and pneumatics
15.07	Wire and wire products
15.07. 9880	Wire and wire products Anchor steel, screwable
	Wire and wire products Anchor steel, screwable Structural steel mesh
9880	Anchor steel, screwable
9880 9885 9890	Anchor steel, screwable Structural steel mesh Reinforcing wire, reinforcing mats, pit mats
9880 9885 9890 9900	Anchor steel, screwable Structural steel mesh Reinforcing wire, reinforcing mats, pit mats Reinforcing meshes for reinforced concrete
9880 9885 9890 9900 9920	Anchor steel, screwable Structural steel mesh Reinforcing wire, reinforcing mats, pit mats Reinforcing meshes for reinforced concrete Wire meshes
9880 9885 9890 9900 9920 9930	Anchor steel, screwable Structural steel mesh Reinforcing wire, reinforcing mats, pit mats Reinforcing meshes for reinforced concrete Wire meshes Wire mesh
9880 9885 9890 9900 9920 9930 9932	Anchor steel, screwable Structural steel mesh Reinforcing wire, reinforcing mats, pit mats Reinforcing meshes for reinforced concrete Wire meshes Wire mesh Wire mesh
9880 9885 9890 9900 9920 9930 9932 9950	Anchor steel, screwable Structural steel mesh Reinforcing wire, reinforcing mats, pit mats Reinforcing meshes for reinforced concrete Wire meshes Wire mesh Wire mesh Wire ropes and strands
9880 9885 9890 9900 9920 9930 9932	Anchor steel, screwable Structural steel mesh Reinforcing wire, reinforcing mats, pit mats Reinforcing meshes for reinforced concrete Wire meshes Wire mesh Wire mesh Wire ropes and strands Wire and wire products
9880 9885 9890 9900 9920 9930 9932 9950 9960	Anchor steel, screwable Structural steel mesh Reinforcing wire, reinforcing mats, pit mats Reinforcing meshes for reinforced concrete Wire meshes Wire mesh Wire mesh Wire ropes and strands
9880 9885 9890 9900 9920 9930 9932 9950 9960	Anchor steel, screwable Structural steel mesh Reinforcing wire, reinforcing mats, pit mats Reinforcing meshes for reinforced concrete Wire meshes Wire mesh Wire mesh Wire ropes and strands Wire and wire products Iron, free-cutting, cold extrusion
9880 9885 9890 9920 9930 9932 9950 9950 9960 9970	Anchor steel, screwable Structural steel mesh Reinforcing wire, reinforcing mats, pit mats Reinforcing meshes for reinforced concrete Wire meshes Wire mesh Wire mesh Wire ropes and strands Wire and wire products Iron, free-cutting, cold extrusion and cold heading wires Iron fine and superfine wires Iron and steel wire, drawn
9880 9885 9890 9920 9930 9932 9950 9950 9960 9970 9980 9990 10000	Anchor steel, screwable Structural steel mesh Reinforcing wire, reinforcing mats, pit mats Reinforcing meshes for reinforced concrete Wire meshes Wire mesh Wire mesh Wire ropes and strands Wire and wire products Iron, free-cutting, cold extrusion and cold heading wires Iron fine and superfine wires Iron and steel wire, drawn Spring steel wire, oil hardened
9880 9885 9890 9920 9930 9932 9950 9950 9960 9970 9980 9990 10000 10010	Anchor steel, screwable Structural steel mesh Reinforcing wire, reinforcing mats, pit mats Reinforcing meshes for reinforced concrete Wire meshes Wire mesh Wire mesh Wire ropes and strands Wire ropes and strands Wire and wire products Iron, free-cutting, cold extrusion and cold heading wires Iron fine and superfine wires Iron and steel wire, drawn Spring steel wire, oil hardened Spring steel wire, unalloyed
9880 9885 9890 9920 9930 9932 9950 9950 9970 9970 9980 9990 10000 10010 10015	Anchor steel, screwable Structural steel mesh Reinforcing wire, reinforcing mats, pit mats Reinforcing meshes for reinforced concrete Wire meshes Wire mesh Wire ropes and strands Wire ropes and strands Wire and wire products Iron, free-cutting, cold extrusion and cold heading wires Iron fine and superfine wires Iron and steel wire, drawn Spring steel wire, oil hardened Spring steel wire, unalloyed Profile wire
9880 9885 9890 9920 9930 9932 9950 9950 9970 9960 9970 9980 9990 10000 10010 10015 10020	Anchor steel, screwable Structural steel mesh Reinforcing wire, reinforcing mats, pit mats Reinforcing meshes for reinforced concrete Wire meshes Wire meshs Wire ropes and strands Wire ropes and strands Wire and wire products Iron, free-cutting, cold extrusion and cold heading wires Iron fine and superfine wires Iron and steel wire, drawn Spring steel wire, oil hardened Spring steel wire, unalloyed Profile wire Flat and shaped wires
9880 9885 9890 9920 9930 9932 9950 9950 9960 9970 9980 9990 10000 10010 10015 10020 10025	Anchor steel, screwable Structural steel mesh Reinforcing wire, reinforcing mats, pit mats Reinforcing meshes for reinforced concrete Wire meshes Wire mesh Wire mesh Wire ropes and strands Wire oppes and strands Wire and wire products Iron, free-cutting, cold extrusion and cold heading wires Iron fine and superfine wires Iron and steel wire, drawn Spring steel wire, oil hardened Spring steel wire, unalloyed Profile wire Flat and shaped wires Threaded steel
9880 9885 9890 9920 9930 9932 9950 9950 9960 9970 9980 9990 10000 10010 10015 10020 10025 10030	Anchor steel, screwable Structural steel mesh Reinforcing wire, reinforcing mats, pit mats Reinforcing meshes for reinforced concrete Wire meshes Wire mesh Wire mesh Wire ropes and strands Wire and wire products Iron, free-cutting, cold extrusion and cold heading wires Iron fine and superfine wires Iron and steel wire, drawn Spring steel wire, oil hardened Spring steel wire, unalloyed Profile wire Flat and shaped wires Threaded steel Other wire products
9880 9885 9890 9920 9930 9932 9950 9950 9960 9970 9980 9990 10000 10010 10015 10020 10025	Anchor steel, screwable Structural steel mesh Reinforcing wire, reinforcing mats, pit mats Reinforcing meshes for reinforced concrete Wire meshes Wire mesh Wire mesh Wire ropes and strands Wire oppes and strands Wire and wire products Iron, free-cutting, cold extrusion and cold heading wires Iron fine and superfine wires Iron and steel wire, drawn Spring steel wire, oil hardened Spring steel wire, unalloyed Profile wire Flat and shaped wires Threaded steel
9880 9885 9890 9920 9930 9932 9950 9960 9970 9980 9990 10000 10010 10015 10020 10025 10030 10035	Anchor steel, screwable Structural steel mesh Reinforcing wire, reinforcing mats, pit mats Reinforcing meshes for reinforced concrete Wire meshes Wire mesh Wire ropes and strands Wire ropes and strands Wire and wire products Iron, free-cutting, cold extrusion and cold heading wires Iron fine and superfine wires Iron and steel wire, oil hardened Spring steel wire, oil hardened Spring steel wire, unalloyed Profile wire Flat and shaped wires Threaded steel Other wire products Prestressing steel
9880 9885 9890 9920 9930 9932 9950 9960 9970 9980 9990 10000 10010 10015 10020 10025 10030 10035	Anchor steel, screwable Structural steel mesh Reinforcing wire, reinforcing mats, pit mats Reinforcing meshes for reinforced concrete Wire meshes Wire mesh Wire ropes and strands Wire ropes and strands Wire and wire products Iron, free-cutting, cold extrusion and cold heading wires Iron fine and superfine wires Iron fine and superfine wires Iron and steel wire, drawn Spring steel wire, oil hardened Spring steel wire, unalloyed Profile wire Flat and shaped wires Threaded steel Other wire products Prestressing steel, prestressed

Stainless, acid- and heat-resistant steels

15.08.	Steel construction
10058	Car lifts, mobile
10060	Automatic reinforcement station
10070	Sheet metal structures
10080	Bridge construction
10090	Hall construction
10100	Masts
10110	Steel construction, general
10115	Joining technology in steel construction,
	general
10120	Steel construction, general
10130	Assembly hall construction
15.09.	Services
10140	Deep hole drilling, contract
10141	Deep hole drilling, horizontal
10145	Forming and smoothing
10146	Cutting tool steel

16 Furnace and energy technology

10150 10152	Engineering and technical assistance Waste gas systems behind electric arc
10154	furnaces Waste heat systems behind walking beam furnaces and pusher furnaces
10160	Complete heating systems
10170	Furnace optimization (conversion to low NOx combustion)
10180	Process control systems for industrial furnaces and energy plants
10190	Rational use of energy
16.01.	Rolling mill furnaces
10200 10210	Deep annealing furnaces Rolling mill furnaces, induction
10220	Rolling mill furnaces
16.02.	Forging furnaces
10230 10240	Forging furnaces
10240	Forging furnaces, gas fired Forging furnaces, induction
16.03 .	Roller Hearth Continuous Furnaces
10260 10270	Roller Hearth Continuous Furnaces Roller hearth and walking beam furnaces
16.04.	Continuous furnaces for wide strip
10280 10290	Strip heating, inductive Strip edge heating, inductive
10290	Continuous furnaces for wide strip
16.05.	Top-hat furnaces
10310 10320	Top-hat furnaces Top and pot annealing furnaces
16.06.	Vacuum furnaces
10330	Vacuum annealing furnaces
10340 10341	Vacuum hardening furnaces Vacuum pumps, dry running,
10041	for vacuum furnaces

16.07.	Hardening and
10.07.	tempering equipment
10350	Quenching baths
10355	Carburizing furnaces
10360	Hardening furnaces
10370	Hardening plants, general
10375	Hardening and tempering plants, electri- cally heated
10380	Hardening and tempering plants, gas heated
10390	Hardening and tempering plants, with inductive heating
10400	Hardening and tempering plants, with resistance heating
10401	Laser hardening systems
10403	Nitriding furnaces
16.08.	Heating furnaces
	and heat treatment plants
10408	Continuous furnaces
10410	Co-step furnaces
10420	Hardening furnaces
10430	Bogie hearth furnaces
10440	Induction heating plants
10450	Industrial furnaces, used
10460	Chamber furnaces
10470	Conductive heating plants
10480 10490	Furnaces with mechanically driven hearth Patenting plants for wire
10490	Plasma nitriding plants
10505	Radiators
10500	Roller hearth and walking beam furnaces
10520	Pit furnaces
10530	plug furnaces
10540	Pusher-type, roller and rotary hearth
	furnaces
10545	Tempering and drying plants
10550	Vertical and horizontal strip furnaces
	for heat treatments
10560	Heat treatment plants
10562	Heat treatment furnaces
	(continuous and discontinuous)
10570	Heat treatment furnaces for batch operation, open heated
	for batter operation, oper notice
16.09.	Bath furnaces
10580	Aluminum melting furnaces
10582	Aluminum melting and holding furnaces
10590	Furnaces and plants for lead coating,
10000	galvanizing and tinning
10600	Salt and metal bath furnaces
16.10.	Industrial furnaces
10010	for special purposes
10610	Furnaces for the ceramic industry
10615	Lime kilns
10620	Inert gas, vacuum furnaces
10630 10640	Tempering furnaces Drying furnaces for casting cores,
10040	molds and mold covers
10650	Drying furnaces for stopper rods
10652	Microwave ovens / dryers
10660	Accessories for industrial furnaces
10.11	
16.11.	Protective gas plants
10670	Protective gas plants

16.12.	Insulations
10680	Block insulation
10690	Firing pads
10700	Calcium silicate
10710	Insulation materials
10720	Vibration protection
10730	Backing insulation
10732	Electrical insulation systems
	for arc furnaces and transformer houses
10735	Heat protection and insulation products
10740	Insulating and sealing boards,
	asbestos-free
10744	Insulating fabrics up to 1260°C
10746	Insulating cords, tapes, packings
	and hoses up to 1260°C
10748	Support arm insulations, asbestos-free
10750	Insulating bricks
10760	Cooling pipe insulations
10770	Furnace components
10780	Sound insulation
10790	Vibration insulation
10800	Thermal insulation
10803	Wool felt for bright annealing furnaces
16.13.	Components
10805	Exhaust technology
10810	Bath rollers
10820	Belt coolers, belt dryers
10830	Block pressers
10840	Block and slab pushers for heating
	furnaces
10850	Burners for gas and oil
10860	Custom-made burners
10870	Feeding and discharging machines
10880	Electric heaters
10890	Natural gas burners
10895	Furnace probes
10000	(for the use of video cameras)
10900 10910	Gas burners Generators for protective
10910	and reaction gases
10915	Hardeners
10915	Heating conductors
10920	Hearth rollers
10950	pulverized coal furnaces (also -plants)
10960	Laser light barriers
10970	Oil burners
10990	Furnace riders
11000	Furnace rollers
11005	Plasma generators
11010	Regenerative burners
11020	Recuperative burners
11028	Recuperators
11030	Recuperators, regenerators
11040	Rollers (e.g. from SIC)
11050	Safety devices for EAF oxygen-fuel
	burners
11060	Jet tubes
11070	Radiant tube burners
11078	Vacuum pumps, dry running,
	for vacuum furnaces
11080	Heat exchangers
11090	Heat recovery systems
11092	Weighing systems for melting furnaces
11093	Wool felt for bright annealing furnaces

16.14. 11110 11120 11150 11160 11170 11180 11190	Operating materials Hardening agents (also hardening powders and carbon restoration agents) Hardening oils Fire-resistant hydraulic fluids Polymer solutions Lubricants Spray cleaners Heat transfer fluids
16.15.	Services
11200	Energy consulting
11210	Energy saving
11215	Commissioning, maintenance and service
	of heating equipment
11240	Planning and projecting of
	energy-technical plants
17	Refractory technology
11245	Product know-how for basic refractory
11010	bricks and mixes
11248	Monitoring of refractory components
17.01.	Raw materials, precursors and binders for refractory materials

11250	Aluminum hydroxide
11260	Alumina, alumina
11263	Reinforcing wires for refractory mixes
11265	Binders for the production of refractory
	materials
11270	Electrocorundum
11280	Graphite
11290	Adhesive sand
11300	Coke breeze
11310	Coke breeze, dry
11320	Magnesium oxide
11330	Microsilica
11360	Silicon carbide
11366	Titanium dioxide
11370	Clays
11380	Alumina specialties
11390	Zirconia
17.02.	Plants for the production
17.02.	Plants for the production of refractory materials
17.02. 11400	
	of refractory materials
	of refractory materials Equipment for the production of refractory materials
11400	of refractory materials Equipment for the production of
11400 17.03 .	of refractory materials Equipment for the production of refractory materials Refractory materials and equipment
11400 17.03 .	of refractory materials Equipment for the production of refractory materials Refractory materials and equipment Tapping stones for converters and electric
11400 17.03. 11410	of refractory materials Equipment for the production of refractory materials Refractory materials and equipment Tapping stones for converters and electric arc furnaces
11400 17.03. 11410 11420	of refractory materials Equipment for the production of refractory materials Refractory materials and equipment Tapping stones for converters and electric arc furnaces Painting, filling and plastering materials
11400 17.03. 11410 11420	of refractory materials Equipment for the production of refractory materials Refractory materials and equipment Tapping stones for converters and electric arc furnaces Painting, filling and plastering materials Basic ramming, gunning and casting mixes Basic bricks (magnesia, magnesia-chro-
11400 17.03. 11410 11420 11430	of refractory materials Equipment for the production of refractory materials Refractory materials and equipment Tapping stones for converters and electric arc furnaces Painting, filling and plastering materials Basic ramming, gunning and casting mixes Basic bricks (magnesia, magnesia-chro- mium, chromium ore, chromite, dolomite,
11400 17.03. 11410 11420 11430	of refractory materials Equipment for the production of refractory materials Refractory materials and equipment Tapping stones for converters and electric arc furnaces Painting, filling and plastering materials Basic ramming, gunning and casting mixes Basic bricks (magnesia, magnesia-chro-
11400 17.03. 11410 11420 11430	of refractory materials Equipment for the production of refractory materials Refractory materials and equipment Tapping stones for converters and electric arc furnaces Painting, filling and plastering materials Basic ramming, gunning and casting mixes Basic bricks (magnesia, magnesia-chro- mium, chromium ore, chromite, dolomite,

- 11470 Electrode masses
- 11480 Fiber ceramic moldings, vacuum formed 11481 Fiber ceramic moldings, vacuum formed, up to 1750°C

11485	Fiber mats and felts up to 1600°C
11490	Fiber products, ceramic
11500	Prefabricated parts, refractory
11510	Refractory concrete
11512	Refractory concrete, high strength,
	for industrial floors
11520	Refractory products, general
11530	Refractory ramming mixes
11540	Refractory anchorages
11550	
11560	Refractory material
	Lightweight refractory bricks
11570	Lightweight refractory
	and insulating mixes
11580	Lightweight refractory
	and insulating bricks
11590	Gas purging equipment, refractory
11600	Pouring mixes, self-flowing
11610	hearth masses
11620	High-fire bricks
11630	Blast furnace bricks
11640	Induction furnace mixes
11650	Insulating material, asbestos-free
11660	Isostatically pressed products
11670	Carbon and graphite bricks
11690	Converter bricks
11700	Arc furnace bricks
11710	Perforated bricks
11720	Masses, refractory (general)
11725	MgO-C bricks
11730	Mortars and mastics, refractory
11740	Mux masses
11750	Ladle masses
11752	Torpedo ladle lining
11755	Ladle lining, monolithic
11760	Ladle bricks
11768	Products made of \ 050HTW \
	051 high temperature wool
11790	Gutter and taphole masses
11800	Gutter lining, cooled
11810	Acid resistant bricks
11820	Acid ramming and centrifugal masses
11830	Firebricks
11840	Shadow pipe
11850	
	Slide gate ceramics
11860	Cast basalt
11865	Protective blankets made of textile fabric,
	refractory
11870	Silicon carbide bricks
11880	Silica bricks, tondina bricks
11886	Special adhesives up to 1200°C
11890	gunning and repair compounds
11900	Steel mill wear material
11910	ramming, casting and vibrating masses
11915	ramming, spraying and casting compounds
11920	Stoppers and spouts
11930	Continuous castings, refractory
11940	Immersion tube, monota immersion spout
11950	Technical ceramics
11960	High-alumina bricks (andalusite, bauxite,
1000	corundum, mullite, sillimanite bricks)
11070	
11970	Torpedo mixer stones
11980	Tundish masses
11985	Pouring compounds, cement-free,
	for blast furnace tapping troughs
11990	Vermiculite
12000	Thermal insulation materials,
	asbestos-free

12004	Vacuum formed parts
12005	Vacuum formed parts,
	without ceramic fibers
12010	Wollastonite
12020	Zircon nozzles
12030 12040	Zircon containing stones Zircon sand / flour)
12040	ZIICOII Salid / lioul)
17.04.	Processing of refractory materials
12050	Processing of used refractory materials
12060	Testing of FF materials
17.05.	Machines for refractory construction
12070	break-out hammers, pneumatic and hydraulic, for electric furnaces,
	converters, ladles and troughs
12071	Excavation robots
12071	Chipper
12080	Converter tap hole repair vehicles
12095	Converter lining devices
12100	Manipulators for FF masses
12110	Ladle spraying machines
12118	Pumping machines
	for refractory materials
12120	Pumping machines
	for refractory materials
12130	Centrifugal machines for FF-masses
12140	Spraying machines for FF materials
12150	Tamping plants, autom., for ladles
17.06.	Refractory construction
12160	lining of all kinds of furnaces
12170	Firing chambers
12175	Refractory anchors
12180	Refractory construction
12190	Refractory ramming mixes
12200	Suspended ceilings
17.07.	Services
12204 12205	Training - Refractory
12200	Refractory maintenance at operating temperature
12206	Refractory systems
12200	
18	Machinery and
10	plant engineering
	plant engineering
12210	Plant engineering, general
12220	CAD design
12230	Engineering and technical assistance
12240	beams, columns, shafts
12250	Industrial Engineering
12258	
	Standard parts for cutting and punching tool construction
12260	Standard parts for cutting
	Standard parts for cutting and punching tool construction
12260	Standard parts for cutting and punching tool construction Cleaning and cleaning materials
12260	Standard parts for cutting and punching tool construction Cleaning and cleaning materials Second-hand machines

12285 Heat exchangers

18.01. Mining equipment, machines and supplies

12290	Plants and machines for underground
	mining

12309	Conveyor systems
12310	Conveying plants and machines
12330	Mine support profiles
18.02.	Chemical plants and accessories
12350	Tank and apparatus construction
12360	Liquid gas - storage stations
12370	Gas tanks
12390	Acid chimneys
12400	Acid and chemical resistant plants and equipment
12410	Nitrogen production plants
18.03.	Steam generation plants
10405	and equipment
12425	Exhaust gas technology
12430	Waste heat boilers
12440	Steam filters
12450	Steam boilers, general
12460	Pressure boilers
12470	Hydrazine removal
12480	Pulverized coal firing systems
18.04.	Foundry equipment, machinery
10051	and supplies
12354	Casting ladles
12500	Molding machines
12530	Foundry equipment, machines and supplies
12535	Foundry tools
12540	Foundry consulting and engineering
12542	Foundry software
12550	Core shooters
12560	fettling machines
12570	Robots
12580	Sand mixers
12586	Melting furnaces, inductive
12590	Shaking ladles
12592	Crucible tongs
12605	Vacuum investment casting
12005	plants-superalloys
12607	Vacuum investment casting plants with
12007	cold crucibles for titanium or titanium alloys
18.05.	Power plants and power stations
12610	Power plants and power stations, steam
12620	Power plants and power stations, electric
18.06.	Ventilation plants and equipment
12630	Blowers
12635	Industrial fans
12650	Air conditioners, general
12660	Air conditioners for heat plants
12670	Air conditioners for crane lances, crane bridges, etc.
12690	Expansion joints
12700	Ventilation ducts
12710	Ventilation systems and equipment,
	general
12720	Natural ventilation
12730	Induced draught systems and equipment
12740	Ventilators

18.07.	Water treatment plants, equipment and accessories
10750	Chemical water treatment
12750	
12760	Pressurized water plants and accumulators
12770	Filtering plants for circulating water
12780	Rubber compensators
12790	Cooling towers
12793	Cooling water / circulating water systems
12796	Magnetic filters
12800	Press water additives
12810	Water treatment systems
12830	Water demineralization, treatment and
	recycling
12840	Water recooling systems
12846	Water filtration
12040	Water initiation
18.08.	Other plants
	Other plants
12848	Chillers
12850	Slag granulation hoses
12860	Slag recycling plants
	(also slag granulation plants)
12862	Slag granulation plants
12870	Lube oil plants
18.09.	Maintenance
	maintenance
12880	Spare parts and consumables
12880	Spare parts and consumables Maintenance, general
12880 12890 12892	Spare parts and consumables Maintenance, general Maintenance organization
12880 12890 12892 12894	Spare parts and consumables Maintenance, general Maintenance organization Maintenance systems
12880 12890 12892	Spare parts and consumables Maintenance, general Maintenance organization
12880 12890 12892 12894 12896	Spare parts and consumables Maintenance, general Maintenance organization Maintenance systems Repair, overhaul and modernization of machine tools
12880 12890 12892 12894 12896 12900	Spare parts and consumables Maintenance, general Maintenance organization Maintenance systems Repair, overhaul and modernization of machine tools Maintenance of large gear units
12880 12890 12892 12894 12896	Spare parts and consumables Maintenance, general Maintenance organization Maintenance systems Repair, overhaul and modernization of machine tools Maintenance of large gear units Maintenance of continuous casting plants
12880 12890 12892 12894 12896 12900 12920	Spare parts and consumables Maintenance, general Maintenance organization Maintenance systems Repair, overhaul and modernization of machine tools Maintenance of large gear units Maintenance of continuous casting plants for ingots and slabs
12880 12890 12892 12894 12896 12900	Spare parts and consumables Maintenance, general Maintenance organization Maintenance systems Repair, overhaul and modernization of machine tools Maintenance of large gear units Maintenance of continuous casting plants for ingots and slabs Maintenance of continuous casters for
12880 12890 12892 12894 12896 12900 12920 12930	Spare parts and consumables Maintenance, general Maintenance organization Maintenance systems Repair, overhaul and modernization of machine tools Maintenance of large gear units Maintenance of continuous casting plants for ingots and slabs Maintenance of continuous casters for ingots and billets
12880 12890 12892 12894 12896 12900 12920 12930 12950	Spare parts and consumables Maintenance, general Maintenance organization Maintenance systems Repair, overhaul and modernization of machine tools Maintenance of large gear units Maintenance of continuous casting plants for ingots and slabs Maintenance of continuous casters for ingots and billets Repair of ingot molds
12880 12890 12892 12894 12896 12900 12920 12930 12950 12960	Spare parts and consumables Maintenance, general Maintenance organization Maintenance systems Repair, overhaul and modernization of machine tools Maintenance of large gear units Maintenance of continuous casting plants for ingots and slabs Maintenance of continuous casters for ingots and billets Repair of ingot molds Repair of ingot molds
12880 12890 12892 12894 12896 12900 12920 12930 12950 12960 12964	Spare parts and consumables Maintenance, general Maintenance organization Maintenance systems Repair, overhaul and modernization of machine tools Maintenance of large gear units Maintenance of continuous casting plants for ingots and slabs Maintenance of continuous casters for ingots and billets Repair of ingot molds Repair of ingot molds Cooling system cleaning
12880 12890 12892 12894 12896 12900 12920 12930 12950 12960 12964 12970	Spare parts and consumables Maintenance, general Maintenance organization Maintenance systems Repair, overhaul and modernization of machine tools Maintenance of large gear units Maintenance of continuous casting plants for ingots and slabs Maintenance of continuous casters for ingots and billets Repair of ingot molds Repair of ingot molds Cooling system cleaning Ladle repair, FF
12880 12890 12892 12894 12896 12900 12920 12930 12950 12960 12964 12970 12980	Spare parts and consumables Maintenance, general Maintenance organization Maintenance systems Repair, overhaul and modernization of machine tools Maintenance of large gear units Maintenance of continuous casting plants for ingots and slabs Maintenance of continuous casters for ingots and billets Repair of ingot molds Repair of ingot molds Cooling system cleaning Ladle repair, FF Repairs, spare parts
12880 12890 12892 12894 12896 12900 12920 12930 12950 12960 12964 12970	Spare parts and consumables Maintenance, general Maintenance organization Maintenance systems Repair, overhaul and modernization of machine tools Maintenance of large gear units Maintenance of continuous casting plants for ingots and slabs Maintenance of continuous casters for ingots and slabs Maintenance of continuous casters for ingots and billets Repair of ingot molds Repair of ingot molds Cooling system cleaning Ladle repair, FF Repairs, spare parts Software for maintenance
12880 12890 12892 12894 12896 12900 12920 12930 12950 12960 12964 12970 12980	Spare parts and consumables Maintenance, general Maintenance organization Maintenance systems Repair, overhaul and modernization of machine tools Maintenance of large gear units Maintenance of continuous casting plants for ingots and slabs Maintenance of continuous casters for ingots and slabs Maintenance of continuous casters for ingots and billets Repair of ingot molds Repair of ingot molds Cooling system cleaning Ladle repair, FF Repairs, spare parts Software for maintenance Preventive maintenance
12880 12890 12892 12894 12896 12900 12920 12930 12950 12960 12964 12970 12980 12983	Spare parts and consumables Maintenance, general Maintenance organization Maintenance systems Repair, overhaul and modernization of machine tools Maintenance of large gear units Maintenance of continuous casting plants for ingots and slabs Maintenance of continuous casters for ingots and slabs Maintenance of continuous casters for ingots and billets Repair of ingot molds Repair of ingot molds Cooling system cleaning Ladle repair, FF Repairs, spare parts Software for maintenance
12880 12890 12892 12894 12896 12900 12920 12930 12950 12960 12964 12970 12980 12983 12990	Spare parts and consumables Maintenance, general Maintenance organization Maintenance systems Repair, overhaul and modernization of machine tools Maintenance of large gear units Maintenance of continuous casting plants for ingots and slabs Maintenance of continuous casters for ingots and slabs Maintenance of continuous casters for ingots and billets Repair of ingot molds Repair of ingot molds Cooling system cleaning Ladle repair, FF Repairs, spare parts Software for maintenance Preventive maintenance
12880 12890 12892 12894 12896 12900 12920 12930 12950 12960 12964 12970 12980 12983 12990 13000	Spare parts and consumables Maintenance, general Maintenance organization Maintenance systems Repair, overhaul and modernization of machine tools Maintenance of large gear units Maintenance of continuous casting plants for ingots and slabs Maintenance of continuous casters for ingots and slabs Maintenance of continuous casters for ingots and billets Repair of ingot molds Repair of ingot molds Cooling system cleaning Ladle repair, FF Repairs, spare parts Software for maintenance Preventive maintenance Heat exchanger cleaning Condition based machine maintenance
12880 12890 12892 12894 12896 12900 12920 12930 12950 12960 12964 12970 12980 12983 12990 13000	Spare parts and consumables Maintenance, general Maintenance organization Maintenance systems Repair, overhaul and modernization of machine tools Maintenance of large gear units Maintenance of continuous casting plants for ingots and slabs Maintenance of continuous casters for ingots and slabs Maintenance of continuous casters for ingots and billets Repair of ingot molds Repair of ingot molds Cooling system cleaning Ladle repair, FF Repairs, spare parts Software for maintenance Preventive maintenance Heat exchanger cleaning
12880 12890 12892 12894 12896 12900 12920 12930 12950 12960 12964 12970 12980 12983 12990 13000 13010	Spare parts and consumables Maintenance, general Maintenance organization Maintenance systems Repair, overhaul and modernization of machine tools Maintenance of large gear units Maintenance of continuous casting plants for ingots and slabs Maintenance of continuous casters for ingots and slabs Maintenance of continuous casters for ingots and billets Repair of ingot molds Repair of ingot molds Cooling system cleaning Ladle repair, FF Repairs, spare parts Software for maintenance Preventive maintenance Heat exchanger cleaning Condition based machine maintenance
12880 12890 12892 12894 12896 12900 12920 12930 12960 12960 12964 12970 12980 12983 12990 13000 13010 18.10.	Spare parts and consumables Maintenance, general Maintenance organization Maintenance systems Repair, overhaul and modernization of machine tools Maintenance of large gear units Maintenance of continuous casting plants for ingots and slabs Maintenance of continuous casters for ingots and slabs Maintenance of continuous casters for ingots and billets Repair of ingot molds Repair of ingot molds Cooling system cleaning Ladle repair, FF Repairs, spare parts Software for maintenance Preventive maintenance Heat exchanger cleaning Condition based machine maintenance

10.10.	FUWER and WORK Machines
13020	Steam turbines
13021	Gas turbines
13030	Rotary compressors
13040	Compressed air equipment
13050	Natural gas, gas transmission
	compressor stations
13060	Natural gas HP storage
13070	Piston pumps
13080	Piston compressors
13083	Corrosion resistant pumps
13090	Centrifugal pumps
13100	Mixing units for all fuel gases
13120	Lubrication pumps
13130	Screw compressors
13150	Turbo compressors
13160	Vacuum pumps
18.11.	Gearboxes and drive elements
13168	Drive elements

13170	Drive engineering
13174	Valve gearboxes
13180	Brakes
13190	Brake disc mounting
13195	Torque limiter
13200	Flange couplings
13210	Cardan joints
13220	Cardan shafts
13230	Gear rollers
13240	Gearboxes and drive elements
13250	Large gearboxes
13255	Chain drives and sprockets
13260	Hirth serration
13261	Hirth spur gearing
13270	Couplings
13285	Couplings, flexible, elastic
13290	Couplings, mechanical and hydrodynamic
13300	Planetary gearboxes
13308	Slew drives
13310	Safety couplings
13318	Spindles
13320	Special constructions
13350	Shaft-hub couplings (backlash-free)
13360	Shaft couplings (rigid)
13370	Winding shafts
13380	Gear drives
13390	Gear wheels
13395	Gearbox repairs
18.12.	Bearings
13400	Slewing rings
13404	Elastomeric bearings
13406	Spherical plain bearings / rod ends
13410	Plain bearings
13420	Ceramic-metal compact plain bearings
13430	Ball bearings
13440	Cam rollers
13460	Linear systems
13470	Roller bearings
13480	Yoke type track rollers
13484	Thermal separation
13485	Support and guide rollers
13490	Rolling bearings
13492	High-temperature rolling bearings

Oil hydraulic systems, equipment and accessories 18.13.

Roller bearings

	and accessories
13508	Rotary distributors
13510	Rotary feeders
13520	Pressure measuring, switching
	and writing devices
13530	Pressure switch
13540	High pressure flange connectors
13550	Hydraulic systems
13560	Hydraulic and shaft seals
13570	Hydro gears
13580	Hydro motors
13590	Hydro pumps
13595	Hydraulic accumulators
13600	Hydro valves
13610	Hydraulic cylinders
13620	Oil hydraulic systems,
	devices and accessories
13630	Vibration dampers
13640	Servo valves
13645	Continuous valves

13660 13670	Complete plants, oil hydraulic Water hydraulic
18.14.	Control systems and components
13680	Shut-off valves
13690	Automatic inflow control
10000	with distribution gate valves
13695	Torque limiters
13710	Electro-hydraulic actuators
13718	Electro-servo cylinders
13720	Multipoint single
	and multi-purpose regulators
13730	Control systems, complete
13740	Control valves
13760 13780	Actuators Continuous single
13700	and multi-purpose regulators
18.15.	Piping and accessories
13786	Exhaust gas technology
13790	Butterfly valves
13800	Asbestos-free fabric expansion joints
13810	Fittings
13820 13840	Flanges Rubber expansion joints
13850	High pressure pipe technology
13859	Safety valves
13860	Expansion joints
13890	Pipe break safety valves
13900	Pipe swivels
13910	Piping and accessories
13920	Pipeline construction
13930	Piping accessories
13940	Check valves
13945 13947	Hoses Flexible hoses with ceramic wear protection
13950	Plug-in disc gate valves
18.16.	Stranding machines
13955	Stranding machines
13958	Rope making machines
18.17.	Tool and model making
13956	Mold frames, mold assemblies
13960	Materials for model
	and prototype construction
13970	Model and prototype making
10.10	
18.18.	Machine tools
13980	Cutting-off machines
13990 14000	External thread cutting machines Band sawing machines
14010	Bending and straightening machines
14015	Slab sawing machines
14020	Wire working and processing machines
14030	Flow-forming machines
14040	Milling machines
14060	Spark erosion machines
14070	honing and lapping machines
14080	Cable sheathing presses
14081	Cable sheathing presses
14088	(lead and aluminum) Sharpening machines
14000	Cold circular saws
14095	Hot circular saws

14100 Mould processing machines

14120	profile and flat shears
14130	Shears (standing, flying)
11100	for metallurgical operations
14140	Shears (standing, flying)
	for sheet metal working
14150	Shearing centers
14160	Grinding and polishing machines
	(also internal)
14170	Special machines for chip forming
14180	Special machines for chipless forming
14190	Special machines for special tasks
14195	Concrete sawing machines
14200	Stone cutting saws
14210	Plate shears
14220	Cut-off machines
18.19.	Tools
14230	Press brake tools
14240	Drills Trackala deilling have
14242	Taphole drilling tools
14250	Diamond tools
14260 14280	Pneumatic tools
14200	Carbide (also metal carbide) Tungsten carbide inserts
14290	and molded parts
14300	Carbide tools
14300	HM tipped saw blades
14304	HP grinding wheels
14306	Saw bands and blades for metallic
14000	and non-metallic materials
14310	Saw blades for metal
14318	Cutters
14320	Shear blades
14323	Splitting knives and accessories
	for splitting lines
14330	Abrasives and grinding wheels
14334	Special tools for die casting industry
14336	Cutting wheels
14337	Roll grinding wheels
14338	Cutting and special tools
18.20.	Clamping technology
14380	Clamping hydraulics
14400	Clamping elements
14401	Clamping tools, screws
18.21.	Components
14410	Components Seals
14410	Seals with high chemical
14412	and thermal resistance
14420	Rotary seals for feeding gases
11120	or liquid media
14430	Cooling water circulation units
100	for continuous casting-rolling lines
14440	Nozzles
	(also blow-off and descaling nozzles)
14450	Pistons
14460	Metal hoses
14470	Buffers (rubber and cellular buffers)
1//80	Stuffing box packings

Buffers (rubber and cellular buffers)

14480 Stuffing box packings 14490 Wear plates

18.22. Operating fluids

10.22.	operating nulus
14500	Solid lubricants
14510	Industrial oils
14520	Cooling lubricants

18.23. Tribology

14522	Dosing and monitoring equipment
	for lubricants
14523	Oil circulation systems for bearing
	and gear lubrication
14524	Two-line grease lubrication systems for
	metallurgical plants and rolling mills
14525	Special lubricants
14526	Central lubrication systems
14527	Machines for degreasing and lubrication
10.04	Comisso

18.24. Services

14528	Service for compressors and turbines
14529	Mechanical processing of hydraulic parts

Transport and 19 storage technique

14530	Engineering and technical assistance
14535	Hot material conveyors
14540	Transport and logistics for industrial
	residues
14545	Hot material conveyors
14548	Transport
14550	Transport technology
19.01.	Metallurgical plant vehicles
14560	Slab, bloom and billet transporters,
	rubber tires
14570	Coil transport systems
14580	Coil transporters
14590	Steel mill vehicles, general
14600	Metallurgical plant vehicles, track-bound
14605	Air cushion vehicles-FTS
14610	Slag ladle transporters
14620	Slag transporter
14630	Scrap transport trailers
	with weighing equipment
14640	Steel mill vehicles
19.02.	Rail vehicles
14650	Diesel locomotives
14660	Railroad wagons
14670	Self-propelled wagons
19.03.	Track technology
14680	Turntables and transfer cars
14684	Track technology
14690	Shunting systems
19.04.	Trackless vehicles
14700	Trailers
14705	Trucks and trailers
14720	Electric industrial trucks
14730	Electric trucks
14734	Electric four-way sideloaders
14740	Driverless transport systems
14742	Driverless transport systems
	for steel and aluminum coils
14750	Forklifts and cross stackers
14760	Rubber-tired heavy-duty
	transport vehicles
14810	Heavy-duty tractors
14820	Telescopic excavators
14822	Transport systems for coils

19.05.	Continuous conveyors
14830	Conveyors (general)
14840	Pneumatic conveyors
14850	Vibratory conveyors
14860	Vertical conveyors
14880	Steep conveyors
14890	Continuous conveyors for bulk material
14900	Continuous conveyors for piece goods
14910	Conveyor belts and screws
14920	Trough chain conveyors
19.06.	Cranes
14930	Slewing cranes
14940	Casting cranes
14945	Crane systems, automatic
14946	High capacity automatic cranes
14950	Cranes, hoists and accessories, general
14955	Crane service
14960	Overhead travelling cranes
14970	Gantry cranes
14980	Bracket cranes
14990	Buffers
14992	Vacuum lifting devices for heavy industry
14993	Automatic stacking devices
	(vacuum lifting devices)
19.07.	Scales
14997	Bundle and coil scales
15000	Batching and blending scales
15010	Track and truck scales
15020	Crane scales
15030	Roller table scales
15040	Scales for continuous weighing
15041	Scales for alloying elements
15042	Scales for pig iron
15043	Scales for scrap
15044	Scales for static weighing
15045	Scales for stationary weighing
15050	Weighing systems for ladle turrets
	and ladle cars
15060	Load cells
15080	Weighing systems for silos
19.08.	Storage and retrieval systems
15090	Bund high-bay warehouse
15100	Container staging systems
15110	Labeling systems
15120	Lattice girder storage systems
15130	Manual overhead conveyors
15134	Aerial work platforms
15140	Storage technology and automation
	systems for sheet metal, long goods and stacking boxes
15141	
15141	Storage technology and automation systems for sheet metal, long goods
15150	and stacking boxes
15150	Storage and retrieval systems Storage systems for coils
15160	Storage and racking systems
15164	Long goods order pickers, high rack
TOTOT	stackers
15170	Marking systems
15180	Pallets and cassettes
15188	Vertical elevators (paternosters)
15190	Stacker cranes

10100	Sidiage systems for cons
15160	Storage and racking systems
15164	Long goods order pickers, high
	stackers
15170	Marking systems
15180	Pallets and cassettes
15188	Vertical elevators (paternosters)
15190	Stacker cranes
15193	Traversers and turning devices

15195	Honeycomb racking systems
19.09.	Warehouse organization
15198	Labels
15200	Identification
15208	Warehouse logistics
15210	warehouse organization)
19.10.	Components
15220	Slinging equipment
15230	Loading and unloading equipment
15240	Sheet metal package tongs
15250	block pushers, extractors
15270	Bunker discharge aid
15280	Bunker and silo equipment
15290	Coil and sheet metal packaging
15300	Coil tongs
15310	Permanent magnets
15320	Electrical equipment for cranes etc.
15330	Electric hoists
15333	Distance measuring devices for cranes
15335 15340	Labels Conveyor belt cover
15350	Conveyor belt scraper
15360	Conveyor devices and equipment
15370	Conveyor belt splices
15380	Conveyor belt vulcanizing equipment
	and material
15390	Grippers and tongs
15400	Handling machines
15410	Lifting clamps, safety lifting clamps
15420	Industrial robots, metallurgical, sensor
	controlled
15430	Chains
15431	Sprockets
15440	Tipping eyes, tipping shackles
15450	Crane wheels
15455 15460	Crane ropes Storage yard equipment
15400	Laser distance measuring devices for
10470	cranes
15480	Load lifting belts
15490	Lifting magnets and equipment
15500	Magnetic brakes
15510	Magnets, magnet systems
15511	EGIS safety device for electric lifting
	magnets
15520	Wheels
15530	Corrosion, friction and wear protection
15540	Bulk containers
15550	Pulleys
15555	Safety device for electric load lifting magnets
15560	Separation magnets
15570	Silos for FF-masses
15580	Silos for bulk materials
15590	Handling plants for bulk materials
15600	Deflection rollers
15610	Packaging technology
15620	Wear protection coatings with aluminum
	oxide ceramics
15630	Wear protection coatings with rubber
15632	Wear protection technology
15635	Track-bound tippers
15640	Wagon tipper
15650	Hot transport and cooling hoods
	for steel ingots

19.11. 15660	· · · · · · · · · · · · · · · · · · ·	
19.12.	Packaging technology	

13.12.	r ackaging teennology
15662	Automated packing stations for coils
	and long goods
15664	Packaging materials

20 Electrical engineering and automation

15670	Electromechanical actuators
15680	Engineering and technical assistance
15690	Technical translations and documentation
20.01.	Electrical equipment for
	metallurgical plants and rolling mills
15700	Workplace design systems
15720	Three-phase motors
15730	Electrical equipment for metallurgical
	plants and rolling mills
15740	Electrical equipment for rolling mills
15750	Large electrical installations, complete
15760	Power supply systems
	for mobile consumers
15770	Spring cable reels
15780	Spring hose reels
15785	Radio remote controls
15788	Radio systems
15790	Radio control systems
15800	Gear motors
15810	DC motors
15820	High current cables and lines,
15000	water cooled
15830	Cables and wires
15840	Cables, cable reels and accessories
15850	Motorized cable reels
15860	Low voltage switchgears and installations
15870 15880	Switchgears Slip ring bodies
15890	Fuse systems
15900	Heavy current capacitors
15910	Plugs and socket-outlets
15920	Power converters (frequency converters)
15930	Power supply systems
10000	(movable and also busbars)
15940	transformers (also for industrial furnaces)
15960	AC and intercom systems
15962	High voltage feeders and contacts
	5
20.02.	Control and automation systems
15967	Electrical, instrumentation and
	control engineering, general
15968	Installations for anisotropic
	control technology
15970	Automation, general
15980	Automation plants for ore and fine ore
15990	Automation plants for blast furnaces
16000	Automation plants for industrial furnaces,
	general
16010	Automation plants for cold rolling mills
16020	Automation plants for coking plants
16030	Automation systems for steel mills

16035	Automation systems for blast furnaces
16040	Automation systems for hot rolling mills
	and tube mills
16041	Automation systems for hot rolling mills
16050	Automation plants and process control
	systems in metallurgical plants and rolling
	mills
16055	Automation of strip processing lines
16060	Automatic detection systems
16063	Strip guiding systems
16070 16080	Data transmission equipment and systems
16090	Industrial television technology Information and communication systems
16100	Identification
16110	Customized complete systems
16120	Guidance systems (inductive) for vehicles
16130	Control systems (by image processing) for
	vehicles
16140	Control and automation systems, general
16150	Positioning systems for cranes
16160	Process automation
16162	Process automation for strip processing
16170	lines Process automation for continuous steel
10170	casting plants
16180	Process automation for metallurgical
10100	plants
16190	Process control systems
16192	Process control with infrared detectors
16200	Process optimization
16202	Process optimization with weighing
	systems
16205	Shopfloor systems
16210 16220	Control systems, complete
10220	Control stations for metallurgical and rolling mill plants
16230	Control systems, electrical
16240	Control systems, electronic
16250	Control systems for press water tanks
16260	Control systems, hydraulic
16270	Control systems, infrared
16280	Power supplies for automation
	and control
16290	Networking
16293	Video technology
16295	Weighing systems for process automation in steelworks
20.03.	Data processing
16300	Analog devices and accessories
16305	Archiving
16310	Production and machine
	data acquisition BDE / MDE
16320	Data acquisition devices and systems
16330	Data processing
16338	Digital image processing
16340 16350	Digital devices and accessories Expert systems
16355	Manufacturing Execution System (MES)
16360	Turnkey system solutions,
	hardware \ 057software
16380	X-Window Terminal
20.04.	Software
16390	Simulation software
16393	Software for archiving, document ma-
	nagement and workflow

16395	Software for order processing, warehouse and test certificate management
16400	Application software
16410	Software for slitting lines
16415	Enterprise resource planning system
	for metal and steel trade
16420	Software for production planning
10400	and control
16430	Software for statistical process control
16440	and quality assurance Technical calculation programs
10440	rechnical calculation programs
20.05.	Maintenance
16450	Machine diagnostics
16460	Maintenance and inspection
21	Measuring and
	testing technique
16470	Gas measuring instruments
	for degreasing plants
16472	Gas measuring devices

for metal degreasing plants 16480 Gas measuring devices for metal cleaning plants 16488 Multichannel measuring systems 21.01. Measuring and testing technology, general 16490 Automation and metrology,

color measurement 16500 Pressure transducers 16508 Corrosion testers 16510 Metrology 16511 Measuring magnetism 16520 Measuring and testing systems, general 16530 Measuring and testing systems, general 16540 Measurement value acquisition 16550 Measured value processing 16552 Measuring and test equipment identification labels 16553 Measuring equipment and test status identification labels 16560 Radioactivity warning systems 16564 Recorder systems, paperless 16566 Pre-warning of melt breakthroughs and residual wall thickness measurement on refractory linings 16568 Roll gauges 21.02. Measurement of physical properties Distance measuring system

16570 16580 Distance sensors for positioning and length measurement (laser, ultrasonic, optical, inductive and capacitive) 16581 Distance sensors for positioning and length measurement (magnetostrictive) 16590 Bath mirror measurement in converter 16600 Bath mirror control 16608 Strip thickness control (AGC) 16610 Strip sag measuring device 16612 Strip flatness measurement 16613 Strip flatness control 16615 Strip guiding system

16620	Tape tension measuring systems
16625	Tension measuring system
	for driven S-rolls
16630	Width measuring devices
16640	Strain gauges and measuring strips
16645	Strain measuring systems
16650	Strain and mass flow measuring systems
16652	Dressing degree
	and mass flow measuring systems
16660	Thickness measuring systems
	and devices
16670	Thickness gauges
16680	Distance switches and measuring devices
	(optical, acoustic and inductive)
16690	Torque measuring devices for S-rollers
16700	Torque measuring device
16710	Speed measuring devices
16720	Flow meters
16721	Flow measuring devices, capacitive,
	e.g. for coal injection
16730	Flow monitoring
16740	Diameter measurement
16750	Electrical measurement of mechanical
16755	quantities
10700	Electronic measuring system for hydraulic and lubricating oils
16770	Form measurement
16780	Level measuring devices
16790	Level control
16800	Level control
16810	Gas measuring instruments
16815	Oxygen sensors for waste gas
16820	Equipment and chemicals
	for waste water control
16830	Speed measuring devices
16850	Infrared switch
16860	Infrared radiation pyrometer
16861	Infrared radiation thermometer
	with scanner
16870	Infrared radiation pyrometer with scanner
16871	Infrared Radiation Thermometer
16875	Infrared thermography
16877	IR camera - infrared based slag detection
16878	Cameras, furnace cameras
16879	Cast iron temperature measurement
16880	Insulating capillary
16890	Force measuring devices for tension and compression
16891	Force measurement and weighing
10001	systems
16892	Force measuring systems
16900	Cooling water monitoring
16910	Length measuring devices for tubes
16920	Linear encoders
16930	Linear encoders
	(also for ways and distances)
16940	Linear encoders, ultrasonic
	(also for ways and distances)
16950	Length and speed measuring systems
	(optical)
16960	Laser speed and length measuring
10055	systems
16970	Conductivity and pH meters
16980	Mass flow meters
17000	Measurement of refractory linings
17010	(in operating condition) Measuring devices for electrical quantities
17010	mousuring devices for electrical quantities

D Measuring devices for electrical quantities

nagement and workflow

17020	Measuring machines
17030	Measurement printers
17033	Microstructure / roughness measurement
17035	Surface crack detection
17040	Opto-electronic measuring instruments
17050	Flatness measuring devices
17057	Profile measuring devices
17060	Profile measuring systems (non-contact)
17080	Pyrometer
17090	Pyrometer tubes
17100	Ratio pyrometer
17105	Inline concentration measurement of liquids
17110	Probes for liquid pig iron
17120	Tube measuring equipment
17130	Coating thickness gauges
17133	Coating thickness control
17135	Layer thickness control
17138	Slag detection with infrared
17140	Slag detectors
17160	Forging measurement
17180	Vibration measuring devices
17190	Rope testing equipment for round and
	flat steel ropes (rope belt conveyors)
17200	Dust measuring equipment
17210	Equipment for radiation measurements
17220	Systems for nuclear radiation
17000	measurement (input control)
17230	Immersion thermocouples
17250 17255	Temperature measurement equipment
17260	Temperature profile measuring systems Thermocouples
17200	Thermocouple protection tubes
17274	Thermographic measurement
17280	Thermal conductivity measuring systems
17290	Rolling mill force measuring systems
17300	Rolling mill measuring systems
17310	Resistance thermometers
17320	Line scan cameras
17322	Non-destructive thickness measurement
	of refractory linings
	(during furnace shutdown)
17325	2-color pyrometer with fiber optics
21.03.	Quality management
17340	3-D profile measurement of rails and
17540	other profiles
17341	3-D profile measurement of weld seams
17345	Pickling bath monitoring
17350	Breakdown early detection
17352	Breakdown early detection and monitoring
17360	Breakdown monitoring
17365	Chrome bath monitoring
17368	Roller emulsion control
17370	In-line surface inspection, optical
17380	Measuring instruments
	for quality management
17384	Mold control
17390	Length, speed and profile measuring
17/00	systems
17400 17408	Hole detection
17408	Surface inspection Surface inspection systems
17409	Surface inspection
17415	Surface inspection of strip steel

- 17426 On-line measurement of oils and waxes
- 17430 On-line surface inspection, optical

- 17432 On-line surface quality inspection, optical
- 17440 On-line roughness measurement
- 17445 Systems for quality data acquisition and processing

21.04. **Quality control**

- 17446 Strip edge inspection 17447 Strip steel surface inspection, automatic
- and complete 17448 Strip steel surface inspection, automatic
- and complete 17450 Quality control, visual
- 17460 Testing services
- 21. Mai Services
- 17470 Metrology services

22 Materials testing

- 17473 Destructive and non-destructive materials testing 22.01. Non-destructive materials testing 17480 Consulting, execution, equipment 17490 Image processing, barcode readers 17500 Demagnetization equipment 17510 Internal pressure testing equipment 17520 Corrosion testing Measuring and testing machines 17530 17536 Training and certification for NDT 17540 Ultrasonic testing equipment / machines 17560 Non-destructive testing of round and flat steel cables 17570 Non-destructive pipe testing equipment 17580 Non-destructive material testing equipment, general 17589 Non-destructive material testing equipment, acoustic 17590 Non-destructive material testing equipment, electromagnetic 17620 Non-destructive material testing equipment, optical 17630 Non-destructive materials testing with X-rays 17640 Non-destructive materials testing with acoustic emission analysis 17650 Non-destructive materials testing equipment with ultrasound 17660 Non-destructive materials testing 17664 Non-destructive materials testing with fluorescent and red / white penetrant methods 17665 Non-destructive material testing with fluorescent and red / white test method 17670 Non-destructive materials testing with coupling agent-free ultrasonic excitation 17680 Non-destructive materials testing, optoelectronic 17690 Non-destructive materials testing (service)
- 22.02. Strength testing, endurance testing 17698
- Fixtures for tensile testing 17700 Stress analyses and reliability tests on machines and components
- 17710 Consulting, execution, equipment
- Fatigue testing machines 17720

- Hardness testers 17730
- 17740 Hardness testing equipment
- 17750 Machines for tensile test preparation
- 17760 Friction and wear testing machines
- 17770 Crack testing machines 17780
 - Pipe testing presses
- 17790 Torsion testing machines 17800 Universal testing machines for tension,
 - compression, bending and tensile tests

Technological testing methods, 22.03. testing service

	leading activite
17810	Chemical analyses
17820	Grain size analysis
17830	Mechanical-technological testing
17840	Metallographic testing
17850	Technological testing
17852	Technological testing,
	microscope image analysis
17860	Deep drawing testing machines
	for sheets and strips
17870	Conversion of conventional universal
	testing machines to electronic
	measurement with data processing
17880	Roll testing (concentricity, eccentricity)
22.04.	Destructive material testing
17888	Corrosion testing
17890	Machines for the production of notched
	bar impact specimens
22.05.	Fatigue testing
17896	Testing of safety valves in operating

17896 Testing of safety valves in operating condition

22.06. Damage analysis

17898 Damage analysis

Analysis and laboratory 23 equipment

17900	Engineering and technical assistance
23.01.	Sampling and sample preparation
17910	Gas probes, gas sampling probes
17915	Sampling
17920	Sampling equipment
17940	Sample punching
17950	Sample transport
17960	Sample preparation
17970	Sample preparation
	for X-ray fluorescence analysis
17980	Sample preparation for OES and XRF
	(X-ray testing)
17990	Sample preparation machines
18000	Spectrometer sample preparation
	with remelting equipment
18010	Punching tools for samples
23.02.	Analytical equipment
18020	Analytical instruments

Analytical instruments
Devices for inline concentration
measurement of liquids
Analyzers for oxygen measurement

18027	Automated analyzers for process control
	and wastewater management
18030	Automation equipment for analysis and
	laboratory
18040	Gas analyzers
18048	Laser induced fluorescence
18050	Laser plasma spectrometer
18059	Mass spectrometers
18060	Conductivity and
	pH measuring instruments
18070	Oil-in-water monitoring in the laboratory
	and in industry
18080	Optical emission spectrometers
18090	02 analyzers
18100	Plasma spectrometers
18105	X-ray diffractometers
18110	X-ray fluorescence spectrometer
18120	X-ray fluorescence spectrometers,
	portable
18130	Oxygen probes
18138	Heavy metal analysis in water, laboratory,
	field, process and online
18140	Nitrogen analyzer system
	for direct determination
18150	Nitrogen probes
18160	Hydrogen analysis system
10100	for direct determination
18170	Hydrogen probes
18180	Accessories for analytical technology
10100	Account of analytical contrology
23.03.	Laboratory equipment, general
18190	Analytical standards
18200	Analytical reference material
18202	Equipment for sample preparation
.0202	for OES and XRF (X-ray testing)
18210	Calibration samples
18220	Annealing boxes
18230	Laboratory furnaces
18240	Laboratory equipment
18250	Laboratory automation
18260	Shuttles
18264	Shuttles and HF crucibles
10204	for C+S determination
18270	Spectral samples
18280	Crucibles
10200	ง แบบปร
23.04.	Metallography
18290	Services
18300	Metallography equipment
18310	Metallographic laboratories

24 Environmental protection and disposal

Metallographic testing

18330	Consulting and measurement
18340	Engineering and technical assistance
24.01.	Dedusting and gas cleaning
18342	Exhaust gas technology
18348	Oxygen sensors for exhaust gas
18350	Exhaust systems
18360	Exhaust gas cooling systems
18362	Exhaust gas cooling with heat recovery
10070	E

18370 Exhaust gas cleaning systems

18375	Secondary exhaust gas cleaning systems
18376	Sintered exhaust gas cleaning systems
18377	Desulfurization of sinter flue gases
	-
18378	Exhaust gas cleaning for pellet plants
18380	Waste heat boiler
18390	Aerosol separation
18400	Treatment of dusts from steel mills and
	foundries
18410	Electrostatic precipitator
18420	Dedusting and gas cleaning
18430	Dedusting plants and accessories, general
18440	Dedusting filters and plants (cassette,
	cartridge, round, bag, pocket filters, etc.)
18450	Denitrification plants
18460	Denitrification catalysts (DENOX)
18470	Fine dust removal for sinter plants
18480	Filter media
18490	Gas recovery plants
18500	Fabric filters
18510	Casting shop dedusting
18515	Blast furnace exhaust gas cleaning
18520	
	Hot gas filtration
18530	Industrial vacuum cleaners
18535	Catalytic plants
18536	Catalyst service
18540	Compact air cleaner
18550	Laser Clean Box
18560	Air filters (also in-line filters)
18570	Multicyclones and cyclones
18580	Afterburning, catalytic
18590	Afterburning, thermal
18600	Wet dust collectors
18608	Wet dedusting systems
18610	Wet fine dust removal for sinter plants
18615	Wet electrostatic precipitators
18620	Wet cleaning plants
18630	Flue gas desulfurization for boiler
	and sinter plants
18640	Flue gas cleaning plants for waste
	and hazardous waste incinerators
18650	Dust collectors
18660	Dust measuring devices
18670	Dust recovery plants
18690	Thermal exhaust air purification
18693	Dry exhaust gas cleaning plants
18700	Dry dedusting plants
10700	(also rotary flow dedusters)
10710	Dry cleaning plants
18710	
18720	Venturi dust collectors
18728	Central exhaust systems
18730	Central dust extraction plants
24.02.	Waste water treatment
24.02. 18740	
10740	Waste water plants, grease separators,
10750	chemical pumps
18750	Waste water treatment
18755	Waste water treatment, thermal
18756	Wastewater treatment for wastewater

containing oil and grease

Chemical water treatment

Evaporation plants

Recirculation systems

Solvent recovery plants

Wastewater treatment plants

Wastewater treatment plants

Recirculating water treatment

Neutralization and detoxification plants

18760

18770

18774

18790

18800

18802 18810

18820

19045 Plants for preparation and recycling of metallurgical residues 19050 Other disposal plants 19060 Recycling of residual materials (ashes, slags, dusts, sands) 19070 Rolling mill slag de-zincification 19072 Dezincification of metallurgical dusts 19080 Recovery of recyclable materials 19090 Fluidized-bed drying of steel mill sludges 24.05. Components 19110 Separators (gasoline, benzene, oil, water) 19114 Aerators and agitators 19120 Emulsion splitting plants 19130 Injection plants for processed, oil-containing mill scale sludges 19140 Injection plants for Carbo Fer 19150 Injection plants for PE granules 19160 Heat exchangers 24.06. **Operating materials** 19170 Activated carbon 19180 l ignito ooko

18830

18840

18842

24.03.

18870

18880

18890

24.04.

18900

18910

18920

18921

18922

18923

18925

18930

18940

18970

18975

18980

18990

18997

19000

19005

19009

19010

19020

Sludge dewatering, mobile

Water management

Regeneration plants

Sand regeneration plants

Exhaust air purification

Car recycling plants

Electric arc dust recycling

Biological exhaust air treatment

Injection plants for filter dust

Oil and grease removers

Radioactive substances

Chimney construction

Slag processing

Residue-free vibratory grinding

(slag transport and recycling)

Chimneys (also sheet metal chimneys)

Separation of non-ferrous metals

Soil and groundwater remediation

Flaring plants, thermal afterburning

Injection plants for alloy and residual materials using oxygen burners

Storage of substances hazardous to water

(dusts)

Sludge dewatering, stationary

Regeneration plants for pickling solutions

Acid resistant collection cups and wall coatings with DIBt test mark

Recycling and waste disposal

Remediation of contaminated sites

Plants for the recycling of raw materials

Plants for the recycling of residual materials

19100	LIGHTLE COKE
19190	Oil binder
19200	Lubricants

24.07. Services

19210	Exhaust gas measurements
19220	Chemical and mineralogical analysis
19230	Emission measurements
19232	Simulation software for exhaust
	gas measurement with design and
	optimization of exhaust systems

25 Occupational safety and ergonomics

25.01.	Occupational safety
19240	Occupational safety clothing
19260	Respiratory protection masks
19263	Fire blankets for welding work
	made of textile fabric
19266	Fire blankets and containers
19270	Gas detectors
19280	Heat protective clothing
19285	High temperature resistant
	and fireproof textile products
19289	Protective glass
19290	Industrial protective glass
19300	Light curtains for accident prevention
	and other applications
19305	Soldering protection mats made of
	textile fabric
19310	Furnace sight glass Neotherm®
19320	Safety edges
19330	Safety mats
19340	Welding protection glass Athermal®
19350	Welding accessories
19360	Dust measuring devices
25.02.	Noise protection devices
19368	Hearing protection
19370	Noise reduction

19370	Noise reduction
19380	Industrial noise protection
19390	Noise protection devices
19400	Noise monitoring
19410	Level recorder
19420	Sound insulation
19430	Sound level meter
19432	Sound insulation

26 Other products

19440	Aluminium and zinc slug production
-------	------------------------------------

26.01. Foundry products

19450	Stainless steel mold casting
19460	Stainless steel shell mold casting
19470	Stainless steel centrifugal casting
19490	Investment casting by the lost wax
	process
19500	Cast iron with spheroidal graphite
	(ductile iron)
19510	Cast iron with lamellar graphite
	(gray cast iron)
19520	Cast iron shape casting
19530	Continuous cast iron
19540	Chilled cast iron
19550	Heat resistant cast iron
19560	Gravity die casting
19570	Copper and copper alloy castings
19580	Light metal castings
19590	Machine mold casting
19610	Acid resistant castings
19630	Centrifugal casting
19640	Heavy metal casting
19660	Steel casting
19670	Wear-resistant casting

27 Consulting, planning and services

19695	Hot tapping under pressure
19700	Fittings service
19710	Training and further education
	of welding personnel
19715	Consulting, planning and services
19720	Consulting services
19721	Consulting for optimization
19730	of weighing systems Consulting service
19730	Procurement, eProcurement
19734	blended learning
19740	Services, quality assurance
19750	Emission measurements
19760	Energy consulting
19770	Energy saving
19780	Energy service
	(optimization, recovery, supply)
19790	Decoating
19792	Spare parts for commissioning
19794	Commissioning
19810	Engineering services
	(also commissioning of metallurgical
	plants as well as conveyor and drive
10015	technology plants)
19815	Engineering problem solving
19820	Maintenance organization
19822 19824	Cooling and boiler water treatment Lean management
19825	Leak sealing under operating pressure
19830	Logistics consulting
19832	Logistics services, steel logistics
19840	Contract annealing
19850	Contract annealing
	(own mobile annealing facilities)
19860	Management consulting
19875	On-site machining
	(milling, drilling, turning, grinding, etc.)
19880	Assembly and maintenance
19890	Marketing services
19892	Offline Maintenance
19893	Online Maintenance
19895	Quality management consulting
19900 19910	Experts
19910	Cutting and welding consulting Welding research and education
19930	Simulation studies and software
19935	Software for metalworking
19940	Supplier of spare parts, equipment and
	accessories for the steel industry, general
19950	Radiation
19952	Radiation protection
19955	supply chain management
19960	Digitalization consulting
19970	Software solutions for digitalization
19980	Digitization analysis
19990	Technical translations and documentation
20000	Training and commissioning
0000-	of metallurgical plants
20005	Management consulting
20010	Leasing of electronic measuring
20015	equipment, data technology and computers Continuing education
20010	

28 Steel in civil engineering

28.01.	Software for building and construction
20050	Cad software
28.02.	Steel in building construction
20058	Structural steel
20070	Hall gates
20086	Pipelines
28.03.	Steel in civil engineering
20100	Offshore technology
20106	Tubes
20108	Micropiles
20110	Anchorages
20112	Sheet piling

30 Service concerning steel materials

20135 Processing services

30.01.Joining20178Soldering