



LIST OF PRODUCTS AND SERVICES

01	Sheet metal, semi-finished and finished products (ferrous/non-ferrous)	04.02.02 sheet metal forming machines 04.02.03 extruding presses 04.02.04 thread rolling machines 04.02.05 cold extrusion presses 04.02.06 coining presses 04.02.07 knurling machines 04.02.08 corner forming machines 04.02.09 rollforming machines for hollow components	09.02.00	joining with fasteners, fastening elements	12.01.02 electric/electronic controlling (incl. CNC) equipment 12.01.03 hydraulic controlling/regulating/measuring equipment 12.01.04 mechanical controlling/regulating/measuring equipment 12.01.05 pneumatic controlling/regulating/measuring equipment	
01.01.00	sheet/plate/strip metal	04.02.10 rollforming operations, general 04.02.11 corrugating machines for sheet metal 04.02.12 sandwich panel machines	09.02.01	riveting	12.02.00	marking/reading equipment, materials tracking
01.01.01	metal film	04.03.01 tensile/pressure forming	09.02.02	screw fastening	12.02.01	marking machines, surface plates
01.01.02	thin sheet metal	04.03.02 drawing/ironing machines	09.02.03	nail fastening	12.02.02	precision measuring instruments, gauges
01.01.03	strip (coiled) metal	04.03.03 spinning and planishing machines	09.02.04	high-speed joining	12.03.00	testing/inspection equipment
01.01.04	plate	04.04.00	09.02.05	other fastener-based joining methods	12.03.01	materials testing
01.01.05	tailored blanks, special sheets	tensile forming	09.02.06	automated equipment and tools	12.03.02	weld seam inspection
01.02.00	surface treated/plastic coated/ plated sheet and coil	04.04.01 stretch wrap forming presses	09.03.00	welding and soldering	12.03.03	surface inspection
01.03.00	semi-finished products (incl. punched sheet, expanded metal) sections/tubes	04.04.02 deep drawing presses	09.03.01	autogenous welding/soldering equipment		
01.04.01	formed tube/section parts	04.05.00	09.03.02	arc welding machines		
01.05.00	sheet metal parts/finished products	straightening, forming, bending	09.03.03	plasma and laser welding machines and equipment		
01.05.01	blanks (incl. laser, plasma and waterjet cut parts etc.)	04.05.01 bending machines	09.03.04	shielded arc welding installations		
01.05.02	pressed and embossed parts	04.05.02 bending/straightening presses	09.03.05	other arc welding installations		
01.05.03	deep drawn, stretch-formed and drawn parts	04.05.03 sheet metal levelling machines	09.03.06	shielded arc welding machines and equipment		
01.05.04	punched and fine blanked parts	04.05.04 sheet metal bending machines				
01.05.05	formed and punched-formed parts	04.05.05 curling machines				
01.05.06	spun/flow formed parts	04.05.06 seaming/tube forming machines				
01.05.07	internal high pressure/hydroformed parts, specialised parts	04.05.07 flanging machines				
01.05.08	warm and hot formed parts	04.05.08 die sinking presses/press brakes				
01.05.09	sheet metal assemblies, other fin. parts (incl. fastening systems, profiled joints)	04.05.09 straightening machines and equipment				
01.06.00	sub-contractors	04.05.10 bending rolls/circular lamination				
		04.05.11 folding machines				
		04.05.12 crimping machines				
		04.05.13 stretcher levelling machines				
		04.05.14 beading machines				
		04.05.15 rollformers				
		04.06.00				
		edge forming				
		04.06.01 rounding off equipment				
		04.06.02 sheet metal deburring machines				
		04.06.03 plate edging machines				
		04.06.04 edge trimming machines				
		04.06.05 plate edge bevellers				
		04.07.00				
		internal high pressure forming/hydroforming				
		04.08.00				
		hot forming/press hardening				
02	Handling technology	05	Flexible sheet metal working technology	10	Surface technology	
02.01.00	processing lines (coil)	05.01.00	blanking incl. workpiece/tool handling	10.01.00	surface treatment, general	
02.01.01	feeding/unloading equipment	05.01.01	trimming and forming machines	10.01.01	surface protection, general	
02.01.02	coiling/uncoiling equipment, reels	05.01.02	sheet metal working centres	10.01.02	dip-coating processes, general	
02.01.03	feeders	05.01.03	bending centres	10.01.03	washing, degreasing	
02.01.04	levellers/straightening machines	05.01.04	cutting centres	10.01.04	cleaning	
02.01.05	passline control/strip loop control systems	05.01.05	combined laser cutting/forming machines	10.01.05	drying	
02.01.06	other equipment	05.01.06	feed presses and automatic bending equipment	10.01.06	lubricating	
02.02.00	conveyor systems (non-coil)	05.01.07	transfer presses	10.01.07	paint finishing	
02.02.01	stacking systems	05.02.00	bending and folding incl. workpiece/tool handling	10.01.08	electrostatic coating	
02.02.02	ejection systems	05.03.00	joining incl. workpiece/tool handling	10.01.09	vaporising, melting	
02.02.03	workpiece insertion units	05.04.00	integrated sheet metal working incl. workpiece/tool handling	10.01.10	hot-dip zinc plating, hot dip tinning	
02.02.04	feeders	05.04.01	can making machines	10.01.11	flame/laser spraying	
02.02.05	blank feeding units	05.04.02	roll forming equipment for special can necks and covers	10.01.12	diffusion-surfacing	
02.02.06	unloading systems, separation systems	06	Tube/section working	10.01.13	electro-annealing	
02.02.07	stop systems	06.01.00	tube/section cutting and trimming (incl. punching/stamping)	10.01.14	diffusion annealing	
02.02.08	robots for sheet metal working/handling	06.02.00	tube/section forming (incl. bending and CNC equipment)	10.01.15	hardening	
02.02.09	transfer systems	06.03.00	tube/section end forming and deburring	10.01.16	eroding	
02.02.10	feeding and loading equipment, general	06.04.00	tube/section measuring systems	10.01.17	descaling	
02.03.00	workpiece fixing	06.05.00	other tube/section working	10.01.18	changing the characteristics of materials	
02.04.00	intermediate storage			10.01.19	deburring	
02.04.01	storage of sheet metal parts			10.02.00	surface treatment, chemical	
02.04.02	storage of coils			10.02.01	stripping, electrolytical polishing	
02.04.03	storage of blanks			10.02.02	corroding	
02.05.00	tool handling			10.02.03	pickling	
02.06.00	assembly technology			10.02.04	coating	
03	Separation technology			10.03.00	surface treatment, electrochemical/electrolytical	
03.01.00	separation equipment, general			10.03.01	coating, galvanising	
03.01.01	strip slitting units/systems			10.03.02	dip-coating processes, electrochemical	
03.01.02	edge trimming equipment			10.04.00	surface treatment, mechanical	
03.01.03	trimming machines (manual/automatic)			10.04.01	grinding processes, general	
03.01.04	fine blanking presses (manual/automatic)			10.04.02	wide belt grinding	
03.01.05	blanking			10.04.03	long belt grinding	
03.01.06	laser cutting machines			10.04.04	vessel grinding	
03.01.07	plasma jet cutting machines			10.04.05	brushing	
03.01.08	cutting to length and slitting machines			10.04.06	polishing	
03.01.09	flame cutting equipment			10.04.07	shot blasting	
03.01.10	slitting lines			10.04.08	shot peening	
03.01.11	cutting-off grinders					
03.02.00	shears and cutting machines			11	Tool technology for sheet metal/plastic working	
03.02.01	section, billet, ingot shears			11.01.00	separation tools	
03.02.02	circle cutting shears			11.01.01	knives/shear blades	
03.02.03	curve cutting shears			11.01.02	cutting/punching tools (incl. transfer tools, perforating tools, grooving tools) carbide tools	
03.02.04	slab shears			11.02.00	pressure forming tools	
03.02.05	rotary shears			11.02.01	roll-forming tools (levelling, section/thread forming, angled rolling, flow-forming rollers)	
03.02.06	special shears and cutting machines			11.02.02	spinning/pressing/straightening/planishing tools (incl. thread forming, flow-forming and flow-turning tools)	
03.02.07	guillotine shears			11.03.00	drawing/pressure forming tools	
03.03.00	cutting to length/trimming			11.03.01	lancing/plunging/burring tools (incl. die-plates, rollers, flow-turning tools) forming-by-raising tools, bending-by-bulging tools	
03.03.01	length cutting machines			11.04.00	drawing tools	
03.04.00	sawing equipment			11.04.01	stretch-forming/embossing tools	
03.04.01	band sawing machines			11.05.00	bending/forming tools	
03.04.02	circular sawing machines			11.05.01	edge coiling tools (rollers for rounding, bending, section forming)	
03.04.03	other sawing machines			11.05.02	folding tools (edging, folding, rounding, creasing, bordering tools)	
03.05.00	other separation processes			11.05.03	tools for die-sinking presses/press brakes	
03.05.01	cutting machines for hollow shapes			11.06.00	hot forming/press hardening tools	
03.05.02	water cutting systems			11.07.00	staking/clinchng tools	
03.06.00	punching, notching, blanking, stamping			11.08.00	tool sets	
03.06.01	notching and notching machines			11.08.01	follow-on tool sets	
03.06.02	punching presses			11.08.02	transfer tool sets	
03.06.03	precision blanking presses			11.09.00	other tools	
03.06.04	high performance feed presses (autom.)			11.10.00	tool accessories, components	
03.06.05	turret punch presses			11.10.01	templates	
03.06.06	punching machines			11.10.02	standardised components, guide elements, springs	
03.06.07	turret presses			11.10.03	lubricating equipment	
03.06.08	rotary die punching			11.10.04	jigs	
03.07.00	notching, perforating			11.10.05	plastic components for tools	
03.07.01	automated notching machines			11.11.00	tool handling/treatment	
03.07.02	perforating machines			11.11.01	heat treatment of tools/hard coatings	
03.08.00	specialised presses for punching/notching/stamping			11.11.02	clamping systems	
				11.11.03	tool changing systems	
04	Forming technology	08	Machine elements and components	12	Process control and quality assurance	
04.01.00	presses, general	08.01.00	components for sheet metal/plate working machines	12.01.00	controlling/regulating/measuring equipment	
04.01.01	mechanical presses	08.01.01	drive technology/drive units	12.01.01	components for controlling/regulating/measuring equipment	
04.01.02	hydraulic presses	08.01.02	turning rolls, turning and tilting tables			
04.01.03	pneumatic presses	08.01.03	flexible machine mountings			
04.01.04	CNC-presses	08.01.04	gearboxes, gears			
04.01.05	double-sided presses	08.01.05	cooling agents and systems			
04.01.06	eccentric presses	08.01.06	light barriers/light curtains			
04.01.07	foot lever presses	08.01.07	motors, generators and accessories			
04.01.08	toggle lever presses	08.01.08	blanking impact absorbers			
04.01.09	crank presses	08.01.09	vibration absorbers			
04.01.10	trout presses, workshop presses	08.01.10	spraying plants and equipment			
04.01.11	blow forging presses	08.01.11	lubrication systems			
04.01.12	specialised presses	08.01.12	two-hand trip guards			
04.01.13	fly presses, single-spindle presses	08.01.13	linear guidance systems			
04.01.14	bench presses	08.01.14	energy supply and guidance systems (cable ducts, hoses, flexible energy conduits)			
04.01.15	die spotting presses	08.01.15	optical components (incl. lasers)			
04.01.16	four column presses	08.01.16	hydraulic components			
04.01.17	two column (open gap) presses	08.01.17	pneumatic components			
04.02.00	pressure forming	08.01.18	vacuum components			
04.02.01	sheet metal profile rolling machines, spinning and flow forming machines	08.01.19	other mechanical components (work safety equipment see also 14.04.00)			