



WELDING CONSUMABLES

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There are many abbreviations and symbols used in the chapter:

Abbr.	Explanation	Abbr.	Explanation
ABS	American Bureau of Shipping	LR	Lloyds Register of Shipping
AC	alternating current	MAG	metal active gas welding
AWS	American Welding Society	MIG	metal inert gas welding
A ₄ , A ₅	unit elongation	O.C.	heat treatment
BV	Bureau Veritas	R _e	yield point
CO	Controlas	R _m	tensile strength
DB	Deutsche Bahn	RS	Russian Sea Register of Shipping
DC	direct current	TIG	tungsten inert gas welding
DNV-GL	Det Norske Veritas - Germanischer Lloyd	TÜV (-D)	Technischer Überwachungs Verein
FN	ferrite number	TÜV (-Ö)	Technischer Überwachungs Verein – Austria
HB	Brinell hardness number	UDT	Office of Technical Inspection
HV	Vickers hardness number	CE	Ü bereinstimmungszertifikat
HRC	Rockwell hardness number	KV	impact resistance, ISO V-notch

Table 1. Abbreviations and symbols

Symbol	Welding current and polarity	Symbol	Welding current and polarity
	direct – plus side to the electrode		direct – minus side to the electrode or alternating
	direct – minus side to the electrode		direct or alternating
	alternating		alternating or direct – plus side to the electrode
	direct – plus side to the electrode or alternating		alternating or direct – minus side to the electrode

Table 2. Symbols of welding currents and polarity

Symbol	Welding position	Symbol	Welding position
	all positions		all positions, except vertical up and vertical down
	all vertical down positions only fillet weld		downhand, horizontal and vertical up
	all positions, except vertical down		horizontal
	downhand, horizontal, vertical and vertical up		downhand, horizontal and vertical down
	downhand, horizontal		downhand, horizontal, vertical and overhead
	downhand		downhand, vertical and vertical down
	vertical down		downhand, vertical, overhead and vertical up
	downhand, horizontal, and vertical		downhand, flat, vertical and vertical down
	vertical up and vertical down		all positions, except vertical up
	vertical up		downhand and vertical
	all positions, except overhead		downhand, vertical and vertical up

Table 3. Symbols of welding positions

1. Coated electrodes for manual welding

1.1. Coated electrodes for welding of non-alloyed and fine-grained steel



Marking and description	Classification	Welding current	Welding positioning	Features	Chemical composition [%]	Admittance	Diameter and catalogue no.
MOST 6012 General-purpose electrode for welding of carbon steel constructions, in particular small-sized with thin walls. Recommended for welding in forced positions, including up-down. Applied for plants of low striking voltage U ₀ >42V. Rutile-cellulose coating.	PN-EN 2560-A-E: E 38 0 RC 11 AWS A5.1: E 6013			$R_e [N/mm^2]=360$ $R_m [N/mm^2]=440-550$ $A_5=22\%$ $KV=47 J (0^\circ C)$	C=0,08; Si=0,30; Mn=0,50;		2 mm: 06 30 601220 2,5 mm: 06 30 601225 3,25 mm: 06 30 601232 4 mm: 06 30 601240 5 mm: 06 30 601250
MOST 6013 (PINK) General-purpose medium coated rutile electrode for welding of carbon steel constructions, exposed to static and dynamic load (steel or building constructions, rolling stocks). Recommended for assembly works, has very good welding properties. Rutile coating.	PN-EN 2560-A-E: E 38 0 RC 11 AWS A5.1: E 6013			$R_e [N/mm^2]=360$ $R_m [N/mm^2]=440-570$ $A_5=22\%$ $KV=47 J (0^\circ C)$	C=0,08; Si=0,20; Mn=0,50;	ABS, BV, DNV-GL	2,5 mm: 06 30 601325 3,25 mm: 06 30 601332 4 mm: 06 30 601340 5 mm: 06 30 601350
MOST 346 (6020) Rutile-acid thick-coated electrode for welding of high resistance steel, boilers, containers and pipelines. Rutile-acidic coating	PN-EN 2560-A-E: E 38 2 RA 13 AWS A5.1: E 6020			$R_e [N/mm^2]=360$ $R_m [N/mm^2]=450-550$ $A_5=24\%$ $KV=47 J (0^\circ C)$	C=0,08; Si=0,20; Mn=0,60;		2 mm: 06 30 602020 2,5 mm: 06 30 602025 3,25 mm: 06 30 602032 4 mm: 06 30 602040 5 mm: 06 30 602050
MOST 246 Thick-coated electrode for welding of carbon steel constructions exposed to static and dynamic load (ship constructions, rolling stocks, building machinery, etc.). Recommended for welding of containers and pipelines. Rutile-basic coating.	PN-EN 2560-A-E: E 35 2 RB 12 AWS A5.1: E 7014			$R_e [N/mm^2]=360$ $R_m [N/mm^2]=440-540$ $A_5=24\%$ $KV=47 J (0^\circ C)$	C=0,10; Si=0,20; Mn=0,50;		2 mm: 06 30 624620 2,5 mm: 06 30 624625 3,25 mm: 06 30 624632 4 mm: 06 30 624640 5 mm: 06 30 624650
MOST 7018 (ORANGE) Basic coating electrode with very good welding parameters. Recommended for welding of carbon steel constructions and other materials with high resistance especially in shipyard industry, machine-building, rail-way construction. Excellent parameters in welding constructions exposed to dynamic load.	PN-EN 2560-A-E: E 42 4 B 42 H5 AWS A 5.1: E 7018			$R_e [N/mm^2]>440$ $R_m [N/mm^2]=510-610$ $A_5>24\%$ $KV>47 J (-40^\circ C)$	C=0,08; Si=0,60; Mn=1,00;	ABS, BV, DNV-GL	2,5 mm: 06 30 701825 3,25 mm: 06 30 701832 4 mm: 06 30 701840 5 mm: 06 30 701850
MOST 7018 PREMIUM Low-hydrogen electrode ideal used to produce high-quality welds. Extremely high resistance up to -50°C. Electrode efficiency: around 110%. Good weldability in all positions, except of vertical-down one. Low content of hydrogen in welds (according to AWS HD ≤4 ml/100 g). Application: steel construction, boilers, containers, shipbuilding, machines, also used for buffer layers in high-carbon steel construction. Especially useful in offshore constructions.	EN ISO 2560-A: E 42 5 B 4 2 H5 AWS A5.1: E7018-1H4			$R_e [N/mm^2]=460 (\geq 420)$ $R_m [N/mm^2]=560$ (500-640) $A_5>27\% (\geq 20)$ $KV>190 J (+20^\circ C)$ $KV>160 J (-20^\circ C)$ $KV>70 J (-50^\circ C)$	C=0,08; Si=0,4; Mn=1,2;	TÜV, DB, ABS, BV, DNV-GL, CE	2,5 mm: 06 30 702025 3,2 mm: 06 30 702033 4,0 mm: 06 30 702040



1.2. Coated electrodes for welding of high-alloyed steels (* confirmation of product availability and minimal amount is required)

Marking and description	Classification	Welding current	Welding positioning	Features	Chemical composition [%]	Admittance	Diameter and catalogue no.
MOST 308L-16 Electrode for welding of high-alloyed steels in grades of 18 Cr and 8 Ni. Rutile coating	EN ISO 3581-A: E 19 9 L R 12 AWS A5.4: E 308 L-16 Werkstoff nr. 1.4316			$R_p [N/mm^2] \geq 360$ $R_m [N/mm^2] \geq 540-610$ $A_5 \geq 32\%$ $KV \geq 80 J (20^\circ C)$	C<0,03; Si<0,90; Ni=9-11; Mn=0,90; Cr=18-21; FN=8;		2,0 mm: 07 20 308204 2,5 mm: 07 20 308254 3,2 mm: 07 20 308324 4,0 mm: 07 20 308404
MOST INOX 347 B Electrodes with content of Nb or Ti for welding of high-alloyed steels. Rutile coating.	EN ISO 3581-A: E 19 9 Nb R 22 AWS A5.4: E 347 15 Werkstoff nr. 1.4551			$R_p [N/mm^2] \geq 350$ $R_m [N/mm^2] \geq 550-610$ $A_5 \geq 30\%$ $KV \geq 60 J (20^\circ C)$	C<0,03; Si<0,90; Ni=9-11; Mn=0,80; Cr=18-21; Nb=0,30; FN=8;		2,5 mm: 07 20 347253 3,2 mm: 07 20 347323 4,0 mm: 07 20 347403
MOST 316L-16 Electrode with content of Mo for welding of high-alloyed steels in grades 18 Cr, 8 Ni, 3 Mo. Rutile coating.	EN ISO 3581-A: E 19 12 3 L R 12 AWS A5.4: E 316 L-16 Werkstoff nr. 1.4430			$R_p [N/mm^2] \geq 400$ $R_m [N/mm^2] \geq 560-650$ $A_5 \geq 32\%$ $KV \geq 70 J (20^\circ C)$	C<0,03; Si<0,90; Ni=11-13; Mn=0,85; Cr=18-20; Mo=2,5-3; FN=8;		2,0 mm: 07 20 316204 2,5 mm: 07 20 316236 3,2 mm: 07 20 316324 4,0 mm: 07 20 316404
MOST 310-15* Electrode for welding heat-resistant steels (1150°C) in grade of 310. Rutile coating.	EN ISO 3581-A: E 25 20 B 22 AWS A5.4: E 310-15 Werkstoff nr. 1.4842			$R_p [N/mm^2] \geq 400$ $R_m [N/mm^2] \geq 550$ $A_5 \geq 30\%$ $KV \geq 70 J (20^\circ C)$	C<0,10; Si<0,50; Ni=19-21; Mn=2,5; Cr=24-26;		2,0 mm 2,5 mm 3,2 mm 4,0 mm
MOST 312-17* Special-purpose electrode for hard-to-weld steels and joints of dissimilar steels. Rutile coating.	EN ISO 3581-A: E 29 9 R 32 AWS A5.4: E 312-17 Werkstoff nr. 1.4337			$R_p [N/mm^2] \geq 500$ $R_m [N/mm^2] \geq 700-800$ $A_5 \geq 20\%$ Hardness: 240 HB	C<0,10; Si=0,9-1,2; Ni=8-10; Mn=1,0; Cr=28-30; Mo=0,5;		2,0 mm 2,5 mm 3,2 mm 4,0 mm
MOST 309L-16* Electrode with low content of C, for welding high-alloyed steel in grade of 309 and joints of dissimilar steels. Rutile coating.	EN ISO 3581-A: E 23 12 L R 32 AWS A5.4: E 309 L-16 Werkstoff nr. 1.4332			$R_p [N/mm^2] \geq 400$ $R_m [N/mm^2] \geq 550-660$ $A_5 \geq 35\%$ $KV \geq 60 J (20^\circ C)$	C<0,03; Si<0,80; Ni=12-13; Mn=1,0; Cr=23-24; FN=15;		2,0 mm 2,5 mm 3,2 mm 4,0 mm
MOST 309MoL-17* Electrode for welding of high-alloyed steels in grade of 309 L and joints of dissimilar steels. Brings austenitic filler metal. Rutile coating.	EN ISO 3581-A: E 23 12 L R 32 AWS A5.4: E 309 L Mo-17 Werkstoff nr. 1.4332 Mo			$R_p [N/mm^2] \geq 450$ $R_m [N/mm^2] \geq 580-680$ $A_5 \geq 35\%$ $KV \geq 60 J (20^\circ C)$	C<0,03; Si=0,80; Ni=12-13; Mn=0,9; Cr=22-23; Mo=2,3-3;		2,0 mm 2,5 mm 3,2 mm 4,0 mm
MOST 307-16* High efficiency (160%) electrode for welding and hardfacing of high-alloyed steels of increased content of Mn. Rutile coating.	EN ISO 3581-A: E 18 8 Mn R 12 AWS A5.4: E 307-16 Werkstoff nr. 1.4370			$R_p [N/mm^2] \geq 400$ $R_m [N/mm^2] \geq 600-690$ $A_5 \geq 30\%$ $KV \geq 75 J (20^\circ C)$	C<0,10; Si=0,80; Ni=8-10; Mn=6,0; Cr=19-21;		2,5 mm 3,2 mm 4,0 mm
MOST 307 B* Electrodes for welding, hardfacing and regeneration of stainless steels with increased content of Mn. Basic coating.	EN ISO 3581-A: E 18 8 B 42 AWS A5.4: E 307-15 Werkstoff nr. 1.4370			$R_p [N/mm^2] \geq 400$ $R_m [N/mm^2] \geq 600-750$ $A_5 \geq 35\%$ $KV \geq 90 J (20^\circ C)$	C<0,1; Si=0,40; Ni=8,0; Mn=6,0; Cr=18,0;		2,5 mm 3,2 mm 4,0 mm



1.3. Coated electrodes for hardfacing and regeneration

Marking and description	Classification	Welding current	Welding positioning	Features	Chemical composition [%]	Admittance	Diameter
MOST EL-HARD 300 Undercoat layer during hardfacing of heavy elements. Abrasion and impact-resistant. Padding weld can be mechanically processed. Applications: rolls, rails, blades, pulleys, conveyor rollers, slide ways, etc.	DIN 8555: E 1-UM-300-P; PN-EN 14700: EFe1-300-P			Hardness: 275-325 HB	C=0,2; Mn=1,5; Mo=0,6; V=0,2;		3,2 mm 4,0 mm 5,0 mm
MOST EL-HARD 350 Reconstruction and hardfacing of elements exposed to abrasive wear and impact. High resistance to cracking, mechanically processed. Applications: road wheels, parts of earth-working machines, chain runners, etc.	DIN 8555: E 1-UM-350-P PN-EN 14700: EFe1-350-P			Hardness: 350-400 HB	C=0,1; Mn=1,0; Cr=3,0;		3,2 mm 4,0 mm 5,0 mm
MOST EL-Mn/Cr Electrode of high manganese and chromium content, high resistance to abrasion and cavitation. Gets hardness after work hardening. Can be applied as undercoat (buffer) layer during hardfacing of elements exposed to stresses. Applications: mining, quarries (crushers), railway engineering (turnouts and scissors crossovers).	DIN 8555: E 7-UM-200-500-KP PN-EN 14700: EFe9-250-KNP			Hardness: 250 HB (po napawaniu) 55 HRC (after cold work)	C=0,7; Mn=17,0; Cr=14,0;		2,5 mm 3,2 mm 4,0 mm 5,0 mm
MOST EL-HARD 600 K Thick-coated stick electrode resistant to abrasive wear and impact, padding weld can't be mechanically workable. Applications: ground equipment, steel and smith industry, gear teeth, crushes, jaw crushes	DIN 8555: E 6-UM-60 PN-EN 14700: EFe8-60-P			Hardness: 58-61 HRC	C=0,5; Mn=0,4; Cr=9,0; Mo=1,0; V=1,5;		3,2 mm 4,0 mm 5,0 mm
MOST EL-HARD 63 Thick-coated stick electrode for high wear-resistant hardfacing on constructional and machine parts that are abrasion-resistant and light impact strength. Applications: crushing and abrasive machinery, sand transporting wear strips, screw conveyors, displacing presses worms, ploughshares, etc.	DIN 8555: E 10-UM-60 GR; PN-EN 14700: EFe15-65-GTR			Hardness: 61-63 HRC	C=4,5; Cr=34,0;		3,2 mm 4,0 mm 5,0 mm
MOST EL-HARD 65 Thick-coated stick electrode resistant to mineral abrasive wear and moderate impact. Contains: chromium carbide, inclusions of Mo, Nb, W and carbides, which increase resistance to abrasive wear in high temperatures. Applications: valves, mixers, platform augers and press mineral crushers, etc.	DIN 8555: E 10-UM-65 Z; PN-EN 14700: EFe16-65-GTR			Hardness: 63-65 HRC 45 HRC (400°C)	C=4,5 Si=1,2; Cr=24; Mo=6; V=1,0; W=2,0; Nb=6,2;		3,2 mm 4,0 mm 5,0 mm
MOST EL-HARD 70 Rutile-coated electrode with recovery rate 240% designed for surfacing on tools and machine parts exposed to extreme abrasion specially under high temperature. Content of boron increases abrasion-resistance. Applications: rollers, chutes, crushers, sieves, platform augers, etc.	DIN 8555: E 10-UM-70 GRZC; PN-EN 14700: EFe15-70-GT2			Hardness: 66-67 HRC 60 HRC (600°C)	C=5,0; Cr=38,0; B=3,5;		3,2 mm 4,0 mm 5,0 mm
MOST EL - TUBE 60T Cored electrode for hardfacing of elements exposed to abrasive wear and impact. Maximum hardness obtained after first layer. Applications: crushers, sieves, pumps platform augers, etc.	PN-EN 14700: E/T Fe15-65-GT2			Hardness: 62-64 HRC	C=5,5; Mn=1,5; Cr=40;		6,0 mm
MOST Lastek 211 High efficient electrode with sintered carbide core and extruded coating that guarantees a very thin and smooth padding weld with superior abrasion resistance. Machining is impossible. Single electrode (fi 4,0 mm) will cover an area of 10 000 mm² at and welds without interruption for about 6 minutes. Applications: screw conveyors, mixers blades, ploughshares, cement industry, mining, etc.							3,0 mm 4,0 mm
MOST EL-TOOL 50 Electrode for regeneration and handfacing of hot working tools. Padding weld can be mechanically processed. Applications: smith matrix, pressure forms mandrels.	DIN 8555: E 3-UM-50 T PN-EN 14700: EFe3-50-T			Hardness: 48-50 HRC; after tempering 50-52 HRC	C=0,25; Mn=0,8; Cr=2,5; W=4,5; V=0;		2,5 mm 3,2 mm 4,0 mm 5,0 mm

Marking and description	Classification	Welding current	Welding positioning	Features	Chemical composition [%]	Admittance	Diameter
MOST EL-TOOL 54 Electrode resistant to abrasive wear, for cold working tools metal. Weld can be grinded. Applications: cutting edges, matrix.	DIN 8555: E 2-UM-55 PN-EN 14700: EFe3-55-T			Hardness: 55 HRC	C=0,4; Cr=7,5; Si=0,4; Mo=2,5; Mn=1,4;		3,2 mm 4,0 mm 5,0 mm
MOST EL-TOOL 60 Electrode resistant to abrasive wear and impact and for metal-to-metal. Regeneration and hardfacing for fast-cutting steel. Applications: Cutting tools, scrapers, shears, cutters, shapes, matrix, etc.	DIN 8555: E 4-UM-60 T PN-EN 14700: EFe 4-60-ST			Hardness: 59-62 HRC after tempering 59-62 HRC	C=0,9; Cr=4,5; Mo=8,0; V=1,5; W=2,0;		2,5 mm 3,2 mm 4,0 mm 5,0 mm
MOST EL - Ni Alloy Co Electrode designed for regeneration and hardfacing of cold and hot working tools. Hardness after work hardening. Efficiency: 170%. Applications: drop forging dies, shears, knives, pumps sealing, hot-cutting and hot-piercing tools, etc.	DIN 8555: E 23-UM-250 CNKPZ PN-EN 14700: E23-250-CKNPZ			Hardness: 220 HB after hardening 400 HB	C=0,06; Cr=16,5; W=4,5; Mo=17,0; Fe<7,0; Co=2,5; Ni=rest;		2,5 mm 3,2 mm 4,0 mm 5,0 mm
MOST EL-Co 1 Cobalt-based electrode design for regeneration of elements exposed to metal-to-metal abrasive wear up to 950°C. Applications: holes, shafts, pumps, rolls, cutting blades, etc	DIN 8555: E 20-UM-55 CTZ PN-EN 14700: Eco 2-55-CTZ			Hardness: 53-58 HRC (20°C) 42-45 HRC (600°C)	C=2,5; Si=1,0; Ni=max 2,5; Fe=max 2,5; Mn=1,0; Cr=33,0; W=12,0; Co=rest		3,2 mm 4,0 mm 5,0 mm
MOST EL-Co 6 Cobalt-based electrode for hardfacing and regeneration of elements exposed to metal-to-metal abrasive wear and pressure up to temperature of 950°C. Very good resistance to thermal and mechanical shocks. Applications: hot-cutting blades, rolls, industrial fittings, engine valves, hot working tools, etc.	DIN 8555: E 20-UM-45 CRTZ PN-EN 14700: Eco 2-40-CTZ			Hardness: 40-45 HRC (20°C) 30 HRC (600°C)	C=1,1; Si=1,0; Ni=max 3,0; Fe=max 2,5; Mn=1,0; Cr=28,0; W=5,0; Co=rest;		2,5 mm 3,2 mm 4,0 mm 5,0 mm
MOST EL-Co 12 Cobalt-based electrode for hardfacing of machine parts exposed to extreme abrasive wear up to temperature of 900°C. Applications: extruder dies, saw blades, runners, etc.	DIN 8555: E 20-UM-50 CTZ PN-EN 14700: Eco 2-50-CTZ			Hardness: 49-51 HRC (20°C) 38-40 HRC (600°C)	C=1,8; Si=1,0; Ni=max 2,5; Fe=max 2,5; Mn=1,0; Cr=29,0; W=9,0; Co=rest;		3,2 mm 4,0 mm 5,0 mm
MOST EL-Co 21 Cobalt-based electrode for hardfacing and regeneration of elements exposed to metal-to-metal abrasive wear and pressure up to temperature of 950°C. Extremely hard after work hardening. Application: Tools for both hot and cold forging and shaping, parts of gas turbines, etc.	DIN 8555: E 20-UM-350 CKTZ PN-EN 14700: Eco 2-300-CTZ			Hardness: 32-38 HRC (20°C) 38-40 HRC (600°C) 42-45 HRC (after cold work)	C=0,25; Si=1,0; Ni=2,5; Fe=max 3,0; Mn=1,0; Mo=5,5; Cr=27,0; Co=rest;		3,2 mm 4,0 mm 5,0 mm
MOST EL-4370 Undercoat (buffer) layer before cold-hardening regeneration and hardfacing. Material for joints of dissimilar steels. Padding weld is resistant to corrosion and temperatures up to 850°C.	DIN 8555: E 18.8 Mn R 26 EN ISO 3581-A: E 18.8 Mn R12			Hardness: after cold work up to 350 HB. A ₅ >35%	C=0,1; Mn=6,0; Si=0,9; Cr=19,0; Ni=9,0;		2,5 mm 3,2 mm 4,0 mm 5,0 mm
MOST EL-29/9 Specially designed high strength austenitic type electrode of duplex structure. Designed for hardfacing of carbon steels and steels which chemical composition is not known. Suitable for joining of dissimilar steels (corrosion resistant with low-carbon steels) and hard-to-weld steels (man-ganese, spring and tool steels, etc). High resistance to cracking coupled with good wear, heat, impact and corrosion resistance. Can be used as an undercoat for hardening hardfacing. Application: rails, shafts, couplings, impellers, hot-work tools, pressing and trimming tools, etc.	DIN 8555: E 29.9 R 23 EN ISO 3581-A: E 29.9 R12			Hardness: after cold work up to 430 HB. A ₅ >20%	C=0,1; Mn=1,0; Si=0,9; Cr=29,0; Ni=9,0;		2,0 mm 2,5 mm 3,2 mm 4,0 mm 5,0 mm
MOST EL-Ni182 Electrode for repairing and joining nickel alloys. Used for joining mononimal and different poles materials at temperature between -196°C and 550°C (e.g. stainless steel – low-alloy steel, stainless steel – nickel alloys) as well as for hard-to-weld steels. Padding metal is resistant to cracking, acid, salt and hydroxide-solutions, and to fused salts in oxidizing and carbonizing atmospheres. Undercoat layer for hardening pad welding. Applications: welding of heat-resisting plates in cement industry, furnaces elements, torches, moulds, tanks, storage and transportation of liquid gases, glass, chemical and petrochemical industry, etc.	DIN 1736: E NiCr 16 FeMn AWS A5.1: E NiCrFe-3/mod			A ₅ >35%	C<0,05; Mn=6,0; Si=0,6; Cr=16,0; Mo=1,0; Nb=2,0; Ni>65,0;		2,5 mm 3,2 mm 4,0 mm 5,0 mm



1.4. Coated electrodes for welding of cast iron (* confirmation of product availability and minimal amount is required)

Marking and description	Classification	Welding current	Welding positioning	Features	Chemical composition [%]	Admittance	Diameter and catalogue no.
MOST Cast Iron Universal electrode with Ni-Fe bimetal core for no pre-heat cast iron welding and cast iron joining. It features great welding parameter values, does not overheat while welding and do not require to stop welding.	EN ISO 1071: A-E Ni-Fe-CI DIN 8573: E Ni-Fe BG 1 AWS A5.15: E Ni-Fe-CI			R _m [N/mm ²]=450 Hardness: 160-190 HB	Ni=54; Fe=42;		2,5 mm: 07 20 700253 3,2 mm: 07 20 700323
MOST FONTE Ni-2* Nickel based electrode for welding, regeneration and hardfacing of grey cast iron. Basic coating.	AWS A5.15: E Ni-CI PN-EN ISO 1071: E C Ni-CI1			R _m [N/mm ²]=300 Hardness: ~180 HB	C=1,0; Si<1,20; Fe<2,0; Ni>95;		2,5 mm 3,2 mm 4,0 mm
MOST Fe-Ni/Cu* Electrode made of iron-nickel alloy for welding, regeneration and hardfacing of all types of cast iron. Basic coating	AWS A5.15: E NiFe-CI PN-EN ISO 1071: E C NiFe-CI1			R _m [N/mm ²]=400 Hardness: ~200 HB	C=1,1; Si=1,5; Fe=rest; Ni=53; Cu=6;		2,5 mm 3,2 mm 4,0 mm
MOST BIMETAL NiFe* Electrode for welding, regeneration and hardfacing of cast iron. Graphite basic coating.	AWS A5.15: E NiFe-CI PN-EN ISO 1071: E C NiFe-CI1			R _e [N/mm ²]=300 R _m [N/mm ²]=450-550 A ₅ >15%; Hardness: ~220 HB	C=1,0; Si<1,50; Fe=rest; Ni=55; Mn<1,0;		2,5 mm 3,2 mm 4,0 mm
MOST FONTE Fe* Electrode for welding, regeneration and hardfacing of old and impurity cast iron. Mechanical working only by grinding.	AWS A5.15: Est PN-EN ISO 1071: E C Fe-13			Hardness: ~350 HB	C=0,13; Si=0,90; Fe=rest; Mn=0,5;		2,5 mm 3,2 mm 4,0 mm
MOST FONTE - Ni* Electrode made of pure Ni for welding, regeneration and hardfacing of cast iron. Graphite basic coating.	AWS A5.15: E Ni-CI PN-EN ISO 1071: E C Ni-CI1			R _e [N/mm ²]=200 R _m [N/mm ²]=300-400 Hardness: 150 HB	C<1,0; Si<2,0; Fe<2,0; Ni=rest (95% min.); Mn<1,0;		2,5 mm 3,2 mm 4,0 mm 5,0 mm
MOST FERRO - Ni* High efficiency electrode made of iron-nickel alloy for welding, regeneration and hardfacing of cast iron and for welding cast iron with steel. Graphite-basic coating.	AWS A5.15: E NiFe-CI PN-EN ISO 1071: E C NiFe-CI1			R _e [N/mm ²]=300 R _m [N/mm ²]=450-550 Hardness: ~200 HB	C<1,0; Mn<1,0; Si=2,0; Ni=58-60; Fe=rest;		2,5 mm 3,2 mm 4,0 mm 5,0 mm
MOST Lastek 40E* Nickel electrode designed for welding grey and malleable cast iron. Enables welding cast iron which is polluted with oil or lubricant. Pading weld characterized by perfect mechanical workability, with no blowholes or cracking. Applications: cold-welding of cast iron, cracked engines blocks, pumps casings, gearwheels, valves clamping, etc.	DIN 8573: E Ni-BG 11 AWS A5.15: E Ni-CI			R _m [N/mm ²]=320 A ₅ >18% Hardness: 130-160 HB			2,5 mm 3,2 mm 4,0 mm
MOST Lastek 41E* Ferro-nickel cored electrode for welding grey, nodular and alloyed cast iron. Due to the higher tensile strength and ductility, Satisfactory welds can be made on heavy or highly stressed section. Can be used for joining of cast iron to carbon steel and to stainless steel. Applications: regeneration of grey and alloyed cast iron, machines bases, motor blocks, gear cases, cast iron tools, pumps. Repairing casting defects with good colour match), etc.	DIN 8573: E NiFe-BG 11 AWS A5.15: E NiFe-CI			R _m [N/mm ²]=400 A ₅ >120% Hardness: 150-180 HB			2,5 mm 3,2 mm 4,0 mm
MOST Lastek 43* An electrode developed to permit a repair of "non-weldable" cast iron in case if Ni base electrode does not give a solid bond. The special coating develops a powerful cleaning action. It enables obtaining smooth weld of a perfect fusion, even on oxidized cast iron. Electrode absorbs the carbon from cast iron and weld becomes hard and non-machinable. The electrode should be used alongside in the groove made with MOST Lastek 1900 as an buffer layer before welding with electrodes MOST Lastek 40E or 41E. Applications: oxidized parts of furnaces, repairing foundry defects for colour match, first (buffer) layer on bad-quality cast. Iron before hardfacing, etc.	DIN 8573: E FeC-BG 11 AWS A5.15: Est			R _m [N/mm ²]=390			3,2 mm 4,0 mm



1.5. Coated electrodes for welding nickel and nickel alloys (* confirmation of product availability and minimal amount is required)

Marking and description	Classification	Welding current	Welding positioning	Features	Chemical composition [%]	Admittance	Diameter and catalogue no.
MOST EL-182 / MOST Ni 182* Electrode for welding of nickel alloys, hard-to-weld steels and joints. Basic coating.	AWS A5.11: E NiCrFe-3 Werkstoff nr. 2.4620 PN-EN ISO 14172: E-Ni 6182			$R_p [N/mm^2] > 380$ $R_m [N/mm^2] > 620$ $A_5 > 35\%$ $KV > 80 J (20^\circ C)$ $> 65 J (-196^\circ C)$	C<0,04; Si=0,40; Mn=6,0; Cr=16,5; Nb=2,0; Fe=6,0; Ni=rest (>60%);		2,5 mm 3,2 mm 4,0 mm
MOST EL-190 / MOST Ni 190* Electrode for welding, regeneration and hardfacing of alloys, Monel Cu-Ni type. High corrosion resistance. Basic coating.	AWS A5.11: E NiCu-7 Werkstoff nr. 2.4366 PN-EN ISO 14172: E-Ni 4060			$R_p [N/mm^2] > 300$ $R_m [N/mm^2] > 480$ $A_5 > 30\%$ $KV > 80 J (20^\circ C)$	C<0,05; Si=0,70; Mn=3,2; Cu=29,0; Ti=0,5; Fe=1,2; Ni=rest (>60%);		2,5 mm 3,2 mm 4,0 mm
MOST EL-C 276 / MOST Ni 276* Electrode for welding of Ni-based alloys and some special-purpose stainless steels. Basic coating.	AWS A5.11: E NiCrMo-4 Werkstoff nr. 2.4887 PN-EN ISO 14172: E-Ni 6276			$R_p [N/mm^2] > 450$ $R_m [N/mm^2] > 720$ $A_5 > 30\%$ $KV > 70 J (20^\circ C)$	C<0,02; Si=0,20; Mn=0,60; Cr=16,5; Mo=16,0; Fe=5,0; Ni=rest; W=4,0;		2,5 mm 3,2 mm 4,0 mm
MOST EL-625 / MOST Ni 625* Electrode for welding of corrosion-resistant nickel-based alloys. Basic coating.	AWS A5.11: E NiCrMo-3 Werkstoff nr. 2.4631 PN-EN ISO 14172: E-Ni 6625			$R_p [N/mm^2] > 450$ $R_m [N/mm^2] > 760$ $A_5 > 30\%$ $KV > 70 J (20^\circ C)$	C<0,04; Si=0,40; Mn=0,60; Cr=22,0; Nb=3,4; Fe=3,0; Ni=rest; Mo=9,0;		2,5 mm 3,2 mm 4,0 mm
MOST EL-Ni Ti 3 / MOST Ni Ti 3* Electrode with 2.5% addition of Ti for welding of pure nickel steels. Basic coating.	AWS A5.11: E Ni-1 Werkstoff nr. 2.4156 PN-EN ISO 14172: E-Ni 2061			$R_p [N/mm^2] > 300$ $R_m [N/mm^2] > 430$ $A_5 > 28\%$ $KV > 160 J (20^\circ C)$ $> 130 J (-196^\circ C)$	C<0,03; Si=0,80; Mn=0,30; Al=0,30; Ti=2,2; Ni=rest (>94);		2,5 mm 3,2 mm 4,0 mm
MOST EL-182 A / MOST B 90* Inconel type electrode for welding, regeneration and hardfacing of Ni-based alloys. Basic coating.	AWS A5.11: E NiCrFe-3 Werkstoff nr. 2.4807 PN-EN ISO 14172: E-Ni 6182			$R_p [N/mm^2] > 390$ $R_m [N/mm^2] > 550$ $A_5 > 30\%$ $KV > 60 J (20^\circ C)$	C<0,10; Si<0,50; Mn=7,8,5; Cr=15-16; Nb=1,5-2,5; Fe<10,0; Ni=rest (>60);		2,5 mm 3,2 mm 4,0 mm 5,0 mm
MOST B 91* Electrode for nickel alloyed steel in type and INCONEL 600, INCONEL 650 and others. Rutile-basic coating	AWS A5.11: E NiCrMo-3 PN-EN ISO 14172: E-Ni 6625			$R_p [N/mm^2] > 450$ $R_m [N/mm^2] > 760$ $A_5 > 30\%$ Hardness: ~240 HB	C<0,04; Si=0,50; Mn=0,8; Cr=21,0; Nb=3,3; Fe=4,0; Ni=rest; Mo=8,5;		2,5 mm 3,2 mm 4,0 mm



1.6. Coated electrodes for welding copper and copper alloys (* confirmation of product availability and minimal amount is required)

Marking and description	Classification	Welding current	Welding positioning	Features	Chemical composition [%]	Admittance	Diameter
MOST Cu 114* Electrode for welding and hardfacing of copper alloys, including tin bronze.	AWS A5.6 : E Cu Sn-A DIN 1733 : EL-CuSn7			Hardness: ~100 HB	Sn=6,0; Mn=0,8; Cu=rest;		2,5 mm 3,2 mm 4,0 mm
MOST Cu 116* Electrode for welding and regeneration of copper alloys and aluminium bronze.	AWS A5.6 : E CuAl-A2 DIN 1733 : EL-CuAl9			R _p [N/mm ²] > 180 R _m [N/mm ²] > 420 A ₅ > 20% Hardness: 130 HB	Al=8,0; Fe=0,7; Mn=1,0; Cu=rest;		2,5 mm 3,2 mm 4,0 mm
MOST Cu 115* Electrode for welding and hardfacing of copper alloys, including aluminium bronze and cast iron.	AWS A5.6 : E CuSn-C Werkstoff nr. 2.1025 DIN 1733 : EL-CuSn7			R _p [N/mm ²] > 120 R _m [N/mm ²] > 300 A ₅ > 20% Hardness: ~110 HB	Sn=7,0; Fe=0,15; Mn=0,9; P=0,1; Cu=rest;		2,5 mm 3,2 mm 4,0 mm



1.7. Coated electrodes for welding aluminium and aluminium alloys (* confirmation of product availability and minimal amount is required)

Marking and description	Classification	Welding current	Welding positioning	Features	Chemical composition [%]	Admittance	Diameter
MOST EL-AISI 5* Electrode for repairing of castings made of aluminium alloys.	AWS A5.3 : E 4043 PN-EN ISO 18273 : AISI5 (4032A)			R _e [N/mm ²] > 70-100 R _m [N/mm ²] > 110-130 A ₅ > 20% Hardness: ~60 HB	Si=5,0; Mn<0,5; Fe<0,5; Al=rest;		2,5 mm 3,2 mm 4,0 mm
MOST EL-AISI 12* Electrode for repairing of castings made of aluminium alloys.	PN-EN ISO 18273 : AISI12 (4047A)			R _e [N/mm ²] = 80 R _m [N/mm ²] = 200 A ₅ = 8%	Si=12,0; Mn<0,5; Fe=0,5; Al=rest;		2,5 mm 3,25 mm 4,0 mm 5,0 mm

2. Wires and rods for MIG/MAG and TIG welding

2.1. Wires and rods for welding non-alloyed and fine-grained steels



Marking and description	Classification	Welding current	Welding positioning	Features	Chemical composition [%]	Admittance	Diameter and catalogue no.
MOST SG2 ITS Copper-coated, manganese and silicon-alloyed solid wire for the MAG welding of low-carbon steels, such as structural, boiler and ship steels, as well as fine-grained carbon-manganese steels. Can be used on high currents for spraying arc and low currents for upset metal transfer. Available packaging: B300 – basket spool, drums. Shielding gas: CO ₂ , Ar+CO ₂ . Welding method: MAG.	PN-EN ISO 14341-A: G4Z4M/C 351 AWS A5.18: ER70S-6 Werkstoff nr.: 1.5125			Ar+20%CO ₂ : R _h [N/mm ²]=490 R _m [N/mm ²]≥590 A ₅ ≥25% KV ≥ 100 J (0°C) 80 J (-20°C)	C=0,1; Si=0,9; Mn=1,5;	TÜV, DB, DNV-GL, PRS,	0,8 mm: 11 60 170083 1,0 mm: 11 60 170103 1,2 mm: 11 60 170133 1,6 mm: 11 60 170163
MOST SG2 ITS blank Electrode wire, manganese-silicon, non copper-clad blank, for MIG welding of low-carbon construction, boilers, shipbuilding, and fine-grained carbon-manganese steel. It allows use of high current intensity in arc spray, and low intensity in short-circuit metal transfer. Packages: S200 – plastic spool, B300 – basket spool, barrel. Shielding gas: CO ₂ , Ar+CO ₂ . Welding method: MAG.	PN-EN ISO 14341-A: G4Z4M/C 351 AWS A5.18: ER70S-6 Werkstoff nr.: 1.5125			Ar+20%CO ₂ : R _h [N/mm ²]=490 R _m [N/mm ²]≥590 A ₅ ≥25% KV ≥ 100 J (0°C) 80 J (-20°C)	C=0,1; Si=0,9; Mn=1,5;	TÜV, DB, DNV-GL, PRS,	0,8 mm: 11 60 171083 1,0 mm: 11 60 171103 1,2 mm: 11 60 171133 1,6 mm: 11 60 171163
MOST SG3 ITM Copper-coated, manganese and silicon-alloyed solid wire for the MAG welding of low-carbon steels, such as structural, boiler and ship steels, as well as fine-grained carbon-manganese steels. It has higher content of Si-Mn components, which provide higher strength of weld metal and resistance to surface impurities. Available packaging: B300 – basket spool, drums. Shielding gas: CO ₂ , Ar+CO ₂ . Welding method: MAG.	PN-EN ISO 14341-A: G464M 451 AWS A5.18: ER70S-7 Werkstoff nr.: 1.5130			Ar+20%CO ₂ : R _h [N/mm ²]=450 R _m [N/mm ²]≥560 A ₅ ≥28% KV ≥ 80 J (-20°C)	C=0,1; Si=1,0; Mn=1,7;	TÜV, DB, DNV-GL, PRS	0,8 mm: 11 60 280083 1,0 mm: 11 60 280103 1,2 mm: 11 60 280133 1,6 mm: 11 60 280163
MOST SG3 ITM blank Electrode wire, manganese-silicon, non copper-clad blank, for MIG and TIG welding of low-carbon construction, boilers, shipbuilding, and fine-grained carbon-manganese steel. Comparing to MOST SG2, this unit features increased components of Si-Mn, what ensures higher endurance of weld metal deposit and resistance to surface contamination of welded elements. Packages: B 300 – basket spool, barrel. Shielding gas: CO ₂ , Ar+CO ₂ . Welding method: MAG.	PN-EN ISO 14341-A: G464M 451 AWS A5.18: ER70S-7 Werkstoff nr.: 1.5130			Ar+20%CO ₂ : R _h [N/mm ²]=450 R _m [N/mm ²]≥560 A ₅ ≥28% KV ≥ 80 J (-20°C)	C=0,1; Si=1,0; Mn=1,7;	TÜV, DB, DNV-GL, PRS	0,8 mm: 11 60 281083 1,0 mm: 11 60 281103 1,2 mm: 11 60 281133 1,6 mm: 11 60 281163
GOLD G3 S11 Copper-coated, manganese and silicon-alloyed solid wire for the MAG welding of low-carbon steels, such as structural, boiler and ship steels, as well as fine-grained carbon-manganese steels. Can be used on high currents for spraying arc and low currents for metal transfer. Available packaging: S200, D300 – plastic spool, B300 – basket spool, drums. Shielding gas: CO ₂ , Ar+CO ₂ . Welding method: MAG.	PN-EN ISO 14341-A: G4Z2M/C 351 AWS A5.18: ER70S-6 DIN 8559: SG2 Werkstoff nr.: 1.5125			Ar+20%CO ₂ : R _h [N/mm ²]=490 R _m [N/mm ²]≥590 A ₅ ≥25% KV=100 J (-10°C) 80 J (-20°C)	C=0,1; Si=0,9; Mn=1,5; pokrytie Cu;	TÜV, DB, LR, ABS, NAKS, CE	0,6 mm: 11 50 170062 0,8 mm: 11 50 172073 1,0 mm: 11 50 172103 1,2 mm: 11 50 172123 1,6 mm: 11 50 172163

Marking and description	Classification	Welding current	Welding positioning	Features	Chemical composition [%]	Admittance	Diameter and catalogue no.
GOLD G4 Si1 Copper-coated, manganese-silicon-alloyed solid wire for the MAG welding of low-carbon steels, such as structural, boiler and ship steels, as well as fine-grained carbon-manganese steels. It has higher content of Si-Mn components, which provides higher strength of weld metal and resistance to surface impurities. Available packaging: B300 – basket spool, drums. Shielding gas: CO ₂ , Ar+CO ₂ . Welding method: MAG.	PN-EN ISO 14341-A: G462M 4Si1 AWS A5.18: ER70S-7 Werkstoff nr.: 1.5130			Ar+20%CO ₂ : R _g [N/mm ²]=450 R _m [N/mm ²]=560 A ₅ ≥28% KV≥80 J (-20°C)	C=0,1; Si=1,0; Mn=1,7; pokrycie Cu;	TÜV, DB	0,8 mm: 11 50 282083 1,0 mm: 11 50 282103 1,2 mm: 11 50 282123 1,6 mm: 11 50 282163
MOST W3 Si 1 Manganese-Chromium solid wire for welding by TIG of low carbon construction steel. Available as coppered rods. Welding method: TIG.	PN-EN ISO 16336-A: W 42 3W3Si1			R _g [N/mm ²]=470 R _m [N/mm ²]=560 A ₅ ≥26% KV=70 J (-30°C)	C=0,09; Si=0,9; Mn=1,5;		1,6 mm: 11 61 170167 2,0 mm: 11 61 170207 2,4 mm: 11 61 170247 3,2 mm: 11 61 170327
MOST W4 Si1 Welding rod with higher contents of Si-Mn components, which provide higher strength of weld elements and resistance of surface impurities for low carbon and low alloy steel. Shielding gas: Ar. Welding method: TIG.	PN-EN ISO 16336-A: W 46 3W4Si1			R _g [N/mm ²]=530 R _m [N/mm ²]=595 A ₅ ≥26% KV=70 J (-30°C)	C=0,1; Si=1,0; Mn=1,7;		1,6 mm: 11 61 280167 2,0 mm: 11 61 280207 2,4 mm: 11 61 280247 3,2 mm: 11 61 280327



2.2. Wires and rods for welding high-resistant steels

Marking and description	Admittance	Classification
MOST NiMoCr/MOST NiMoCr blank	DB, TÜV	AWS A5.28: ER 110-S G PN-EN ISO 16834-A: G 694MMn3Ni1CrMo

2.3. Wires and rods for welding heat-resistant steels (* confirmation of product availability and minimal amount is required)

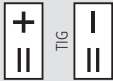
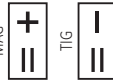
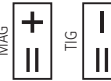
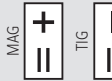
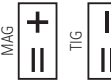
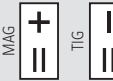


Marking and description	Classification	Welding current	Welding positioning	Features	Chemical composition [%]	Admittance	Diameter
MOST CrMo 1* Product for welding of steels designed for work in high temperatures. Shielding gas: Ar+CO ₂ . Welding method: MAG.	PN-EN ISO 21952-A: G CrMo1Si AWS A5.28: ER80S-G			Ar+CO ₂ : R _g [N/mm ²]=450 R _m [N/mm ²]=500 A ₅ ≥20% KV>90 J (20°C)	C=0,10; Si=0,60; Mn=1,0; Mo=0,5; Cr=1,15;		1,2 mm
MOST CrMo 2* Product for welding of steels designed for work in high temperatures. Shielding gas: Ar+CO ₂ . Welding method: MAG.	PN-EN ISO 21952-A: G CrMo2Si AWS A5.28: ER90S-G			Ar+CO ₂ : R _g [N/mm ²]=420 R _m [N/mm ²]=520 A ₅ ≥20% KV>90 J (20°C)	C=0,06; Si=0,60; Mn=1,10; Mo=1,0; Cr=2,80;		1,2 mm



2.4. Wires and rods for welding high-alloyed steels (* confirmation of product availability and minimal amount is required)

Marking and description	Classification	Welding current	Welding positioning	Features	Chemical composition [%]	Admittance	Diameter and catalogue no.
MOST 308 L Si Shielding gas: Ar+O ₂ (MAG), Ar (TIG). Welding method: MAG and TIG.	PN-EN ISO 14343: G 19 9 L Si (W 19 9 L Si) AWS A5.9: ER308LSi Werkstoff nr: 1.4316	MAG  TIG 		$R_m [N/mm^2] > 390$ $R_m [N/mm^2] > 600$ $A_5 > 34\%$ $KV > 120 J (20^\circ C)$	C<0,025; Si=0,40; Mn=1,80; C=20,0; Ni=10,0; N<0,06	TÜV, CE	Wires diameter: 0,8 mm: 17 20 504083 1,0 mm: 17 20 504103 1,2 mm: 17 20 504123 Rods diameter: 1,0 mm: 17 21 504107 1,2 mm: 17 21 504127 1,6 mm: 17 21 504167 2,0 mm: 17 21 504207 2,4 mm: 17 21 504247 3,2 mm: 17 21 504327
MOST 309 L Si Shielding gas: Ar+O ₂ (MAG), Ar (TIG). Welding method: MAG and TIG.	PN-EN ISO 14343: G 23 12 L Si (W 23 12 L Si) AWS A5.9: ER309LSi Werkstoff nr: 1.4332	MAG  TIG 		$R_m [N/mm^2] > 410$ $R_m [N/mm^2] > 600$ $A_5 > 41\%$ $KV > 120 J (20^\circ C)$	C<0,025; Si=0,40; Mn=1,70; C=24,50; Ni=12,50; N<0,05	CE	Wires diameter: 0,8 mm: 17 20 506083 1,0 mm: 17 20 506103 1,2 mm: 17 20 506123 Rods diameter: 1,0 mm 1,2 mm 1,6 mm 2,0 mm 2,4 mm 3,2 mm
MOST 312* Shielding gas: Ar+O ₂ (MAG), Ar (TIG). Welding method: MAG and TIG.	PN-EN ISO 14343: G 29 9 (W 29 9) AWS A5.9: ER312 Werkstoff nr: 1.4337	MAG  TIG 		$R_m [N/mm^2] > 520$ $R_m [N/mm^2] > 730$ $A_5 > 25\%$ $KV > 100 J (20^\circ C)$	C=0,10; Si=0,40; Mn=1,80; C=30,50; Ni=9,0; Mo<0,4; Cu<0,20; N<0,06	CE	
MOST 410 NiMo* Shielding gas: Ar+O ₂ (MAG), Ar (TIG). Welding method: MAG and TIG.	PN-EN ISO 14343: G 13 4 (W 13 4) AWS A5.9: ER410NiMo Werkstoff nr: 1.4351	MAG  TIG 		$R_m [N/mm^2] > 600$ $R_m [N/mm^2] > 800$ $A_5 > 15\%$ $KV > 50 J (20^\circ C)$	C=0,03; Si=0,70; Mn=0,70; C=13,0; Ni=4,5; Mo=0,5		
MOST 307 Si Shielding gas: Ar+O ₂ (MAG), Ar (TIG). Welding method: MAG and TIG.	PN-EN ISO 14343: G 18 8 (W 18 8) AWS A5.9: ER307Si Werkstoff nr: 1.4370	MAG  TIG 		$R_m [N/mm^2] > 460$ $R_m [N/mm^2] > 650$ $A_5 > 41\%$ $KV > 140 J (20^\circ C)$	C=0,08; Si=0,90; Mn=7,0; C=18,0; Ni=8,0; Mo<0,5; Cu<0,10; N<0,06	TÜV, CE	Wires diameter: 0,8 mm: 17 20 502 083 1,0 mm: 17 20 502 103 1,2 mm: 17 20 502 123 Rods diameter: 1,6 mm 2,0 mm 2,4 mm 3,2 mm

Marking and description	Classification	Welding current	Welding positioning	Features	Chemical composition [%]	Admittance	Diameter and catalogue no.
MOST 316 L Si Shielding gas: Ar+O ₂ (MAG), Ar (TIG). Welding method: MAG and TIG	PN-EN ISO 14343: G 19 12 3 L Si (W 19 12 3 L Si) AWS A5.9: ER316LSi	MAG  TIG 		$R_m [N/mm^2] > 380$ $R_m [N/mm^2] > 500$ $A_5 > 35\%$ $KV > 130 J (20^\circ C)$ $N_i = 12,0$ $Mo = 2,60$ $Cu < 0,20$	C<0,025; Si=0,90; Mn=1,80; C=18,50; N=12,0; Mo=2,60; Cu<0,20;	TÜV, CE	Wires diameter: 0,8 mm: 17 20 512 083 1,0 mm: 17 20 512 103 1,2 mm: 17 20 512 123 Rods diameter: 1,0 mm: 17 21 512 107 1,2 mm: 17 21 512 127 1,6 mm: 17 21 512 167 2,0 mm: 17 21 512 207 2,4 mm: 17 21 512 247 3,2 mm: 17 21 512 327
MOST 2209* Shielding gas: Ar+O ₂ (MAG), Ar (TIG). Welding method: MAG and TIG.	PN-EN ISO 14343: G 22 9 3 NL (W 22 9 3 NL) AWS A5.9: ER 2209 Werkstoff nr: 1.4462	MAG  TIG 		$R_m [N/mm^2] > 600$ $R_m [N/mm^2] > 750$ $A_5 > 25\%$ $KV > 160 J (20^\circ C)$	C<0,02; Si=0,50; Mn=1,60; C=23,0; N=9,0; Mo=3,20; N=0,16		
MOST 430 Ti* Shielding gas: Ar+O ₂ (MAG), Ar (TIG). Welding method: MAG and TIG.	PN-EN ISO 14343: G Z 17Ti W Z 17Ti AWS A5.9: ER430Ti Werkstoff nr: 1.4502	MAG  TIG 		$R_m [N/mm^2] > 295$ $R_m [N/mm^2] > 490$ $A_5 > 20\%$	C=0,07; Si=0,70; Mn=0,30; C=17,50; Ti=0,60		
MOST 385 (904 L)* Shielding gas: Ar+O ₂ (MAG), Ar (TIG). Welding method: MAG and TIG.	PN-EN ISO 14343: G 20 25 5 CuL (W 20 25 5 CuL) AWS A5.9: ER385 Werkstoff nr: 1.4519	MAG  TIG 		$R_m [N/mm^2] > 320$ $R_m [N/mm^2] > 540$ $A_5 > 37\%$ $KV > 120 J (20^\circ C)$	C<0,02; Si=0,40; Mn=1,80; C=20,0; N=25,0; Mo=4,5; Cu=1,50; N<0,06		
MOST 347 Si Shielding gas: Ar+O ₂ (MAG), Ar (TIG). Welding method: MAG and TIG.	PN-EN ISO 14343: G 19 9 Nb Si (W 19 9 Nb Si) AWS A5.9: ER347Si Werkstoff nr: 1.4551	MAG  TIG 		$R_m [N/mm^2] > 400$ $R_m [N/mm^2] > 610$ $A_5 > 35\%$ $KV > 110 J (20^\circ C)$	C=0,04; Si=0,90; Mn=1,20; C=19,50; N=10,0; Mo<0,5; Cu<0,20; N<0,06	CE	Wires diameter: 0,8 mm 1,0 mm 1,2 mm: 17 20 513123 Rods diameter: 2,0 mm: 17 21 513207 2,4 mm
MOST 318 Si* Shielding gas: Ar+O ₂ (MAG), Ar (TIG). Welding method: MAG and TIG.	PN-EN ISO 14343: G 19 12 3 Nb Si (W 19 12 3 Nb Si) AWS A5.9: ER 318 Si Werkstoff nr: 1.4563	MAG  TIG 		$R_m [N/mm^2] > 400$ $R_m [N/mm^2] > 610$ $A_5 > 36\%$ $KV > 110 J (20^\circ C)$	C=0,04; Si=0,90; Mn=1,20; C=18,50; N=12,50; Mo=2,60; Cu<0,20; N<0,065;		
MOST 310 Shielding gas: Ar+O ₂ (MAG), Ar (TIG). Welding method: MAG and TIG.	PN-EN ISO 14343: G 25 20 (W 25 20) AWS A5.9: ER 310 Werkstoff nr: 1.4842	MAG  TIG 		$R_m [N/mm^2] > 390$ $R_m [N/mm^2] > 590$ $A_5 > 43\%$ $KV > 175 J (20^\circ C)$	C=0,12; Si=0,30; Mn=1,80; C=26,0; N=21,0; Mo<0,30; Cu<0,10; N<0,06	CE	Wires diameter: 0,8 mm: 17 20 510083 1,0 mm: 17 20 510103 1,2 mm: 17 20 510123 Rods diameter: 2,0 mm



2.5. Wires and rods for hardfacing and regeneration

Marking and description	Classification	Welding current	Welding positioning	Features	Chemical composition [%]	Admittance	Diameter
MOST EL-250 HB Wire designed for hardfacing of products with high impact- and stroke-resistance. Low-alloyed solid wire suitable to repair open to wear parts. Used for machine parts, rolls, rails etc. Welding method: MIG/MAG, TIG.	DIN 8555: MSG 1-250 Werkstoff nr: 1.8401 DIN EN 14700: SFe1			Hardness: 225–275 HB	C=0,3; Si=0,45; Mn=1,1; Cr=1,0; Al=0,1; Ti=0,2;		Wires diameter: 0,8 mm; 1,0 mm 1,2 mm; 1,6 mm Rods diameter: 1,6 mm; 2,0 mm 2,4 mm; 3,2 mm
MOST EL-350 HB Wire designed for hardfacing of products with high impact- and stroke-resistance. Low-alloyed solid wire accurate to repair open to wear parts. Used for machine parts, rolls, rails etc. Welding method: MIG/MAG, TIG.	DIN 8555: MSG 2-350 Werkstoff nr: 1.8405 DIN EN 14700: SFe2			Hardness: 370 HB	C=0,7; Si=0,45; Mn=2,0; Cr=1,0; Al=0,1; Ti=0,2;		Wires diameter: 0,8 mm; 1,0 mm 1,2 mm; 1,6 mm Rods diameter: 1,0 mm; 1,6 mm 2,0 mm; 2,4 mm 3,2 mm
MOST EL-500 HB Wire designed for impact- and stroke-resistant hardfacing. Solid wire accurate to repair parts exposed to wear and pressure, made of structural steels, cast steels and manganese steels. Used for machine parts, rollers, shaft pins, rails etc. Welding method: MIG/MAG, TIG.	DIN 8555: MSG 2-50 Werkstoff nr: 1.8425 DIN EN 14700: SFe2			Hardness: 47-52 HRC	C=1,1; Si=0,45; Mn=1,9; Cr=2,0; Al=0,1; Ti=0,2;		Wires diameter: 1,0 mm; 1,2 mm 1,6 mm Rods diameter: 1,0 mm; 1,6 mm 2,0 mm; 2,4 mm 3,2 mm
MOST EL-600 HB Solid wire designed for impact- and stroke-resistant hardfacing. Filler deposit is free of cracks, hard, impact- and abrasion- resistant. In case of hard-to-weld materials preheating or undercoat (buffer layer) is recommended. Can be used for: crusher wheels, loader buckets parts and a final layer of manganese steels hardfacing. Structure: martensitic. Welding method: MIG/MAG, TIG.	DIN 8555: MSG 6-60 Werkstoff nr: 1.4718 DIN EN 14700: SFe8			Hardness: 59 HRC	C=0,5; Si=3,0; Mn=0,4; Cr=9;		Wires diameter: 0,8 mm; 1,0 mm 1,2 mm; 1,6 mm Rods diameter: 1,0 mm; 1,6 mm 2,0 mm; 2,4 mm 3,2 mm
MOST EL-650 HB Wire designed for impact and stroke-resistant hardfacing. Solid wire suitable to repair hot-work parts, exposed to abrasive wear, strokes and temperatures up to 500°C. Possible applications: parts of machines, dies, rollers etc. Welding method: MIG/MAG, TIG.	DIN 8555: MSG 3-GZ 60T Werkstoff nr: 1.2606			Hardness: 57-59 HRC	C=0,35; Si=1,1; Mn=0,4; Cr=5,5; Mo=1,2; V=0,25; W=1,3;		Wires diameter: 0,8 mm; 1,0 mm 1,2 mm; 1,6 mm Rods diameter: 1,0 mm; 1,6 mm 2,0 mm; 2,4 mm
MOST W 45 Rods for tool steel. Rods for hardfacing and regeneration of hot working elements. Welding method: TIG	DIN 8555: MSG 3-45T Werkstoff nr: 1.2567			Hardness: 44-50 HRC	C=0,2; Si=0,2; Mn=0,3; Cr=2,4; W=4,5; V=0,6;		1,6 mm 2,0 mm 2,4 mm

Marking and description	Classification	Welding current	Welding positioning	Features	Chemical composition [%]	Admittance	Diameter
MOST W 60 Rods for tool steel. Rods for handfacing and regeneration of fast-cutting steel elements. Welding method: TIG	DIN 8555: MSG 4-60-S Werkstoff nr.: 1.3348			Hardness: 58 HRC	C=1,0; Si=0,3; Mn=0,3; W=1,8; Mo=8,3; Cr=4,0; V=1,9;		1,6 mm; 2,4 mm 2,0 mm; 3,2 mm
MOST EL-Co 1 Cobalt-based padding weld, resistant to extreme metal-to-metal abrasive wear up to 950°C. Application: holes, shafts, pumps, rolls, cutting blades, etc.	DIN 8555: MF 20-55-CGTZ AWS A5.13-70: RCoCr-C DIN EN 14700: TCo 2-65-CGTZ			Hardness: 52-59 HRC (20°C) 42-45 HRC (600°C)	C=2,5; Si=0,8; Ni=max 3,0; Fe=max 3,0; Cr=30,0; W=13,0; Co=rest;		Rods diameter: 2,5 mm 3,2 mm 4,0 mm 5,0 mm Wires diameter: 1,2 mm 1,6 mm
MOST EL-Co 6 Cobalt-based padding weld, resistant to extreme metal-to-metal abrasive wear and pressure up to 950°C. Very good resistance to thermal and mechanical shocks. Application: hot-cutting blades, rolls, industrial fittings, engine valves, hot working tools, etc.	DIN 8555: MF 20-45-CTZ AWS A5.13-70: RCoCr-A DIN EN 14700: TCo 2-45-CTZ			Hardness: 39-46 HRC (20°C) 30 HRC (600°C)	C=1,1; Si=1,0; Ni=max 3,0; Fe=max 3,0; Cr=28,0; W=4,0; Co=rest;		Rods diameter: 2,5 mm; 3,2 mm 4,0 mm; 5,0 mm Wires diameter: 1,2 mm; 1,6 mm
MOST EL-Co 12 Cobalt-based padding weld, resistant to extreme abrasive wear up to 950°C. Application: extruder dies, saw blades, runners, etc.	DIN 8555: MF 20-50-CTZ AWS A5.13-70: RCoCr-B DIN EN 14700: TCo 2-50-CTZ			Hardness: 46-52 HRC (20°C) 38-40 HRC (600°C)	C=1,4; Si=1,5; Ni=max 3,0; Fe=max 3,0; Cr=29,0; W=8,0; Co=rest;		Rods diameter: 2,5 mm 3,2 mm 4,0 mm 5,0 mm Wires diameter: 1,2 mm 1,6 mm
MOST EL-Co 21 Cobalt-based padding weld resistant to extreme metal-to-metal abrasive wear and pressure up to 950°C. Hardness achievable after impact-hardening. Application: tools for both hot and cold forging and shaping, parts of gas turbines, etc.	DIN 8555: MF 20-350-CKTZ AWS A5.13-70: RCoCr-E DIN EN 14700: TCo 1-350-CKTZ			Hardness: 32-38 HRC (20°C) 38-40 HRC (600°C) 42-45 HRC (after cold work)	C=2,5; Si=1,0; Ni=2,5; Fe=max 3,0; Mo=5,5; Cr=27,0; Co=rest;		Rods diameter: 2,5 mm 3,2 mm 4,0 mm 5,0 mm Wires diameter: 1,2 mm 1,6 mm



2.6. Wires and rods for welding cast iron, nickel and nickel alloys

Marking and description	Classification	Welding current	Welding positioning	Features	Chemical composition [%]	Admittance	Diameter
MOST EL-NiFe Ferro-nickel solid wire for welding of cast iron and joining cast iron with steel. Can be used for: centrifugal cast iron, spherical graphite iron, malleable cast iron. Welding method: MIG, TIG.	DIN 8573: MSG NiFe1 Werkstoff nr: 2.4472/2.4560				Ni=55,0; C=1,5; Fe=rest;		Wires diameter: 0,8 mm; 1,0 mm 1,2 mm; 1,6 mm Rods diameter: 2,0 mm
MOST EL-Ni 4155 Solid wire for nickel welding (up to 450 °C) and it's alloys with steel and copper. Weld resistance to temperature up to -196 °C. Welding method: MIG and TIG.	AWS A5.14: ER Ni 1 Werkstoff nr: 2.4155 DIN 1736: SG NiTi 4			$R_e [N/mm^2] \geq 300$ $R_m [N/mm^2] \geq 500$ $A_5 \geq 35\%$	C=0,02; Si=0,40; Mn=0,40; Fe=0,20; Ti=3,0; Ni=rest;		Wires diameter: 1,2 mm; 2,0 mm 3,2 mm Rods diameter: 2,0 mm; 3,25 mm 4,0 mm; 5,0 mm
MOST EL-Ni 4886 Inox wire for joining and repair of nickel alloy and high-temperature steel and it's fixation with low and high alloy steel. Working temperatures up to 400°C. Weld resistant to temp. up to -196°C Welding method: MIG and TIG.	Werkstoff nr: 2.4886 AWS A5.14: ER NiCrMo-4 DIN 1736: SG NiMo16Cr16W			$R_e [N/mm^2] \geq 470$ $R_m [N/mm^2] \geq 780$ $A_5 \geq 35\%$ $KV \geq 80 J (20^\circ C)$ $60 J (-196^\circ C)$	C=0,01; Cr=15,5; Fe=5,0; Mn=0,5; Mo=16,0; Si=0,06; V=0,3; W=4,0; Ni=rest;		Wires diameter: 1,2 mm; 1,6 mm 2,0 mm; 2,4 mm 3,2 mm Rods diameter: 1,6 mm; 2,0 mm 2,4 mm; 3,2 mm
MOST EL-Ni 4377 Wire for joining and repair NiCu alloy and alloys of copper with steels. Working temperatures up to 425°C. Weld resistant to temp. up to -196°C. Welding method: MIG and TIG.	Werkstoff nr: 2.4377 AWS A5.14: ER NiCu7 DIN 1736: SG NiCu30MnTi			$R_e [N/mm^2] \geq 300$ $R_m [N/mm^2] \geq 500$ $A_5 \geq 35\%$ $KV \geq 150 J (20^\circ C)$ $110 J (-196^\circ C)$	C=0,02; Si=0,20; Mn=3,3; Fe=1,0; Cu=30,0; Ti=2,0; Ni=rest;		Wires diameter: 1,0 mm; 1,2 mm 1,6 mm; 2,0 mm Rods diameter: 1,6 mm; 2,0 mm 2,4 mm; 3,2 mm
MOST EL-Ni 4806 Inox heat-resistant wire for joining and repair nickel alloys, high-temperature steel and austenite-ferrite alloys, temp. up to 500°C. Weld resistant to temp. -300°C-900°C. Welding method: MIG and TIG.	Werkstoff nr: 2.4806 AWS A5.14: ER NiCr3 DIN 1736: SG NiCr20Nb			$R_e [N/mm^2] \geq 400$ $R_m [N/mm^2] \geq 680$ $A_5 \geq 40\%$ $KV \geq 150 J (20^\circ C)$	C=0,02; Si=0,20; Mn=3,0; Fe=1,0; Ti=0,5; Ni=rest; Cr=20,0; Nb+Ta=2,5;		Wires diameter: 1,0 mm; 1,2 mm 1,6 mm; 2,0 mm Rods diameter: 1,6 mm; 2,0 mm 2,4 mm; 3,2 mm
MOST EL-Ni 4831 High resistant to corrosion wire for joining and repair similar materials. resistant to high temp, cryogenic steel, nickel and austenite- ferrite alloys up to 550°C to 1100°C. Welding method: MIG and TIG.	Werkstoff nr: 2.4831 AWS A5.14: ER NiCrMo3 DIN 1736: SG NiCr21Mo9Nb			$R_e [N/mm^2] \geq 420$ $R_m [N/mm^2] \geq 800$ $A_5 \geq 35\%$ $KV \geq 110 J (20^\circ C)$ $85 J (-196^\circ C)$	C=0,02; Si=0,20; Mn=0,2; Fe=1,5; Mo=9,0; Ni=rest; Cr=22,0; Nb+Ta=3,3;		Wires diameter: 0,8 mm; 1,2 mm 1,6 mm; 2,0 mm 2,4 mm; 3,2 mm Rods diameter: 1,6 mm; 2,0 mm 2,4 mm; 3,2 mm

2.7. Wires and rods for welding copper and copper alloys (* confirmation of product availability and minimal amount is required)



Marking and description	Classification	Welding current	Welding positioning	Features	Chemical composition [%]	Admittance	Diameter
MOST CuAl 8 * Shielding gas: Ar, Ar+He, He, Welding method: MIG and TIG.	AWS A5.7: ER CuAl-A1 Werkstoff nr. 2.0921 PN-EN 14640: S Cu 6100 (CuAl8)			$R_e [N/mm^2] > 200$ $R_m [N/mm^2] > 430$ $A_5 > 40\%$ $KY > 100 J (20^\circ C)$	Cu>90,0; Al=8,0;		Wires diameter: 1,2 mm Rods diameter: 2,0 mm
MOST CuSn * Shielding gas: Ar, Ar+He, He, Welding method: MIG and TIG.	AWS A5.7: ER Cu Werkstoff nr. 2.1006 PN-EN 14640: S Cu 1898 (CuSn1)			$R_e [N/mm^2] > 100$ $R_m [N/mm^2] > 210-240$ $A_5 = 30\%$ $KY > 80 J (20^\circ C)$	Si=0,30; Mn=0,30; Cu>98,0; Sn=0,80;		Wires diameter: 1,2 mm Rods diameter: 2,0 mm
MOST CuSn 6 * Shielding gas: Ar, Ar+He, He, Welding method: MIG and TIG.	Werkstoff nr. 2.1022 PN-EN 14640: S Cu 5180 (CuSn6P)			$R_e [N/mm^2] > 150$ $R_m [N/mm^2] > 220-360$ $A_5 = 20\%$ $KY > 80 J (20^\circ C)$	Cu>92,0; Sn=6,40;		Wires diameter: 1,2 mm Rods diameter: 2,0 mm
MOST CuSi 3 * Shielding gas: Ar, Ar+He, He, Welding method: MIG and TIG.	AWS A5.7: ER CuSi-A Werkstoff nr. 2.1461 PN-EN 14640: S Cu 6560 (CuSi3Mn1)			$R_e [N/mm^2] > 120$ $R_m [N/mm^2] > 350$ $A_5 > 40\%$ $KY > 60 J (20^\circ C)$	Si=3,0; Mn=1,0; Cu>94,0; Fe=0,07; Zn=0,10; Sn=0,10;		Wires diameter: 1,2 mm Rods diameter: 2,0 mm
MOST CuNi 30 Fe * Shielding gas: Ar, Ar+He, He, Welding method: MIG and TIG.	AWS A5.7: ER CuNi Werkstoff nr. 2.0837 PN-EN 14640: S Cu 7158 (CuNi30)			$R_e [N/mm^2] > 250$ $R_m [N/mm^2] > 400$ $A_5 > 30\%$ $KY > 100 J (20^\circ C)$	C>0,05; Mn=1,0; Cu=rest; Ti=0,30; Ni=30,0; Fe=0,60;		Wires diameter: 1,2 mm Rods diameter: 2,0 mm
GOLD CuSi 3 Shielding gas: Ar, Ar+He, He, Welding method: MIG and TIG.	AWS A5.7: ER CuSi-A Werkstoff nr. 2.1461 PN-EN 14640: S Cu 6560 (CuSi3Mn1)			$R_e [N/mm^2] > 120$ $R_m [N/mm^2] > 350$ $A_5 > 40\%$ $KY > 60 J (20^\circ C)$	Si=3,0; Mn=1,0; Cu>94,0; Fe=0,07; Zn=0,10; Sn=0,10;		Wires diameter: 0,8 mm: 11 50 805083 1,0 mm: 11 50 805103



2.8. Wires and rods for welding of aluminium and aluminium alloys (* confirmation of product availability and minimal amount is required)

Marking and description	Classification	Welding current	Welding positioning	Features	Chemical composition [%]	Admittance	Diameter
MOST Al 99,5 (IA 1070)* Shielding gas: Ar. Welding method: MIG and TiG.	Werkstoff nr.: 3.0259 PN-EN ISO 18273: S Al 1070 (Al 99,5)	MIG  TiG 		$R_e = [N/mm^2] = 39-59$ $R_m = [N/mm^2] = 68-88$ $A_5 = 25-35\%$	Al>99,5; Si<0,40; Cu<0,05; Zn<0,07; Fe<0,30; Ti<0,05;	TÜV	Wires diameter: 0,8 mm 1,0 mm 1,2 mm 1,6 mm Rods diameter: 1,6 mm 2,0 mm 2,0 mm 3,2 mm 4,0 mm
MOST Al 99,5 Ti (IA 1450)* Shielding gas: Ar. Welding method: MIG and TiG.	DIN 1732 :SG Al 99,5 Ti Werkstoff nr.: 3.0805 PN-EN ISO 18273: S Al 1450 (Al 99,5Ti)	MIG  TiG 		$R_e = [N/mm^2] = 40-60$ $R_m = [N/mm^2] = 70-90$ $A_5 = 25-35\%$	Al>99,5; Si<0,25; Mn>0,05; Mg<0,05; Cu<0,05; Zn<0,10; Fe<0,40; Ti<0,15;		Wires diameter: 0,8 mm 1,0 mm 1,2 mm 1,6 mm Rods diameter: 1,6 mm 2,0 mm 3,2 mm 4,0 mm
MOST Al Mg 3 (IA 5754) Shielding gas: Ar. Welding method: MIG and TiG.	AWS A5.10: ER 5754 Werkstoff nr.: 3.3536 PN-EN ISO 18273: S Al 5754 (AlMg3)	MIG  TiG 		$R_e = [N/mm^2] = 80-100$ $R_m = [N/mm^2] = 175-205$ $A_5 = 15-20\%$	Si<0,40; Mn<0,1-0,6; Mg=2,6-3,6; Cr<0,30; Zn<0,02; Fe<0,15; Ti<0,25; Cu<0,05; Al=rest;		Wires diameter: 0,8 mm 1,0 mm 1,2 mm 1,6 mm Rods diameter: 1,6 mm 2,0 mm 3,2 mm 4,0 mm
MOST Al Mg 5 (IA 5356) Shielding gas: Ar. Welding method: MIG and TiG.	AWS A5.10: ER 5356 Werkstoff nr.: 3.3556 PN-EN ISO 18273: S Al 5356 (AlMg5Gr)	MIG  TiG 		$R_e = [N/mm^2] = 100-135$ $R_m = [N/mm^2] = 220-260$ $A_5 = 15-25\%$	Si<0,25; Mn<0,2; Mg=4,5-5,2; Cu<0,05; Zn<0,02; Fe<0,40; Ti<0,25; Cr<0,30; Al=rest	TÜV, DB, ABS, BV, DNV-GL, LR, CE	Wires diameter: 0,8 mm: 11 40 908082 1,0 mm: 11 40 908102 1,2 mm: 11 40 908122 1,6 mm Rods diameter: 1,6 mm: 11 41 908167 2,0 mm: 11 41 908207 2,4 mm: 11 41 908247 3,2 mm: 11 41 908327

Marking and description	Classification	Welding current	Welding positioning	Features	Chemical composition [%]	Admittance	Diameter
MOST Al Mg 4.5 Mn (IA 5183) Shielding gas: Ar. Welding method: MIG and TiG.	AWS A5.10: ER 5183 Werkstoff nr.: 3.3548 PN-EN ISO 18273: S Al 5183 (AlMg4,5Mn0,7)	MIG  TiG 		$R_e = [N/mm^2] = 110-150$ $R_m = [N/mm^2] = 275-335$ $A_5 = 15-20\%$	Si<0,25; Mn=0,6-1,0; Mg=4,3-5,2; Cu=0,05; Zn=0,25; Fe<0,40; Ti<0,25; Cr<0,25; Al=rest;	TÜV, DB, BV, DNV-GL, LR	Wires diameter: 0,8 mm 1,0 mm: 11 40 907102 1,2 mm: 11 40 907122 Rods diameter: 1,6 mm 1,6 mm 2,0 mm 3,2 mm 4,0 mm
	MOST Al Mg 4,5 Mn Zr (IA 5087)* Shielding gas: Ar. Welding method: MIG and TiG.	AWS A5.10: ER 5187 Werkstoff nr.: 3.3546 PN-EN ISO 18273: S Al 5087 (AlMg4,5MnZr)	MIG  TiG 		$R_e = [N/mm^2] = 110-150$ $R_m = [N/mm^2] > 285$ $A_5 = 15-20\%$	Si<0,25; Mn=0,6-1,0; Mg=4,3-5,2; Cu=0,05; Zn=0,25; Fe<0,40; Zr=0,10; Cr<0,25; Al=rest; Ti<0,25;	TÜV, DB, DNV-GL, CE
MOST Al Si 5 (IA 4043) Shielding gas: Ar. Welding method: MIG and TiG.	AWS A5.10: ER 4043 Werkstoff nr.: 3.2245 PN-EN ISO 18273: S Al 4043 (AlSi5)	MIG  TiG 		$R_e = [N/mm^2] > 50$ $R_m = [N/mm^2] = 120-150$ $A_5 = 10-18\%$	Si=4,5-5,5; Mn=0,10; Mg=0,1; Cu=0,05; Fe<0,40; Ti<0,25; Al=rest;	CE, DB	Wires diameter: 0,8 mm 1,0 mm: 11 40 904102 1,2 mm: 11 40 904122 Rods diameter: 1,6 mm 2,0 mm 3,2 mm
	MOST Al Si 12 (IA 4047)* Shielding gas: Ar, Ar+He. Welding method: MIG and TiG.	AWS A5.10: ER 4047 Werkstoff nr.: 3.2885 PN-EN ISO 18273: S Al 4047 (AlSi12)	MIG  TiG 		$R_e = [N/mm^2] > 70$ $R_m = [N/mm^2] > 160-190$ $A_5 = 10-15\%$	Si=11-13,5; Mn>0,5; Mg=0,05; Cu=0,05; Zn=0,10; Fe<0,60; Al=rest; Ti<0,15;	CE

2.9. Wires and rods for welding of titanium (* confirmation of product availability and minimal amount is required)



Marking and description	Classification	Welding current	Welding positioning	Features	Chemical composition [%]	Admittance	Diameter
MOST Ti Grade 2* Titanium alloys wires Grade 2 for welding of different titanium alloys are used when good mechanical properties are required. Wire suitable for welding heat exchangers, tanks and piping in chemical industry and structures in aerospace industry. Shielding gas Ar Welding method: TiG	AWS A 5.16: ERTi-2 EN ISO 24034: S Ti 0120 (Ti99,6)			$R_e [N/mm^2] = 270$ $R_m [N/mm^2] = 390$ $A_5 = 22\%$ $KV = 34 [20^\circ C]$	C<0,03 Ti=rest Fe<0,20		

3. Flux cored wires for MIG/MAG welding

3.1. Flux cored wires for welding of non-alloy and fine grain steels



Marking and description	Classification	Welding current	Welding positioning	Features	Chemical composition [%]	Admittance	Diameter and catalogue no.
MOST E71 T1 Flux cored wire used in machinery, ships and bridges constructions. Properties of the weld are comparable to SF 71. Stable welding in all positions and power variations. Shielding gas CO ₂ .	AWS A5.20: E71T-1C PN-EN ISO 17632-A: T422PC1			$R_p [N/mm^2] > 545$ $R_m [N/mm^2] > 572$ $A_5 > 28\%$ $KV > 110 J (0^\circ C)$ $70 J (-20^\circ C)$	C=0,03; Si=0,51; Mn=1,26; P=0,01; S=0,011;	BV, LR, DNW-GL, ABS, RS	1,2 mm: 11 33 502 123 1,4 mm
MOST E 71 T-1 Premium Seamless flux-cored rutile wire for one and multi-stitch welding of carbon, carbon-manganese and suchlike fine-grained Argon-CO ₂ or CO ₂ coated steel. Features: very good weldability in all possible welding positions, high welding speed, low spatter loss, smooth face of weld, fast cooling and easy remove of slag. Especially suitable for shipbuilding, constructions and applications that require the smooth surface of welds.	EN ISO 17632-A: T46 4 P M 1 H5 T46 2 P C 1 H5 AWS A5.36: E71T1-M21A4-CS1-H4 E71T1-C1A2-CS1-H4			$R_p [N/mm^2] > 460$ $R_m [N/mm^2] > 580$ $A_5 > 25\%$ $KV > 60 J (-40^\circ C)$ $110 J (20^\circ C)$ $55 J (20^\circ C)$	for C1: C=0,04; Si=0,40; Mn=1,0; for M21: C=0,05; Si=0,35; Mn=1,25;	TÜV, DNW-GL, ABS, LR, BV, CE	1,2 mm: 11 33 503 123
MOST 710 MetalC Seamless flux-cored wire for one or multi-stitch welding of carbon, carbon-manganese steel and suchlike fine-grained Argon-CO ₂ or CO ₂ coated steel. Features: high efficiency, good weldability regular face of weld, low spatter loss. Good properties of welds in both, low temperatures (-60°C) and after heat treatment. Designed for manual welding as well as robot and automated applications.	EN ISO 17632-A: T46 6 M M 1 H5; T42 5 M C 1 H5 AWS A5.36: E70T15-M21A8-CS1-H4; E70T15-C1A6-CS1-H4	 for PG: 		$R_p [N/mm^2] > 500$ $R_m [N/mm^2] > 600$ $A_5 > 29\%$ $KV > 90 J (-40^\circ C)$ $60 J (-20^\circ C)$	for C1: C=0,06; Si=0,80; Mn=1,60;	TÜV, DNW-GL, ABS, LR, CE	1,2 mm: 11 33 507 124
GOLD E71T-11 SHELF SHIELD Flux-cored, semi-shielded wire designed for welding of non-alloyed, low-carbon steel in all positions. Applications: assembly of steel constructions, in construction site.	AWS: A5.20 E71T-11 EN ISO 17632: T 42.2 Y1			$R_p [N/mm^2] > 400$ $R_m [N/mm^2] > 480$ $A_5 > 20\%$	Si=0,6; Mn=1,75; P=0,03; S=0,03; Al=1,8; N=0,5;		0,8 mm: 11 53 600 083



3.2. Flux cored wires for pad welding and regeneration

Marking and description	Classification	Welding current	Welding positioning	Features	Chemical composition [%]	Admittance	Diameter
MOST F-200 K Resistant to corrosion, temperature and thermal shocks up to 850°C padding weld. Due to high elongation (40%) it fits for applications as undercoat (buffer) layer before hardening welding and for joining of hard-to-weld and of dissimilar steels metals. Possible applications: scissors crossovers, parts of crushers, rolls, rails, beaters, etc.	DIN 8555: MF 8-200-CKNPZ PN EN 14700: T Fe 10-200-CKNPZ			Hardness: 180-200/400 HB	C=0,1; Si=0,4; Mn=6,0; Cr=19,0; Ni=8,5; Fe=rest;		1,6 mm 2,4 mm
MOST F-240 K Fits for welding elements of manganese steel (of "Hadfield" type) exposed to high impacts. Padding weld is non-magnetic, crack-free and gets hardened under influence of cold work. Possible applications: crusher jaws, elements of railway tracks, excavators buckets, elements of manganese steel, etc.	DIN 8555: MF 7-200-KNP PN EN 14700: T Fe 9-250-KNP			Hardness: 200-230/450 HB	C=1,0; Si=0,4; Mn=14,0; Cr=4,0; Ni=0,6; Fe=rest;		1,6 mm 2,4 mm
MOST F-250 K High-manganese and high-chromium, corrosion-resistant, non-magnetic padding weld of high plasticity. Applied as undercoat (buffer) layer at hardening welding (especially in case of repeated regeneration of used elements). Padding weld resistant to compression, stress and impacts.	DIN 8555: MF 7-250-KNP PN EN 14700: T Fe 9-250-KNP			Hardness: 220-250/500 HB	C=0,4; Si=0,4; Mn=16,0; Cr=14,0; Ni=1,2; Mo=0,6; V=0,2; Fe=rest;		1,6 mm 2,4 mm
MOST F-300 Low-alloyed, ductile, crack-free padding weld, purposed for reconstruction works especially when there are many layers required. Possible applications: tractors wheels, shafts, transmission gears, rotational suspension pins in rail joints, etc.	DIN 8555: MF 1-300-P PN EN 14700: T Fe 1-300-P			Hardness: 280-325 HB	C=0,1; Si=0,5; Mn=2,0; Cr=1,5; Mo=0,4; Fe=rest;		1,6 mm 2,4 mm
MOST F-450 Workable, low-alloyed padding weld for multi-layer hardfacing. Especially in case when basic material has large content of carbon and undercoat (buffer) layer or pre-heating is required. Possible applications: wheel rims, chain links, bucket chains, etc.	DIN 8555: MF 3-45-PT PN EN 14700: T Fe 2-45-PT			Hardness: 42-45 HRC	C=0,2; Cr=4,5; Mo=0,3; V=0,2; Fe=rest;		1,6 mm 2,4 mm
MOST F-601 Padding weld of high resistance to abrasive wear and impacts, keeping high hardness at temperature of up to 550°C. Increase of hardness possible after heat treatment (heat-working). Possible applications: hammers, rolls of rollers, bucket teeth, etc.	DIN 8555: MF 6-60-PT PN EN 14700: T Fe 6-60-PT			Hardness: 55-58 HRC	C=0,5; Si=1,0; Mn=3,0; Cr=6,0; Mo=1,6; V=1,5; W=1,0; Fe=rest;		1,6 mm 2,4 mm
MOST F-WZ 50 Padding weld designed for regenerations and reconstructions of hot-working tools. Workable, possible heat treatment, keeps hardness at temperature up to 550°C. Possible applications: mandrels, drop forging dies, heat-cutting knives, etc.	DIN 8555: MF 3-50-ST PN EN 14700: T Fe 3-50-ST			Hardness: 48-50 HRC	C=0,3; Cr=2,5; V=0,6; W=4,5; Fe=rest;		1,2 mm 1,6 mm 2,4 mm
MOST F-WZ 59 Resistant to abrasion and high temperature padding weld of high-speed steel character purposed for regeneration and manufacture of cold- and hot- working tools. Possible applications: punches, dies, etc.	DIN 8555: MF 4-55-ST PN EN 14700: T Fe 4-55-ST			Hardness: 57-59 HRC	C=0,6; Cr=4,0; Mo=3,5; W=3,5; Fe=rest;		1,2 mm 1,6 mm 2,4 mm
MOST F-59 Strongly resistant to abrasion and medium impact padding weld with high content of chromium carbides. Possible applications: agricultural tools, excavators, screw conveyors, etc.	DIN 8555: MF 10-60-GR PN EN 14700: T Fe 14-60-GR			Hardness: 59-61 HRC	C=5,0; Si=1,5; Cr=32,0; Fe=rest;		1,6 mm 2,0 mm 2,4 mm 2,8 mm 3,2 mm

Marking and description	Classification	Welding current	Welding positioning	Features	Chemical composition [%]	Admittance	Diameter
MOST F-64 Resistant to large mineral wear at high temperatures padding weld of hard martensitic microstructure with carbides. Can be applied for single-layer hardfacing with no notable loss of hardness. Possible applications: concrete and mineral industries, brickyards, etc.	DIN 8555: MF 10-65-GZ PN EN 14700: T Fe 16-65-GZ			Hardness: 62-64 HRC	C=3,8; Cr=22,0; V=0,8; W=0,8; Fe=rest;		1,2 mm 1,6 mm 2,0 mm 2,4 mm 2,8 mm 3,2 mm
MOST F-65 Padding weld with content of extremely hard carbides. Designed for hardfacing of elements exposed to high mineral wear at temperature of up to 650°C. Possible applications: great furnace cones, sintering plants, screw conveyors, etc.	DIN 8555: MF 10-65-GZ PN EN 14700: T Fe 16-65-GZ			Hardness: 63-65 HRC	C=5,2; Cr=21,0; Mo=7,0; Nb=7,0; V=1,0; W=2,0; Fe=rest;		1,6 mm 2,0 mm 2,4 mm 3,2 mm

3.3. Flux cored wires for cast iron



Marking and description	Classification	Welding current	Welding positioning	Features	Chemical composition [%]	Admittance	Diameter
MOST F-NiFe 36 Cored wire for welding cast iron and joining steels with cast iron. Padding weld is workable, distinguished by extremely low coefficient of thermal expansion.	Werkstoff nr.: 1.3912 PN EN 14700: 1.3912			Hardness: 140-160 HB	Mn=3,0; Ni=36,0; Fe=rest;		1,6 mm 2,0 mm 2,4 mm 2,8 mm
MOST F-NiFe 60/40 NiFe cored wire for welding cast iron and joining cast iron with steel. Available also as solid wire. Can be used for: centrifugal cast iron, GGG cast iron, malleable cast iron.	DIN 8555: MF NiFe-2 PN EN 14700: NiFe-CI			Hardness: 160-190 HB	Mn=4,0; Fe=40,0; Ni=rest; Cu+;		1,6 mm 2,0 mm 2,4 mm 2,8 mm

4. Other welding consumables

4.1. Electrodes for cutting and grooving



Marking and description	Classification	Welding current	Features	Chemical composition [%]	Admittance	Diameter and catalogue no.
CARBON ELECTRODES MOST Carbon electrodes are used for: ▪ welding steels and non-iron materials, ▪ arc grooving and cutting, ▪ removing old welds, finishing of welds, ▪ cleaning and repairing cast-iron and non-iron castings, ▪ underwater cutting of metals.			Example size selection for round electrodes: ▪ width of groove: electrodes diameter x 1,4/1,5 mm ▪ depth of groove: electrodes diameter x 0,7/0,8 mm ▪ arc amperage: electrodes diameter x (40-50) A	C=98;		6,0 mm: 03 77 257062 8,0 mm: 03 77 257082 10,0 mm: 03 77 257102

4.2. Special-purpose electrodes (* confirmation of product availability and minimal amount is required)



Marking and description	Classification	Welding current	Features	Chemical composition [%]	Admittance	Diameter
MOST Lastek 1000* Cutting of all materials without compressed air (stainless steel, aluminium, cast-iron, bronze, copper, etc.). Stainless steel cutting gives clean cutting edges without carbon-deposits. High speed cutting. Does not overheat, and can be used totally. Cutting plates in vertical as well as in horizontal position. Application: removal of passes, rivets, cutting out of wholes, demolitions, etc.						2,5 mm 3,2 mm 4,0 mm 5,0 mm
MOST Lastek 1001* The special coating guarantees a concentrated heat input in the workpiece without depositing any metal. Can be used for bending and straightening profiles and plates. Application: art and ornamental works, removal of machine parts, preheating of weld that must be peened, etc.						3,2 mm 4,0 mm
MOST Lastek 1008* Electrode for underwater welding. Application: drilling rigs, ship repairs, harbor works, etc.						3,2 mm 4,0 mm 5,0 mm
MOST Lastek 1010* Electrode used for spotwelding of metals, which is an alternative to resistance welding. Suitable for joining steel sheets of total thickness up to 10mm (e.g. 5mm + 5mm) with complete penetration, as well as for spotting (riveting) steel sheets of 10mm or less to heavier workpieces without complete penetration. Appropriate for plating stainless steel and mild steel. Application: chemical industry (spotwelding stainless steels to profiles without drilling through the stainless steel sheet), general workshop activities, etc.						1,5 mm 2,0 mm 2,5 mm 3,2 mm 4,0 mm
MOST Lastek 1900* Electrode for melting and blowing away any metal (from stainless steel to cast iron or copper alloys) with a standard AC or DC power source. The highly concentrated blowing action removes any grease or oil or excess carbon on cast iron and leaves clean groove free of adhering molten particles. Can be used on spots that can not be reached with a grinding wheel. Application: preparation of surfaces for hardfacing, removal of old hardfaced layers prior to rebuilding, beveling of all metals, removal of riser head in foundries, etc.						2,5 mm 3,2 mm 4,0 mm 5,0 mm

4.3. Gas welding rods

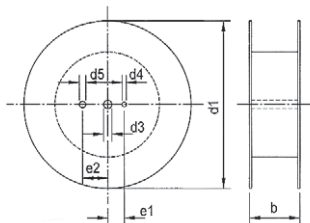


Marking and description	Classification	Welding current	Features	Chemical composition [%]	Admittance	Diameter and catalogue no.
MOST SpG1A Wire for gas: acetylene-oxygen welding, dedicated for low carbon steel. Used in welding of water and heating systems.	PN-EN 12536: 01 AWS A5.2: R 45			C=0,1; Si<0,15; Mn=0,5;	CE	Non-copper: 2,5 mm: 11 61 010257 3,2 mm: 11 61 010327 4,0 mm: 11 61 010407 Copper Rods: 2,5 mm: 11 61 011257 3,2 mm: 11 61 011327 4,0 mm: 11 61 011407

5. Types of packaging of welding wires

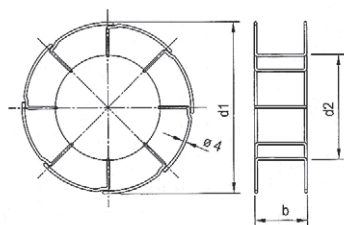


Plastic spool



Indication Catalog	Weight [kg]	Outer diameter d1 [mm]	Internal width b [mm]	Hole diameter d3 [mm]	Mark according to PN-EN ISO 544:2011
S 100	0,5-1,0	100	45	16,5	S 100
S 200	2-5	200	55	50,5	S 200
S 300	6-20	300	100	50,5	S 300

Basket spool



Indication Catalog	Weight [kg]	Outer diameter d1 [mm]	Internal width d2 [mm]	Hole diameter b [mm]	Mark according to PN-EN ISO 544:2011
B 200	2-5	200	90	55	-
B 300	6-20	300	180	100	B 300

„Drums”

Indication Catalog	Weight [kg]	Outer diameter A [mm]	Heigh H [mm]	Heigh with Cover [mm]
Drum	250-280	510	810	1120

