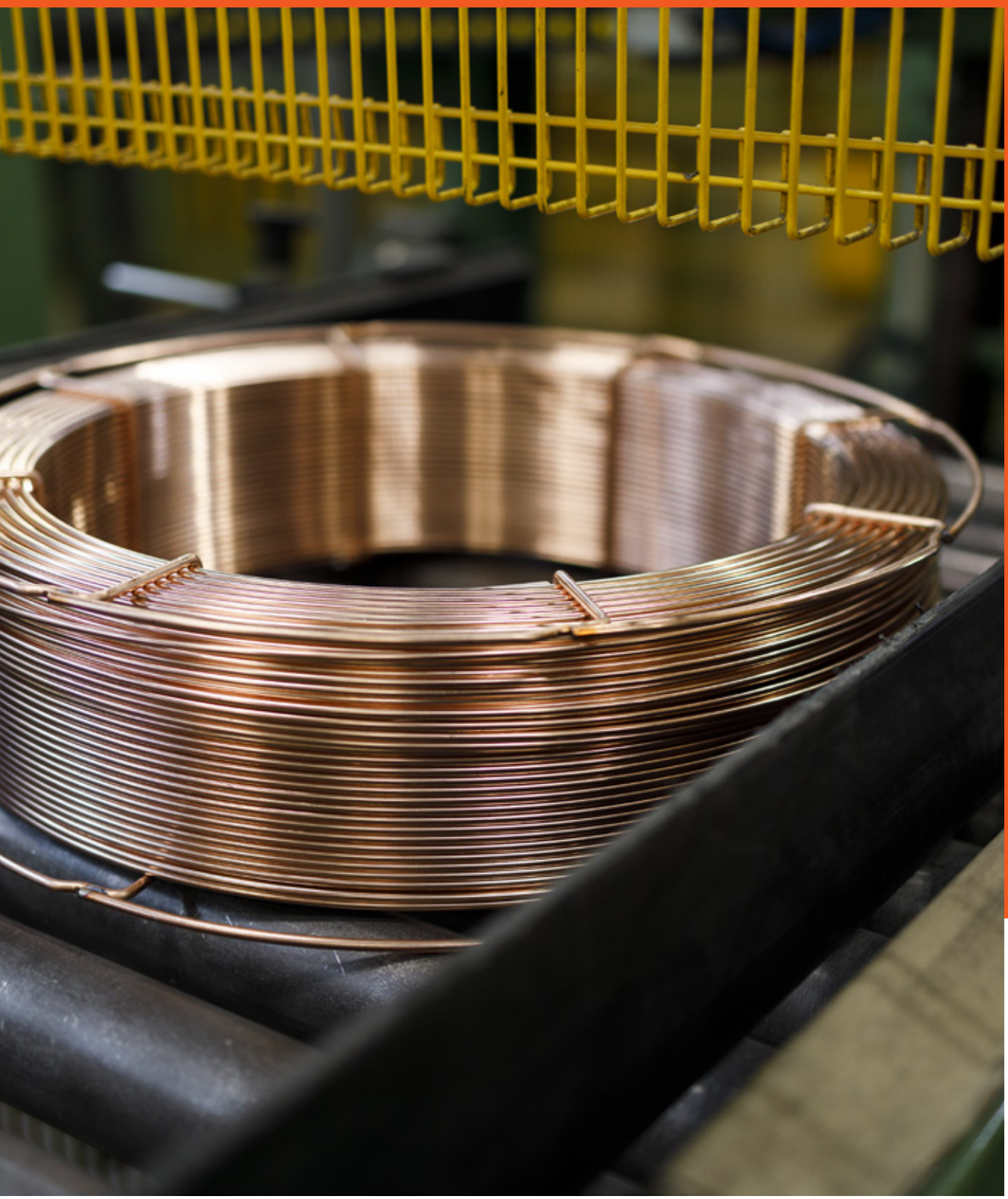

GMAW WIRES

G3

MIG/MAG (GMAW) gas shielded welding wires to join non-alloy carbon steels.

Classification	EN ISO 14341-A-G 38 2 M21 2Si1 - AWS A5.18 ER70S-3

Chemical analysis

%	C	Mn	Si	Ni	Cr	Mo	Cu[1]
min	0,06	0,90	0,50				
max	0,14	1,30	0,75	0,15	0,15	0,15	0,30

Mechanical properties[2]

Yeld strenght (Rp0,2)	≥ 400 Mpa
Tensile strenght (Rm)	≥ 480 Mpa
Elongation (A5)	≥ 22%
Impact energy (ISO-V KV)	47 J @ -40 °C

Approvals	CE Marking

G6

MIG/MAG (GMAW) gas shielded welding wires to join non-alloy carbon steels.

Classification	EN ISO 14341-A G 42/46 4 M21 3Si1 - EN ISO 14341-A G 42 2 C1 - AWS A5.18 ER70S-6

Chemical analysis

%	C	Mn	Si	Ni	Cr	Mo	Cu[1]
min	0,06	1,40	0,80				
max	0,14	1,60	1,00	0,15	0,15	0,15	0,30

Mechanical properties[2]

Yeld strenght (Rp0,2)	510 Mpa
Carico di rottura (Rm)	570 Mpa
Elongation (A5)	29%
Impact energy (ISO-V KV)	85 J @ -40 °C

Approvals	ABS, BV, DB, DNV, LRS, RINa, TÜV - CE Marking

G9

MIG/MAG (GMAW) gas shielded welding wire Mn-Si-alloyed of non-alloyed carbon steels to join carbon steels.

Classification	EN ISO 14341-A G 46 5 M21 4Si1 - EN ISO 14341-A G 46 2 C1 - AWS A5.18 ER70S-6

Chemical analysis

%	C	Mn	Si	Ni	Cr	Mo	Cu[1]
min	0,06	1,60	0,80				
max	0,14	1,85	1,15	0,15	0,15	0,15	0,30

Mechanical properties[2]

Yeld strenght (Rp0,2)	535 Mpa
Tensile strenght (Rm)	600 Mpa
Elongation (A5)	27%
Impact energy (ISO-V KV)	55 J @ -50 °C

Approvals	ABS, BV, DB, DNV, LRS, RINa, TÜV - CE Marking

GMo

MIG/MAG (GMAW) gas shielded welding wires to joint creep-resistant steels with service temperature up to 500° C.

Classification	EN ISO 14341-A G 46 4 M21 2Mo - AWS A5.28 ER70S-A1 - G50 4 M21 2Mo

Chemical analysis

%	C	Mn	Si	Ni	Cr	Mo	Cu[1]
min	0,08	0,90	0,30			0,40	
max	0,12	1,30	0,70	0,15	0,15	0,60	0,35

Mechanical properties[2]

Yeld strenght (Rp0,2)	500 Mpa
Tensile strenght (Rm)	620 Mpa
Elongation (A5)	21%
Impact energy (ISO-V KV)	60 J @ -40 °C

Approvals	CE Marking

G9Mo

MIG/MAG (GMAW) gas shielded welding wires of creep-resistant steels with a service temperature of up to 500 °C.

Classification	EN ISO 14341-A G 50 4 M21 4Mo - AWS A5.28 ER80S-D2 - AWS A5.28 ER90S-D2

Chemical analysis

%	C	Mn	Si	Ni	Cr	Mo	Cu[1]
min	0,07	1,70	0,50			0,40	
max	0,12	2,10	0,80	0,15	0,15	0,60	0,25

Mechanical properties[2]

Yeld strenght (Rp0,2)	590 Mpa
Tensile strenght (Rm)	690 Mpa
Elongation (A5)	23%
Impact energy (ISO-V KV)	80 J @ -40 °C

Approvals	CE Marking

GH2

MIG/MAG (GMAW) gas shielded welding wires of weather resisting steels such as COR-TEN, Itacor, Patinax, Dillicor and so on.

Classification	EN ISO 14341-A G 50 4 M21 Z - AWS A5.28 ER80S-G

Chemical analysis

%	C	Mn	Si	Ni	Cr	Mo	Cu[1]
min	0,06	1,30	0,70	0,70	0,25		0,30
max	0,10	1,60	1,00	0,85	0,40	0,10	0,50

Mechanical properties[2]

Yeld strenght (Rp0,2)	590 Mpa
Tensile strenght (Rm)	660 Mpa
Elongation (A5)	24%
Impact energy (ISO-V KV)	70 J @ -40 °C

Approvals	CE Marking

G3NI1

MIG/MAG (GMAW) welding wires with 0.9% Ni-alloyed of fine-grained and low alloy nickel steels with high impact toughness down to -50° C.

Classification	EN ISO 14341-A G 46 5 M21 3Ni1 - AWS A5.28 ER80S-Ni1

Chemical analysis

%	C	Mn	Si	Ni	Cr	Mo	Cu[1]
min	0,07	1,00	0,60	0,80			
max	0,12	1,20	0,80	1,00	0,15	0,15	0,20

Mechanical properties[2]

Yeld strenght (Rp0,2)	490 Mpa
Tensile strenght (Rm)	580 Mpa
Elongation (A5)	28%
Impact energy (ISO-V KV)	80 J @ -50 °C

Approvals	CE Marking

GTH

MIG/MAG (GMAW) gas shielded welding wires Cr-Ni-Mo alloyed of high strength steels.

Classification	EN ISO 16834-A G 62 5 M21 Mn3NiCrMo - AWS A5.28 ER100S-G

Chemical analysis

%	C	Mn	Si	Ni	Cr	Mo	Cu[1]
min	0,08	1,60	0,60	0,50	0,55	0,25	
max	0,10	1,80	0,80	0,60	0,65	0,30	0,30

Mechanical properties[2]

Yeld strenght (Rp0,2)	700 Mpa
Tensile strenght (Rm)	770 Mpa
Elongation (A5)	20%
Impact energy (ISO-V KV)	70 J @ -50 °C

Approvals	DB, TÜV - CE Marking

GTA

MIG/MAG (GMAW) gas shielded welding wires Cr-Ni-Mo alloyed of high strength steels with low temperature impact requirements.

Classification	EN ISO 16834-A G 69 5 M21 Mn3Ni1CrMo - AWS A5.28 ER110S-G

Chemical analysis

%	C	Mn	Si	Ni	Cr	Mo	Cu[1]
min	0,08	1,60	0,50	1,40	0,30	0,24	
max	0,11	1,80	0,70	1,60	0,40	0,30	0,35

Mechanical properties[2]

Yeld strenght (Rp0,2)	820 Mpa
Tensile strenght (Rm)	870 Mpa
Elongation (A5)	19%
Impact energy (ISO-V KV)	60 J @ -50 °C

Approvals	DB, TÜV - CE Marking

GT2

MIG/MAG (GMAW) gas shielded welding wires of high strength steels and fine-grained structural steels with a yield strength of up to 890 MPa.

Classification	EN ISO 16834-A G 89 4 M21 Mn4Ni2,5CrMo - AWS A5.28 ER120S-G

Chemical analysis

%	C	Mn	Si	Ni	Cr	Mo	Cu[1]
min	0,08	1,60	0,50	2,30	0,30	0,40	
max	0,13	2,10	0,80	2,80	0,60	0,65	0,25

Mechanical properties[2]

Yeld strenght (Rp0,2)	960 Mpa
Tensile strenght (Rm)	1040 Mpa
Elongation (A5)	16%
Impact energy (ISO-V KV)	60 J @ -40 °C

Approvals	CE Marking

GCR1Mo

MIG/MAG (GMAW) Cr-Mo solid wire for creep resistant steels like A-387 Grade 11 & 12, A 335 Grade P11 or similar materials.

Classification	EN ISO 21952-A G Z - EN ISO 21952-B-G 1CM - AWS A5.28 ER80S-B2

Chemical analysis

%	C	Mn	Si	Ni	Cr	Mo	Cu[1]
min	0,07	0,40	0,40		1,20	0,40	
max	0,12	0,70	0,70	0,20	1,50	0,65	0,35

Mechanical properties[3]

Yeld strenght (Rp0,2)	520 Mpa
Tensile strenght (Rm)	630 Mpa
Elongation (A5)	24%
Impact energy (ISO-V KV)	100 J @ -10 °C

Approvals	CE Marking

[1] Copper content including copper coating.
[2] Typical mechanical properties obtained with shielded gas EN ISO 14175 M21.
[3] Typical mechanical properties with shielded gas EN ISO 14175 M13 after PWHT at 690 °C/ 1 h.