

**MIG/MAG Wires
For C-Mn Steels
Welding**





AMA 40-13M

Standards: AWS/ASME SFA - 5.18 ER70S-3

Application/ Properties: Low alloy wire electrode for MAG- Welding of general structural steels and pipe steels using CO₂ – or mixed shielding gas, e.g. Ar with 5-25% CO₂.

Analysis of Wire electrode% (Typical value):

C	Si	Mn	P	S
0.06-0.12	0.45-0.75	0.9-1.4	≤0.025	≤0.025

Mechanical properties of all-weld metal using CO₂ shielding gas (single value are typical values) :

Yield Strength (N/mm ²)	Tensile Strength (N/mm ²)	Elongation A4 (%)	Impact energy Joule ISO - V -18 °C
>420	500-640	>22	>27



Material:

Unalloyed Structural steels	DIN 17 100	St 33, St 37-2 to St 52-3 St 50*, ST 60*
Pipe steels	DIN 1626/1629	St 37.0 to St 52.0
	DIN 1628/1630	St 37.4 to St 52.4
	DIN 17175	St 35.8 to St 45.8
	DIN 17172	StE 210.7 to StE 360.7
Fine grain structural steels	DIN 17 102	StE 255 to StE 355 WStE 255 to WStE 355 TStE 255 TO TStE 355
Boiler plates	DIN 17 155	HI, HII, 17 Mn 4, 19Mn5*
Shipbuilding steels		A, B, D, E
casting steels		GS-38, GS-45, GS-52

* Depending on plate thickness, preheat 150-300C
 Delivery: Copper coating & wound wire - reel on:
 weight :15kg.
 diameter : 0.8-2 mm



AMA 40-14M

Standards: AWS/ASME SFA - 5.18 ER70S-4

Application/ Properties: Low alloy wire electrode for MAG- Welding of general structural steels and pipe steels using CO₂ – or mixed shielding gas, e.g. Ar with 5-25% CO₂.

Analysis of Wire electrode% (Typical value):

C	Si	Mn	P	S
0.07-0.15	0.65-0.85	1-1.5	≤0.025	≤0.025

Mechanical properties of all-weld metal using CO₂ shielding gas (single value are typical values) :

Yield Strength (N/mm ²)	Tensile Strength (N/mm ²)	Elongation A4 (%)	Impact energy Joule ISO - V 25 °C
>420	500-640	>22	>80

Material:

Unalloyed Structural steels	DIN 17 100	St 33, St 37-2 to St 52-3 St 50*, ST 60*
Pipe steels	DIN 1626/1629	St 37.0 to St 52.0
	DIN 1628/1630	St 37.4 to St 52.4
	DIN 17175	St 35.8 to St 45.8
	DIN 17172	StE 210.7 to StE 360.7
Fine grain structural steels	DIN 17 102	StE 255 to StE 355 WStE 255 to WStE 355 TStE 255 TO TStE 355
Boiler plates	DIN 17 155	H1,HII,17 Mn 4, 19Mn5*
Shipbuilding steels		A, B, D, E
casting steels		GS-38, GS-45, GS-52



* Depending on plate thickness, preheat 150-300C
 Delivery: Copper coating & wound wire - reel on:
 weight :15kg.
 diameter : 0.8-2 mm



AMA 40-16M

Standards: AWS/ASME SFA - 5.18 ER70S-6

Application/ Properties: Low alloy wire electrode for MAG- Welding of general structural steels and pipe steels using CO₂ – or mixed shielding gas, e.g. Ar with 5-25% CO₂.

Analysis of Wire electrode% (Typical value):

C	Si	Mn	P	S
0.06-0.15	0.8-1.15	1.4-1.85	≤0.025	≤0.025

Mechanical properties of all-weld metal using CO₂ shielding gas (single value are typical values) :

Yield Strength (N/mm ²)	Tensile Strength (N/mm ²)	Elongation A4 (%)	Impact energy Joule ISO - V -29 °C
>420	500-640	>22	>27

Material:

Unalloyed Structural steels	DIN 17 100	St 33, St 37-2 to St 52-3 St 50*, ST 60*
Pipe steels	DIN 1626/1629	St 37.0 to St 52.0
	DIN 1628/1630	St 37.4 to St 52.4
	DIN 17175	St 35.8 to St 45.8
	DIN 17172	StE 210.7 to StE 360.7
Fine grain structural steels	DIN 17 102	StE 255 to StE 355 WStE 255 to WStE 355 TStE 255 TO TStE 355
Boiler plates	DIN 17 155	HI, HII, 17 Mn 4, 19Mn5*
Shipbuilding steels		A, B, D, E
casting steels		GS-38, GS-45, GS-52



* Depending on plate thickness, preheat 150-300C
 Delivery: Copper coating & wound wire - reel on:
 weight :15kg.
 diameter : 0.8-2 mm



AMA 40-18M

Standards: DIN 8559 SG 2
 Material-No. 1.5125
 EN 440 G3 Si1

Application/ Properties: Low alloy wire electrode for MAG- Welding of general structural steels and pipe steels using CO₂ – or mixed shielding gas, e.g. Ar with 5-25% CO₂.

Analysis of Wire electrode% (Typical value):

C	Si	Mn	P	S
0.06-0.12	0.7-1	>1.3-1.6	≤0.025	≤0.025

Mechanical properties of all-weld metal using CO₂ shielding gas (single value are typical values) :

C	Si	Mn	P	S
0.05-0.1	0.5-0.8	0.7-1	≤0.025	≤0.025

Mechanical properties of all-weld metal using CO₂ shielding gas (single value are typical values) :

Yield Strength (N/mm ²)	Tensile Strength (N/mm ²)	Elongation A5 (%)	Impact energy Joule ISO - V 25 °C
>420	500-640	>22	>80

Material:

Unalloyed Structural steels	DIN 17 100	St 33, St 37-2 to St 52-3 St 50*, ST 60*
Pipe steels	DIN 1626/1629	St 37.0 to St 52.0
	DIN 1628/1630	St 37.4 to St 52.4
	DIN 17175	St 35.8 to St 45.8
	DIN 17172	StE 210.7 to StE 360.7
Fine grain structural steels	DIN 17 102	StE 255 to StE 355 WStE 255 to WStE 355 TStE 255 TO TStE 355
Boiler plates	DIN 17 155	HI, HII, 17 Mn 4, 19Mn5*
Shipbuilding steels		A, B, D, E
casting steels		GS-38, GS-45, GS-52



* Depending on plate thickness, preheat 150-300°C
 Delivery: Copper coating & wound wire - reel on:
 weight :15kg.
 diameter : 0.8-2 mm



AMA 40-19M

Standards: DIN 8559 SG 3
 Material-No. 1.5130
 EN 440 G4 Si1

Application/ Properties: Low alloy wire electrode for MAG- Welding of general structural steels and pipe steels using CO₂- or mixed shielding gas, e.g. Ar with 5-25% Co₂.

Analysis of Wire electrode% (Typical value):

C	Si	Mn	P	S
0.06-0.13	0.8-1.2	>1.6-1.9	≤0.025	≤0.025

Mechanical properties of all-weld metal using CO₂ shielding gas (single value are typical values) :

C	Si	Mn	P	S
0.05-0.1	0.6-0.9	1-1.5	≤0.025	≤0.025

Mechanical properties of all-weld metal using CO₂ shielding gas (single value are typical values) :

Yield Strength (N/mm ²)	Tensile Strength (N/mm ²)	Elongation A5 (%)	Impact energy Joule ISO - V 25 °C
>420	500-640	>22	>80

Material:

Unalloyed Structural steels	DIN 17 100	St 33, St 37-2 to St 52-3 St 50*, ST 60*
Pipe steels	DIN 1626/1629	St 37.0 to St 52.0
	DIN 1628/1630	St 37.4 to St 52.4
	DIN 17175	St 35.8 to St 45.8
	DIN 17172	StE 210.7 to StE 360.7
Fine grain structural steels	DIN 17 102	StE 255 to StE 355 WStE 255 to WStE 355 TStE 255 TO TStE 355
Boiler plates	DIN 17 155	HI, HII, 17 Mn 4, 19Mn5*
Shipbuilding steels		A, B, D, E
casting steels		GS-38, GS-45, GS-52

* Depending on plate thickness, preheat 150-300C
 Delivery: Copper coating & wound wire - reel on:

weight :15kg.
 diameter : 0.8-2 mm

