

# COPPER COATED MILD STEEL (MIG/MAG) WIRE



Gas metal arc welding (GMAW), sometimes referred to by its subtypes metal inert gas (MIG) welding or metal active gas (MAG) welding, is a semi-automatic or automatic arc welding process in which a continuous and consumable wire electrode and a shielding gas are fed through a welding gun. A constant voltage, direct current power source is most commonly used with GMAW, but constant current systems, as well as alternating current, can be used. There are four primary methods of metal transfer in GMAW, called globular, short-circuiting, spray, and pulsed-spray, each of which has distinct properties and corresponding advantages and limitations.

## RASI®- CO2

COPPER COATED MILD STEEL WIRE/ MIG WELDING WIRE

### CLASSIFICATIONS

IS. : 6419-71    Grade S-4  
AWS - A 5.18 ER 70S-6

### CHARACTERISTICS

RASI CO2 is a double deoxidized copper coated Mn-Si wire for GMAW using CO2 or 80% Ar, 20% CO2 mixtures for shielding of Weld Metal. The Weld Metal is of Radiography Quality.

### APPLICATIONS

RASI CO2 is all position welding wire and is used for:

- \* Welding of all sheet metal and structural steels
- \* Carbon & Low Alloy Steels
- \* Pressure Vessels etc.

### CHEMICAL COMPOSITION OF WIRE

ELEMENT	C	Mn	Si	S	P	Cu
% (MAX)	0.06-0.15	1.40-1.85	0.80-1.15	0.035	0.025	0.5

### MECHANICAL PROPERTIES OF ALL-WELD METAL WITH CO2 GAS SHEILDING

UTS (N/mm <sup>2</sup> )	Ys (N/mm <sup>2</sup> )	Elongation %	CVN - Impact
>480	>400	>22	At 20° / -30° c 100/40J

NOTE : Single values shown above are maximum

### CURRENT CONDITIONS: DC [+] ONLY

SIZE	0.8mm	1.0mm	1.2mm	1.6mm
Current (Amps)	50-180	80-200	120-260	150-350

PACKING	SIZE (in mm)	WEIGHT
Spools (layer winding)	0.80 1.00 1.20 1.60	12.50/15 kg Net
Spools (Random winding)	0.80 1.00 1.20	12.5 kg Net

PRECAUTIONS: Use short arc during welding. Store the wire in dry conditions. Avoid moisture.