



MILD STEEL HIGH EFFICIENCY ELECTRODES

DEEPWELD

CHARACTERISTICS :

A heavy coated, iron powder, deep penetration electrode for butt & fillet welds. Steels up to 14 mm thickness can be welded without edge preparation of bevelling. To achieve production targets electrodes can be used at higher current and faster speed.

Deposition efficiency approx. 103%. Can be used only in flat and horizontal position. The deposited weldmetal is of Radiographic quality.

APPLICATIONS:

Welding of Heavy structures, Bridges, Tanks, Shipdeck plates by deep penetration technique thus eliminating beveling and refilling of the groove. Penetration beyond the root for depositing fillet weld.

TYPICAL WELDMETAL COMPOSITION :

Element	Percent
C	0.06-0.10
Mn	0.45-0.75
Si	0.45-0.65
P	0.03 Max
S	0.03 Max

TYPICAL MECHANICAL PROPERTIES OF ALL WELD METAL :

Ultimate Tensile Strength Kg/mm2	Yield Strength Kg/mm2	Elongation % (L=5d)	CVN Impact Strength at 0 °C. Kgm
46-55	37-46	26-28	7-9

CLASSIFICATION :

AWS A5.1	:	E 6027
DIN 1913	:	E 4152 AR 11 105
BS 639	:	E 4152 AR

CURRENT RANGE & PACKING DATA :

Size MM DxL	Current Range (Amps) AC or DC (-)	Pieces per Packet	Pieces per Carton
5.00x350	250-300	40	160
4.00x350	180-250	65	260
3.15x350	150-180	105	420



SUPREMO-7014

CHARACTERISTICS :

A heavy coated rutile based iron powder electrode. Deposition efficiency is above 110%. The electrode is suitable for all positions including vertical down. Excellent for contact welding. The weld metal is extremely ductile and is of radiographic quality. Also suitable for low alloy medium tensile steels.

APPLICATIONS:

Highly stressed structures, High pressure vessels, Boilers, Bridges, Machine parts, Bogies and under frames of Railway wagons, Cranes, Low alloy steels, Steel castings etc.

TYPICAL WELDMETAL COMPOSITION :

Element	Percent
C	0.07-0.10
Mn	0.40-0.65
Si	0.15-0.40
P	0.03 Max
S	0.03 Max

TYPICAL MECHANICAL PROPERTIES OF ALL WELD METAL :

Ultimate Tensile Strength Kg/mm2	Yield Strength Kg/mm2	Elongation % (L=5d)	CVN Impact Strength at 0 °C. Kgm
51-61	41-51	22-26	6-10

CLASSIFICATION :

AWS A5.1	:	E 7014
DIN 1913	:	E 5122 RR 11 110
BS 639	:	E 5122 RR

CURRENT RANGE & PACKING DATA :

Size MM DxL	Current Range (Amps) AC or DC (-)	Pieces per Packet	Pieces per Carton
6.30x450	260-300	30	120
5.00x450	200-250	45	180
4.00x450	140-200	75	300
3.15x450	100-140	110	440





MILD STEEL HIGH EFFICIENCY ELECTRODES

SUPREMO-7024 (140)

CHARACTERISTICS :

A super heavy coated, rutile based, iron powder electrode suitable for butt and fillet down hand and horizontal welding, specially suitable for high current and high speed uses resulting in better output/time ratio. The deposition efficiency of electrode is 140% approx. It is a contact electrode that produces very smooth welds with least spattering tendency. It gives radiographic quality weld metal deposition.

APPLICATIONS:

Heavy structures like Cranes, Bridges & Girders, Earth moving equipment, Heavy machine parts, Fillet welding in mild steel, Heavy deck plates etc.

TYPICAL WELDMETAL COMPOSITION :

Element	Percent
C	0.07-0.10
Mn	0.5-0.8
Si	0.2-0.4
P	0.03 Max
S	0.03 Max

TYPICAL MECHANICAL PROPERTIES OF ALL WELD METAL :

Ultimate Tensile Strength Kg/mm ²	Yield Strength Kg/mm ²	Elongation % (L=5d)	CVN Impact Strength at 0 °C. Kgm
50-60	40-50	24-28	6-10

CLASSIFICATION :

AWS A5.1	:	E 7024
DIN 1913	:	E 5132 RR 11 140
BS 639	:	E 5132 RR

CURRENT RANGE & PACKING DATA :

Size MM DxL	Current Range (Amps) AC or DC (-)	Pieces per Packet	Pieces per Carton
6.30x450	300-360	15	60
5.00x450	250-300	20	80
4.00x450	200-250	30	120
3.15x450	150-170	45	180



SUPREMO-7024 (200)

CHARACTERISTICS :

A super heavy coated, rutile based, iron powder electrode. This electrode is quite economical because of high deposition efficiency i.e 200% approx. It is suitable for high speed welding of butt, fillet welds in horizontal and downhand welding with radiographic quality welds.

APPLICATIONS:

Heavy structures like Cranes, Bridges & Girders, Earth moving equipment, Heavy machine parts, Fillet welding in mild steel, Heavy deck plates etc.

TYPICAL WELDMETAL COMPOSITION :

Element	Percent
C	0.07-0.10
Mn	0.60-0.8
Si	0.3-0.5
P	0.03 Max
S	0.03 Max

TYPICAL MECHANICAL PROPERTIES OF ALL WELD METAL :

Ultimate Tensile Strength Kg/mm ²	Yield Strength Kg/mm ²	Elongation % (L=5d)	CVN Impact Strength at 0 °C. Kgm
50-57	41-48	22-29	6-10

CLASSIFICATION :

AWS A5.1	:	E 7024
DIN 1913	:	E 5132 RR 11 210
BS 639	:	E 5132 RR

CURRENT RANGE & PACKING DATA :

Size MM DxL	Current Range (Amps) AC or DC (-)	Pieces per Packet	Pieces per Carton
5.00x450	250-320	20	80
4.00x450	200-250	30	120
3.15x450	150-180	45	180

