



**MILD STEEL GENERAL PURPOSE STICK ELECTRODES**

BRAND NAME	CLASSIFICATIONS	APPROVAL	REDRYING	POLARITY	WELDING	PRODUCT DESCRIPTION POSITION
SUPERBOND	AWS A/SFA 5.1 E6013 IS 814 ER4212X	ABS, DNV, LRS TOYO, BV, IRS	NR*	AC OR DC(+)	F/H/V-DOWN/ V-up/OH	For welding of STRUCTURAL steels. Deposits smooth & shiny beads with fine ripples.
SUPERBOND-S	AWS A/SFA 5.1 E6013 IS 814 ER4212X BS 639 E4333R22 DIN 1913 E4333R322	ABS, DNV, LRS TOYO, BV, IRS	100-110°C FOR 1/2 Hr.	AC or DC(+)	F/H/V-DOWN/ V-up/OH	For welding of STRUCTURAL steels, where BEAD FINISH is required. Best suited for VERTICAL UPWARD and OVERHEAD positions.
SUPERBOND-SS	AWS A/SFA 5.1 E6013 IS 814 ERR4222XE BS 639 E4322RR21 DIN 1913 4322RR622	ABS, DNV, LRS TOYO, BV, IRS	100-110°C FOR 1/2 Hr.	AC or DC(+)	F/H	For welding of STRUCTURAL steels, where HIGH WELDING SPEED is desirable. Best suited for VERTICAL UPWARD and OVERHEAD positions.

Notes: Weld metal shall be of radiographic quality.

**MILD STEEL STICK ELECTRODES (SPECIAL)**

BRAND NAME	CLASSIFICATIONS	APPROVAL	REDRYING	POLARITY	WELDING	PRODUCT DESCRIPTION POSITION
SUPABASE*	AWS A/SFA 5.1 E7018 IS 814 ER4212X DIN 1913 E5144B1026	ABS, BV, DNV, IRS, LRS GL, NPCIL, IBR, TOYO RDSO, BIS	250°C FOR 1/2 Hr	AC or DC(+)	F/H/V-DOWN/ V-up/OH	For welding of Mild steel, Medium Carbon steel heavy joints under restraints and subject to dynamic loading. Deposition efficiency 115%
SUPABASE-X X PLUS*	AWS A/SFA 5.1 E7018 IS 814 ER4212X DIN 1913 E5144B1026	ABS, BV, DNV, IRS, LRS GL, NPCIL, IBR, TOYO RDSO, BIS	250°C FOR 1/2 Hr	AC or DC(+)	F/H/V-DOWN/ V-up/OH	For welding of Mild steel, Medium Carbon steel heavy joints under restraints and subject to dynamic loading. Best suited for 5G & 6G positions. Deposition efficiency 115%.
SILOX-Fe	IS 814 ER4122 DIN 1913 E4400A525		NR*	AC or DC(-)	F/H/V-DOWN/ V-up/OH	For weld deposit of VERY LOW SILICON CONTENT and almost PURE IRON. Weld metal is made CORROSION RESISTANT by molten Zinc. Deposits smooth and shiny beads Recommended for welding and repairing of hot dip galvanising bath, resurfacing worn-out parts. Also used as sandwiched layer between CS and SS.
TOPSTAR 110	AWS A/SFA 5.1 E7014 IS 814 ERR5222XJ BS 639 E4322R11011 DIN 1913 E4322RR1115		150°C FOR 1 Hrs	AC or DC(-)	F/H/V-Down	For HIGH-PRODUCTIVITY during welding of STRUCTURAL STEEL. Best suited for VERTICAL & DOWN HAND positions. Deposition efficiency 110%.
TOPSTAR 140	AWS A/SFA 5.1 E7024 IS 814 ERR5224XK BS 639 E5122R14032 DIN 1913 ES122RR1135140		150°C FOR 1 Hrs	AC or DC(-)	F/H	For HIGH-PRODUCTIVITY during welding of STRUCTURAL STEEL. Best suited for DOWN HAND & HORIZONTAL positions. Deposition efficiency 140%.
TOPSTAR 210	AWS A/SFA 5.1 E7024 IS 814 ERR5242XL BS 639 E5122RR21032 DIN 1913 ES122RR1135140		150°C FOR 1 Hrs	AC or DC(-)	F/H	For VERY HIGH PRODUCTIVITY during welding of HEAVY STRUCTURES. Best suited for DOWN HAND & HORIZONTAL positions. Deposition efficiency 210%.
TOPSTAR DP	AWS A/SFA 5.1 E7024 IS 814 ERR5242XL BS 639 E5122RR21032 DIN 1913 ES122RR1135200		150°C FOR 1 Hrs	AC or DC(-)	F/H	For DEEP PENETRATION during welding butt and fillet joints. CONCENTRATED SPRAY TYPE ARC. AVOID BEVELLING of joint upto 7mm. Deposition efficiency 102%.
TENALLOY Z PLUS*	AWS A/SFA 5.1 E7018-1 IS 814 EB5629H3JX BS 639 E5156B11029(H) DIN 1913 E5155B1029	ABS, BV, DNV, GL, IRS, LRS, NPCIL IBR, TOYO, RDSO, BIS	At 300°C FOR 2 Hrs	AC or DC(+)	F/H/V-DOWN/ V-up/OH	For Heavy sections and restrained joints in LOW ALLOY STEELS. Excellent TOUGHNESS down to MINUS 50°C. Recommended for POSITIONAL PIPE WELDING. Deposition efficiency 110%.
TENALLOY R*	AWS A/SFA 5.1 E7018-G IS 814 EB5629H3JX BS 639 E5156B11029(H) DIN 1913 E5155B1029		At 300°C FOR 1 Hrs	AC or DC(+)	F/H/V-DOWN/ V-up/OH	For heavy sections and restrained joints in LOW ALLOY STEELS, containing Ni upto 1.0% SUB ZERO TEMP. applications. Deposition efficiency 110%.
TENALLOY R (SPECIAL)*	AWS A/SFA 5.1 E7018-1 IS 814 EB5629H3JX BS 639 E5156B11029(H) DIN 1913 E5155B1029	LRS, ABS, BV	At 300°C FOR 1 Hrs	AC or DC(+)	F/H/V-DOWN/ V-up/OH	For heavy sections and restrained joints in LOW ALLOY STEELS, containing Ni upto 1.0%. SUB ZERO TEMP. applications. Deposition efficiency 110%.