

# SMAW (STICK) WELDING ELECTRODES



Shielded metal arc welding (SMAW), also known as manual metal arc (MMA) welding, flux-shielded arc welding or informally as stick welding, is a manual arc welding process that uses a consumable electrode coated in flux to lay the weld. An electric current, in the form of either alternating current or direct current from a welding power supply is used to form an electric arc between the electrode and the metals to be joined. As the weld is laid, the flux coating of the electrode disintegrates, giving off vapors that serve as a shielding gas and providing a layer of slag, both of which protect the weld area from atmospheric contamination.

Because of the versatility of the process and the simplicity of its equipment and operation, shielded metal arc welding is one of the world's most popular welding processes. It dominates other welding processes in the maintenance and repair industry, and though flux-cored arc welding is growing in popularity, SMAW continues to be used extensively in the construction of steel structures and in industrial fabrication. The process is used primarily to weld iron and steels (including stainless steel) but aluminium, nickel and copper alloys can also be welded with this method.

**RASI ELECTRODES LIMITED** has a wide range of welding electrodes, catering to the vast fabrication industries. Specially formulated welder friendly welding electrodes for excellent welds with easy slag peel for less downtime on chipping and cleaning and increasing your productivity with considering the economical factor.

## RASI RANGE OF WELDING ELECTRODES FOR:

### GENERAL PURPOSE MILD STEEL ELECTRODES

**RASI** - E 6013 | E 6013 R | E 6013 RR | E 7018 | Gold-weld E 6013 | Ba-jaj E 6013

### LOW HYDROGEN / MILD STEEL SPECIAL ELECTRODES

**RASI** - E 7018 | E 7018 -1 | E 7018 -1 H4R | E 7024 | E 8016 - G

### LOW HYDROGEN LOW ALLOY - HIGH TENSILE ELECTRODE

**RASI** - E 7016 | E 7018 -1 | E 7018 - A1 | E 7018 - G | E 8018 - G | E 8018 - B2 | E 8018 - B3 | E 8018 - B6 | E 8018 - B8 | E 8018 - W2 | E 8018 - C1 | E 8018 - C2 | E 8018 - C3 | E 9018 - G | E 9018 - D1 | E 9018 - B3 | E 9018 - B9 | E 9018 - M | E 10018 - M | E 8016 | E 8016 - B2 | E 9016 - G | E 9016 - B3 | E 9016 - B9 | E 8013 - G | E 11018-M | E 11016-G

### STAINLESS STEEL & HEAT RESISTING STEEL

**RASI** - Silver-Arc - E 308L - 16 | E 308L - 15 | E 309L - 16 | E 309 - 16 | E 309LMo - 16 | E 347 - 16 | E 316 L - 16 | E 312 - 16 | E 310 - 16 | E 310 - 15 | E 410 - 16 | E 430 - 16

### HARD FACING WELDING ELECTRODE

**RASI** - HF - 250 R | HF 350 R | HF 450 R | HF 550 R | HF 650 R | HF 600 LH | HF MANG-13 | HF MANG-ALLOY | HF VPN 800 | HF TUNCARB | HF Cr 33

### CAST IRON ELECTRODE

**RASI** - Ci -NM | Ci - Fe Ni | Ci - Monel | Ci - Ni | E Ni Cu-B

### PIPE WELDING ELECTRODES

**RASI** E 6010 | E 6011 | E 7010 - G | E 7010 - P1 | E 8010 - G

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\*Ask for welding handbook for other grades