

LOW HEAT INPUT WELDING ELECTRODES

MAINTENANCE / REPAIR / RECLAMATION



Effective maintenance and repair are essential for efficient running of industries. welding, as a tool of maintenance and repair, plays a vitally important role in the functioning of all major industries. In general it may be said that practically any metal part which has broken or worn-out in service can be reclaimed by welding. In fact, one of the first uses of welding was to repair broken machinery and parts. what started out, as a process for making an emergency repair until a replacement could be obtained, has today become an economic necessity to conserve expensive materials and to reduce inventories.

RASI - ULTRA TECH A wide range of welding electrodes specially designed for low heat input welding. These electrodes are the result of extensive development, testing and analysis in our well-equipped modern laboratories. The advantages of welding, particularly for maintenance and repair applications, with low heat input ULTRATECH electrodes needs no emphasis. It is well known that the composition and metallurgical state of the base material affects the properties of the deposited weld metal since the first layer will always be diluted with base material. There is also risk of damage to the desirable structure in the heat-affected zone of the base material. It is in this context that the introduction of ULTRATECH low heat input electrodes can be fully appreciated.

YOU DERIVE THE FOLLOWING BENEFITS WHEN YOU USE ULTRATECH ELECTRODES:

- Reduced pick-up of carbon and other detrimental elements from the base material.
- Minimal effect on the surface of the base material adjacent to the fusion zone, known as heat-affected zone.
- Reduced propensity for grain coarsening in weld metal and heat affected zone, thereby resulting in better toughness of weld and heat affected zone.
- Reduced width of the heat-affected zone.
- Reduction in the cracking tendency of the highly brittle materials due to reduced 'thermal shock';
- Less distortion of the weldment.
- Lower consumption of electrodes, especially in hardfacing applications due to lower dilution with the parent material.

Through developments in the design of flux coating, it has been ensured that each ULTRATECH electrode performs at low welding currents, low arc voltage and short arc length. These factors are strictly controlled to ensure that you get the maximum advantage of low heat input welding with ULTRATECH electrode.

RANGE OF ULTRATECH WELDING ELECTRODES -

WELDING ALLOYS OF STEELS.

ULTRATECH - 13 | ULTRATECH - 14 | ULTRATECH - 15

WELDING ALLOYS FOR DISSIMILAR STEELS

ULTRATECH - 16 | ULTRATECH - 16S | ULTRATECH - 18 | ULTRATECH - 18T | ULTRATECH - 19 | ULTRATECH - 19H

WELDING ALLOYS FOR CAST IRON

ULTRATECH - 25 | ULTRATECH - 25F | ULTRATECH - 26 | ULTRATECH - 27 | ULTRATECH - 28

WELDING ALLOYS FOR STAINLESS STEEL

ULTRATECH - 33 | ULTRATECH - 33L | ULTRATECH - 33M | ULTRATECH - 34 | ULTRATECH - 35

WELDING ALLOYS FOR COPPER & NON FERROUS ALLOYS

ULTRATECH - 40 | ULTRATECH - 41

WELDING ALLOYS FOR NICKEL & NICKEL ALLOYS (INCONEL & HAST ALLOYS)

ULTRATECH - 52 | ULTRATECH - 53

WELDING ALLOYS FOR HARDSURFACING & WEAR RESISTANCE

ULTRATECH - 61LH | ULTRATECH - 62 | ULTRATECH - 63 Cr-Mn | ULTRATECH - 63 Ni-Mn | ULTRATECH - 64 | ULTRATECH - 65 | ULTRATECH - 66 | ULTRATECH - 68 | ULTRATECH - 69

ELECTRODES FOR CUTTING AND GOUGING

ULTRATECH - 70 | ULTRATECH - 71

*Please ask for Welding hand book for low heat input welding for details of each product.