

# RATNA 312

## A High Alloy "UNIVERSAL" Electrode for Joining Steels of Unknown Composition

**CLASSIFICATION** : AWS/SFA-5.4: E 312-16; IS 5206: E 29.9 R 26

**CHARACTERISTICS** : It is an electrodes gives 30/10 deposit, it has two phase structure with high nos. of ferrites in austenitic matrix. It is suitable for carbon steel, low alloy steel, dissimilar materials etc. electrode is recommended also for unknown steel, leaf springs and difficult-to-weld with higher strength.

**APPLICATION** :

- 1) It is ideally suitable for welding difficult-to-weld e.g. high hardenable tool, die & spring steel, 13% Mn steels, free cutting steels, high temperature steels..
- 2) Dissimilar joints between stainless steel and high carbon steels.
- 3) Surfacing to metal to metal wear areas, not working tools, furnace components etc.
- 4) Suitable rebuilding chemical agitator blades, shafts, rolling mill spindles, bucket lips.

**RE-DRY CONDITION** : Re-Dry the electrode at 250°C for 1 hrs. before use.

**ALL WELD CHEMICAL COMPOSITION %**

C	Mn	Si	S	P	Cr	Ni	Mo	Cu
0.15	0.50-2.50	1.0	0.03	0.04	28.0-32.0	8.0-10.5	0.75	0.75

(single value maximum)

**ALL WELD MECHANICAL PROPERTIES:**

UTS (N/mm <sup>2</sup> )	ELONGATION (%)	Condition
660 min	22 min	As Welded

**DIEMENSION, CURRENT CONDITION & PACKING DATA**

Size (mm) (Dia)	Size (inch) (Dia)	Current Condition (DC+/AC) Amps	Kg./pkt.	Kg./Case
2.40/2.50	3/32"	50-80	2	10
3.15/3.20	1/8"	75-100	2	10
4.00	5/32"	110-140	2	10
5.00	3/16"	150-180	2	10

Tailor made packing available on request.