GWELD
SEAL OF TRUST

GRIBINOX 175

IDENTIFICATION: GRIBINOX 175

CLASSIFICATION: AWS/SFA 5.4 E 630-15

CHARACTERISTICS:

A basic coated special electrode developed for welding high strength martensitic precipitation hardening steels. The deposited weld metal is of X-ray quality.

TYPICAL APPLICATION:

For welding high strength martens tic stainless steels, precipitation hardened by additions of copper.

Application include:-

- PUMP SHAFTS
- IMPELLERS
- HYDRAULIC EQUIPMENT
- used in :-
- OIL & GAS INDUSTRIES
- PETRO-CHEMICAL PLANTS
- MARINE & NUCLEAR ENGINEERING.

WELD METAL ANALYSIS (RANGE) %

C	Mn	Si	S	Mo
0.05 max	0.35-0.70	0.7 max	0.03 max	0.3 max
P	**Cr**	**Ni**	**Cu**	**Nb**
0.035 max	16 16.75	4.5 5.5	3.25	0.15-0.3

MECHANICAL PROPERTIES (TYPICAL):

After PWHT, 1035±10°C for 1 hr, and then

Precipitate hardening at 610-630° C for 4 hrs

Followed by air cooling to ambient temperature

UTS MPa	ELN (%) (L=5D)
950	12

MATERIALS TO BE WELDED:

Precipitation hardening steel such as:

- ASTM type 630
- 17-4PH(Armco Steel)
- Custom 630 (Carpenter Technology)
- ASTM A747 CB-7Cu-1, CB-7Cu-2 (cast alloys)

MICROSTRUCTURE:

In the PWHT condition the microstructure consists of precipitation hardened tempered martensite with some retained austenite.

REDRYING: 300oC /2 hrs. max 5 cycles, 10 hr. total.

RECOMMENDED CURRENT AND PACKING DATA:

SIZE (mm)	LENGTH (mm)	AMPS DC (+)	PACKING/BOX (KG)	WEIGHT/1000 Pcs (KG)
2.5	350	70-110	2X5=10	20.5
3.15	350	80-140	2X5=10	32
4	350	100-180	2X5=10	51