NSB-17.4 Cu R	FOR WELDING MARTENSITIC PRECIPITATION HARDENING STAINLESS STEELS	DATA SHEET NO. 80

SPECIFICATION	AWS A5.4
CLASSIFICATION	E630-26
PRODUCT DESCRIPTION	A special rutile based flux with a positive ratio of chemically basic minerals to acid minerals that contains all the major alloying elements is extruded onto a high purity ferritic wire. The use of balanced silicates ensures both strength of coating and resistance to moisture absorption.
WELDING FEATURES OF THE ELECTRODE	The arc stability is excellent on both AC and DC+ as is the electrodes ability for initial arc strike and re-striking. Spatter is minimal and the slag is readily detachable leaving smooth evenly rippled seams of pleasing appearance. Metal recovery is some 130% with respect to weight of the core wire. Pre-heat and interpass temperature should be 200 ºC max.
APPLICATIONS AND MATERIALS TO BE WELDED	Applications occur in the gas, oil, marine and petrochemical industries for shafts, pumps, etc when the following materials are involved. ASTM A564 Grade 630 UNS S 17400 Custom 630 (Carpenter) A747 CB 7Cu (cast) Proprietary 17-4PH (Armco Steel)

UNCONTROLLED

WELD METAL ANALYSIS COMPOSITION % BY Wt.

	C	Mn	Si	S	P	Cr	Ni	Mo	Cu	Nb +Ta	Fe
MIN	-	0.25	-	-	-	16	4.5	-	3.25	0.15	
MAX	0.05	0.75	0.75	0.03	0.04	16.75	5.0	0.75	4.0	0.30	
TYPICAL	0.03	0.6	0.3	0.02	0.02	16.5	4.8	0.2	3.5	0.2	Bal.

WELD METAL PROPERTIES (ALL WELD METAL)

PROPERTY	UNITS	MIN.	TYPICAL	PWHT	
Tensile strength	N/mm^2	930	1035	750ºC/2 HOURS A/C 25ºC THEN 550ºC 2 HOURS –A/C	PROPRIETORY PWHT PREFERENCE IS OVER-AGED AS STATES
0.2% Proof stress	N/mm^2	-	635		
Elongation on 4d	%	7	10		
Reduction of Area (RA)	%	-	24		

WELDING AMPERAGE AC or DC+

Ø (mm)	2.0	2.6	3.2	4.0	5.0
MIN	35	65	80	120	160
MAX	80	100	125	170	210

OTHER DATA	Electrodes that have become damp should be re-dried at 150ºC for 30 mins.
RELATED PRODUCTS	Please contact our Technical Department for detail.