410

MARTENSITIC TYPE WELDING ROD FOR STAINLESS STEEL TYPE AISI-410. IT WITHSTANDS OXIDATION AND CORROSION AT TEMPERATURES UP TO 750°C

CLASSIFICATION A.W.S: E-410-16

APPLICATIONS: This welding rod is used to recondition worn turbine parts, valve seats, motor shafts, to correct casting defects and in many other industrial applications.

CHARACTERISTICS AND PROCEDURE: 410 is a martensitic type stainless steel welding rod (11-14 % Chromium). Together with its good mechanical properties, it has good corrosion resistance. Among the traits of this kind of steel is its dramatic capacity to harden once the weld seam cools down. That is why heating is necessary to avert a temperature difference as much as possible between the base metal and the weld seam which would lead to unwanted hardening. Heat treatment consists on postweld heating of the part between 845 and 900° C. This temperature should be maintained for two hours. Later on, the temperature should be lowered by 40° C per hour till it reaches 600° C. Finally, the part is taken out of the oven and it is allowed to cool down in the air, inside the workshop. Clean the base metal to remove dirt, scales, grease and rust. Use the lowest possible AMP. Keep the arc short and tilt the welding rod slightly in the same direction as the weld. Let the slag stand on the filler metal till it all cools down. Avoid overheating the base metal. Remove the slag between one pass and the next. .

TENSILE RESISTANCE:	5,975 KG./CM2 (85,000 PSI) con tratamiento térmico.
BRINELL HARDNESS:	210 BHN
ELONGATION:	30-35%
POSITIONS:	ALL
CURENT:	AC OR DC REVERSE POLARITY

FILLER METAL CHEMICAL ANALYSIS %					SIZES	AMPERAGE
C	**Mn**	**Si**	**Cr**	**Ni**		
0.08	0.80	1.0	12.0	0.40	3.25 mm - 1/8"	80-100
					4.0 mm - 5/32"	110-130
					5.0 mm - 3/16"	140-170