## 7018-1

## WELDING ROD WITH LOW HYDROGEN CONTENT AND POWDER IRON COVERING TO WELD LOW, MEDIUM AND HIGH CARBON STEEL. ITS PROPERTIES ALLOW IT TO WITHSTAND LOW TEMPERATURES.

CLASSIFICATION A.W.S: E-7018-1

## IDENTIFICATION: GREY COATING

**APPLICATIONS**: 7018 is a welding rod with excellent impact resistance-- 70 foot-lb (94.5 joules) at -46°C, which makes it ideal for shipbuilding and shiprepair. It can be used wherever high impact resistance at low temperatures is required. The resulting welds are optimal and successfully pass all X-ray tests. Since the filler metal has high ductility and resistance, 7018-1 can be used with hard to weld materials. It is ideal to weld agricultural equipment and construction equipment, cranes, bridges and high pressure pipes, hydraulic gates and store tanks, structures, railway tanker cars and railway cars, railroad equipment, automotive equipment, electric equipment, power station equipment and shipyard equipment, etc.

**CHARACTERISTICAS AND PROCEDURE:** This is a welding rod with a low hydrogen and powder iron content covering. It is a high performance electrode (120%) which can be used to weld with any current and in all positions. The arc is extremely stable and there is very little splatter. For best results, clean the joint area to remove dirt, scales, grease and rust. When welding with thicknesses over 3 mm (1/8"), you should chamfer the edges at 70°. When using DC, connect the welding rod holder to the positive pole (reverse polarity). Keep the arc as short as possible. Once the slag starts to cool down, it peels off. Always use dry electrodes; in case they were wet, they should be dried for two hours between 375° to 400°c.

TENSILE RESISTANCE:	4,921 - 5,624 KG./CM2 (70,000 A 80,000 PSI)			
ELASTIC LIMIT:	4,358 - 4,850 KG./CM2 (62,000 A 69,000 PSI)			
ELONGATION IN 5 cm:	32%			
IMPACT TEST:	9.67 KG. X M			
CHARPY V:	A (-46°C ) 70 pie-lb.			
BRINELL HARDNESS:	180 BHN			
POSITIONS:	ALL			
CURRENT:	AC or DC REVERSE POLARITY			

FILLER METAL CHEMICAL ANALYSIS %				SIZES	AMPERAGE	
С	Mn	Р	S	Si	2.25 mm - 3/32"	60-85
0.09	1.35	0.03	0.03	0.6	3.25 mm - 1/8"	100-130
					4.0 mm - 5/32"	140-180
					5.0 mm - 3/16"	200-250