# 17.4Cu.R

Used for welding very high strength martensitic stainless steels, precipitation hardened by additions of copper. Strength can be up to three times that of standard 300 series austenitic stainless steels. The FV520/450 type alloys have corrosion resistance comparable to 304 stainless steel. The 630/17-4PH types, with no Mo and higher carbon, do not have such good resistance to intergranular and pitting corrosion as the FV520/450 types. Applications include pump shafts, impellers, hydraulic equipment used in oil and gas industries, petrochemical, marine and nuclear engineering.

## **CLASSIFICATIONS**

There are no national specifications for this electrode but it is similar to AWS A5.4 E630-26.

#### **CHEMICAL ANALYSIS**

% Carbon	0.020	
% Manganese	0.700	
% Silicon	0.250	
% Sulphur	0.010	
% Phosphorous	0.010	

% Chromium	15.00	
% Nickel	4.000	
% Molybdenum	0.200	
% Copper	2.000	

### TYPICAL MECHANICAL PROPERTIES ALL WELD METAL

Tensile Strength	1035 MPa			
0.2% Proof Stress	635 MPa			
Elongation on 4d	10%			
<b>Reduction Area</b>	24J			
* 750% / 2				

\* 750°C / 2 hours, air cool to 15°C, then 550°C / 2 hours, air cool.

# **PACKING DATA**

#### (Amps DC<sup>+</sup> or AC (OCV 70V Min.)

Diameter (mm)	Current (A)	Item Number	Canned Pack Mass (Kg)
2.50	70 – 110	078-086	4.1
3.20	80 – 140	078-088	5
4.00	100 – 180	078-090	6.2

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