



B69 (DC+)

LOW ALLOY STEEL

DESCRIPTION

Low hydrogen basic coated electrode with Cr and Mo for welding steels of similar chemical composition. Deposit resisting to temperature and creep up to 1112°F (600°C). Highly resistant to hot gas and overheated steam.

CLASSIFICATION

AWS A5.5 : E8018-B6 EN 1599 : E CrMo5 B 4 2 H5 ISO 3580-A : E CrMo5 B 4 2 H5

TYPICAL APPLICATIONS

For heat exchangers, tubes, steam boilers, overheaters...

BASE MATERIALS

Tubes & steels for boiler and pressure vessels:

ASTM	A387 Gr 5Cl1 et 2 – A199 Gr T5 – A182 Gr F5 – A213 G T5 A335 Gr P5 – A336 Gr F5 – A369 GrF5 – A217 Gr C5
Material N°	1.7332 – 1.7362 – 1.7363
EN	17 CrMo 3 5 – 12 CrMo 19 5 – G X12 CrMo5

PROCEDURE

Redrying: 1h at 572°F (300°C), if necessary. Preheating of joints to weld at 572°F (300°C). Interpass temperature: 482-662°F (250-350°C). Annealing after welding is advised at 1346°F (730°C) /2h, then slow cooling (maxi 131°F (55°C) /h, until 1076°F (580°C), followed by cooling at calm air).

MECHANICAL PROPERTIES, after heat treatment at 1346°F (730°C) /2h

Tensile strength: > 85 572 psi (> 590 MPa)
 Yield strength: > 66 717 psi (> 460 MPa)
 Elongation: > 20 %
 Impact (Charpy V): > 70 J at +20°C

TYPICAL WELD METAL COMPOSITION (%)

C	Mn	Si	Cr	Mo	P	S
< 0.10	0.8	0.4	5.0	0.5	< 0.025	< 0.025

WELDING PARAMETERS

Diameter: 4.0 mm (5/32") 3.2 mm (1/8") 2.5 mm (3/32")
 Amperage: 150 A 115 A 80 A

WELDING POSITIONS



1G/PA 2F/PB 2G/PC 3G/PF 4G/PE

Rev.: 15_03

Specialized welding alloys and technology. For technical assistance or for ordering:



Membre de / Member of SELECTARC GROUP - FRANCE

info@fsh-welding.ca
 www.fsh-welding.ca

2204, 46^e avenue
 Lachine (Mtl), Québec
 Canada H8T 2P3

Tél : 514.631.7670
 1.800.361.9097
 Fax : 514.636.3339