

# BÖHLER AWS E70C-6M

## METAL CORED WIRE FOR GENERAL STEEL CONSTRUCTION

### Clean manufacturing process

With this metal-cored wire for general steel construction by Böhler Welding, fabricators have an ideal welding consumable for an extremely clean manufacturing process, permitting the welding of multi passes without the need of inter-run cleaning. The BÖHLER AWS E70C-6M is characterized by minimum oxide residue, minimal spatter formation and low hydrogen content. This filler material is ideal for horizontal and flat fillet welds and allows fabricators a time efficient welding process with remarkably less weld cleaning.

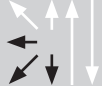
Product features	Product benefits	User benefits
» <b>Designed chemistry</b>	<ul style="list-style-type: none"> <li>» Can be use under mixed M21 (Ar + 15-25% CO<sub>2</sub>)</li> <li>» For semi-automatic and fully automatic joint welding of unalloyed and fine-grained constructional steels with service temperatures to -20°C</li> <li>» Good penetration</li> <li>» High resistance to porosity</li> <li>» Good wetting behaviour</li> <li>» Can be used for steel grades up to yield strength of 460 MPa (67 ksi)</li> </ul>	<ul style="list-style-type: none"> <li>» Flexibility in production</li> <li>» Ideal for horizontal and flat fillet welds</li> </ul>
» <b>Extremely clean manufacturing process</b>	<ul style="list-style-type: none"> <li>» Steady spray arc-like droplet transfer with minimal spatter formation</li> <li>» Low hydrogen contents (≤ 5 ml/100 g deposit)</li> <li>» Minimum oxide residues</li> </ul>	<ul style="list-style-type: none"> <li>» Less post weld cleaning</li> <li>» Time saving process</li> <li>» Permits the welding of multi passes without the need for inter-run cleaning</li> </ul>



### Typical applications

- » General steel construction
- » Shipbuilding

# BÖHLER AWS E70C-6M

Classifications		Operating data		
EN ISO 17632-A	AWS A5.36	Welding positions	Polarity	Shielding gas
T 42 2 M M21 3 H5	E70T15-M21A2-CS1-H4		DC+	M21

Typical chemical composition, all weld metal, wt. %			
Shielding gas	C	Si	Mn
M21	0.04	0.70	1.60

Mechanical properties, all weld metal (single values typical)						
Shielding gas	Condition	Yield strength $R_{p0.2\%}$ MPa	Tensile strength $R_m$ MPa	Elongation A ( $L_0 = 5d_0$ ) %	CVN Impact toughness ISO-V KV J	
					+20 °C	-20 °C
M21	As welded	490 ( $\geq 420$ )	590 (500 – 640)	25 ( $\geq 20$ )	110	80 ( $\geq 47$ )

Steels to be welded	
EN	ASTM
Steels up to a yield strength of 460 MPa (67 ksi) S235JR-S355JR, S235JO-S355JO, S235J2-S355J2, S275N-S420N, S275M-S420M, P235GH-P355GH, P275NL1-P420NL1, P215NL, P265NL, P355N, P285NH-P420NH, P195TR1-P265TR1, P195TR2-P265TR2, P195GH-P265GH, L245NB-L415NB, GE200-GE240, shipbuilding steels: A, B, D, E, A 32-E 36	A 106 Gr. A, B, C; A 181 Gr. 60, 70; A 283 Gr. A, C; A 285 Gr. A, B, C; A 350 Gr. LF1; A 414 Gr. A, B, C, D, E, F, G; A 501 Gr. B; A 513 Gr. 1018; A 516 Gr. 55, 60, 65, 70; A 573 Gr. 58, 65, 70; A 588 Gr. A, B; A 633 Gr. C, E; A 662 Gr. B; A 711 Gr. 1013; A 841 Gr. A; API 5 L Gr. B, X42, X52, X56, X60, X65

Approvals
TÜV, DB, DNV-GL, CE

Overview diameters and packaging					
	Wire basket BS300			Black plastic spool S300	
	Weight:	16 kg		Weight:	15 kg
	Precision layer wound			Precision layer wound	
	Dimensions			Dimensions	
	ø external	300 mm		ø external	300 mm
	ø Pinhole	52 mm		ø Pinhole	52 mm
	Width	100 mm		Width	110 mm
Diameter	SAP code	Diameter	SAP code		
1.2 mm	39345	1.2 mm	39348		