

## FOXcore 70 MC

### Metal cored wire

**Metal-cored all positional high efficiency wire for shipbuilding and general construction applications for welding of unalloyed steels using Argon-CO<sub>2</sub> shielding gas.**

FOXcore 70 MC from Böhler Welding offers an ideal wire for extremely clean manufacturing processes, enables multi pass welding without the need of inter-run cleaning.

The FOXcore 70 MC 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 ensures a time efficient welding process with remarkably less weld cleaning.

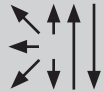
Product features	Product benefits	User benefits
» <b>Designed chemistry</b>	<ul style="list-style-type: none"> <li>» Can be used under mixed M21-M20 (Ar + 5-25%CO<sub>2</sub>)</li> <li>» For semi-automatic and fully automatic joint welding of unalloyed and fine-grained constructional steels with service temperatures to -40°C</li> <li>» Good penetration</li> <li>» High resistance to porosity</li> <li>» Good wetting behavior</li> <li>» Can be used for steel grades up to yield strength of 460 MPa</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 (<math>\leq 5</math> 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

# FOXcore 70 MC

Classifications			Operating data		
EN ISO 17632-A	EN ISO 17632-B	AWS A5.18/SFA-5.18	Welding positions	Polarity	Shielding gas
T 46 4 M M21 1 H5 T 46 4 M M20 1 H5	T 49 T15-1M21A-UH5 T 49 T15-1M20A-UH5	E70C-6M H4		DC+	M21-M20

Typical chemical composition, all weld metal, wt. %			
Shielding gas	C	Si	Mn
M21	0.07	0.7	1.5

Mechanical properties, all weld metal (single values typical)						
Shielding gas	Condition	Yield strength $R_{p0.2}$ MPa	Tensile strength $R_m$ MPa	Elongation $A_5$ %	CVN Impact toughness ISO-V KV J	
					-30 °C	-46 °C
M21-M20	As welded	490 (≥ 460)	580 (550 – 660)	25 (≥ 22)	70 (≥ 47)	55 (≥ 27)

Steels to be welded		
EN	Shipbuilding Steel	ASTM
S235JR-S355JR, S235JO-S355JO, S450JO, S235J2-S355J2, S275N-S460N, S275M-S460M, P235GH-P355GH, P275NL1-P460NL1, P215NL, P265NL, P355N, P285NH-P460NH, P195TR1-P265TR1, P195TR2-P265TR2, P195GH-P265GH, L245NB-L415NB, L450QB, L245MB-L450MB, GE200-GE240	A, B, D, E, AH32 - EH40	ASTM A 106 Gr. A, B, C; A 181 Gr. 60, 70; A 283 Gr. A, C; A 285 Gr. A, B, C; 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

Approvals
TÜV, DB, ABS, LR, DNV GL, BV, CWB, CE

Overview spool types					
Plastic spool S200			Wire basket spool BS300		
	Precision layer wound	Available spool weight: 5 kg		Precision layer wound	Available spool weight: 16 kg
	Dimensions: Ø external 200 mm Ø internal 52 mm Width 47 mm	Available diameters: 1.2 mm		Dimensions: Ø external 300 mm Ø internal 52 mm Width 100 mm	Available diameters: 1.2 mm

Welding equipment	
<p>For the best performance with our FOXcore flux-cored wires, we recommend our TERRA NX welding equipment, with specific dynamic characteristics that emphasize the welding behavior of our cored wires.</p> <p>TERRA NX 320 SMC / TERRA NX 320 MSE / TERRA NX 400 MSE / TERRA NX 500 MSE</p>	