

Classifications

AWS A5.20 / SFA-A5.20
EN ISO 17632-A

E71T-9C-J

T49 4 T1-1 C1 A-N1-H5

Characteristics and typical fields of application

BÖHLER Q 72 RC (C1) is a rutile flux cored wire and designed for all-position welding with excellent CVN impact properties in as welded condition at - 40°C for pure CO₂ shielding gas.

Excellent welding characteristics in all positions. Very good mechanical properties, easy slag removability, low spatter level, smooth and good weld beads with X-ray-quality.

Applicable in out-of-position welding, with higher productivity and less time for post-weld cleaning. Applicable for Single pass & multi passes weld.

Suitable for Butt, fillet welding of 490N/mm² class high strength steel and low temperature steel of structure such as ships, bridges, buildings and storage tanks.

Base materials

S 235JR, S275JR, S355JR, S420, P235 GH, P265GH,

API 5L X42-X 60, AH 32, DH 36, EH-36, EQ 43, A 40-F40, SA 516- Gr60, Gr65 ...etc

Shipbuilding steel: A, B, D, E, AH 27S-EH 36

ASTM 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;

Typical analysis

	Gas	C	Si	Mn
wt.-%	C1	0.04	0.5	1.3

Mechanical properties of all-weld metal - typical values (min. values)

Condition	Yield strength R _e	Tensile strength R _m	Elongation A (L ₀ =5d ₀)	Impact energy ISO-V KV J	
	MPa	MPa	%	-20°C	-40°C
u	540 (≥ 400)	600 (490-640)	28 (≥ 22)	110	90 (≥ 27)

u untreated, as welded – shielding gas C1

Operating data

	Polarity	DC+	Dimension mm
	Shielding gas (EN ISO 14175)	C1	1.2
			1.6

Welding with standard GMAW-facilities possible

Approvals

DNV