TEST REPORT – 2.2

Document-no. : BOAX-B 40-600 **Edition : 05/2022**

A) Material tests

B) Inspection tests

Valve Description: **BOAX-B Butterfly valve**
Type: **BOAX-B PN 10/16 DN 40 to 600**

Material

Body	3g	DN 40 to 600	EN-GJS-400-15 (5.3106) EN 1563
Shaft	6k	DN 40 to 600	1.4028 EN10088 Stainless steel (13% Cr)
Disc	6	DN 40 to 600	1.4408 EN 10213 / ASTM A351 gr.CF8M
	3g	DN 40 to 600	EN-GJS-400-15 (5.3106) EN 1563 + paint
Liner	XC	EPDM	
	K	Nitril	
	XU	EPDM	

On the basis of continuous shop recordings we certify the results are based on EN 10204 as mentioned below:
Mean values of the statistic evaluation of test records of the material suppliers.

A) Material tests

Material values of statistic evaluation of tests records of material suppliers.

Chemical analysis composition % - Mechanical test at ambient temperature

Body:	C%	Si%	Mn%	P%	S%
EN-GJS-400-15	-	-	-	-	-
EN-GJS-400-15 Average	3,70	2.60	0,29	0,022	0,013

Body:	Tensile Strength Rm (N/mm2)	0,2% - Proportional Elongation Rp0,2(N/mm^2)	Percentage Elongation after FractureA5 (%)	Hardness Brinell HB
EN-GJS-400-15	Min 400	Min 250	Min 15	-
EN-GJS-400-15 Average	457.5	313	20.3	163

Disc:	C%	Si%	Mn%	P%	S%	Cr%	Ni%	Cu%	Mo%
EN-GJS-400-15	-	-	-	-	-	-	-	-	-
EN-GJS-400-15 Average	3.65	2.54	0.265	0.038	0.014				
1.4408 / CF8M	0.07 max	1.50 max	1.50 max	0.040 max	0.030 max	18.00 to 20.00	9.00 to 12.00	0 max	2.00 to 2.50
1.4408 / CF8M Average	0.04	0.60	1.16	0.031	0.011	18.32	10.30	0	2.31

Disc:	Tensile Strength Rm (N/mm2)	0,2% - Proportional Elongation Rp0,2(N/mm2)	Percentage Elongation after Fracture A5 (%)	Impact tests
EN-GJS-400-15	min 400	min 250	Min 15	-
EN-GJS-400-15 Average	446	290.6	19.97	
1.4408 / CF8M	485	min 205	min 30	min 60
1.4408 / CF8M Average	592.54	257.9	31.24	132

B) Inspection tests

Shell test EN 12266-1 P10
ISO 5208

Pressure (bar): 1,5 X PS
Test medium : Water

Seat leak test
EN 12266-1- P12 Leakage rate A
ISO 5208 Category A

Pressure (bar): 1,1 X PS
Test medium : Water

Sebastien CHEVALIER
KSB SAS LRC
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