

Test report

for annual approval 2012



ABS 5YQ690M	BV --	DNV VY69M	GL --	LRS 5Y69M	RS --	RINA ---
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Filler metal	OE-SD3 2NiCrMo / OP 121TT		
Test-No	Z12-14W1	Type of current/polarity	DC+
Size	3,2 mm	Base Material	P265 GH., 20 mm
Batch-No	91567	Technique	MULTI-RUN
Batch-No Flux	01746315	Interpass temperature	150 °C
Parameters	550 A, 32 V, 50 cm/min	Heat treatment	As welded <input checked="" type="checkbox"/> Buttered
		Type of specimen	All-weld metall
		Welding position	PA

Tensile test acc. EN 10 002-1

Type of specimen	Round tensile specimen longitudinal			
Yield point [ReH]	735	N/mm ²	754	N/mm ²
Proof stress [Rp0,2]				
Proof stress [Rp1,0]				
Tensile strength [Rm]	825	N/mm ²	845	N/mm ²
Elongation [A5]	18,0	%	17,8	%
Reduction of area [Z]				
Position of fracture				

Impact test acc. EN 10 045-1

	Values	Average
Test temperature	-60 °C	88 76 97
		87 J

Bend test

Last layer
Root pass

Chemical composition [%]

C	0,073	Cr	0,541
Mn	1,306	Ni	2,300
Si	0,183	Mo	0,503
P	0,013	Cu	0,089
S	0,007	V	0,002

Type of test piece and specimen are according to the test requirements of the classification societies.

Date: 17.10.2012 QSZ - Eschenfelder

The requirements for the approval are fulfilled.

Surveyor:



16.10.2012 10:48:18 Probe: OP121TT Z12-14W1 01746315 Q-555/12 HUBIG MP11.10-29 REV.8
Programm: NL-CRST Task: NL-CRST

Abf.	C	Si	Mn	P	S	Cr	Mo	Ni	V	W	Al	Cu	Nb	Ti
1>	0.073	0.186	1.304	0.013	0.006	0.544	0.506	2.309	0.002	0.004	0.021	0.089	!0.001	0.0034
2>	0.073	0.181	1.309	0.014	0.007	0.538	0.499	2.291	0.002	0.004	0.020	0.089	!0.001	0.0033
MW	0.073	0.183	1.306	0.013	0.007	0.541	0.503	2.300	0.002	0.004	0.021	0.089	!0.001	0.0033

	Sn	As	Co	B	Pb	Sb	Ca	Ce	Se	Ta	Te	Zr	Mg	Zn
1>	0.002	0.004	0.005	!0.0000	!0.001	0.003	0.0004	0.005	0.004	!0.002	0.003	!0.001	0.002	0.002
2>	0.002	0.004	0.005	!0.0000	!0.001	0.003	0.0000	0.004	0.004	0.002	0.003	!0.001	0.002	0.001
MW	0.002	0.004	0.005	!0.0000	!0.001	0.003	0.0002	0.004	0.004	!0.002	0.003	!0.001	0.002	0.002

	Fe_%	Fe4_Int.
1>	94.91	67.28
2>	94.94	68.12
MW	94.92	67.70

HUBIG
16. 10. 2012