



Pos. 15, 19 St.
TAIWAN VALVE COMPANY LTD.
3,24TH ROAD TAICHUNG INDUSTRIAL PARK TAICHUNG, R.O.C
Inspection Certificate (EN 10204-3.1B) Report No.: ECH-5A9902-050413

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S/C ECH-5A9902 P/O 9460624 OP
Customer: ECONOSTO NEDERLAND B.V. Article: ECON 3PC DIN2999 BALL VALVE
Material: EN10213-2(1995)/1.0619 Heat Treatment: 920, Normalizing, Cooling by air, 1hr

A) Chemical Analysis

Spec		B) Tensile test / Hardness / Charpy (Test Temp RT)																				
		C %	Si %	Mn %	P %	S %	Ni %	Cr %	Mo %	Cu %	V %	N %	Rp 0.2 N/mm ²	Rp 1.0 N/mm ²	Tensile N/mm ²	Elong- ation(%)	Reduct- -ion(%)	Energy Charpy Impact (Joule)				
																		HB	1	2	3	AVG
Size	Heat No	Min																				
DN15	ABC75																					
DN15	ABC56																					
DN15	CBD60																					
DN15	E9A0J																					
DN15	NB933																					
DN15	CBC57																					
DN15	CBD40																					
DN15	E9AZ3																					
DN15	EBCD2																					
DN15	NB334																					
DN15	NB934																					
DN15	WB159																					
DN20	ABD38																					
DN20	CBD62																					
DN20	NB933																					

2) Dimensional check and NDT

C) Dimensional check and NDT

Testing Item	Details	Result
Visual inspection & dimensional check	Kennzeichnung auf Aluschild H13003, H13003 H13013, H13013 H13080, H13088	OK
Surface crack inspection (PT)	H13180, H13181 H13280, H13281 H14006, H14012	N/A
Radiographic examination (RT)	H14080, H14081 H14088, H14180 H14181, H14280	N/A
I.K. Intergranular corrosion testing (ASTM A 262-98)	H14281	N/A

D) Remarks:

Delivery Condition: Anti-rust

It is here by certified that above results are true and correct in every detail.

Place: Taiwan Taichung Date: 2005/04/13

Works inspector

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Inspection Certificate(EN 10204-3.1B)	Report No.: ECH-5A9902-050413	Page: 3/7
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Customer: ECONOSTO NEDERLAND B.V.	Valve Type: ECON	Date: 2005/04/13
Specification: EN12516-1(2000)	P/INO: ECH-5A9902	Order No.: 9460624 OP
Material: EN10213-2(1995)/1.0619		

Content of Delivery

Leak and Pressure Test according to DIN EN12266-1(2003)

Item No	No of Piece	Article	Size	Class	Trim (Ball/Stem/Seat)	Shell test (Water)		Seat test (Water)		Seat test (Air)		Test Result		
												Shell	Seat-Water	Seat-Air
1	75	ECON 3PC DIN2999 BALL VALVE	DN15	PN63		94.5Bar	15SEC	N/A	N/A	6Bar	15SEC	Acceptable	N/A	Acceptable
2	30	ECON 3PC DIN2999 BALL VALVE	DN15	PN63		94.5Bar	15SEC	N/A	N/A	6Bar	15SEC	Acceptable	N/A	Acceptable
3	150	ECON 3PC DIN2999 BALL VALVE	DN15	PN63		94.5Bar	15SEC	N/A	N/A	6Bar	15SEC	Acceptable	N/A	Acceptable
4	60	ECON 3PC DIN2999 BALL VALVE	DN20	PN63		94.5Bar	15SEC	N/A	N/A	6Bar	15SEC	Acceptable	N/A	Acceptable
5	25	ECON 3PC DIN2999 BALL VALVE	DN20	PN63		94.5Bar	15SEC	N/A	N/A	6Bar	15SEC	Acceptable	N/A	Acceptable
6	90	ECON 3PC DIN2999 BALL VALVE	DN25	PN63		94.5Bar	15SEC	N/A	N/A	6Bar	15SEC	Acceptable	N/A	Acceptable
7	20	ECON 3PC DIN2999 BALL VALVE	DN32	PN63		94.5Bar	15SEC	N/A	N/A	6Bar	15SEC	Acceptable	N/A	Acceptable
8	10	ECON 3PC DIN2999 BALL VALVE	DN40	PN63		94.5Bar	15SEC	N/A	N/A	6Bar	15SEC	Acceptable	N/A	Acceptable
9														
10														

Test Results

Test Item	According	Result
Check of Calculation and safety Requirements acc. to	EN12516-1	Acceptable
Visual and functional tests	TV STD	Acceptable
NDE, material certificates (see material certificate, as annex)	N/A	N/A

Annexes/ 1)Material certificates of pressure parts

2)Material list of other parts

It is here by certified that above results are true and correct in every detail.

Place: Taiwan Taichung

Date: 2005/04/13

Works inspector

W-M. Liao