

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

Page: 4/14

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

B) Tensile test / Hardness / Charpy (Test Temp RT)

Spec		C %	Si %	Mn %	P %	S %	Ni %	Cr %	Mo %	Cu %	V %	N %	Rp 0.2 N/mm <sup>2</sup>	Rp 1.0 N/mm <sup>2</sup>	Tensile N/mm <sup>2</sup>	Elong- ation(%)	Reduct- -ion(%)	HB	Energy Charpy Impact (Joule)			
		Min	Article	Max															1	2	3	AVG
Size	Heat No	Piece																				
DN15	ABC75	30	BODY																			
DN15	CBC56	50	BODY																			
DN15	CBD60	48	BODY																			
DN15	E9AOJ	52	BODY																			
DN15	NB933	75	BODY																			
DN15	CBC57	70	CAP																			
DN15	CBD40	80	CAP																			
DN15	E9AZ3	75	CAP																			
DN15	EEBCD2	75	CAP																			
DN15	NB334	32	CAP																			
DN15	NB934	150	CAP																			
DN15	WB159	28	CAP																			
DN20	ABD38	10	BODY																			
DN20	CBD62	60	BODY																			
DN20	NB933	15	BODY																			

C) Dimensional check and NDT

Testing Item	Details	Result
Visual inspection & dimensional check	TV Standard	OK
Surface crack inspection (PT)	N/A	
Radiographic examination (RT)	N/A	
I.K. Intergranular corrosion testing (ASTM A 262-98)	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

*Handwritten signature*





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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/I NO: 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

*H-M. Liao.*