

Leaktest certificate.No.DC.LC.250172

DeMaCo order nr.: 250172	Client P.O nr.: LP 119 / 40009	Customer : Air Liquide AGS GmbH
DeMaCo procedure : DEN-10-ASME	Project : ASU Kosice	Location: Slovak republic

Herewith DeMaCo Holland bv confirms to have executed the He-Leaktest according
Working Specification DEN-10-ASME rev.0

Leaktest procedure	Leak test accuracy:
According method 2	Object vacuum: 1×10^{-9} mbar.l/sec

Drawing no.	Section no.	Ambient Humidity	Accuracy (mbar)	Result	Retest Required	date
23992.C.1	1	52%	$<1 \times 10^{-9}$ mbar l/s	No leakage	No	02-06-05
23992.C.1	2	52%	$<1 \times 10^{-9}$ mbar l/s	No leakage	No	02-06-05
23992.C.1	3	56%	$<1 \times 10^{-9}$ mbar l/s	No leakage	No	04-06-05
23992.C.1	4	54%	$<1 \times 10^{-9}$ mbar l/s	No leakage	No	03-06-05
23992.C.1	5	52%	$<1 \times 10^{-9}$ mbar l/s	No leakage	No	02-06-05
23992.C.1	6	56%	$<1 \times 10^{-9}$ mbar l/s	No leakage	No	04-06-05
23992.C.1	7	52%	$<1 \times 10^{-9}$ mbar l/s	No leakage	No	02-06-05
23992.C.1	8	54%	$<1 \times 10^{-9}$ mbar l/s	No leakage	No	03-06-05
23992.C.1	9	52%	$<1 \times 10^{-9}$ mbar l/s	No leakage	No	02-06-05
23992.C.1	10	52%	$<1 \times 10^{-9}$ mbar l/s	No leakage	No	02-06-05
23812.C.1	11	56%	$<1 \times 10^{-9}$ mbar l/s	No leakage	No	04-06-05
23812.C.1	12	54%	$<1 \times 10^{-9}$ mbar l/s	No leakage	No	03-06-05
23812.C.1	13	52%	$<1 \times 10^{-9}$ mbar l/s	No leakage	No	02-06-05
23812.C.1	14	52%	$<1 \times 10^{-9}$ mbar l/s	No leakage	No	04-06-05
23812.C.1	15	52%	$<1 \times 10^{-9}$ mbar l/s	No leakage	No	02-06-05
23812.C.1	16	52%	$<1 \times 10^{-9}$ mbar l/s	No leakage	No	02-06-05
23812.C.1	17	54%	$<1 \times 10^{-9}$ mbar l/s	No leakage	No	03-06-05
23812.C.1	18	52%	$<1 \times 10^{-9}$ mbar l/s	No leakage	No	02-06-05
23971.C.1	19	52%	$<1 \times 10^{-9}$ mbar l/s	No leakage	No	02-06-05
23971.C.1	20	52%	$<1 \times 10^{-9}$ mbar l/s	No leakage	No	02-06-05
23971.C.1	21	54%	$<1 \times 10^{-9}$ mbar l/s	No leakage	No	03-06-05
23971.C.1	22	52%	$<1 \times 10^{-9}$ mbar l/s	No leakage	No	02-06-05
23971.C.1	23	54%	$<1 \times 10^{-9}$ mbar l/s	No leakage	No	03-06-05
23971.C.1	24	52%	$<1 \times 10^{-9}$ mbar l/s	No leakage	No	02-06-05
23971.C.1	25	52%	$<1 \times 10^{-9}$ mbar l/s	No leakage	No	02-06-05
23971.C.1	26	56%	$<1 \times 10^{-9}$ mbar l/s	No leakage	No	04-06-05
23971.C.1	27	56%	$<1 \times 10^{-9}$ mbar l/s	No leakage	No	04-06-05
23971.C.1	28	56%	$<1 \times 10^{-9}$ mbar l/s	No leakage	No	04-06-05

[illegible]

Place : Noord-Scharwoude (NL)



DeMaCo order nr.: 250172	Client P.O nr.: LP 119 / 40009	Customer : Air Liquide AGS GmbH
DeMaCo procedure : DEN-10-ASME	Project : ASU Kosice	Location: Slovak republic

Leaktest procedure	Leak test accuracy:
According method 2	Object vacuum: 1×10^{-9} mbar.l./sec

[illegible]

Place :

Leaktest certificate methode 2 onsite.No.DC.LC.250172_OS

DeMaCo order nr.: 250172	Client P.O nr.: LP 119 / 40009	Customer : Air Liquide AGS GmbH
DeMaCo procedure : DEN-10-ASME	Project : ASU Kosice	Location: Slovak republic

Herewith DeMaCo Holland bv confirms to have executed the He-Leaktest according
Working Specification DEN-10-ASME rev.0

Leaktest procedure	Leak test accuracy:
According method 2	Object vacuum: 1×10^{-9} mbar.l/sec

Line No.	Section no.	Ambient Humidity	Accuracy (mbar)	Result	Retest Required	date
50-OL-61106	19 > 20			Approved	No	24-08-05
50-OL-61106	20 > 21			Approved	No	21-08-05
50-OL-61106	21 > 22			Approved	No	21-08-05
50-OL-61106	22 > 23			Approved	No	21-08-05
50-OL-61106	23 > 24			Approved	No	21-08-05
50-OL-61106	24 > 25			Approved	No	21-08-05
50-OL-61106	25 > 26			Approved	No	21-08-05
50-OL-61106	26 > 27			Approved	No	21-08-05
50-OL-61106	27 > 28			Approved	No	21-08-05
50-OL-61106	28 > 29			Approved	No	21-08-05
50-OL-61106	29 > 30			Approved	No	21-08-05
50-OL-61106	30 > 31			Approved	No	21-08-05
	19 - existing	Direction Liquifier		Approved	No	24-08-05
	19 - existing	Direction Tank		Approved	No	24-08-05
50-OL-61106	19			Approved	No	21-08-05
50-OL-61106	20			Approved	No	21-08-05
50-OL-61106	30			Approved	No	21-08-05
50-OL-61106	31			Approved	No	21-08-05

Remarks :

Name : RDJ

Date : 12-1-2006

Signature : 

Place :

Leaktest certificate methode 2 onsite.No.DC.LC.250172_OS

DeMaCo order nr.: 250172	Client P.O nr.: LP 119 / 40009	Customer : Air Liquide AGS GmbH
DeMaCo procedure : DEN-10-ASME	Project : ASU Kosice	Location: Slovak republic

Herewith DeMaCo Holland bv confirms to have executed the He-Leaktest according
Working Specification DEN-10-ASME rev.0

Leaktest procedure	Leak test accuracy:
Accordinging method 2	Object vacuum: 1×10^{-9} mbar.l/sec

Drawing no.	Section no.	Ambient Humidity	Accuracy (mbar)	Result	Retest Required	date
25574.C.2.C	1 > 2		1×10^{-3}	Approved	No	22-12-05
25574.C.2.C	2 > 3		1×10^{-3}	Approved	No	22-12-05
23812.C.1.D	11 > 12		1×10^{-3}	Approved	No	22-12-05
23812.C.1.D	12 > 13		1×10^{-3}	Approved	No	22-12-05
23812.C.1.D	13 > 14		1×10^{-3}	Approved	No	22-12-05
23812.C.1.D	14 > 15		1×10^{-3}	Approved	No	22-12-05
23812.C.1.D	15 > 16		1×10^{-3}	Approved	No	22-12-05
23812.C.1.D	16 > 17		1×10^{-3}	Approved	No	22-12-05
23812.C.1.D	17 > 18		1×10^{-3}	Approved	No	22-12-05
23821.C.1.D	32 > 33		1×10^{-3}	Approved	No	22-12-05
23821.C.1.D	33 > 34		1×10^{-3}	Approved	No	22-12-05
23821.C.1.D	34 > 35		1×10^{-3}	Approved	No	22-12-05
23821.C.1.D	35 > 36		1×10^{-3}	Approved	No	22-12-05
25574.C.2.C	3		1×10^{-3}	Approved	No	22-12-05
23812.C.1.D	17		1×10^{-3}	Approved	No	22-12-05
23812.C.1.D	18		1×10^{-3}	Approved	No	22-12-05
23821.C.1.D	36		1×10^{-3}	Approved	No	22-12-05

Remarks :

Name : RDJ

Date : 12-1-2006

Signature :



Place :

page 1-1



DeMaCo order nr.: 250172	Client P.O nr.:	Customer : Air Liquide AGS GmbH
DeMaCo procedure : DEN-10-ASME	Project : ASU Kosice	Location: Slovak republic

Leaktest procedure	Leak test accuracy:
According method 2	Object vacuum: 1×10^{-9} mbar.l/sec

[illegible]

Remarks : _____

Name : RDJ

Date : 12-1-2006

Signature : 

Place :

page 1-1

All tenders and contracts for the performance of deliveries by us are governed by the Orgalime General Conditions for the supply of mechanical electrical and associated electronic

DeMaCo Holland bv
Oester 2
Postbus 4

T +31 (0)226 33 21 00
F +31 (0)226 33 21 11
E info@DeMaCo.nl

Vacuumtest certificate.No.DC.VC.250172

DeMaCo order nr.: 250172	Client P.O nr.: LP 119 / 40009	Customer : Air Liquide AGS GmbH
DeMaCo procedure : DEN-10-ASME	Project : ASU Kosice	Location: Slovak republic

Herewith DeMaCo Holland bv confirms to have executed the vacuumtest according
Working Specification DEN-10-ASME rev.0

Drawing no.	Section no.	Accuracy (mbar)	Result	Date
23992.C.1	1	$<1*10^{-5}$	approved	18-6-2005
23992.C.1	2	$<1*10^{-5}$	approved	18-6-2005
23992.C.1	3	$<1*10^{-5}$	approved	18-6-2005
23992.C.1	4	$<1*10^{-5}$	approved	18-6-2005
23992.C.1	5	$<1*10^{-5}$	approved	23-6-2005
23992.C.1	6	$<1*10^{-5}$	approved	23-6-2005
23992.C.1	7	$<1*10^{-5}$	approved	18-6-2005
23992.C.1	8	$<1*10^{-5}$	approved	23-6-2005
23992.C.1	9	$<1*10^{-5}$	approved	23-6-2005
23992.C.1	10	$<1*10^{-5}$	approved	23-6-2005
23812.C.1	11	$<1*10^{-5}$	approved	23-6-2005
23812.C.1	12	$<1*10^{-5}$	approved	18-6-2005
23812.C.1	13	$<1*10^{-5}$	approved	18-6-2005
23812.C.1	14	$<1*10^{-5}$	approved	18-6-2005
23812.C.1	15	$<1*10^{-5}$	approved	18-6-2005
23812.C.1	16	$<1*10^{-5}$	approved	18-6-2005
23812.C.1	17	$<1*10^{-5}$	approved	18-6-2005
23812.C.1	18	$<1*10^{-5}$	approved	18-6-2005
23971.C.1	19	$<1*10^{-5}$	approved	23-6-2005
23971.C.1	20	$<1*10^{-5}$	approved	23-6-2005
23971.C.1	21	$<1*10^{-5}$	approved	23-6-2005
23971.C.1	22	$<1*10^{-5}$	approved	18-6-2005
23971.C.1	23	$<1*10^{-5}$	approved	23-6-2005
23971.C.1	24	$<1*10^{-5}$	approved	23-6-2005
23971.C.1	25	$<1*10^{-5}$	approved	23-6-2005
23971.C.1	26	$<1*10^{-5}$	approved	18-6-2005
23971.C.1	27	$<1*10^{-5}$	approved	23-6-2005
23971.C.1	28	$<1*10^{-5}$	approved	18-6-2005

page 1-2

[illegible]

Noord-Scharwoude (NL)



Herewith DeMaCo Holland bv confirms to have executed the vacuumtest according Working Specification DEN-10-ASME rev.0

[illegible]

Remarks : _____

Name : RDJ

Date : 12-1-2006

Signature : 

Place : _____

Vacuumtest certificate onsite.No.DC.VC.250172_OS

DeMaCo order nr.: 250172	Client P.O nr.: LP 119 / 40009	Customer : Air Liquide AGS GmbH
DeMaCo procedure : DEN-10-ASME	Project : ASU Kosice	Location: Slovak republic

Herewith DeMaCo Holland bv confirms to have executed the vacuumtest according
Working Specification DEN-10-ASME rev.0

Line no.	Section no.	Accuracy (mbar)	Result	Date
50-OL-61106	19 > 20		Approved	23-8-2005
50-OL-61106	20 > 21		Approved	21-8-2005
50-OL-61106	21 > 22		Approved	21-8-2005
50-OL-61106	22 > 23		Approved	21-8-2005
50-OL-61106	23 > 24		Approved	21-8-2005
50-OL-61106	24 > 25		Approved	21-8-2005
50-OL-61106	25 > 26		Approved	21-8-2005
50-OL-61106	26 > 27		Approved	21-8-2005
50-OL-61106	27 > 28		Approved	21-8-2005
50-OL-61106	28 > 29		Approved	21-8-2005
50-OL-61106	29 > 30		Approved	21-8-2005
50-OL-61106	30 > 31		Approved	21-8-2005
	19 - excisting	Direction Liquifier	Approved	23-8-2005
	19 - excisting	Direction Tank	Approved	23-8-2005
50-OL-61106	19		Approved	21-8-2005
50-OL-61106	20		Approved	21-8-2005
50-OL-61106	30		Approved	21-8-2005
50-OL-61106	31		Approved	21-8-2005

Remarks :

Name : RDJ

Date : 12-1-2006

Signature :



Place :

Vacuumtest certificate onsite.No.DC.VC.250172_OS

DeMaCo order nr.: 250172	Client P.O nr.: LP 119 / 40009	Customer : Air Liquide AGS GmbH
DeMaCo procedure : DEN-10-ASME	Project : ASU Kosice	Location: Slovak republic

Herewith DeMaCo Holland bv confirms to have executed the vacuumtest according
Working Specification DEN-10-ASME rev.0

Drawing no.	Section no.	Accuracy (mbar)	Result	Date
25574.C.2.C	1 > 2	1×10^{-3}	Approved	22-12-2005
25574.C.2.C	2 > 3	1×10^{-3}	Approved	22-12-2005
23812.C.1.D	11 > 12	1×10^{-3}	Approved	22-12-2005
23812.C.1.D	12 > 13	1×10^{-3}	Approved	22-12-2005
23812.C.1.D	13 > 14	1×10^{-3}	Approved	22-12-2005
23812.C.1.D	14 > 15	1×10^{-3}	Approved	22-12-2005
23812.C.1.D	15 > 16	1×10^{-3}	Approved	22-12-2005
23812.C.1.D	16 > 17	1×10^{-3}	Approved	22-12-2005
23812.C.1.D	17 > 18	1×10^{-3}	Approved	22-12-2005
23821.C.1.D	32 > 33	1×10^{-3}	Approved	22-12-2005
23821.C.1.D	33 > 34	1×10^{-3}	Approved	22-12-2005
23821.C.1.D	34 > 35	1×10^{-3}	Approved	22-12-2005
23821.C.1.D	35 > 36	1×10^{-3}	Approved	22-12-2005
25574.C.2.C	3	1×10^{-3}	Approved	22-12-2005
23812.C.1.D	17	1×10^{-3}	Approved	22-12-2005
23812.C.1.D	18	1×10^{-3}	Approved	22-12-2005
23821.C.1.D	36	1×10^{-3}	Approved	22-12-2005

Remarks :

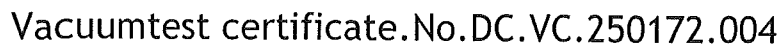
Name : RDJ

Date : 12-1-2006

Signature :




Place :



Herewith DeMaCo Holland bv confirms to have executed the vacuumtest according Working Specification DEN-10-ASME rev.0

Remarks : _____

Name : RDJ _____ Date : 12-1-2006 _____

Signature :  _____ Place : _____

Retentiontest certificate.No.DC.RT.250172.004

DeMaCo order nr.: 250172.004	Client P.O nr.:	Customer : Air Liquide GmbH
Quality Assurance Plan:	Project : Project Kosice	Location: Kosice

Herewith DeMaCo Holland bv confirms to have executed the retentiontest for at least 24 hour according Working specification DEN 33

Drawing no.	Spool no.	0 hour		24 hour		48 hour		72 hour	
		Date	Value	Date	Value	Date	Value	Date	Value
23992.C.1.C	1	5-07-05	2x10 ⁻⁶	6-07-05	4x10 ⁻⁵				
23992.C.1.C	2	27-06-05	1,4x10 ⁻⁶	28-06-05	3x10 ⁻⁵				
23992.C.1.C	3	9-07-05	8,7x10 ⁻⁶	10-07-05	3,5x10 ⁻⁵				
23992.C.1.C	4	18-06-05	5,1x10 ⁻⁶	19-06-05	1,8x10 ⁻⁵				
23992.C.1.C	5	25-06-05	1x10 ⁻⁶	26-06-05	1,6x10 ⁻⁵				
23992.C.1.C	6	23-06-05	2,3x10 ⁻⁶	24-06-05	3,7x10 ⁻⁵				
23992.C.1.C	7	18-06-05	5x10 ⁻⁶	19-06-05	9x10 ⁻⁵				
23992.C.1.C	8	23-06-05	1,7x10 ⁻⁶	24-06-05	1x10 ⁻⁵				
23992.C.1.C	9	27-06-05	1,4x10 ⁻⁶	28-06-05	2,5x10 ⁻⁵				
23992.C.1.C	10	9-07-05	5,9x10 ⁻⁶	10-07-05	6,6x10 ⁻⁵				
23812.C.1.E	11	27-06-05	1,2x10 ⁻⁶	28-06-05	7,7x10 ⁻⁶				
23812.C.1.E	12	1-07-05	4,7x10 ⁻⁶	2-07-05	3,5x10 ⁻⁵				
23812.C.1.E	13	18-06-05	5x10 ⁻⁶	19-06-05	1x10 ⁻⁴				
23812.C.1.E	14	5-07-05	1,1x10 ⁻⁶	6-07-05	1,2x10 ⁻⁵				
23812.C.1.E	15	25-06-05	2x10 ⁻⁶	26-06-05	2x10 ⁻⁵				
23812.C.1.E	16	18-06-05	5,1x10 ⁻⁶	19-06-05	4,2x10 ⁻⁵				
23812.C.1.E	17	18-06-05	5,1x10 ⁻⁶	19-06-05	2,9x10 ⁻⁵				
23812.C.1.E	18	29-06-05	4,3x10 ⁻⁶	30-06-05	5,5x10 ⁻⁵				
23971.C.1.B	19	9-07-05	2,5x10 ⁻⁶	10-07-05	5x10 ⁻⁵				
23971.C.1.B	20	23-06-05	2,3x10 ⁻⁶	24-06-05	3,6x10 ⁻⁵				
23971.C.1.B	21	5-07-05	1,1x10 ⁻⁶	6-07-05	1,2x10 ⁻⁵				
23971.C.1.B	22	23-06-05	2,3x10 ⁻⁶	24-06-05	3,1x10 ⁻⁵				
23971.C.1.B	23	28-06-05	9,2x10 ⁻⁷	29-06-05	1,1x10 ⁻⁵				
23971.C.1.B	24	28-06-05	3x10 ⁻⁶	29-06-05	4x10 ⁻⁵				
23971.C.1.B	25	28-06-05	9,2x10 ⁻⁷	29-06-05	1,3x10 ⁻⁵				
23971.C.1.B	26	23-06-05	1,7x10 ⁻⁶	24-06-05	3x10 ⁻⁵				
23971.C.1.B	27	25-06-05	2x10 ⁻⁶	26-06-05	1x10 ⁻⁵				

Name : RDJ

Date : 16-1-2005

Signature : 

Place : Noord-Scharwoude (NL)



Herewith DeMaCo Holland bv confirms to have executed the retentiontest for at least 24 hour according Working specification DEN 33

Name : RDJ

Date : 16-1-2005

Signature : 

Place : Noord-Scharwoude (NL)



DeMaCo order nr.: 250172.004	Client P.O nr.:	Customer : Air Liquide GmbH
Quality Assurance Plan: 250.172.004	Project : Project Kosice	Location: Kosice

[illegible]

Place : Noord-Scharwoude (NL)



Herewith DeMaCo Holland bv confirms to have executed the pressuretest according
Working Specification DEN-10-ASME rev.0

[illegible]

Signature : Place :



DeMaCo order nr.: 250172	Client P.O nr.: LP 119 / 40009	Customer : Air Liquide AGS GmbH
DeMaCo procedure : DEN-10-ASME	Project : ASU Kosice	Location: Slovak republic

Examination standard:	ASME V, art.2
Acceptance standard:	ASME VIII, Div 1 UW 51

Place : Noord-Scharwoude (NL)



DeMaCo order nr.: 250172	Client P.O nr.: LP 119 / 40009	Customer : Air Liquide AGS GmbH
DeMaCo procedure : DEN-10-ASME	Project : ASU Kosice	Location: Slovak republic

Examination standard:	ASME V, art.2
Acceptance standard:	ASME VIII, Div 1

[illegible]

Place :

Cleaning certificate.No.DC.CL.250172

DeMaCo order nr.: 250172	Client P.O nr.: LP 119 / 40009	Customer : Air Liquide AGS GmbH
DeMaCo procedure : DEN-10-ASME	Project : ASU Kosice	Location: Slovak republic

Herewith DeMaCo Holland bv confirms to have executed the cleaning of undermentioned spools according Working Specification DEN-10-ASME rev.0

Drawing no.	Section no.	Cleaned (sign)	Pressured 0,1 bar	Remarks
23992.C.1	1	Approved	N.A.	
23992.C.1	2	Approved	N.A.	
23992.C.1	3	Approved	N.A.	
23992.C.1	4	Approved	N.A.	
23992.C.1	5	Approved	N.A.	
23992.C.1	6	Approved	N.A.	
23992.C.1	7	Approved	N.A.	
23992.C.1	8	Approved	N.A.	
23992.C.1	9	Approved	N.A.	
23992.C.1	10	Approved	N.A.	
23812.C.1	11	Approved	N.A.	
23812.C.1	12	Approved	N.A.	
23812.C.1	13	Approved	N.A.	
23812.C.1	14	Approved	N.A.	
23812.C.1	15	Approved	N.A.	
23812.C.1	16	Approved	N.A.	
23812.C.1	17	Approved	N.A.	
23812.C.1	18	Approved	N.A.	
23971.C.1	19	Approved	N.A.	
23971.C.1	20	Approved	N.A.	
23971.C.1	21	Approved	N.A.	
23971.C.1	22	Approved	N.A.	
23971.C.1	23	Approved	N.A.	
23971.C.1	24	Approved	N.A.	
23971.C.1	25	Approved	N.A.	
23971.C.1	26	Approved	N.A.	
23971.C.1	27	Approved	N.A.	
23971.C.1	28	Approved	N.A.	

[illegible]

Place : Noord-Scharwoude (NL)