

Wolf GmbH & Co.KG

57234 Wilnsdorf

Kom.Nr. 37106

**Air Liquide Purchase-no.:
4500023998**

Project: ASU Kosice No.9

Dokument No. :

Document: Inspection and Testing Plan

Description: Molsieve Adsorber

Tag No.: W15001 / W15002

Drawing No.: 11437- 0

0	first issue	07.12.2004		Strake	TB		
Status	Ausgabe	Datum	geänd.Seiten	erstellt	Abtlg.	geprüft	genehmigt

WOLF	Fabrication- and Testingplan MOLSIEVE ADSORBER W 15001/ W15002	Wolf-Dokument Nr: 11437-4-ITP Air Liquide-Dokument Nr:	Issue: 0 07.12.04	Sheet 2 of 6
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1 Scope

This Inspection and Test plan covers relevant inspections and tests of 2 Molsieve Adsorber in an ASU-Unit.

2 Definitions/Abbreviations

SUPPLIER	=	WOLF GmbH & Co. KG, Behälter- und Apparatebau, 57234 Wilnsdorf
CLIENT	=	Client (Erection Place Kosice, Slowakia).
PURCHASER	=	Air Liquide AGS GmbH, Füttingsweg 34,D-57234 Krefeld, Germany.
NB	=	Notified Body = Kenn-Nr.: 0044, (RWTÜV Systems GmbH, Dienststelle Siegen, Leimbachstrasse 227, D-57074 Siegen).
PED	=	Pressure Equipment Directive 97/23/EC.
WPS	=	Welding procedure specification
WPAR	=	Procedure qualification approval record
PWHT	=	Postweld Heat Treatment
NDE	=	Non-Destructive Examination
WPTC	=	Weld Production Test Coupon
MDR	=	Manufacturing Data Report (Final Documentation)
MTR	=	Mill Test Report
LW	=	Longitudinal welding seam
CW	=	Circumferential welding seam
NW, NCW	=	Nozzle welding seam
n.a.	=	Not applicable

3 Key to Type of Inspection











A	=	Approve
I	=	Prepare / Compile and Issue
O	=	Organize
P	=	Participate
R	=	Review of Documents / Evaluation of Radiographs
X	=	Perform
H	=	Full Witness (Hold Point)
		Advance notice for inspection: 5 working days. Supplier shall not proceed with the fabrication unless the concerned party waives their participation in writing
C	=	Certificate / document required for MDR.
W	=	Spot Witness
		Advance notice for inspection: 5 working days. Supplier may proceed with the fabrication or inspection activity even in the absence of concerned parties.




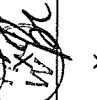







4 Signing-Off

When one operation has been completed to their satisfaction the various representatives shall sign and date their acceptance in the respective columns against the individual operations.

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		MOLSIEVE ADSORBER W15001/W15002				Air Liquide-Dokument Nr:					
SL. No.	Operation (Inspection / Test Activity)	Reference Document (Spec's, Drg's etc.)	Verification Document	Inspection / Test Mark-Up / Sign-off				Cert's Doc's for MDR	Remarks		
				SUPPLIER	CLIENT	PURCHASE R	NB				

1	Pre-Fabrication Meeting	Minutes of meeting	P	O + P							
2	Fabrication Documents										
2.1	- Fabrication drawings - List of materials - Design calculation	Tag W15001/W15002	Approved documents					R/A			C
2.2	- NDE procedures - Pressure test procedure - Painting procedure - Material traceability procedure	Supplier's documents	Approved documents					R			
2.3	- WPS / WPAR - Welding and testing plan - Inspection and test plan	11437-4-WTP Supplier's documents	Approved documents					R/A			C
2.4	- Welder's list - Welder's qualification records	Supplier's documents	Approved documents					R			
2.5	- Material specifications or suborders for material	n.A.	Approved documents								
3	Materials										
3.1	Inspection of in-coming materials (visual checks; identification, dimensional checks etc.)	Material specifications or suborders for material									
3.2	Mill Test Reports	part list	MTR's								
3.3	Filler Metal Certificates	11437-4-WTP	Filler Metal Certificates					R			C
4	Templates & Anchor Bolts										
4.1	Dimensional & visual checks on templates	Fabrication drawings	Supplier's inspection report								

WOLF		Fabrication- and Testingplan MOLSIEVE ADSORBER W15001/W15002			Wolf-Dokument Nr: 11437-4-ITP Air Liquide-Dokument Nr:		Issue: 0 07.12.04		Sheet 4 of 6	
SL. No.	Operation (Inspection / Test Activity)	Reference Document (Spec's, Drg's etc.)	Verification Document	Inspection / Test Mark-Up / Sign-off	Supplier	CLIENT	PURCHASE R	NB	Cert's Doc's for MDR	Remarks
4.2	Dimensional & visual checks on anchor bolts	Fabrication drawings	Supplier's inspection report, MTR		X		R			
5	Fabrication									
5.1	Material identification and transfer of markings	Material traceability procedure					W			
5.2	Visual checks of surfaces of pressure envelope materials prior to start with fabrication	Welding and testing plan								
5.3	Check of weld-edge preparation	Fabrication drawings								
5.4	Fit-up, alignment and root-gap check	Fabrication drawings								
5.5	Adherence to specified welding data / parameters	n.A.								
5.6	PT of LW, CW after backchipping	Welding and testing plan, Fabrication drawings								
5.7	Visual examination of LW, CW, NW, NCW	Welding and testing plan, Fabrication drawings					W			
5.8	Check of roof-topping (peaking) & flat-spotting (banding) on LW of shell stracks	n.A.								
5.9	Out-of roundness, ovality of shell stracks and ellipsoidal heads	acc. tolerances DIN28005, Part 1	Supplier's inspection report				W			
5.10	PT of LW, CW	Welding and testing plan 11437-4 WTP	Supplier's RT report & radiographs				R		C	
5.11	n.a.									
5.12	MT of temporary weld locations after grinding	Welding and testing plan 11437-4 WTP					R			

WOLF		Fabrication- and Testingplan MOLSIEVE ADSORBER W15001/W15002			Wolf-Dokument Nr: 11437-4-ITP Air Liquide-Dokument Nr:		Issue: 0 07.12.04		Sheet 5 of 6	
SL. No.	Operation (Inspection / Test Activity)	Reference Document (Spec's, Drg's etc.)	Verification Document	Inspection / Test Mark-Up / Sign-off				Cert's Doc's for MDR		Remarks
				SUPPLIER	CLIENT	PURCHASE R	NB			
5.13	MT of arc strikes on inside wall after grinding	Welding and testing plan,				R				
5.14	n.a.									
6	Inspection & Pressure Test									
6.1	Visual inspection	Fabrication drawings	Supplier's inspection report			H			C	
6.2	Dimensional inspection	Fabrication drawings DIN 28005	Supplier's inspection report			H			C	
6.3	Approval of concession requests & non-conformance reports	n.A.	Approved concession requests & non- conformance reports	X		R / A				
6.4	Verification of MDR and release for pressure test	Fabrication drawings	See column Cert's, Doc's for MDR			H			C	
6.5	Verification of pressure gauge calibration	Fabrication drawings	Calibration certificate			R				
6.6	Pressure test	Fabrication drawings	Pressure test certificate	X		H			C	
6.7	Leak test on reinforcing pad welds	Fabrication drawings	Supplier's leak test report	X		R			C	
7	Painting									
7.1	Surface preparation	Fabrication drawing	Painting certificate			R			C	
7.2	Paint application	Fabrication drawing	Painting certificate			R			C	
7.3	Check of dry film thickness	Fabrication drawing	Painting certificate			W			C	
7.4	Adherence test, if any	Fabrication drawing	Painting certificate	X		R			C	

