

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:	Issuc: 0 07.12.04	Sheet 2 of 6
-------------	---	---	----------------------	--------------

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







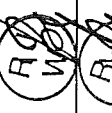




3 Key to Type of Inspection




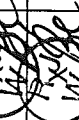



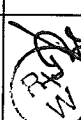
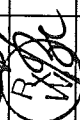


A	=	Approve
I	=	Prepare / Compile and Issue
O	=	Organize
P	=	Participate
R	=	Review of Documents / Evaluation of Radiographs
X	=	Perform
H	=	Full Witness (Hold Point)
		Advance notice for inspection: 5 working days. Supplier shall not proceed with the fabrication unless the concerned party waives their 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.

WOLF		Fabrication- and Testingplan MOLSIEVE ADSORBER W15001/W15002				Wolf-Dokument Nr: 11437-4-ITP Air Liquide-Dokument Nr:		Issue: 0 07.12.04		Sheet 3 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			

1	Pre-Fabrication Meeting		Minutes of meeting	P				O + P		
2	Fabrication Documents									
2.1	<ul style="list-style-type: none"> - Fabrication drawings - List of materials - Design calculation 		Tag W15001/W15002	Approved documents				R / A		C
2.2	<ul style="list-style-type: none"> - NDE procedures - Pressure test procedure - Painting procedure - Material traceability procedure 		Supplier's documents	Approved documents				R		
2.3	<ul style="list-style-type: none"> - WPS / WPAR - Welding and testing plan - Inspection and test plan 		11437-4-WTP Supplier's documents	Approved documents				R / A		C
2.4	<ul style="list-style-type: none"> - Welder's list - Welder's qualification records 		Supplier's documents	Approved documents				R		
2.5	<ul style="list-style-type: none"> - Material specifications or suborders for material 		n.A.	Approved documents						
3	Materials									
3.1	<ul style="list-style-type: none"> Inspection of in-coming materials (visual checks; identification, dimensional checks etc.) 		Material specifications or suborders for material							
3.2	<ul style="list-style-type: none"> Mill Test Reports 		part list	MTR's				R		C
3.3	<ul style="list-style-type: none"> Filler Metal Certificates 		11437-4-WTP	Filler Metal Certificates				R		
4	Templates & Anchor Bolts									
4.1	<ul style="list-style-type: none"> 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	Supplier's inspection report, MTR	Inspection / Test Mark-Up / Sign-off				Cert's Doc's for MDR	Remarks
					SUPPLIER	CLIENT	PURCHASE R	NB		
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		

