



中国认可  
国际互认  
检验  
INSPECTION  
CNAS IB0241



**TÜVRheinland®**  
Precisely Right.

## Inspection Certificate - Pressure Equipment

<b>Certificate No.:</b>	<b>01 202 CHN/K-22A1652</b>		
<b>Manufacturer:</b>	AIRCOM (Zhejiang) General Equipment Co., Ltd.		
<b>Manufacturing plant:</b>	No. 968 Waitang Road, Haiyan Economic Development Zone Xitangqiao Subdistrict, Haiyan County Jiaxing City, Zhejiang Province 314305 People's Republic of China		
<b>Manufactured for:</b>	ATLAS COPCO COMPRESSOR CO., LTD.		
<b>Location of installation:</b>	Singapore - Singapore Ministry of Manpower (MOM)		
<b>Equipment Type:</b>	<input type="checkbox"/> Tank <input type="checkbox"/> Jacket Vessel <input type="checkbox"/> Reactor <input type="checkbox"/> Heat exchanger <input checked="" type="checkbox"/> Separator <input type="checkbox"/> Horizontal <input checked="" type="checkbox"/> Vertical <input type="checkbox"/> Sphere   .....		
<b>Regulations/Codes/Specification:</b>			
ASME	Section VIII, Div.1	Edition:	2021 ED
Applied	<input checked="" type="checkbox"/> in full	<input type="checkbox"/> in part	Code Stamp   ASME U
<b>Standards/other Specifications:</b>		N.A.	
<b>Mfg./Serial No.:</b>	1055269 to 1055318	<b>Trade mark:</b>	N.A.
<b>TECHNICAL DATA:</b>			
<b>Chamber</b>	<b>Shell</b>	<b>--</b>	
Max. allowable Pressure PS [PSI]	152		
Max./min. allowable Temperature TS [°F]	248/-4		
Fluid Contents/Fluid Group	Compressed Air/Oil/(Non-lethal)		
Heat treatment, Temperature/Time	None		
Impact test [°C]	None		
Mat'l Spec./Grade, Shell/Head	SA-414 Gr. G (Shell & head)/SA-105(Flat head)		
Diameter (ID)/ Length / Thickness, [inch]	5.669/15.138/0.108		
Head Type/ Min. Thickness, [inch]	2.087:1 Ellipsoidal / 0.094; Flat head/2.114		
Tube Material Spec./Grade, Dimensions	N/A		
Tubesheet Mat'l Spec./Grade, Dimensions	N/A		
Joint Efficiency, %	Longitudinal	0.7	
	Circumferential	0.65	
Capacity or Volume, [Liter]	6.7		
Other information:	Corrosion allowance [inch]: 0		
<b>DESIGN AND CALCULATION APPROVAL:</b>			
Drawing No./Rev. No.:	SEP01638 REV. 5	Approved Date:	Nov. 01, 2022
<b>PRESSURE TEST:</b>			
<b>Chamber</b>	<b>Shell</b>	<b>--</b>	
Test Pressure PT [PSI]	198		
Test Fluid	Water		
Holding Time [min]	30		
Test Date	Dec,9,2022		
Used measurement and test equipment:	Pressure gauges	Calibrated valid	Acceptable
<b>Pressure Test Result: Acceptable.</b>			





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## Inspection Certificate - Pressure Equipment

Certificate No.:01 202 CHN/K-22A1652

FINAL INSPECTION:		accept-able	N/A	see Annex:	Remarks
1.	(Main-) Drawings/Calculation Reports	√			
2.	Dimensional check: (Safety relevant dimensions of the pressure equipment correspond with drawing)	√			
3.	Visual inspection	√			
4.	Records on base materials and consumables	√			
5.	Material traceability	√			
6.	Qualification of welding procedures(WPS/PQR)	√			
7.	Qualification of personnel performing permanent joining	√			
8.	Production tests		√		
9.	Heat treatment records		√		
10.	Qualification of NDE personnel		√		
11.	Non-destructive examination test reports		√		
12.	Records on repair and modifications		√		
13.	Marking of equipment	√			
14.					


Remarks:

Final Inspection Date: Dec,9,2022

**STAMPING: To indicate a satisfactory result of examination, the equipment was stamped as follow:**

Equipment Body:

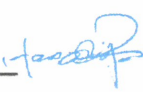
Location:

Nameplate: 

**RESULT:**


The above-mentioned inspections were performed in accordance with the provisions of the stated test requirements/specifications.

**Notes:** There may be additional requirements applicable to the equipment, e.g. acceptance test on site prior to start of operation or the conformity to local regulations or laws.

**Inspector** ( Hao Shijie,signature) 

**Location:** Shanghai,P.R.China

**Date:** Dec,9,2022

  
( Lu Ping, signature)

**Attachments:** See above **Accredited Signatory**

Inspection Body (No. CNAS IB0241): TÜV Rheinland (Shanghai) Co., Ltd.  
For order processing we have stored essential object data and the address. The protection of the data is guaranteed.  
The test results relate exclusively to the described equipment. Partial copies of the documentation without a written authorization by the inspection agency is not permitted.



1638213300  
Client PN  
4474/1  
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FORM U-1A MANUFACTURER'S DATA REPORT FOR PRESSURE VESSELS

(Alternative Form for Single Chamber, Completely Shop or Field Fabricated Vessels Only)

As Required by the Provisions of the ASME Boiler and Pressure Vessel Code Rules, Section VIII, Division 1 Page 1 of 2

1. Manufactured and certified by **AIRCOM (Zhejiang) General Equipment Co., Ltd., No. 968 Waitang Road, Haiyan Economic Development Zone, Xitangqiao Subdistrict, Haiyan County, Jiaxing City, Zhejiang Province, 314305, People's Republic of China**  
(Name and address of Manufacturer)

2. Manufactured for **Atlas Copco Airpower nv, Ingberthoeveweg 7, Aartselaar, 2630, Belgium**  
(Name and address of Purchaser)

3. Location of Installation **Not Known**

(Name and address)

4. Type **Vertical** **1055269 thru 1055318** **0H2920.7C** **SEP01638 Rev.5(Remark 7)** **1061144-1061193** **2022**  
(Horizontal or vertical, tank) (Manufacturer's serial number) (CRN) (Drawing number) (National Board number) (Year built)

5. ASME Code, Section VIII, Division 1 **2021/ N/A** **N/A** **N/A**  
(Edition and Addenda, if applicable (date)) (Code Case numbers) (Special service per UG-120(d))

6. Shell: **SA-414 Gr.G** **0.108 in** **0 in** **5.669" (ID)** **1' 3.138"**  
(Material spec. number, grade) (Nominal thickness) (Corr. allow.) (Inner diameter) (Length (overall))

Body Flanges on Shells												
No.	Type	ID	OD	Flange Thk	Min Hub Thk	Material	How Attached	Location	Bolting			
									Num & Size	Bolting Material	Washer (OD, ID, thk)	Washer Material
N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

7. Seams: **Table UW-12 Tp.1** **None** **70%** **N/A** **N/A** **Table UW-12 Tp.2** **None** **65%** **1**  
[Long. (welded, dbl., sngl., lap, butt)] [R.T.(spot or full)] (Eff., %) (H.T. temp) (Time, hr) [Girth. (welded, dbl., sngl., lap, butt)] [R.T. (spot or full)] (Eff., %) (No. of courses)

8. Heads: (a) **SA-105** (b) **SA-414 Gr.G (No heat treatment)**  
(Material spec. number, grade or type) (H.T. - time and temp.) (Material spec. number, grade or type) (H.T. - time and temp.)

	Location (Top, Bottom, Ends)	Thickness		Radius		Elliptical Ratio	Conical Apex Angle	Hemispherical Radius	Flat Diameter	Side to Pressure		Category A		
		Min.	Corr.	Crown	Knuckle					Convex	Concave	Type	Full, Spot, None	Eff.
(a)	TOP	2.114	0 in.	N/A	N/A	N/A	N/A	N/A	5.906 in.			N/A	N/A	N/A
(b)	BOTTOM	0.094 in.	0 in.	N/A	N/A	2.087:1	N/A	N/A	N/A		X	N/A	N/A	N/A

Body Flanges on Heads												
	Location	Type	ID	OD	Flange Thk	Min Hub Thk	Material	How Attached	Bolting			
									Num & Size	Bolting Material	Washer (OD, ID, thk)	Washer Material
(a)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A		N/A	N/A	N/A

9. MAWP **152 psi** **N/A** at max. temp. **248 °F** **N/A**  
(Internal) (External) (Internal) (External)  
Min. design metal temp. **-4 °F** at **248 psi** Hydro, pneu., or comb. test pressure **HYDRO at 198 psi**  
Proof test **N/A**

10. Nozzles, inspection and safety valve openings:

Purpose (Inlet, Outlet, Drain, etc.)	No.	Diameter or Size	Type	Material		Nozzle Thickness		Reinforcement Material	Attachment Details		Location (Insp. Open.)
				Nozzle	Flange	Nom.	Corr.		Nozzle	Flange	
Drain	1	G 3/8"	Coupling	SA-106 Gr.B	N/A	0.105 in.	0 in.	Inherent	Fig. UW-16.1(c)	N/A	
Outlet	1	M26	Coupling	SA-105	N/A	0.039 in.	0 in.	Inherent	Fig. UW-16.1(c)	N/A	
Carft mouth	1	G 3/4"	Coupling	SA-106 Gr.B	N/A	0.168 in.	0 in.	Inherent	Fig. UW-16.2(K)	N/A	

Additional Nozzles - See Attached U-4...

11. Supports: Skirt **No** Lugs **No** Legs **No** Other **1 Support** Attached **Welded on shell**  
(Yes or no) (Number) (Number) (Describe) (Where and how)

12. Remarks: Manufacturer's Partial Data Reports properly identified and signed by Commissioned Inspectors, have been furnished for the following items of the report:

N/A

(Name of part, item number, Manufacturer's name and identifying stamp)

1. Anti-vibrating system and safety valve not supplied. It is responsibility of the user.
2. Threaded couplings.
3. Tested in horizontal position.
4. Girth seams: Joggle in heads Fig.UW-9-3.
5. Impact test exemption per UG-20(f).
6. Corrosion allowance not required per UG-25(d), for noncorrosive service. Inspection openings be omitted per UG-46 (a)(4).
7. CRN registration drawing number is SEP01638 Rev.0.

Manufactured by	<b>AIRCOM (Zhejiang) General Equipment Co., Ltd., No. 968 Waitang Road, Haiyan Economic Development Zone, Xitangqiao Subdistrict, Haiyan County, Jiaxing City, Zhejiang Province, 314305, People's Republic of China</b>		
Manufacturer's Serial No.	1055269 thru 1055318	CRN	0H2920.7C
		National Board No.	1061144-1061193

**CERTIFICATE OF SHOP/FIELD COMPLIANCE**

We certify that the statements made in this report are correct and that all details of design, material, construction, and workmanship of this vessel conform to the ASME BOILER AND PRESSURE VESSEL CODE, Section VIII, Division 1. "U" Certificate of Authorization Number **35192**

expires **June 3, 2023**

Date **12/09/2022** Co. name **AIRCOM (Zhejiang) General Equipment Co., Ltd.** Signed *Jerry Wang*  
(Manufacturer) (Representative)

**CERTIFICATE OF SHOP/FIELD INSPECTION**

Vessel constructed by **AIRCOM (Zhejiang) General Equipment Co., Ltd.** at **Subdistrict, Haiyan County, Jiaxing City, Zhejiang Province, 314305, People's Republic of China**

I, the undersigned, holding a valid commission issued by The National Board of Boiler and Pressure Vessel Inspectors and employed by TUV Rheinland AIA Services, LLC, of Houston, TX

have inspected the component described in this Manufacturer's Data Report on **December 9, 2022**, and state that, to the best of my knowledge and belief, the Manufacturer has constructed this pressure vessel in accordance with ASME BOILER AND PRESSURE VESSEL CODE, Section VIII, Division 1. By signing this certificate neither the Inspector nor his/her employer makes any warranty, expressed or implied, concerning the pressure vessel described in this Manufacturer's Data Report. Furthermore, neither the Inspector nor his/her employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

Date **12/09/2022** Signed *[Signature]* Commissions **13914**  
(Authorized Inspector) (National Board Authorized Inspector Commission number)

1638213300

Client PN

4474/1

PO

## FORM U-4 MANUFACTURER'S DATA REPORT SUPPLEMENTARY SHEET

As Required by the Provisions of the ASME Boiler and Pressure Vessel Code Rules, Section VIII, Division 1

1. Manufactured and certified by **AIRCOM (Zhejiang) General Equipment Co., Ltd., No. 968 Waitang Road, Haiyan Economic Development Zone, Xitangqiao Subdistrict, Haiyan County, Jiaxing City, Zhejiang Province, 314305, People's Republic of China**  
(Name and address of Manufacturer)

2. Manufactured for **Atlas Copco Airpower nv, Ingberthoeveweg 7, Aartselaar, 2630, Belgium**  
(Name and address of Purchaser)

3. Location of installation **Not Known**

(Name and address)

4. Type **Vertical** **N/A** **1055269 thru 1055318**  
(Horizontal, vertical, or sphere) (Tank, separator, heat exch., etc.) (Manufacturer's serial number)

**0H2920.7C**  
(CRN)

**SEP01638 Rev.5(Remark 7)**  
(Drawing number)

**1061144-1061193**  
(National Board number)

**2022**  
(Year built)

Data Report  
Item Number

Remarks

## Additional nozzles, inspection and safety valve openings:

Purpose (Inlet, Outlet, Drain, etc.)	No.	Diameter or Size	Type	Material		Nozzle Thickness		Reinforcement Material	Attachment Details		Location (Insp. Open.
				Nozzle	Flange	Nom.	Corr.		Nozzle	Flange	
Inlet	1	G 1"	Coupling	SA-105	N/A	0.133 in.	0 in.	Inherent	Fig. UW-16.1(c)	N/A	
Carft mouth	1	G 3/4"	Coupling	SA-106 Gr.B	N/A	0.118 in.	0 in.	Inherent	Fig. UW-16.1(c)	N/A	
Air inlet	1	OD 1.457"	Coupling	SA-106 Gr.B	N/A	0.118 in.	0 in.	Inherent	Fig. UW-16.1(c)	N/A	
Carft mouth	1	G 1/8"	Thread-F	N/A	N/A	N/A	0 in.	Inherent	N/A	N/A	
Carft mouth	1	G 1/4"	Thread-F	N/A	N/A	N/A	0 in.	Inherent	N/A	N/A	
Safety valve	1	G 1/8"	Thread-F	N/A	N/A	N/A	0 in.	Inherent	N/A	N/A	

Certificate of Authorization: Type **"U"** No. **35192** Expires **June 3, 2023**

Date **12/09/2022** Name **AIRCOM (Zhejiang) General Equipment Co., Ltd.**  
(Manufacturer)

Signed **Jeffrey Wang**  
(Representative)

Date **12/09/2022** Signed **[Signature]**  
(Authorized Inspector)

Commissions **13914**  
(National Board Authorized Inspector Commission number)