the pressure equipment safety authority

9410 - 20 Ave N.W.
Edmonton, Alberta, Canada T6N 0A4
Tel: (780) 437-9100 / Fax: (780) 437-7787

May 08, 2023

Attention: Cecylia Garbacz
TECHNICAL STANDARDS & SAFETY AUTHORITY
345 CARLINGVIEW DRIVE
TORONTO, ON M9W 6N9

The design submission, Tracking Number 2023-00879, Web Portal Number 2023-S0496, originally received on February 10, 2023 was surveyed and accepted for registration as follows:

CRN : 0H23168.2 **Accepted on:** May 08, 2023

Reg Type: NEW DESIGN **Expiry Date:** May 08, 2033

Drawing No. : Report R-1759-AB, R.0

Fitting type: Housing D1, D2, D3, D4 Desiccant Air Dryers

Design registered in the name of : FONDREMY INC

Description	MAWP	Design Temperature
See scope for rating		

The registration is conditional on your compliance with the following notes:

As indicated on AB-41 Statutory Declaration or AB-351 Declaration of Conformity form and submitted documentation, the code of construction is SECTION VIII, DIV. 1.

- It is our understanding that the fitting(s), included as the scope of this submission, that is(are) subject to the Safety Codes Act shall comply with the requirements of the indicated Standard or Code of Construction on the AB-41 Statutory Declaration or AB-351 Declaration of Conformity as supported by the attached data which identifies the dimensions, materials of construction, press./temp. ratings and the basis for such ratings, and the identification marking of the fittings.
- This registration is valid only for fittings fabricated at the location(s) covered by the QC certificate attached to the accepted AB-41 Statutory Declaration or AB-351 Declaration of Conformity form.
- This registration is valid only until the indicated expiry date and only if the Manufacturer maintains a valid quality management system approved by an acceptable third-party agency, and maintains a valid Certification of Authorization Permit if required by the jurisdiction where manufacturing takes place, until that date.
- Should the approval of the quality management system lapse before the expiry date indicated above, this registration shall become void.

An invoice covering survey and registration fees will be forwarded from our Revenue Accounts.

If you have any question don't hesitate to contact me by phone at (780) 433-0281 ext 3330 or fax (780) 437-7787 or e-mail grynchuk@absa.ca.

Sincerely,

M. Grynchuk

GRYNCHUK, MILLA, P. Eng.
DOP Cert. No. D00005217

Continued on the next page…

the pressure equipment safety authority

9410 - 20 Ave N.W.
Edmonton, Alberta, Canada T6N 0A4
Tel: (780) 437-9100 / Fax: (780) 437-7787

May 08, 2023

STATUTORY DECLARATION
Registration of Fittings
Single or Multiple Fitting Designs within one Fitting Category

In this space, show facsimile of manufacturer's logo or trademark as it will appear on the fitting.

FONDRÉMY
SUPER-DRY SYSTEMS INC.

I, Francis Lemair (name of applicant), General Manager (position title) (must be in a position of authority)

of FONDREMY INC. (name of manufacturer)

located at 1465, Boul Industriel, Chambly (Quebec) J3L 4C4 (plant address)

do solemnly declare that the fittings listed hereunder, which are subject to the Safety Codes Act (select only one)

☒ comply with the requirements of ASME Section VIII-1 (title of recognized North American Standard) which specifies the dimensions, materials of construction, pressure/temperature ratings and identification marking of the fittings, or

☐ are not covered by the provisions of a recognized North American standard and are therefore manufactured to comply with _____ (title of code of construction or other applicable document) as supported by the attached data which identifies the dimensions, materials of construction, pressure/temperature ratings and the basis for such ratings, and the identification marking of the fittings.

I further declare that the manufacture of these fittings is controlled by a quality control program which has been verified as described in the below Table as being suitable for the manufacturing of these fittings to the stated standard, regulation, code, guideline or other applicable document. The fittings covered by the declaration for which I seek registration are as provided in the Supplementary Sheet(s) attached.

Quality Program Verification and Manufacturing Sites

A copy of the Quality Certificate from each manufacturing site must be included

Item #	Product Description, Model or Series	Quality Program	Scope of Certification	Expiry Date	Verifying Organization	Location(s) Plant Name and address
1.	Desiccant Air Dryers	ISO 9001:2015	Development and Manufacture	April 1, 2024	BNQ	See Worldwide Locations Appendix
2.						

Tracking #: _____

In support of this application, the following information, calculations and/or test data are attached:

Scope of CRN, Drawings, Calculations, Reports

(Signature of the Declarer) (Date)

DECLARED before me at Mareville (city) in the province of Québec (province, territory, or state)

this 6 day of April (Month), 2023 (Year)

(print) Guillaume Ste-Marie, notary (a Commissioner of Oaths or Notary Public)

(sign) _____ (a Commissioner of Oaths or Notary Public)

for life (expiry date (mm/dd/yy))

Commissioner of Oaths / Notary Public in and for: Quebec, Canada (province, territory, or state)

For ABSA Office Use Only:

NOTES: _____

To the best of my knowledge and belief, the application meets the requirements of the Safety Codes Act and CSA Standard B51, Part 1, Clause 4.2, and is accepted for registration in Category _____.

CRN: _____

Registered Date: _____

Expiry Date: _____

Signature: _____
(Signature of the Administrator/SCO)

The information you provide is necessary only for the administration of the programs as required by the Alberta Safety Codes Act and Regulations in the Pressure Equipment Discipline

2023-00879
ABSA
SAFETY CODES ACT - PROVINCE OF ALBERTA
ACCEPTED: 0H23168.2
See acceptance letter for conditions of registration.
Date: 2023-05-08 By: M. Grynchuk
MILLA GRYNCHUK, P. Eng.
DOP: D00005217

This stamp and signature have been affixed electronically to this registered design as required by Section 20(1) of the Pressure Equipment Safety Regulation, in accordance with the Electronic Transactions Act.

Tracking #: _____

FONDREMY INC.
1465, BOUL INDUSTRIEL,
CHAMBLY (QUEBEC)
J3L 4C4

24-Apr-23

SCOPE OF CRN REGISTRATION

Product Description	Design Code	Material Specification	Housing	Inlet/ Outlet	MAWP at 100°F	MDMT	Report Number
Desiccant Air Dryers	ASME Section VIII-1	Housing: ASTM B26 UNS A03560 T6, Coupling: 300 Series Stainless Steel	D1	1" FNPT	130 psig	-40°F	Super-Dry Report R-1759-AB Rev. 0
			D2	1-1/2" FNPT	150 psig		
			D3	2" FNPT	105 psig		
			D4	3" FNPT	70 psig		

Note 1: MAWP = Maximum Allowable Working Pressure, MDMT = Minimum Design Metal Temperature.

Note 2: For low temperature operation the products shall conform to the rules of the applicable codes under which they are used.

Note 3: In accordance with CSA B51 paragraph 4.2.5 Fondremy is taking responsibility for the product covered under this CRN that is manufactured at Clampco Products, Inc., 1743 Wall Road, Wadsworth, OH 44281.

SUPERDRY SYSTEMS INC.
2285 ave. Francis-Hughes, # 315
Laval, Qc, Canada
H7S 1N5

24-Apr-23

Design Report Number
R-1759-AB Revision 0

DESIGN REPORT IN ACCORDANCE WITH ASME SECTION VIII-1, 2021

Product Description: **Housing D1, D2, D3, D4 Desiccant Air Dryers** ***(Note 1)***
Assembly Drawing(s): SKU: 280-110 Rev. 03, SKU:280-120 Rev. 03, SKU: 280-130 Rev. 02, SKU: 280-140 Rev. 02 ***(Note 2)***
Connection Types: 1" FNPT, 1-1/2" FNPT, 2" FNPT, 3" FNPT
Material: Housing and Cover: ASTM B26 UNS A03560 T6
Coupling: 300 Series Stainless Steel as manufactured by Clampco

Design Conditions:

Housing	Drawing	Design Pressure and Temperature
D1	SKU: 280-110 Rev. 03	130 psig at 100°F
D2	SKU: 280-120 Rev. 03	150 psig at 100°F
D3	SKU: 280-130 Rev. 02	105 psig at 100°F
D4	SKU: 280-140 Rev. 02	70 psig at 100°F

MDMT: -40°F
Corrosion Allowance: NIL
Mechanical Allowance: NIL
NDE: NIL
PWHT: NIL

Note 1: See Appendix A for Catalog Data.
Note 2: See Appendix B for Assembly Drawings and Component Drawings.

DESCRIPTION OF PRODUCT

Super-Dry Compressed Air Dryers contains two highly efficient polypropylene coalescer elements at inlet & outlet ports to absorb oil and all solid air particles. Also included, one desiccant bag specifically designed to absorb water vapors and humidity from your compressed air system.

Figure 1

ALLOWABLE STRESS

Material:			**ASME SB26 UNS A03560 T6**
Allowable Stress Values @	100	F=	6,880 psi, Stress Value from Table 1b of ASME Section II-D ***(Note)***
Yield Stress @	100	F=	20,000 psi, Stress Value from Table 1b of ASME Section II-D ***(Note)***
Tensile Stress @	100	F=	30,000 psi, Stress Value from Table 1b of ASME Section II-D ***(Note)***

Note: Casting Quality Factor = 0.8

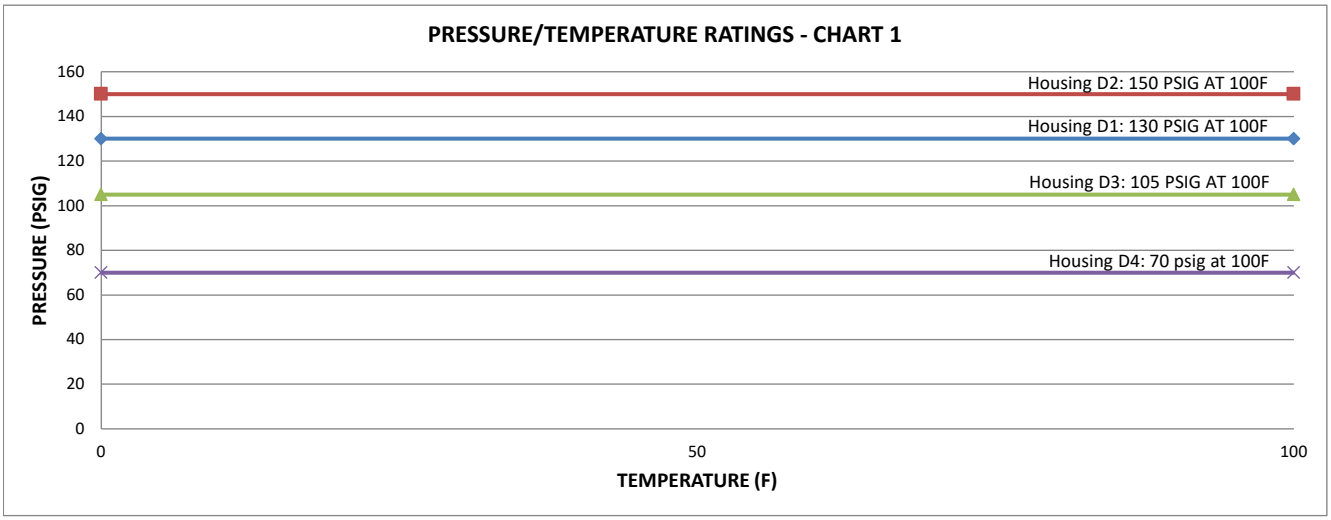
1/ Proof Test in accordance with Part UG-101 of ASME VIII-1

1.1/ Samples Tested

Testing was performed on all fitting types and sizes to be covered under the CRN.

1.2/ Section UG-101(m) Calculations

It is required that the product satisfy the requirements of UG-101 resulting in the following maximum allowable working pressure's (MAWP) at the following design temperatures.



To determine the required burst test pressure to satisfy the above MAWP at the above design temperatures the requirements of UG-101(k) apply. In accordance with the requirements of UG-101(k) the maximum allowable working pressure for vessels or parts that are to operate at temperatures at which the allowable stress value of the material is less than at the test temperature shall be determined by the following formula:

Po = Pt*(S/S2)

Calculations have been performed using ASME SB26 UNS A03560 T6		
Sizes:	**All**	
where;		
Po =		psig, MAWP at the design temperature
Pt =		psig, MAWP at test temperature
S =	6880	psi, Maximum allowable stress value at the design temperature
S2 =	6880	psi, Maximum allowable stress value at the test temperature
Solving for Pt the results are:		
Pt =	Po	psig, MAWP at test temperature or MAWP at 100 F

In accordance with UG-101(m)(1) the burst test may be stopped at any pressure before rupture that will satisfy the requirements for the desired maximum allowable working pressure.

In accordance with UG-101(m)(2)(b) the MAWP of parts constructed from cast materials, except cast iron and ductile iron is determined as follows:

P = (Bf/4)x(SuE/Suavg) **or** **P = (Bf/4)x(SuE/Sur)**
Option A *Option B*

where;
P = psig, MAWP
B = psig, Bursting Pressure, or hydrostatic test pressure at which the test was stopped
f = 0.8 Quality Factor used Casting
E = efficiency of welded joint, if used (No welded joints = 1)
Su = psi, specified minimum tensile strength at room temperature.
Suavg = psi, average actual tensile strength of test specimens at room temperature
Sur = psi, maximum tensile strength of range of specification at room temperature.

Proof testing was performed to meet the intent of Section UG-101. Correcting for Su or Suavg was not performed nor documented. This results in a **Minimum Burst Pressure factor 4/E/f = 4/1/0.8 = 5.00X**

To compensate for the fact that Su or Suavg was not documented a further factor of 1.20X has been applied. **This results in a Minimum Burst Test factor of 5.00 x 1.20 = 6.00X**

Therefore, the required burst pressure is calculated by the formula:

B = 4xPx(Suavg/SuE)/f

The following table summarizes the required burst test pressure to satisfy the required MAWP.

Housing	P = Pt = Calculated MAWP at 100F (psig)	Suavg/Su	E	f	B - Calculated Minimum Burst Pressure (psig) at 100 F.
D1	130	1.2	1	0.8	780
D2	150	1.2	1	0.8	900
D3	105	1.2	1	0.8	630
D4	70	1.2	1	0.8	420

1.3/ Test Results

Proof testing was witnessed by a National Board Inspector. See ***Appendix C*** for proof test results.

The results of the proof test show

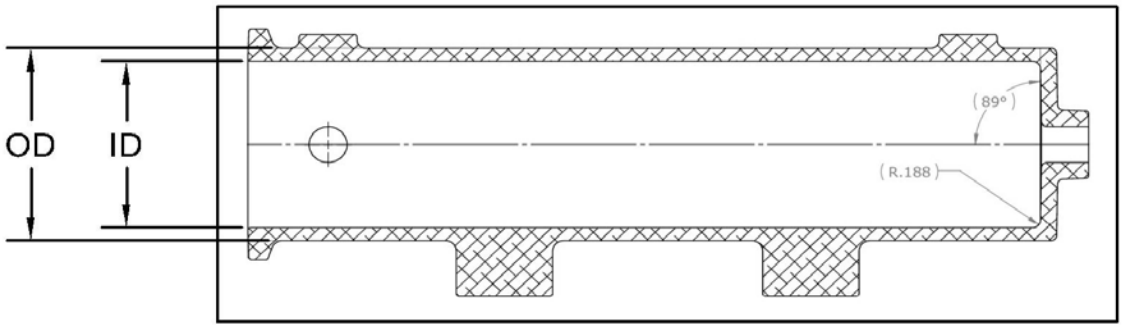
Housing	Sample No.	Actual Burst Pressure (psig)	Required MAWP at Test Temperature (Pt)(psig)	Burst CRN factor (X)	Failure Mode
D1	17010350-1	787	130	6.05	Lid/Clamp
D2	17010350-2	936	150	6.24	Lid/Clamp
D3	17010350-3	650	105	6.19	Lid/Clamp
D4	17010350-4	428	70	6.11	Crack on Lid

Therefore, since the actual burst pressure exceeds the calculated minimum burst pressure the products are suitable for the design conditions stated.

2. Shell Wall Thickness

In support of the Proof Test results the following calculations are performed.

The housings wall thickness has been explored to ensure compliance with ASME Section VIII-1 UG-27



Housing	Housing OD (in.)	Housing ID (in.)	Wall Thickness (in.)
D1	4.590	4.060	0.27
D2	6.940	6.030	0.46
D3	6.940	6.030	0.46
D4	9.065	8.030	0.52

Circumferential Stress (Longitudinal Joints).
When the thickness does not exceed one-half of the inside radius, or P does not exceed 0.385SE, the following formulas shall apply:

eq. (1) t = (PR)/(SE-0.6P)

Therefore, The maximum internal Design Pressure can be calculated as

P = SEtactual / (R+0.6tactual)

Where;

t actual =		in, = Actual Nominal Wall Thickness - Wall Thickness tolerance (0.008")
P =		psig, Max. Internal design gage pressure
P Rated =	130	psig, **Housing D1** Maximum rated pressure per Manufacturer.
	150	psig, **Housing D2** Maximum rated pressure per Manufacturer.
	105	psig, **Housing D3** Maximum rated pressure per Manufacturer.
	70	psig, **Housing D4** Maximum rated pressure per Manufacturer.
D = OD		in., Outside Diameter
ID =		in., Inside Diameter
R =		in., Inside Radius
S =	6,880	psi, Basic Allowable Stress Value **ASME SB26 UNS A03560 T6**
E =	1.0	Joint Efficiency
c =	0.0	Corrosion Allowance

The results of the calculations are as follows:

Housing	OD in.	ID in.	R	t actual-c in.	P psig.	P Rated psig	
D1	4.590	4.060	2.030	0.265	833	130	Acceptable
t in.	**c in.**	**t+c in.**	**t actual in.**				
0.0388	0.0000	0.0388	0.265				

Housing	OD in.	ID in.	R	t actual-c in.	P psig.	P Rated psig	
D2	6.940	6.030	3.015	0.455	952	150	Acceptable
t in.	**c in.**	**t+c in.**	**t actual in.**				
0.0666	0.0000	0.0666	0.455				

Housing	OD in.	ID in.	R	t actual-c in.	P psig.	P Rated psig	
D3	6.940	6.030	3.015	0.455	952	105	Acceptable

t in.	c in.	t+c in.	t actual in.
0.0464	0.0000	0.0464	0.455

Housing	OD in.	ID in.	R	t actual-c in.	P psig.	P Rated psig	
D4	9.065	8.030	4.015	0.518	823	70	Acceptable

t in.	c in.	t+c in.	t actual in.
0.0411	0.0000	0.0411	0.518

Since tactual is larger than t+c in all cases the wall thickness is acceptable.

3. Minimum Temperature Considerations

The products minimum design metal temperature (MDMT) is - 40°F

3.1/ Minimum Temperature Considerations ASME Section VIII-1 UNF-65

UNF-65 LOW TEMPERATURE OPERATION
The materials listed in Tables UNF-23.1 through UNF-23.5, together with deposited weld metal within the range of composition for material in that Table, do not undergo a marked drop in impact resistance at subzero temperature. Therefore, no additional requirements are specified for wrought aluminum alloys when they are used at temperatures down to −452°F (−269°C);

Since the products MDMT is greater then the minimum specified in ASME Section VIII-1 the material is acceptable for use at the MDMT specified.

4. Testing

4.1 Hydrostatic

Hydrostatic testings shall be performed in accordance with ASME Section VIII-1 UG-99(b)

(b) Except as otherwise permitted in (a) above and 27-4, vessels designed for internal pressure shall be subjected to a hydrostatic test pressure that at every point in the vessel is at least equal to 1.3 times the maximum allowable working pressure35 multiplied by the lowest stress ratio (LSR) for the pressure-boundary materials of which the vessel is constructed.

Therefore the minimum hydrostatic test pressure shall be equal to **1.3 x P** psig

PREPARED BY:

Scott Islip, P. Eng.
ROUND ENGINEERING INC.

24-Apr-23
Date

APPENDIX A

SUPER-DRY
NO MORE WATER.

D Series

Compressed Air Dryers

- UP TO 300 SCFM
- POINT OF USE DRYERS
- SUPPLEMENT TO A CENTRAL SYSTEM
- ZERO AIR LOSS

LIFE EXPECTANCY 25 YEARS

SUPER-DRY 10 YEAR WARRANTY

Applications

| Sand Blasting | Paint Spraying | Dust Collectors | Foam Spray |
| Air Welders | Plasma Cutting | Air Tools | Packing Equipment |

D Series

How It Works

Super-Dry Compressed Air Dryers contains two highly efficient polypropylene coalescer elements at inlet & outlet ports to absorb oil and all solid air particles. Also included, one desiccant bag specifically designed to absorb water vapors and humidity from your compressed air system.

Housings for Flows up to 300 SCFM

- Heavy duty aluminum casting for high durability and corrosion resistance
- Powder coated exterior for added durability
- Special V-band stainless steel clamps permit easy removal of covers for cartridge replacement
- Optimized air flow through housing minimizes pressure drop
- Wall mounting brackets included
- 3 stages in one unit: separation, filtration and drying

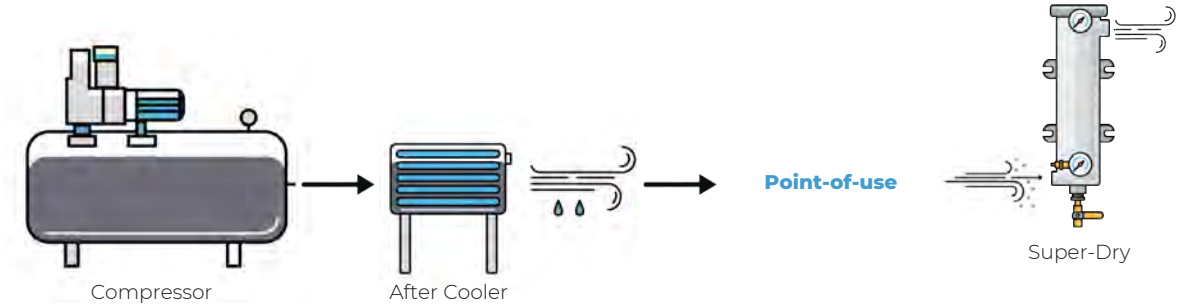
Enhanced Performance

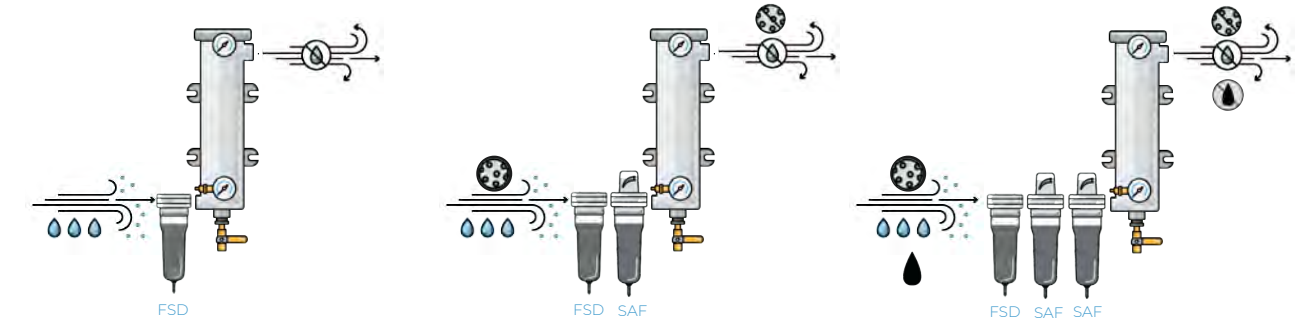
- Easy replaceable self-contained desiccant cartridges
- High efficiency polypropylene coalescent elements
- Optimum filter efficiency even at low air flows
- 10 year warranty
- Life expectancy: 25 years
- Pressure dew point: - 40° F*
- Max. working pressure: 150 PSIG

*The Super-Dry D Series is a non-regenerative point-of-use air dryer. It will not provide a stable dew point for continuous operations. It is not a replacement for a twin tower air dryer.

D Series

Typical Configurations

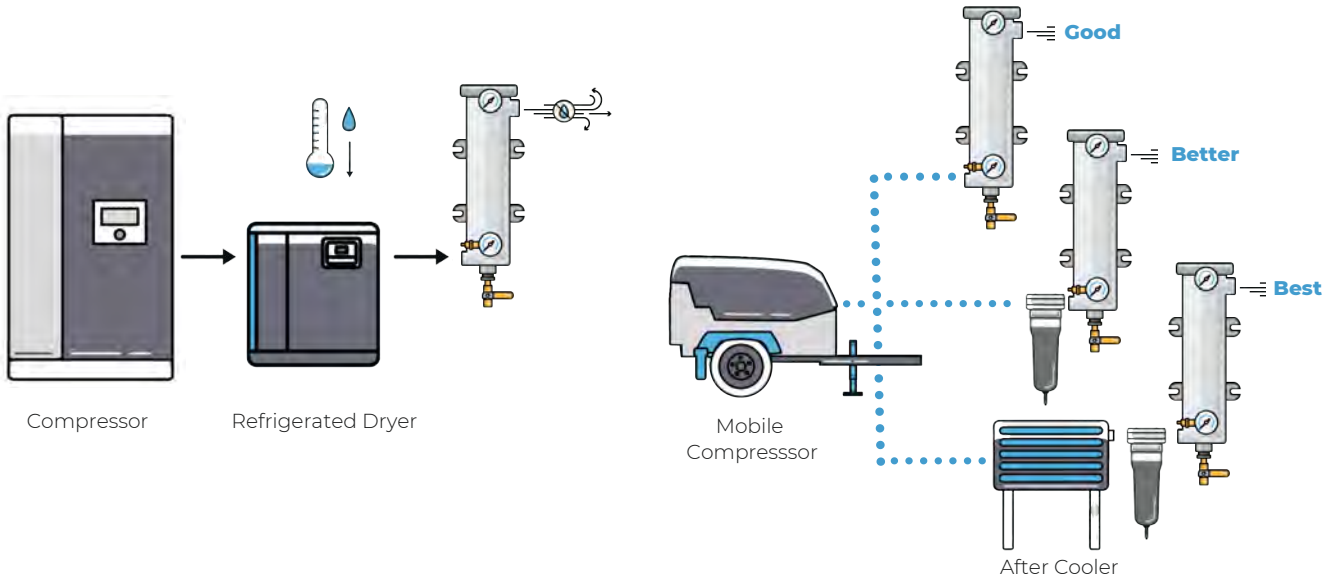




Bulk Liquids

Solid Particulates

Oil Carry-Over



1 Temperature and Moisture Indicator

» Indicates optimum cartridge replacement based on % relative humidity

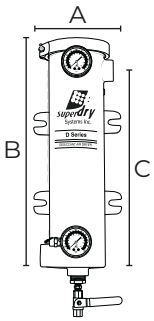
2 Automatic Timer Drain

» Efficient drainage of condensate

» Extends the cartridge life of the dryer

3 Water Separator

» Pre-Filtration of D series Air Dryer

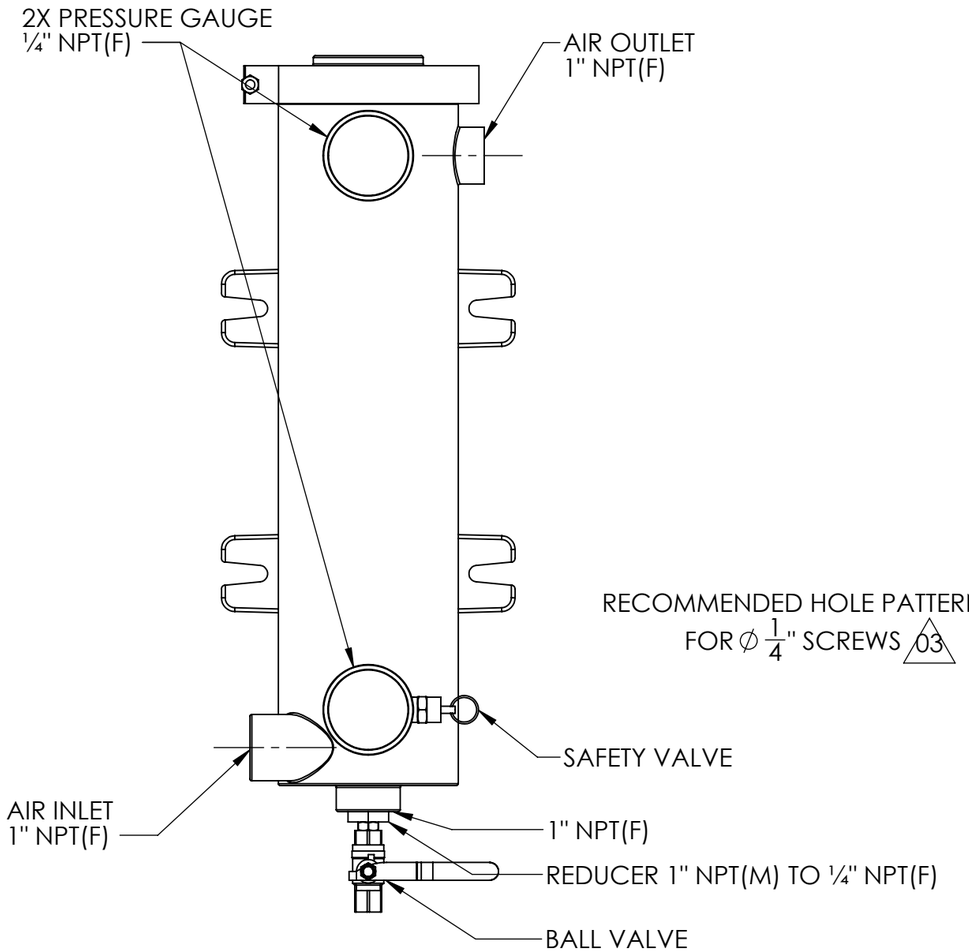


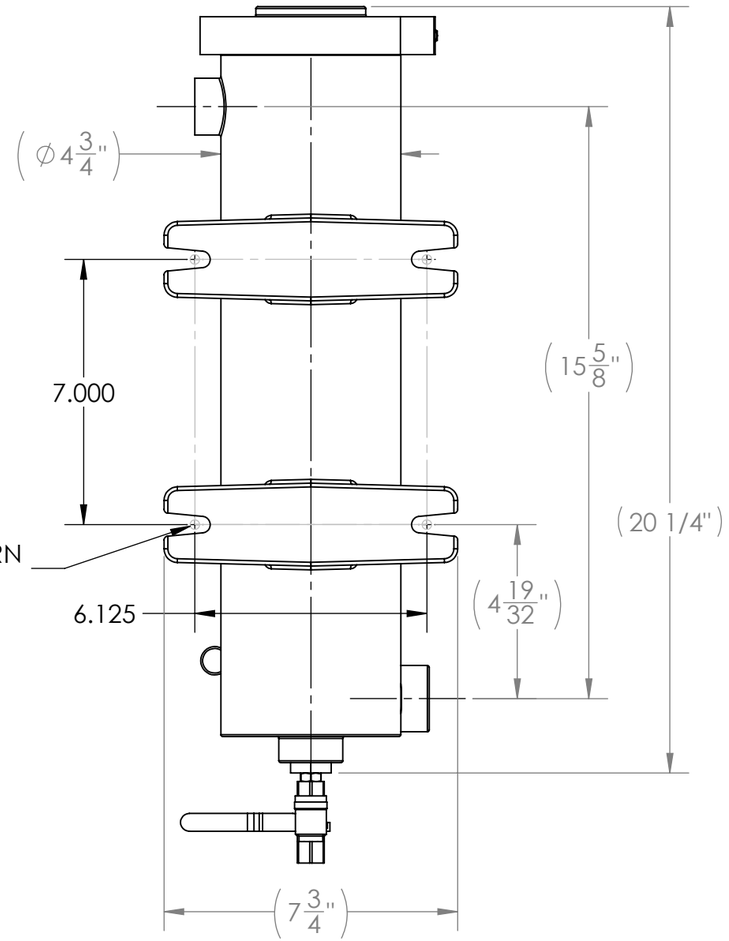
Specifications and ordering information:

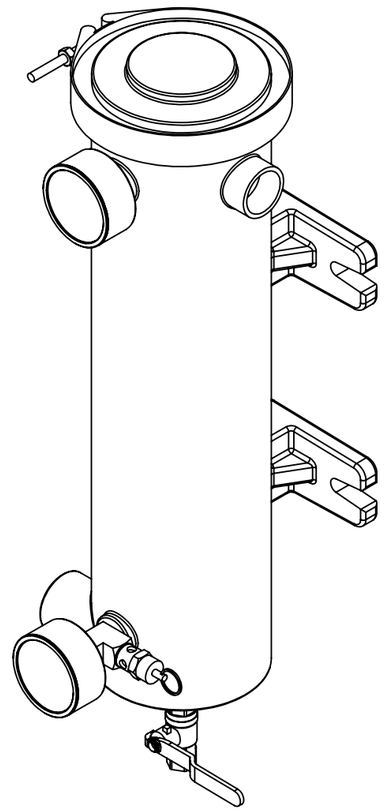
Housing	Air flow 100 psig scfm	Inlet/ Outlet NPT in	Dimensions (in) A	B	C	Replacement kit	Weight (lbs)
D-1	70	1	6	19	17 ½	ED-1	20
D-2	150	1 ½	9	20	18	ED-2	40
D-3	200	2	9	33	30	ED-3	75
D-4	300	3	11	33	29 ½	ED-4	100
D4-CRN	300	3	12	35	29 ½	ED-4 -CRN	125

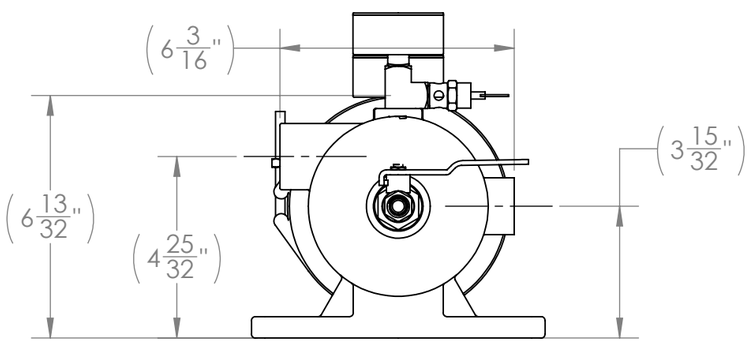
Maximum inlet temperature: 100°F (38°F) Maximum inlet pressure: 150 psig

APPENDIX B

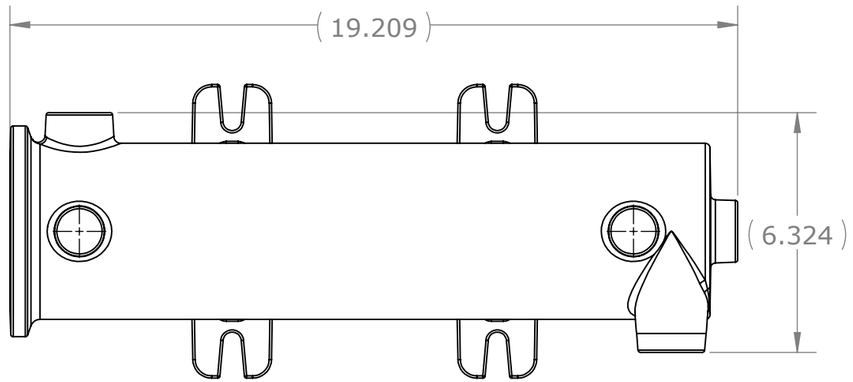


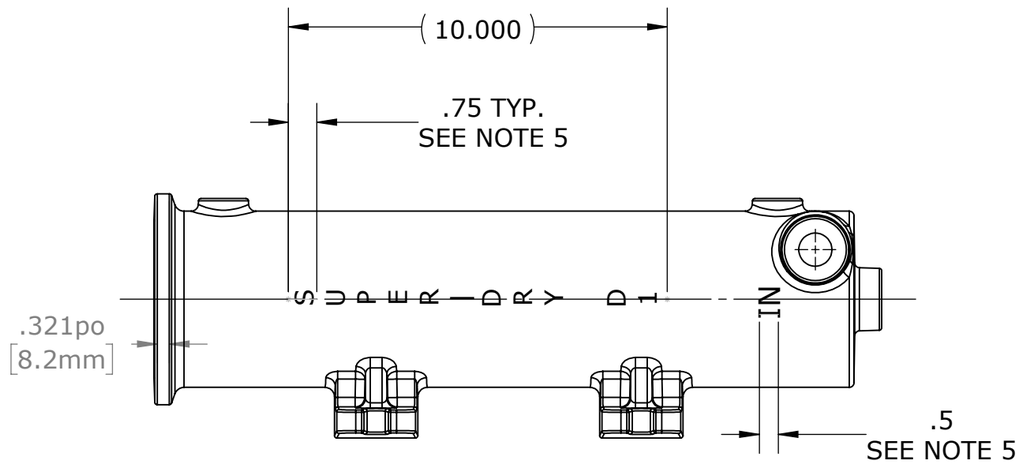


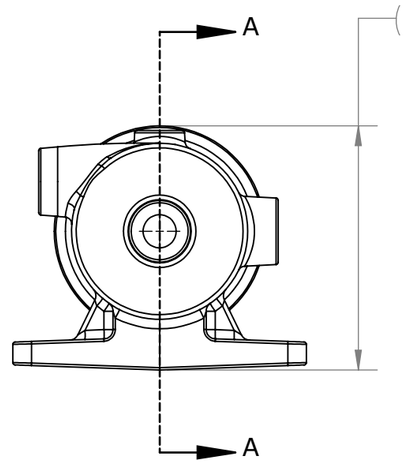


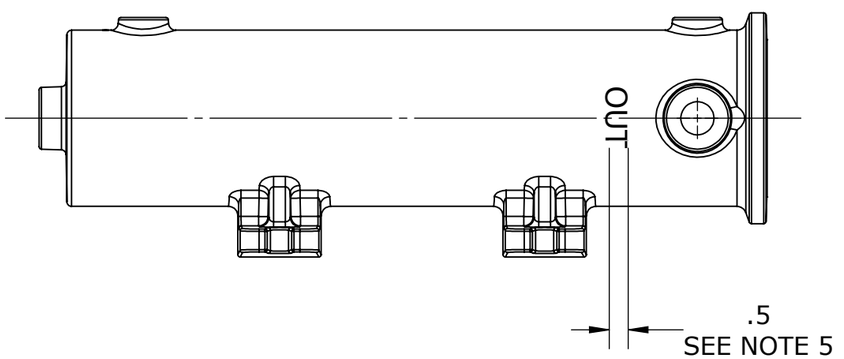


DESSINÉ / DRAWN: JC	DATE YY/MM/DD: 21/11/23	SUPER-DRY NO MORE WATER.	
VÉRIFIÉ / CHECKED: JDF	DATE YY/MM/DD: 22/07/19	DESCRIPTION: D1 - Desiccant Air Dryer	
ÉCHELLE / SCALE: 1:4	FORMAT / SIZE: B	NO. DESSIN / DWG NUMBER: SKU: 280-110	PAGE / SHEET: 1 OF 1 / REV.: 03









NOTES:

1. THIS DRAWING IS A LIMITED DIMENSION PRINT CREATED FROM A 3D SOLID MODEL. FOR BASIC DIMENSIONS NOT SHOWN ON DRAWING REFER TO 3D SOLID MODEL.
2. REMOVE SHARP EDGES AND BURRS
3. UNLESS OTHERWISE SPECIFIED, SURFACES TO BE WITHIN ⌓ | 0.125 | A
4. DRAFT ANGLE: 3° MAX
5. IDENTIFICATION: 0.1" RAISED LETTERS
6. NO WELDING NOR THERMAL CUT ALLOWED ON CASTED PARTS

REV	DESCRIPTION	DWN	APP	DATE
IR	RELACHE INITIALE / INITIAL RELEASE	JDF		2022-07-13

REVISION

SAUF INDICATIONS CONTRAIRES
UNLESS OTHERWISE SPECIFIED

CONFORME A ASME Y14.5M-2018.
TOUTES LES DIMENSIONS SONT EN POUCES.
IN ACCORDANCE WITH ASME Y14.5M-2018.
ALL DIMENSIONS ARE IN INCHES.

TOLERANCES:
X ± 1/16
X.X ± .030
X.XX ± .015
X.XXX ± .005
X.XXXX ± .0005
ANGLE ± .5°

MATERIAU / MATERIAL: ALUMINUM CASTING SB-26-A03560-T71

POIDS TOTAL / TOTAL WEIGHT: 12.0 LBS

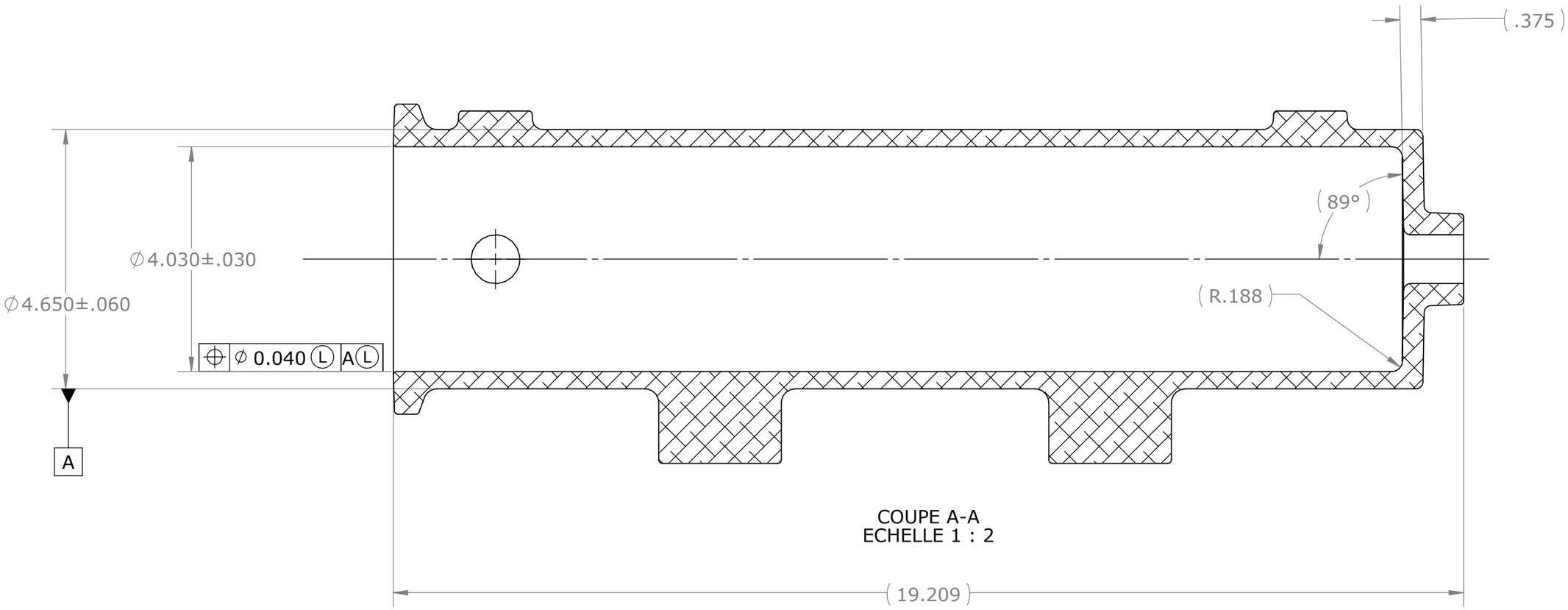
DESSINE / DRAWN: J.DUPLESSIS-F. — DATE YY/MM/DD: 2022-07-13

VERIFIE / CHECKED — DATE YY/MM/DD

SUPER-DRY
NO MORE WATER.

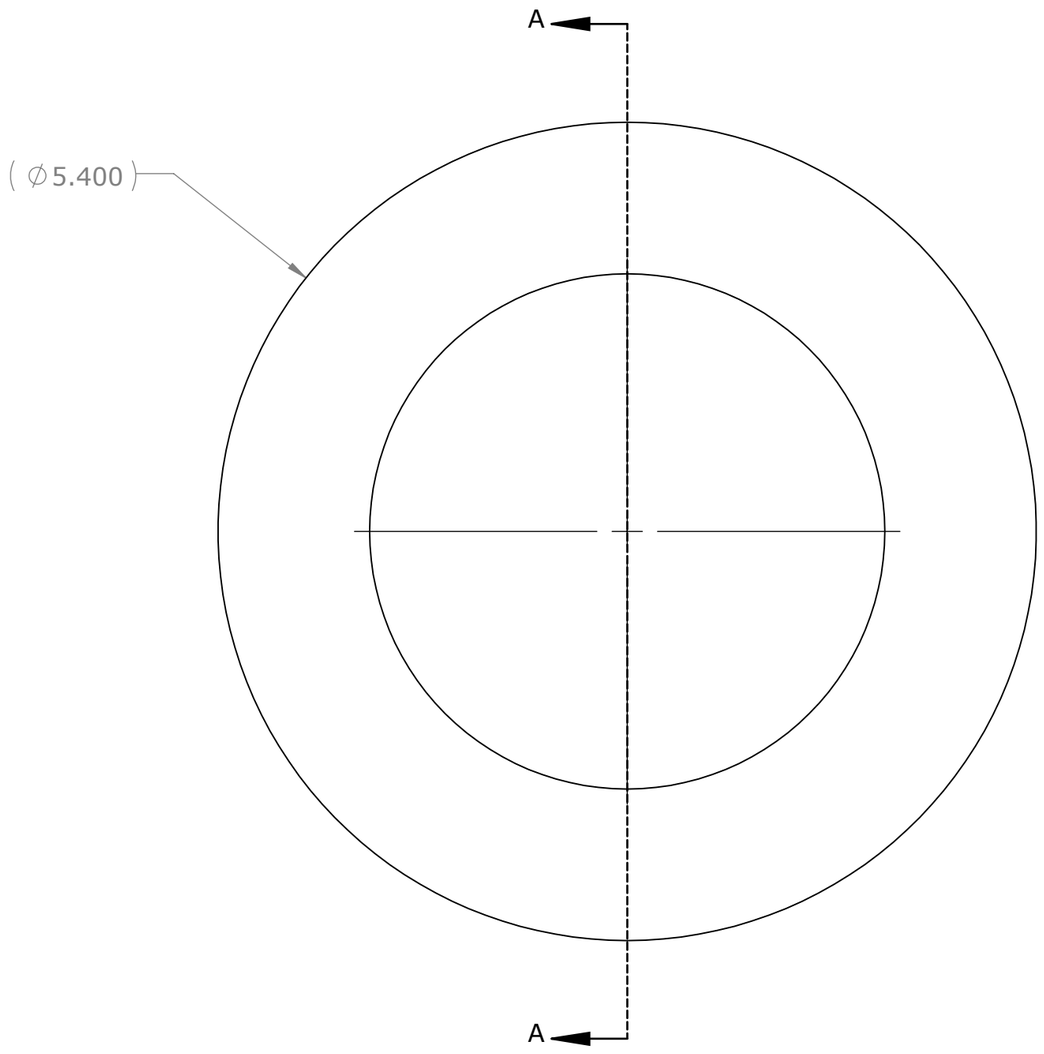
DESCRIPTION: Cylindre D1 - Corps principal

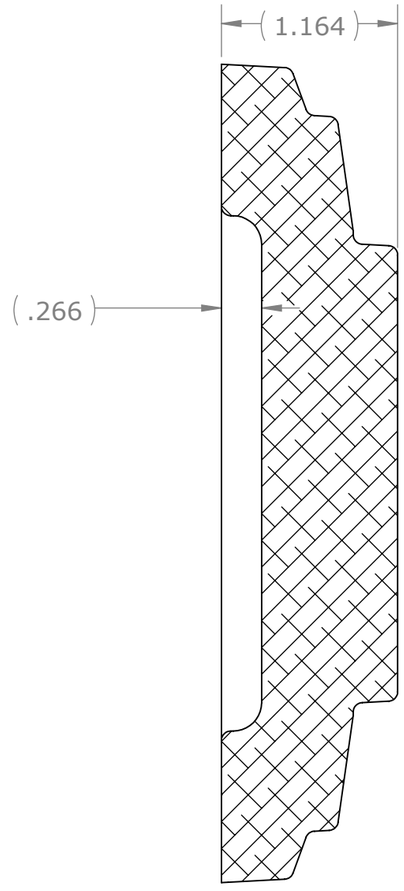
ECHELLE / SCALE	FORMAT / SIZE	NO. DESSIN / DWG NUMBER	PAGE / SHEET	REV.
1:4	B	Cylindre D1 corps principal_REV_IR	1 OF 2	IR



COUPE A-A
ECHELLE 1 : 2

SAUF INDICATIONS CONTRAIRES UNLESS OTHERWISE SPECIFIED			SUPER-DRY NO MORE WATER.
CONFORME A ASME Y14.5M-2018. TOUTES LES DIMENSIONS SONT EN POUCES. IN ACCORDANCE WITH ASME Y14.5M-2018. ALL DIMENSIONS ARE IN INCHES.	TOLERANCES: X ± 1/16, X.X ± .030, X.XX ± .015, X.XXX ± .005, X.XXXX ± .0005, ANGLE ± .5°		PROPRIETARY AND CONFIDENTIAL THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE PROPERTY OF SUPER-DRY. ANY REPRODUCTION IN PART OR AS A WHOLE WITHOUT THE WRITEN PERMISSION OF SUPER-DRY IS PROHIBITED
MATERIAU / MATERIAL	ALUMINUM CASTING SB-26-A03560-T71		
POIDS TOTAL / TOTAL WEIGHT	12.0 LBS		
DESSINE / DRAWN	J.DUPLESSIS-F.	DATE YY/MM/DD 2022-07-13	DESCRIPTION: Cylindre D1 - Corps principal
VERIFIE / CHECKED		DATE YY/MM/DD	
ECHELLE / SCALE 1:2	FORMAT / SIZE B	NO. DESSIN / DWG NUMBER Cylindre D1 corps principal_REV_IR	PAGE / SHEET 2 OF 2 — REV. IR





COUPE A-A

NOTES:

1. THIS DRAWING IS A LIMITED DIMENSION PRINT CREATED FROM A 3D SOLID MODEL. FOR BASIC DIMENSIONS NOT SHOWN ON DRAWING REFER TO 3D SOLID MODEL.
2. REMOVE SHARP EDGES AND BURRS
3. UNLESS OTHERWISE SPECIFIED, SURFACES TO BE WITHIN ⌓ 0.125
4. DRAFT ANGLE: 3° MAX
5. NO WELDING NOR THERMAL CUT ALLOWED ON CASTED PARTS

REV	DESCRIPTION	DWN	APP	DATE
IR	RELACHE INITIALE / INITIAL RELEASE	JDF		2022-07-14

REVISION

SAUF INDICATIONS CONTRAIRES
UNLESS OTHERWISE SPECIFIED

CONFORME A ASME Y14.5M-2018.
TOUTES LES DIMENSIONS SONT EN POUCES.
IN ACCORDANCE WITH ASME Y14.5M-2018.
ALL DIMENSIONS ARE IN INCHES.

TOLERANCES:

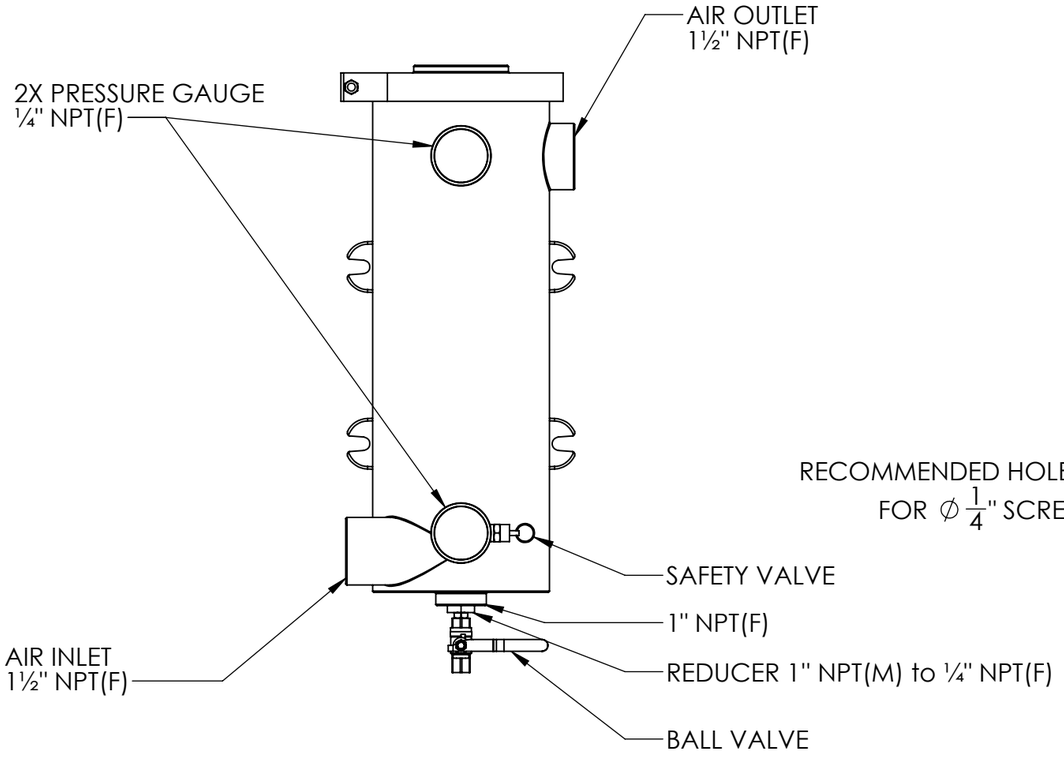
X	± 1/16
X.X	± .030
X.XX	± .015
X.XXX	± .005
X.XXXX	± .0005
ANGLE	± .5°

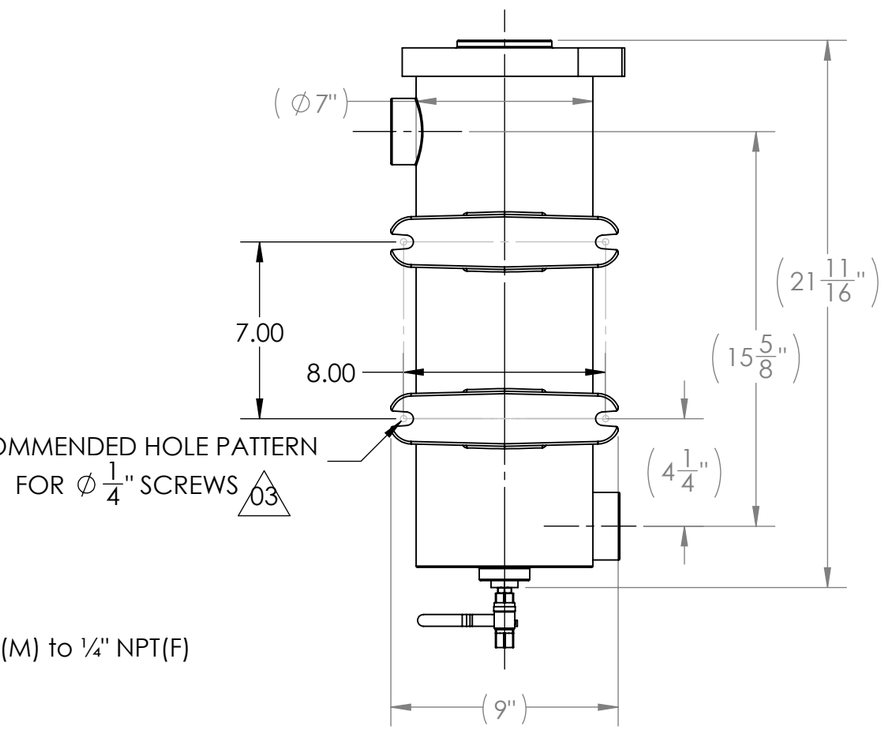
SUPER-DRY
NO MORE WATER.

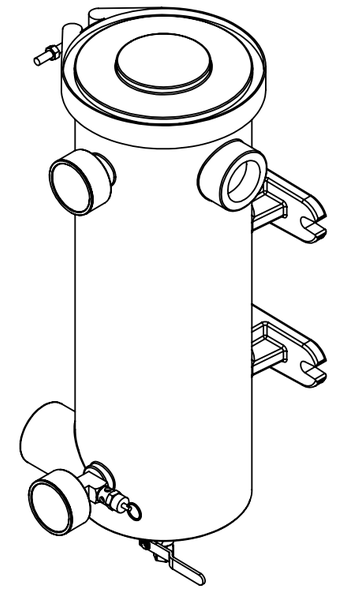
MATERIAU / MATERIAL	ALUMINUM CASTING SB-26-A03560-T71
POIDS TOTAL / TOTAL WEIGHT	1.65 LBS
DESSINE / DRAWN	J.DUPLESSIS-F.
DATE YY/MM/DD	2022-07-13
VERIFIE / CHECKED	
DATE YY/MM/DD	

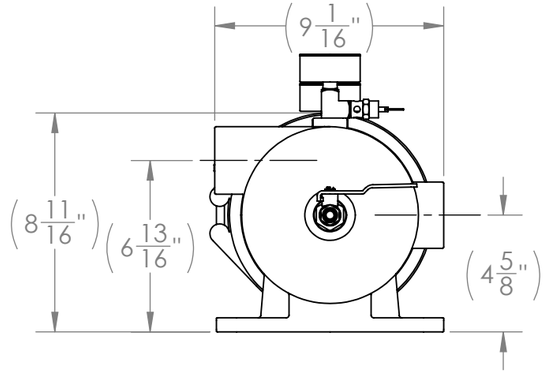
DESCRIPTION: CYLINDRE D1 - COUVERCLE

ECHELLE / SCALE	FORMAT / SIZE	NO. DESSIN / DWG NUMBER	PAGE / SHEET	REV.
1:1	B	Cylindre D1 - Couvercle_REV_IR	1 OF 1	IR



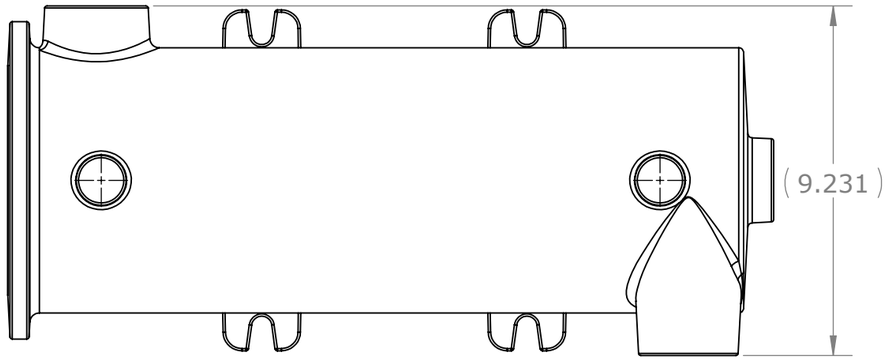


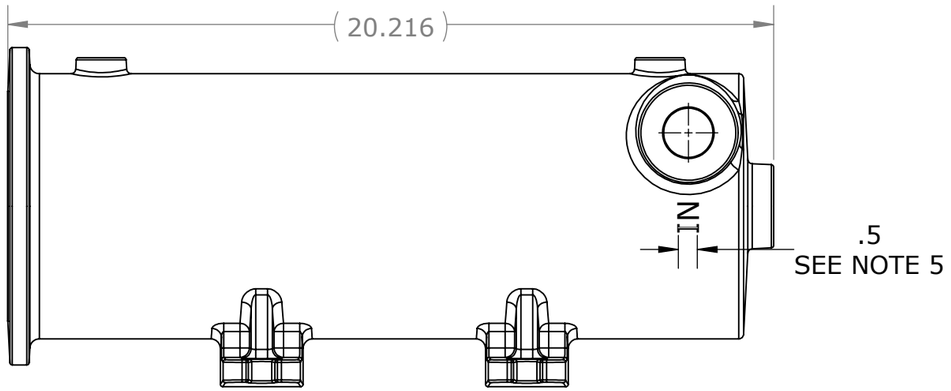


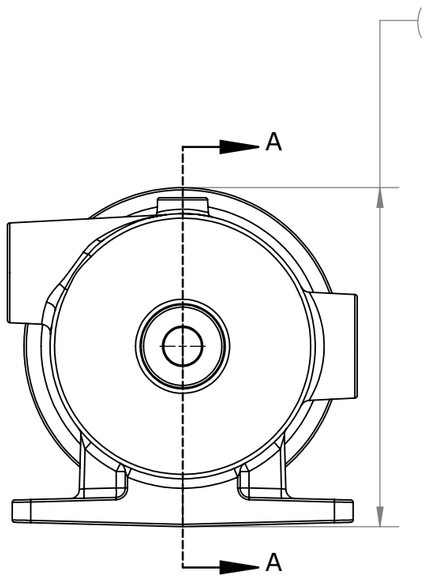


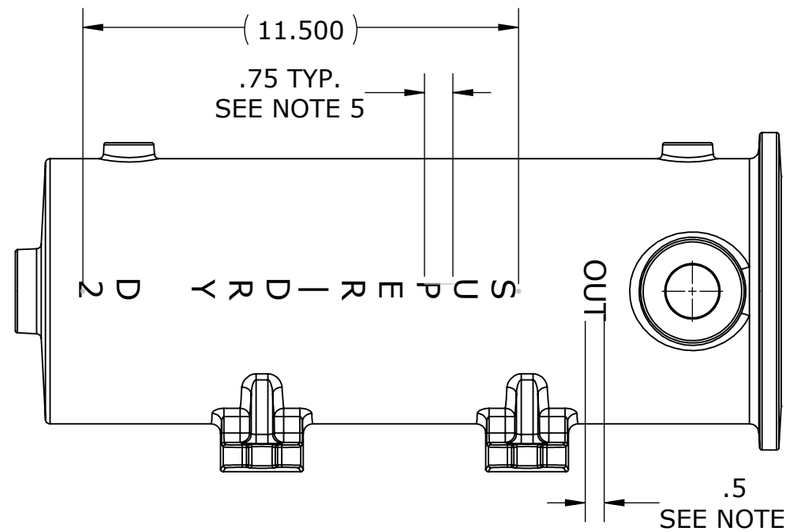
SUPER-DRY
NO MORE WATER.

DESSINE / DRAWN: JC		DATE YY/MM/DD: 21/11/23	DESCRIPTION: D2 - Desiccant Air Dryer	
VERIFIE / CHECKED: JDF		DATE YY/MM/DD: 22/07/19		
	ECHELLE / SCALE: 1:6	FORMAT / SIZE: B	NO. DESSIN / DWG NUMBER: SKU: 280-120	PAGE / SHEET: 1 OF 1 / REV.: 03









NOTES:

1. THIS DRAWING IS A LIMITED DIMENSION PRINT CREATED FROM A 3D SOLID MODEL. FOR BASIC DIMENSIONS NOT SHOWN ON DRAWING REFER TO 3D SOLID MODEL.
2. REMOVE SHARP EDGES AND BURRS
3. UNLESS OTHERWISE SPECIFIED, SURFACES TO BE WITHIN ⌓ 0.125 A
4. DRAFT ANGLE: 3° MAX
5. IDENTIFICATION: 0.1" RAISED LETTERS
6. NO WELDING NOR THERMAL CUT ALLOWED ON CASTED PARTS

REV	DESCRIPTION	DWN	APP	DATE
01	MATERIAU MIS À JOUR. DIAMÈTRE INTÉRIEUR ÉTAIT 5.875. TOLÉRANCES AJOUTÉES DIA. INTÉRIEUR	JDF		2022-07-18
IR	RELACHE INITIALE / INITIAL RELEASE			

REVISION

SAUF INDICATIONS CONTRAIRES
UNLESS OTHERWISE SPECIFIED

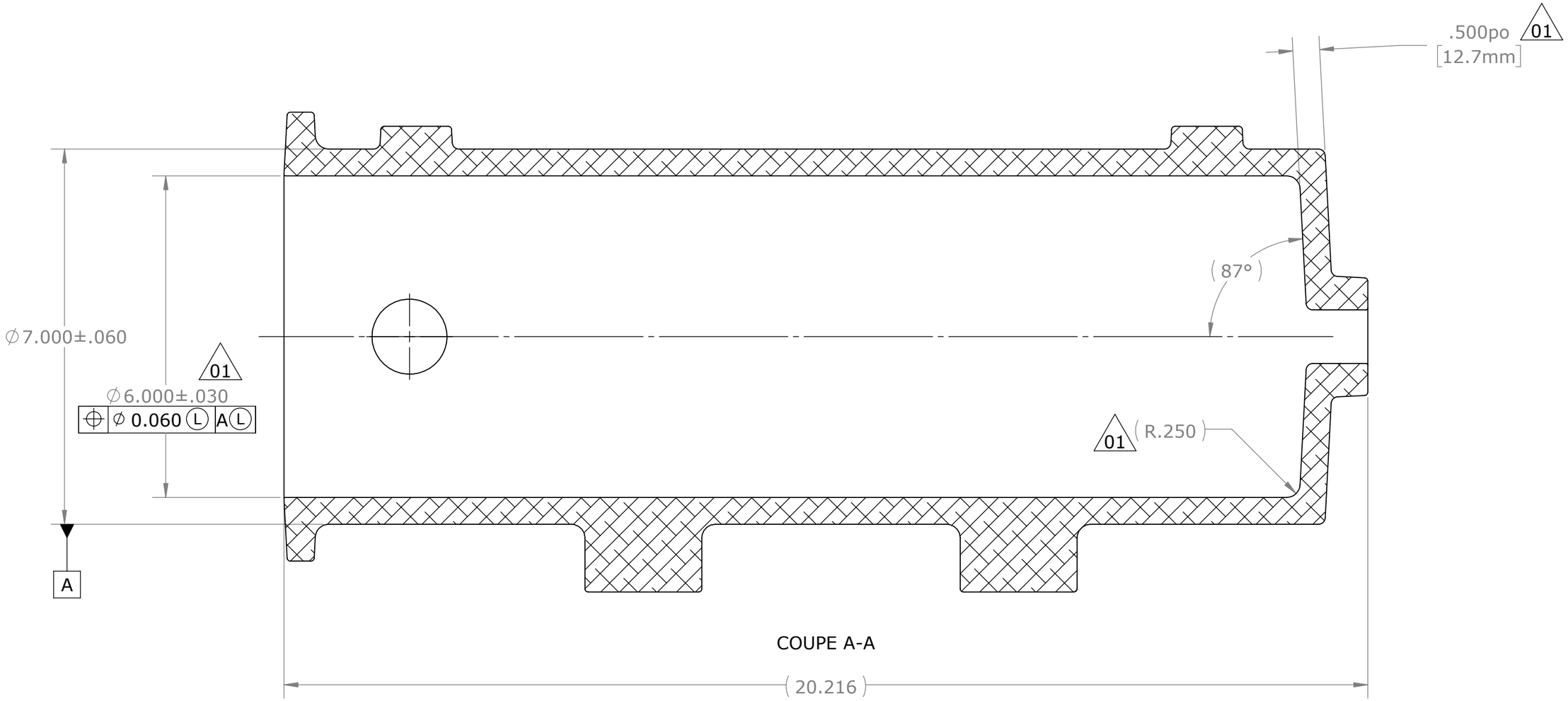
CONFORME A ASME Y14.5M-2018.
TOUTES LES DIMENSIONS SONT EN POUCES.
IN ACCORDANCE WITH ASME Y14.5M-2018.
ALL DIMENSIONS ARE IN INCHES.

TOLERANCES:
X ± 1/16
X.X ± .030
X.XX ± .015
X.XXX ± .005
X.XXXX ± .0005
ANGLE ± .5°

SUPER-DRY
NO MORE WATER.

MATERIAU / MATERIAL	ALUMINUM CASTING SB-26-A03560-T71
POIDS TOTAL / TOTAL WEIGHT	26.5 LBS
DESSINE / DRAWN	J.DUPLESSIS-F.
DATE YY/MM/DD	2022-04-22
VERIFIE / CHECKED	
DATE YY/MM/DD	
ECHELLE / SCALE	1:8
FORMAT / SIZE	B
NO. DESSIN / DWG NUMBER	Cylindre D2 corps principal_REV01
PAGE / SHEET	1 OF 2
REV.	01

DESCRIPTION
Cylindre D2 - Corps principal



SAUF INDICATIONS CONTRAIRES
UNLESS OTHERWISE SPECIFIED

CONFORME A ASME Y14.5M-2018.
TOUTES LES DIMENSIONS SONT EN POUCES.
IN ACCORDANCE WITH ASME Y14.5M-2018.
ALL DIMENSIONS ARE IN INCHES.

TOLERANCES:

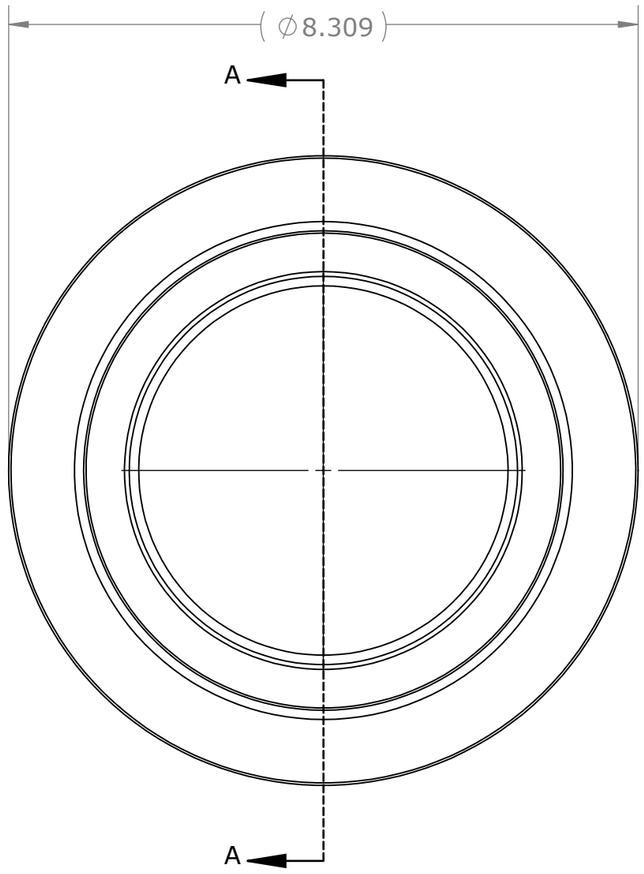
X	± 1/16
X.X	± .030
X.XX	± .015
X.XXX	± .005
X.XXXX	± .0005
ANGLE	± .5°

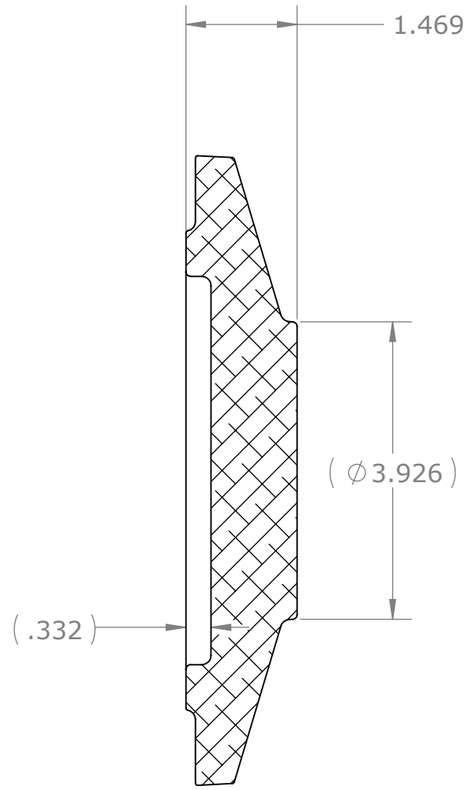
MATERIAU / MATERIAL	ALUMINUM CASTING SB-26-A03560-T71
POIDS TOTAL / TOTAL WEIGHT	26.5 LBS
DESSINE / DRAWN	J.DUPLESSIS-F.
DATE YY/MM/DD	2022-04-22
VERIFIE / CHECKED	
DATE YY/MM/DD	

SUPER-DRY
NO MORE WATER.

DESCRIPTION
Cylindre D2 - Corps principal

ECHELLE / SCALE	FORMAT / SIZE	NO. DESSIN / DWG NUMBER	PAGE / SHEET	REV.
1:2	B	Cylindre D2 corps principal_REV01	2 OF 2	01





COUPE A-A

NOTES:

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2. REMOVE SHARP EDGES AND BURRS
3. UNLESS OTHERWISE SPECIFIED, SURFACES TO BE WITHIN ⌓ 0.125
4. DRAFT ANGLE: 3° MAX
5. NO WELDING NOR THERMAL CUT ALLOWED ON CASTED PARTS

01

REV	DESCRIPTION	DWN	APP	DATE
01	NOTE 5 CHANGED. MATERIAL UPDATED	JDF		2022-07-18
IR	RELACHE INITIALE / INITIAL RELEASE			

REVISION

SAUF INDICATIONS CONTRAIRES
UNLESS OTHERWISE SPECIFIED

CONFORME A ASME Y14.5M-2018.
TOUTES LES DIMENSIONS SONT EN POUCES.
IN ACCORDANCE WITH ASME Y14.5M-2018.
ALL DIMENSIONS ARE IN INCHES.

TOLERANCES:
X ± 1/16
X.X ± .030
X.XX ± .015
X.XXX ± .005
X.XXXX ± .0005
ANGLE ± .5°

01

MATERIAU / MATERIAL: ALUMINUM CASTING SB-26-A03560-T71

POIDS TOTAL / TOTAL WEIGHT: 4.5 LBS

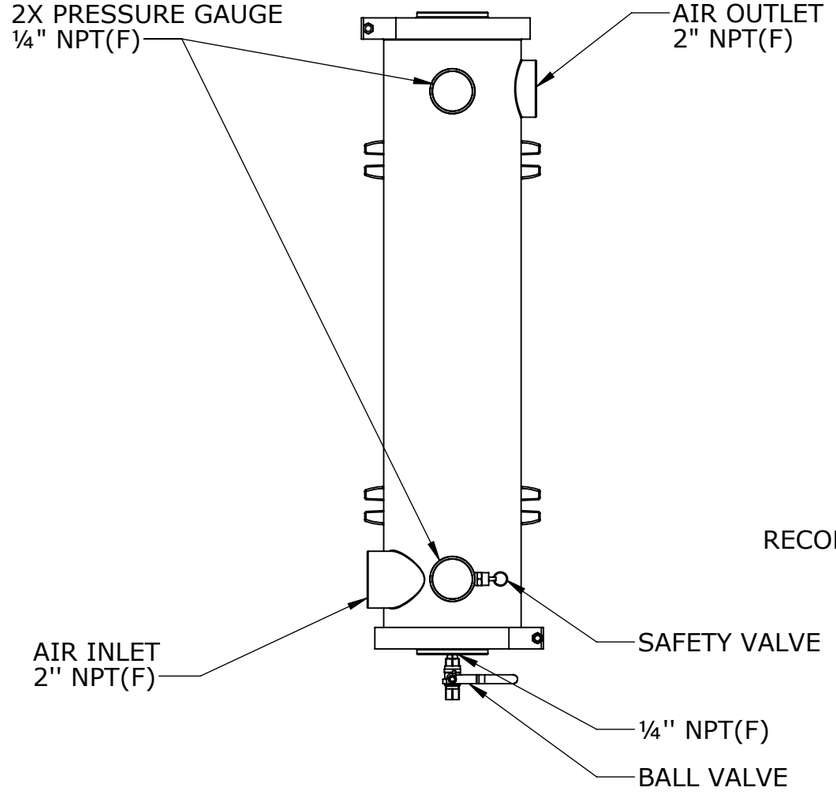
DESSINE / DRAWN: J.DUPLESSIS-F. DATE YY/MM/DD: 2022-04-22

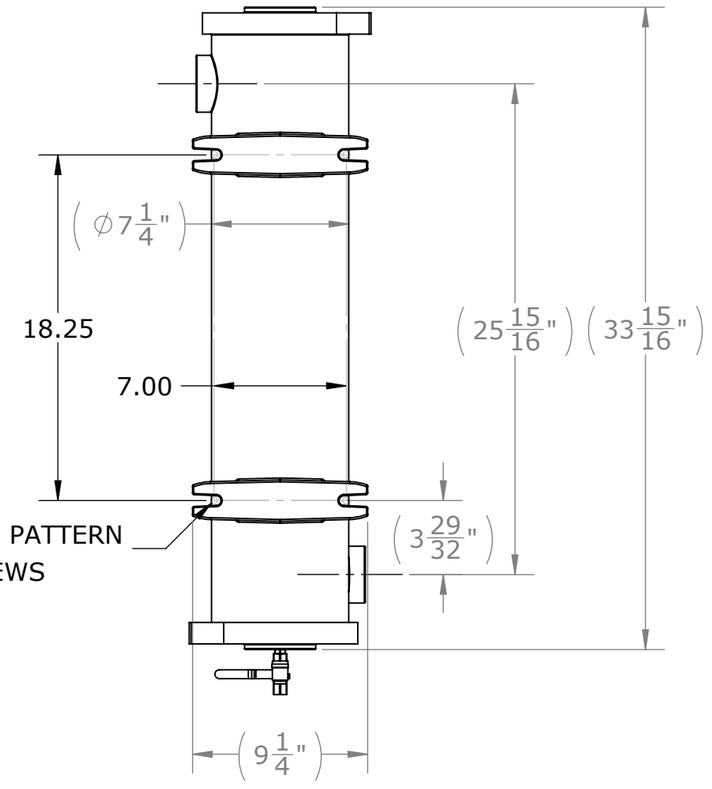
VERIFIE / CHECKED: DATE YY/MM/DD:

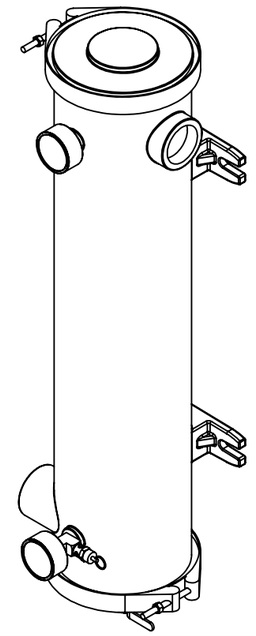
SUPER-DRY
NO MORE WATER.

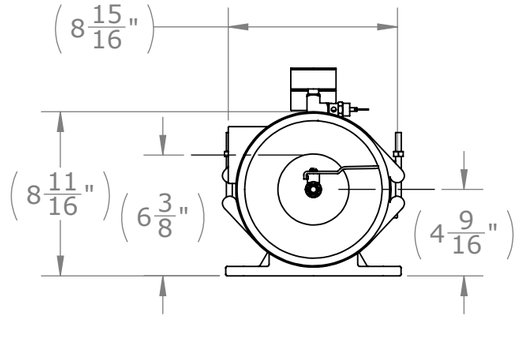
DESCRIPTION: CYLINDRE D2 ET D3 - COUVERCLE

ECHELLE / SCALE	FORMAT / SIZE	NO. DESSIN / DWG NUMBER	PAGE / SHEET	REV.
1:2	B	Cylindre D2 ET D3 - Couvercle_REV01	1 OF 1	01



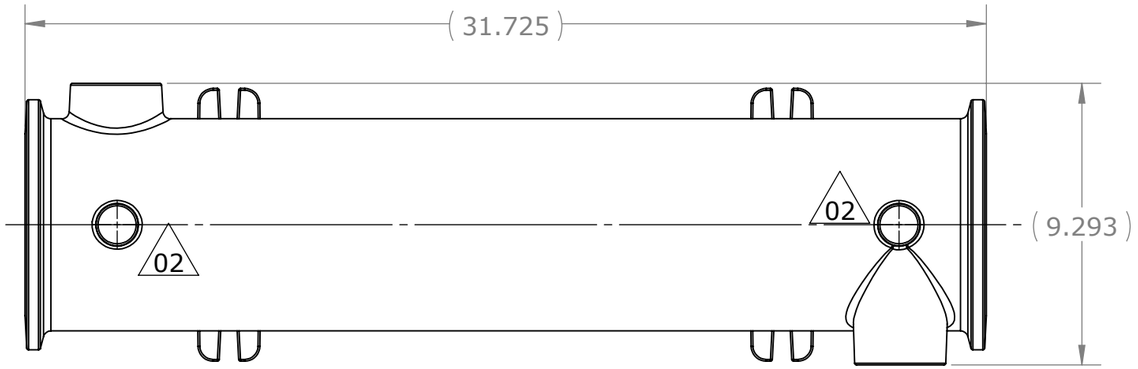


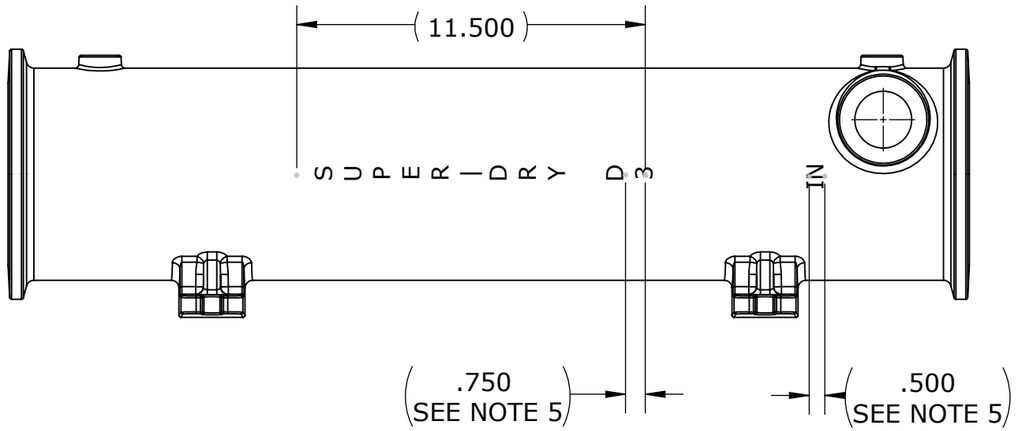


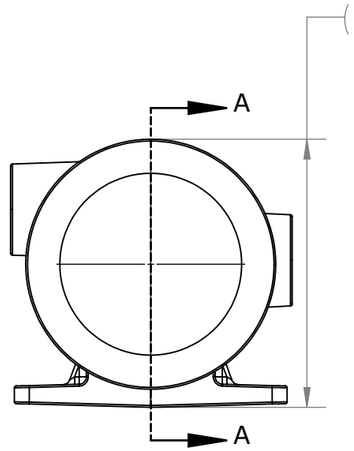


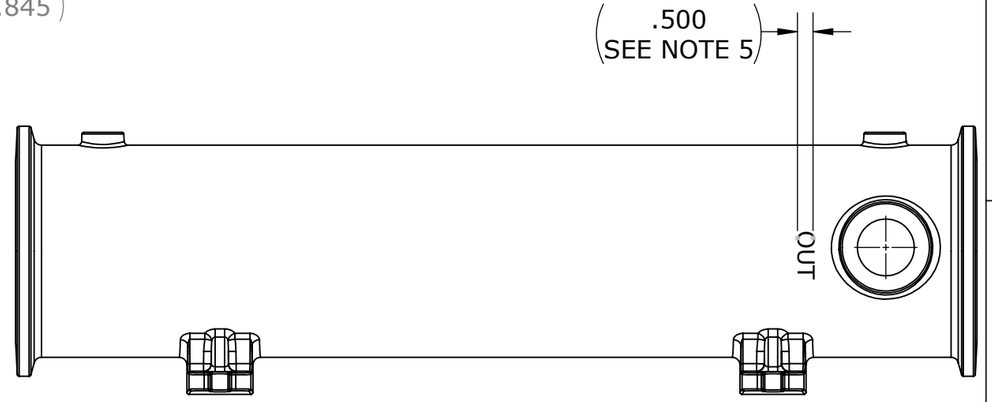
SUPER-DRY
NO MORE WATER.

DESSINE / DRAWN: JC	DATE YY/MM/DD: 21/11/23	DESCRIPTION: D3 - Desiccant Air Dryer	
VERIFIE / CHECKED: JDF	DATE YY/MM/DD: 22/07/19		
ECHELLE / SCALE: 1:8	FORMAT / SIZE: B	NO. DESSIN / DWG NUMBER: SKU: 280-130	PAGE / SHEET: 1 OF 1 / REV.: 02









NOTES:

1. THIS DRAWING IS A LIMITED DIMENSION PRINT CREATED FROM A 3D SOLID MODEL. FOR BASIC DIMENSIONS NOT SHOWN ON DRAWING REFER TO 3D SOLID MODEL.
2. REMOVE SHARP EDGES AND BURRS
3. UNLESS OTHERWISE SPECIFIED, SURFACES TO BE WITHIN ⌓ 0.125 A
4. DRAFT ANGLE: 3° MAX
5. IDENTIFICATION: 0.1" RAISED LETTERS
6. NO WELDING NOR THERMAL CUT ALLOWED ON CASTED PARTS

REV	DESCRIPTION	DWN	APP	DATE
02	TROUS POUR MANOMÊTRE RECENTRÉS SUR LA LIGNE D'AXE	JDF		2022-08-01
01	MATERIAU MIS À JOUR. AUTRES DIMENSIONS AJUSTÉES SUITE AU SCAN 3D DES PIÈCES. TOLÉRANCES AJOUTÉES DIA. INTÉRIEUR	JDF		2022-07-12
IR	RELACHE INITIALE / INITIAL RELEASE			

REVISION

SAUF INDICATIONS CONTRAIRES
UNLESS OTHERWISE SPECIFIED

CONFORME A ASME Y14.5M-2018.
TOUTES LES DIMENSIONS SONT EN POUCES.
IN ACCORDANCE WITH ASME Y14.5M-2018.
ALL DIMENSIONS ARE IN INCHES.

TOLERANCES:
X ± 1/16
X.X ± .030
X.XX ± .015
X.XXX ± .005
X.XXXX ± .0005
ANGLE ± .5°

MATERIAU / MATERIAL: ALUMINUM CASTING SB-26-A03560-T71

POIDS TOTAL / TOTAL WEIGHT: 37.8 LBS

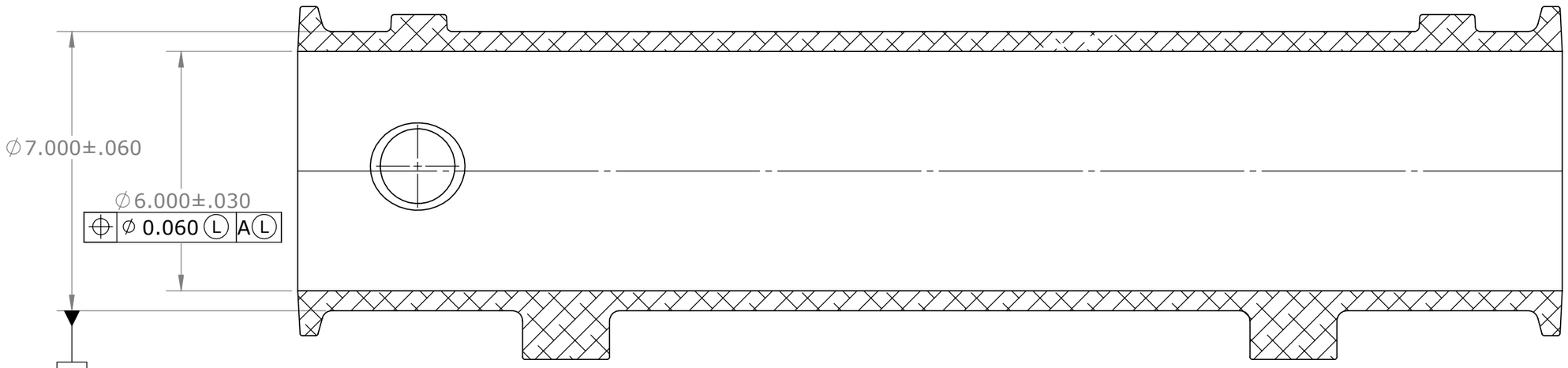
DESSINE / DRAWN: Alexandre El-Hage — DATE YY/MM/DD: 2022-05-12

VERIFIE / CHECKED — DATE YY/MM/DD

SUPER-DRY
NO MORE WATER.

DESCRIPTION: Cylindre D3 - Corps principal

ECHELLE / SCALE: 1:5 — FORMAT / SIZE: B — NO. DESSIN / DWG NUMBER: Cylindre D3 corps principal_REV02 — PAGE / SHEET: 1 OF 2 — REV.: 02

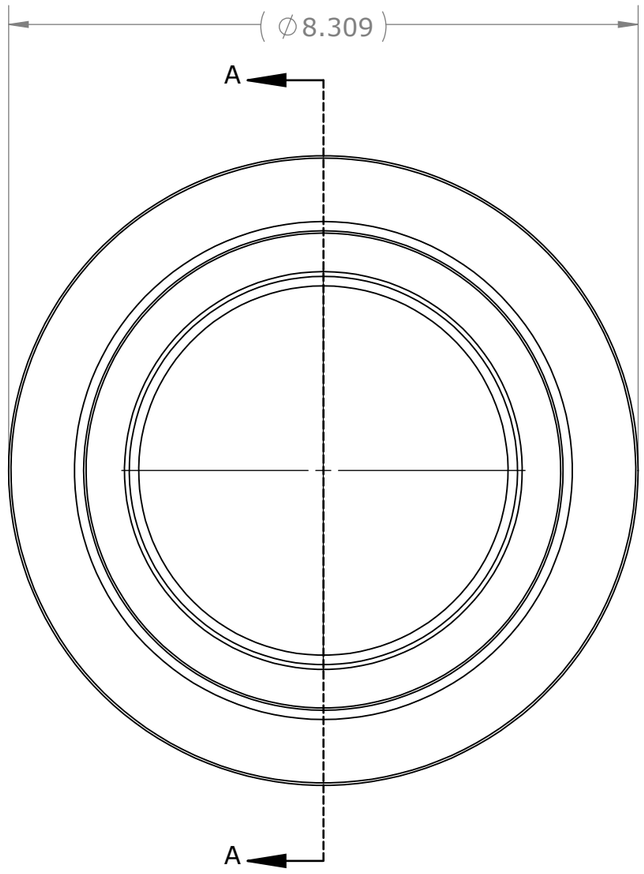


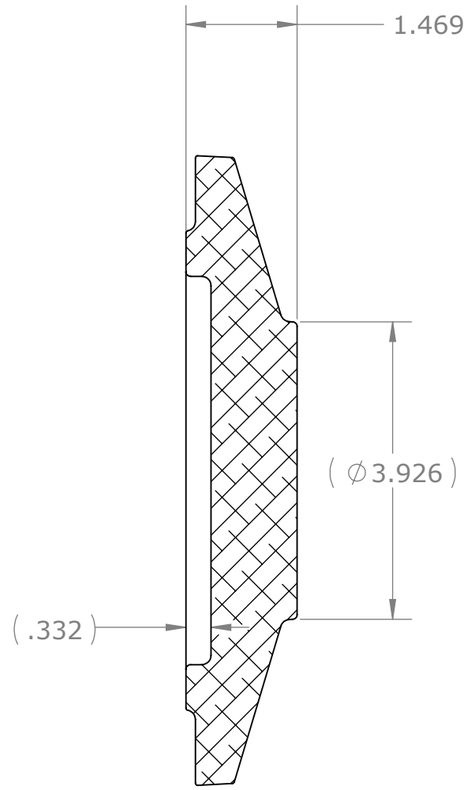
COUPE A-A
ECHELLE 1 : 3

SAUF INDICATIONS CONTRAIRES UNLESS OTHERWISE SPECIFIED			
CONFORME A ASME Y14.5M-2018. TOUTES LES DIMENSIONS SONT EN POUCES. IN ACCORDANCE WITH ASME Y14.5M-2018. ALL DIMENSIONS ARE IN INCHES.	TOLERANCES: X ± 1/16, X.X ± .030, X.XX ± .015, X.XXX ± .005, X.XXXX ± .0005, ANGLE ± .5°		
MATERIAU / MATERIAL	ALUMINUM CASTING SB-26-A03560-T71		
POIDS TOTAL / TOTAL WEIGHT	37.8 LBS		
DESSINE / DRAWN	Alexandre El-Hage	DATE YY/MM/DD	2022-05-12
VERIFIE / CHECKED		DATE YY/MM/DD	
ECHELLE / SCALE	1:3	FORMAT / SIZE	B
NO. DESSIN / DWG NUMBER	Cylindre D3 corps principal_REV02	PAGE / SHEET	2 OF 2
REV.	02		

SUPER-DRY
NO MORE WATER.

DESCRIPTION: Cylindre D3 - Corps principal





COUPE A-A

NOTES:

1. THIS DRAWING IS A LIMITED DIMENSION PRINT CREATED FROM A 3D SOLID MODEL. FOR BASIC DIMENSIONS NOT SHOWN ON DRAWING REFER TO 3D SOLID MODEL.
2. REMOVE SHARP EDGES AND BURRS
3. UNLESS OTHERWISE SPECIFIED, SURFACES TO BE WITHIN ⌓ 0.125
4. DRAFT ANGLE: 3° MAX
5. NO WELDING NOR THERMAL CUT ALLOWED ON CASTED PARTS

01

REV	DESCRIPTION	DWN	APP	DATE
01	NOTE 5 CHANGED. MATERIAL UPDATED	JDF		2022-07-18
IR	RELACHE INITIALE / INITIAL RELEASE			

REVISION

SAUF INDICATIONS CONTRAIRES
UNLESS OTHERWISE SPECIFIED

CONFORME A ASME Y14.5M-2018.
TOUTES LES DIMENSIONS SONT EN POUCES.
IN ACCORDANCE WITH ASME Y14.5M-2018.
ALL DIMENSIONS ARE IN INCHES.

TOLERANCES:
X ± 1/16
X.X ± .030
X.XX ± .015
X.XXX ± .005
X.XXXX ± .0005
ANGLE ± .5°

01

MATERIAU / MATERIAL: ALUMINUM CASTING SB-26-A03560-T71

POIDS TOTAL / TOTAL WEIGHT: 4.5 LBS

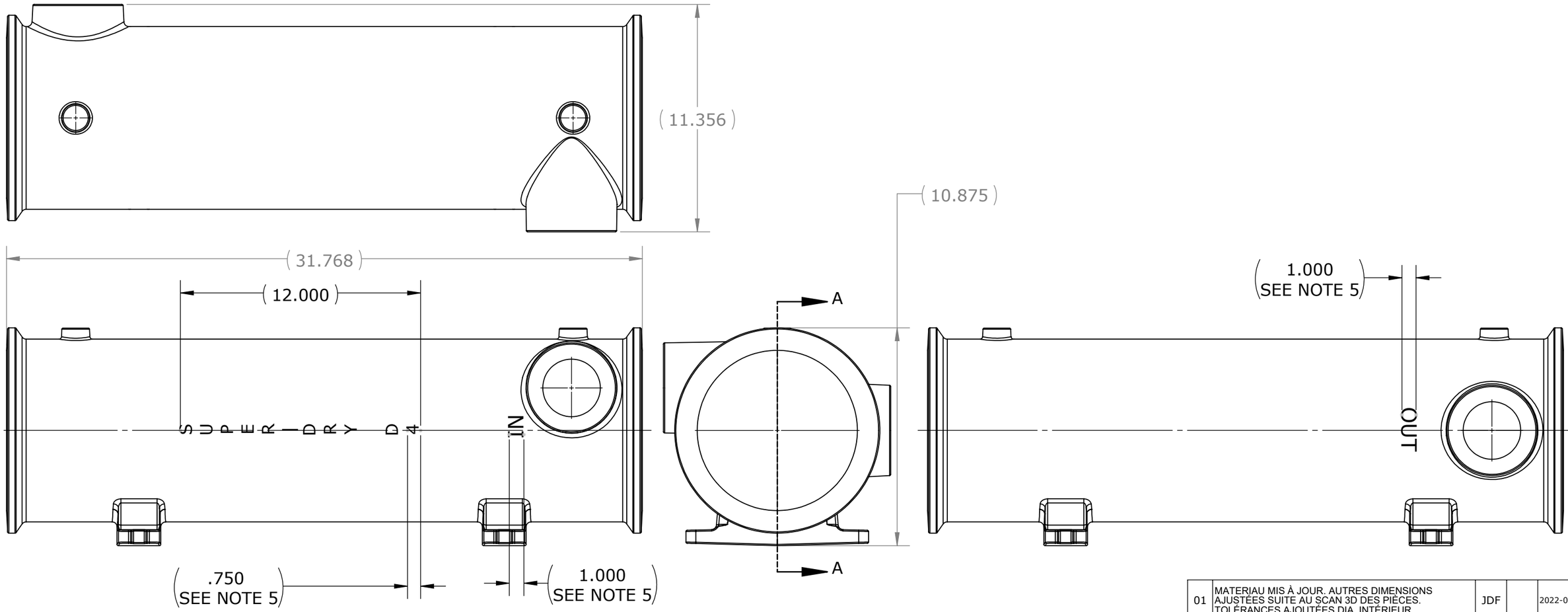
DESSINE / DRAWN: J.DUPLESSIS-F. DATE YY/MM/DD: 2022-04-22

VERIFIE / CHECKED: DATE YY/MM/DD:

SUPER-DRY
NO MORE WATER.

DESCRIPTION: CYLINDRE D2 ET D3 - COUVERCLE

ECHELLE / SCALE	FORMAT / SIZE	NO. DESSIN / DWG NUMBER	PAGE / SHEET	REV.
1:2	B	Cylindre D2 ET D3 - Couvercle_REV01	1 OF 1	01



NOTES:

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2. REMOVE SHARP EDGES AND BURRS
3. UNLESS OTHERWISE SPECIFIED, SURFACES TO BE WITHIN ⌓ | 0.125 | A
4. DRAFT ANGLE: 3° MAX
5. IDENTIFICATION: 0.1" RAISED LETTERS
6. NO WELDING NOR THERMAL CUT ALLOWED ON CASTED PARTS

REV	DESCRIPTION	DWN	APP	DATE
01	MATERIAU MIS À JOUR. AUTRES DIMENSIONS AJUSTÉES SUITE AU SCAN 3D DES PIÈCES. TOLÉRANCES AJOUTÉES DIA. INTÉRIEUR	JDF		2022-07-12
IR	RELACHE INITIALE / INITIAL RELEASE			

REVISION

SAUF INDICATIONS CONTRAIRES
UNLESS OTHERWISE SPECIFIED

CONFORME A ASME Y14.5M-2018.
TOUTES LES DIMENSIONS SONT EN POUCES.
IN ACCORDANCE WITH ASME Y14.5M-2018.
ALL DIMENSIONS ARE IN INCHES.

TOLERANCES:
X ± 1/16
X.X ± .030
X.XX ± .015
X.XXX ± .005
X.XXXX ± .0005
ANGLE ± .5°

MATERIAU / MATERIAL: ALUMINUM CASTING SB-26-A03560-T71

POIDS TOTAL / TOTAL WEIGHT: 55.4 LBS

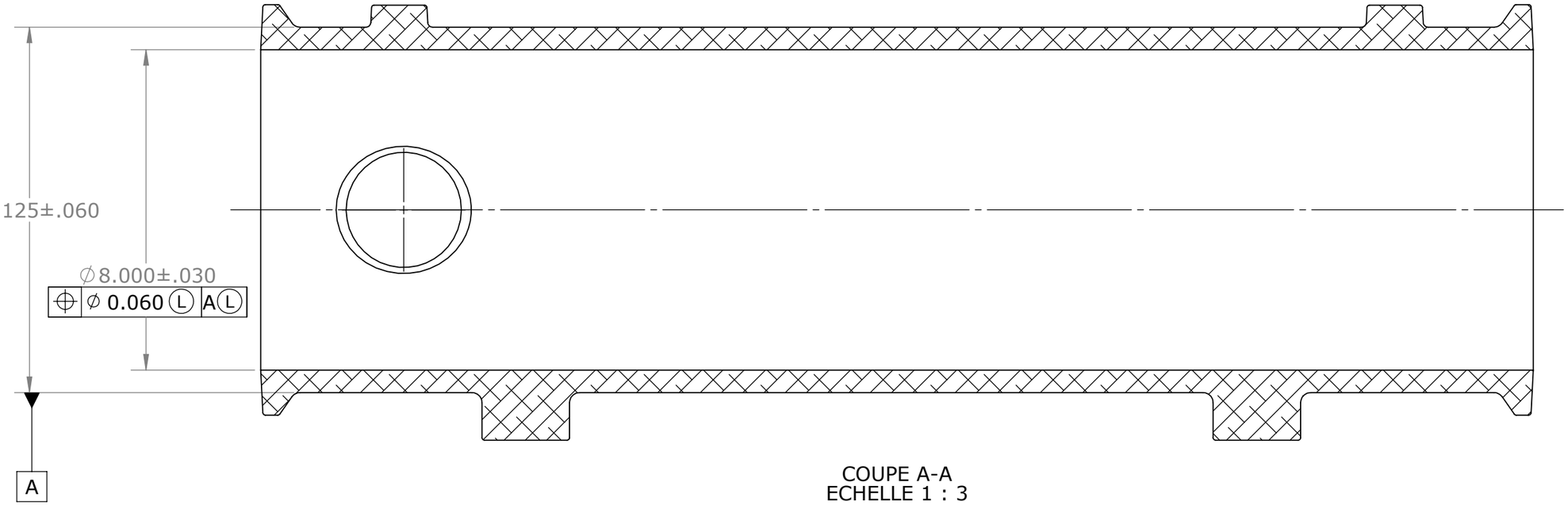
DESSINE / DRAWN: Alexandre El-Hage — DATE YY/MM/DD: 2022-05-11

VERIFIE / CHECKED — DATE YY/MM/DD

SUPER-DRY
NO MORE WATER.

DESCRIPTION: Cylindre D4 - Corps principal

ECHELLE / SCALE	FORMAT / SIZE	NO. DESSIN / DWG NUMBER	PAGE / SHEET	REV.
1:5	B	Cylindre D4 corps principal_REV01	1 OF 2	01

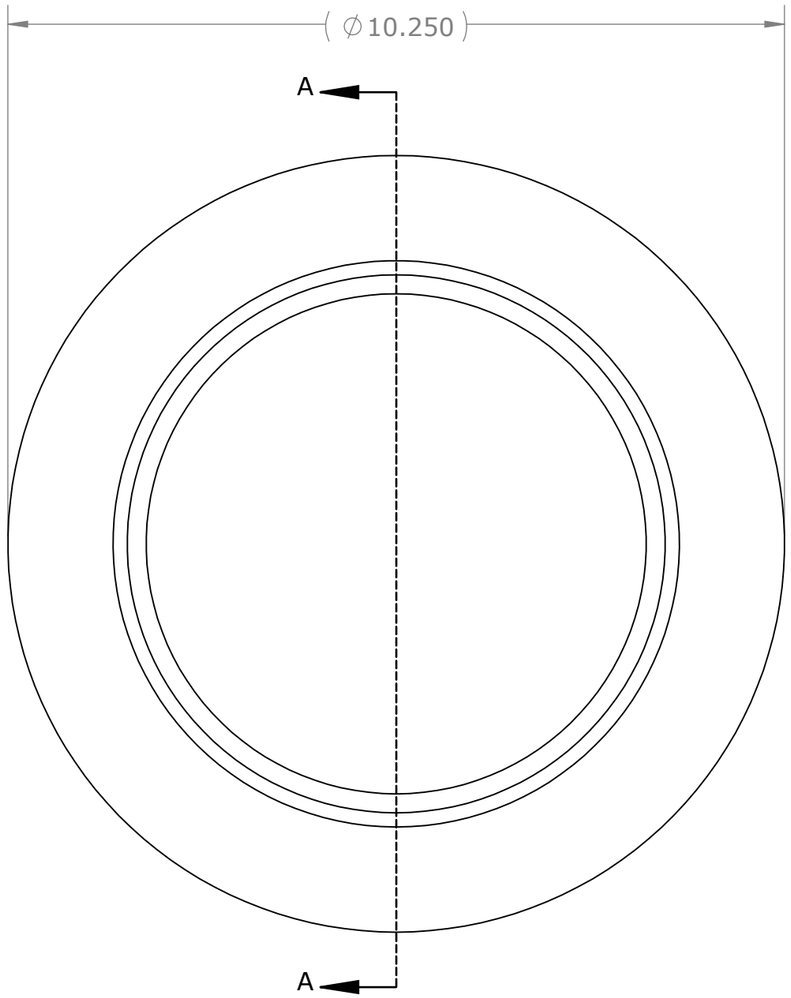


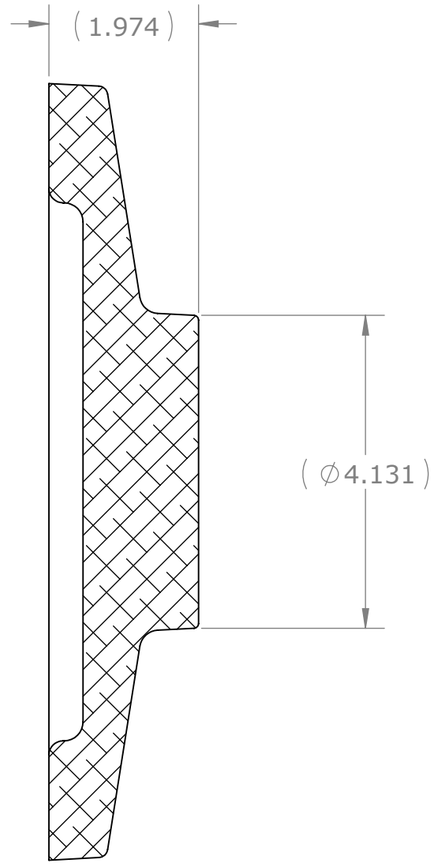
COUPE A-A
ECHELLE 1 : 3

SAUF INDICATIONS CONTRAIRES UNLESS OTHERWISE SPECIFIED			
CONFORME A ASME Y14.5M-2018. TOUTES LES DIMENSIONS SONT EN POUCES. IN ACCORDANCE WITH ASME Y14.5M-2018. ALL DIMENSIONS ARE IN INCHES.	TOLERANCES: X ± 1/16, X.X ± .030, X.XX ± .015, X.XXX ± .005, X.XXXX ± .0005, ANGLE ± .5°		
MATERIAU / MATERIAL	ALUMINUM CASTING SB-26-A03560-T71		
POIDS TOTAL / TOTAL WEIGHT	55.4 LBS		
DESSINE / DRAWN	Alexandre El-Hage	DATE YY/MM/DD	2022-05-11
VERIFIE / CHECKED		DATE YY/MM/DD	
ECHELLE / SCALE	1:3	FORMAT / SIZE	B
NO. DESSIN / DWG NUMBER	Cylindre D4 corps principal_REV01	PAGE / SHEET	2 OF 2
REV.	01		

SUPER-DRY
NO MORE WATER.

DESCRIPTION
Cylindre D4 - Corps principal





COUPE A-A

NOTES:

1. THIS DRAWING IS A LIMITED DIMENSION PRINT CREATED FROM A 3D SOLID MODEL. FOR BASIC DIMENSIONS NOT SHOWN ON DRAWING REFER TO 3D SOLID MODEL.
2. REMOVE SHARP EDGES AND BURRS
3. UNLESS OTHERWISE SPECIFIED, SURFACES TO BE WITHIN ⌓ 0.125
4. DRAFT ANGLE: 3° MAX
5. NO WELDING NOR THERMAL CUT ALLOWED ON CASTED PARTS

REV	DESCRIPTION	DWN	APP	DATE
01	DIMENSIONS HORS TOUT AJUSTÉE	JDF		2022-07-14
IR	RELACHE INITIALE / INITIAL RELEASE			

REVISION

SAUF INDICATIONS CONTRAIRES
UNLESS OTHERWISE SPECIFIED

CONFORME A ASME Y14.5M-2018.
TOUTES LES DIMENSIONS SONT EN POUCES.
IN ACCORDANCE WITH ASME Y14.5M-2018.
ALL DIMENSIONS ARE IN INCHES.

TOLERANCES:
X ± 1/16
X.X ± .030
X.XX ± .015
X.XXX ± .005
X.XXXX ± .0005
ANGLE ± .5°

MATERIAU / MATERIAL: ALUMINUM CASTING SB-26-A03560-T71

POIDS TOTAL / TOTAL WEIGHT: 7.3 LBS

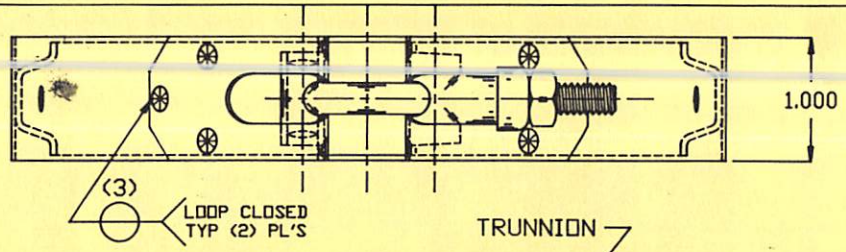
DESSINE / DRAWN: Alexandre El-Hage — DATE YY/MM/DD: 2022-05-11

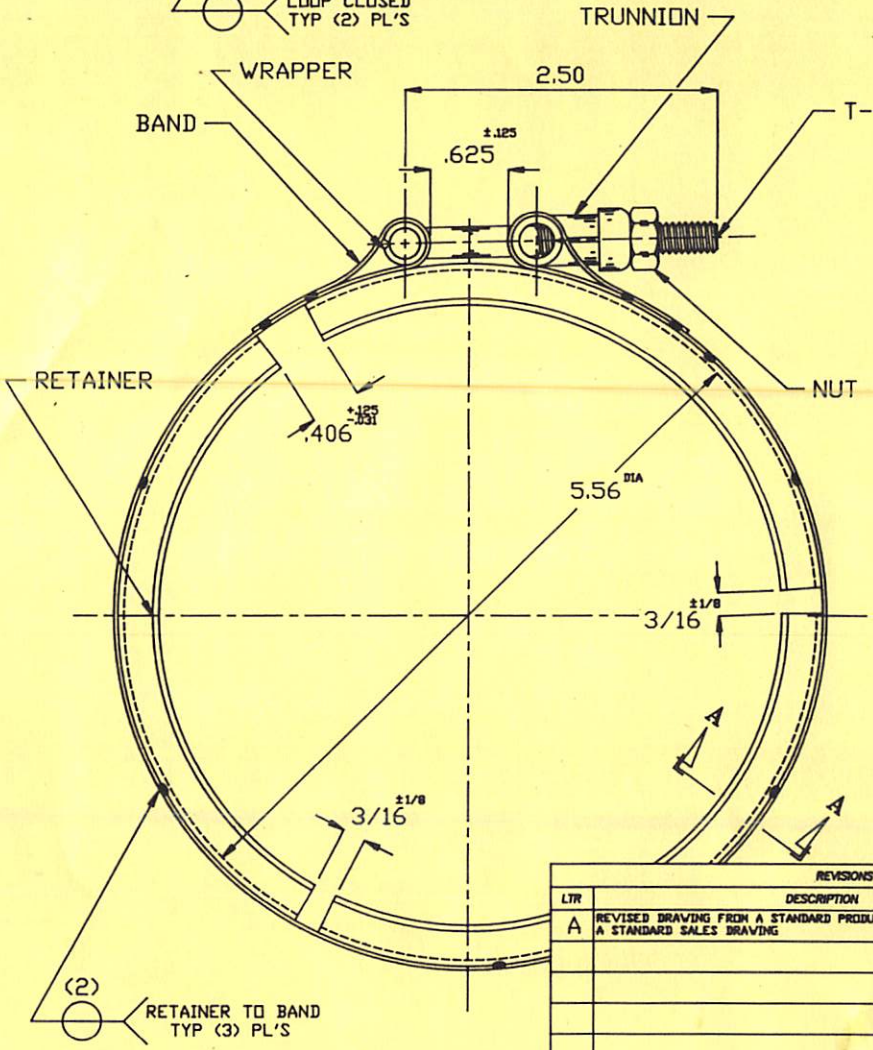
VERIFIE / CHECKED: Justin Duplessis-Faille — DATE YY/MM/DD: 2022-07-14

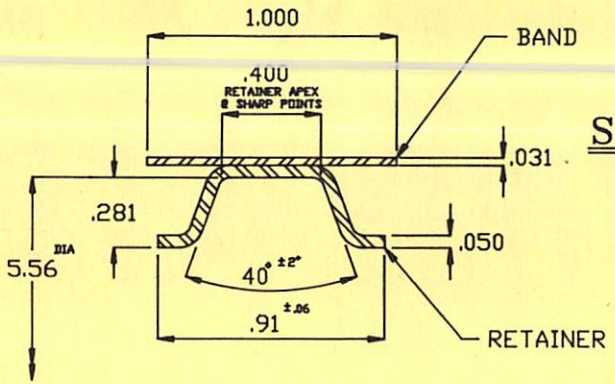
SUPER-DRY
NO MORE WATER.

DESCRIPTION: CYLINDRE D4-COUVERCLE

ECHELLE / SCALE	FORMAT / SIZE	NO. DESSIN / DWG NUMBER	PAGE / SHEET	REV.
1:2	B	Cylindre D4 - Couvercle_REV01	1 OF 1	01







SECTION A=A
2 x SIZE
52 SERIES

GENERAL NOTES:

1) **NON STANDARD MARKING REQUIREMENTS:**
PER CUSTOMER SPECIFICATION, COUPLING WILL BE MARKED AS FOLLOWS:
UNIVERSAL (DATE CODE)

2) DIMENSIONS SHOWN APPLY WHEN COUPLING IS ON A STEEL TEST MANDREL WITH A NOMINAL DIAMETER OF (5.560"), AND (80 In-Lbs.) OF TORQUE IS APPLIED TO THE NUT.

BILL OF MATERIAL

NAME	SIZE	MATERIAL SPECIFICATION	QUAN	PART NUMBER
WRAPPED T-BOLT ASSEMBLY	1/4-20 X 2.50	TYPE STAINLESS NON W/.75 WIDE 302,305 STEEL MAGNETIC / WRAPPER	1	
TRUNNION ASSEMBLY	1/4 x .75 x .75	301,302,304 INITIAL CONDITION STAINLESS STEEL ANNEALED	1	
NUT	1/4-20	TYPE STAINLESS HEX SILVER 18-8 STEEL NUT PLATED 800°F	1	
RETAINER	52 SERIES .050	301,302,304 INITIAL CONDITION STAINLESS STEEL ANNEALED	3	
BAND	.031 X 1.000	TYPE 301,302,304 1/2 #2 FINISH STAINLESS STEEL HARD #5 EDGE	1	

REVISIONS

LTR	DESCRIPTION	DATE	APP'D
A	REVISED DRAWING FROM A STANDARD PRODUCTION DRAWING TO A STANDARD SALES DRAWING	08-29-01	FRITZ

DRAWN FRITZ DATE 07-18-94
CHK'D DATE
APP'D R.G.T. DATE 07-18-94

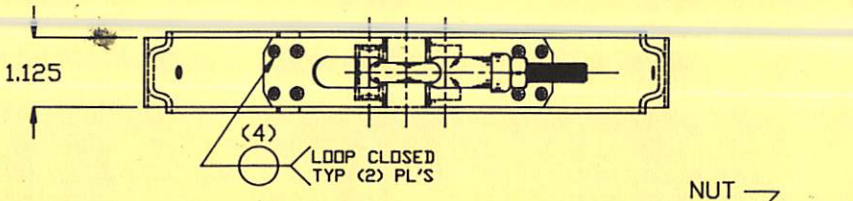
UNLESS OTHERWISE SPECIFIED ALL DIMENSIONS ARE IN INCHES
FRACTIONS ±1/32"
2 PLACE DECIMALS ± .030"
3 PLACE DECIMALS ± .010"
ANGLES ±1/2°
ALL SURFACES MACHINED-- 125 MAXIMUM SURFACE CONDITION
DO NOT SCALE DRAWING
REMOVE ALL BURRS

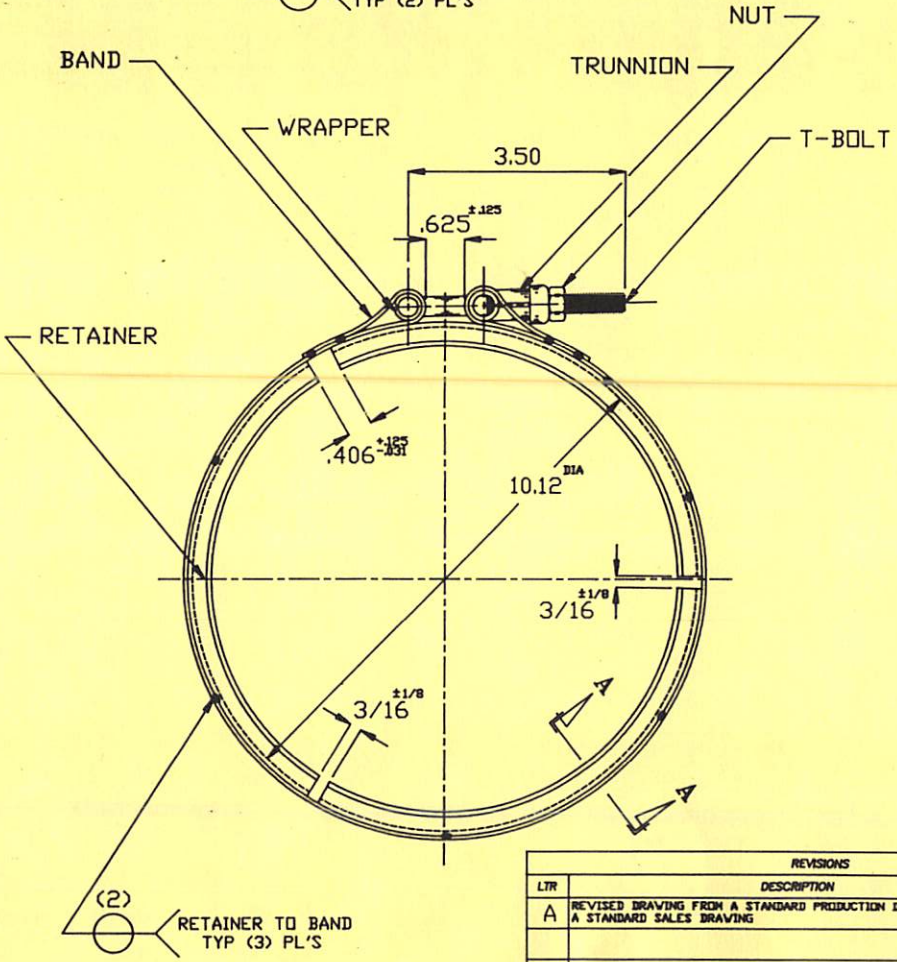
CLAMPCO WORLDWIDE CLAMPING SPECIALISTS
CLAMPCO PRODUCTS INC.
1743 WALL ROAD
WADSWORTH, OHIO 44281 U.S.A.

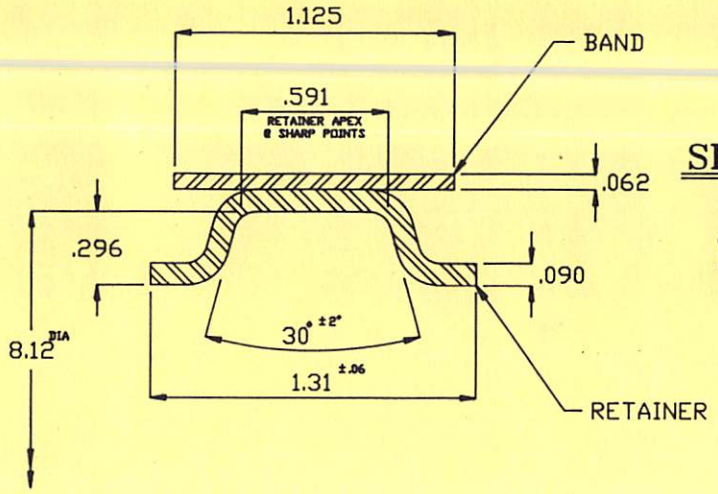
DRAWING TITLE: SPECIALTY PROD. 4112-6-556
UNIVERSAL COMPRESSOR INC ONLY

SIZE B | DRAWING NUMBER 995UZ-0556 | REV A

AUTOCAD 13 | 995UZ0556 | SCALE: FULL SIZE | FSCM 54646 | SHEET: 1 OF 1







SECTION A–A
2 x SIZE
93 SERIES

GENERAL NOTES:

1) **NON STANDARD MARKING REQUIREMENTS:**
PER CUSTOMER SPECIFICATION, COUPLING WILL BE MARKED AS FOLLOWS:
UNIVERSAL (DATE CODE)

2) DIMENSIONS SHOWN APPLY WHEN COUPLING IS ON A STEEL TEST MANDREL WITH A NOMINAL DIAMETER OF (10.120"), AND (100 In-Lbs.) OF TORQUE IS APPLIED TO THE NUT.

BILL OF MATERIAL

NAME	SIZE	MATERIAL SPECIFICATION	QUAN	PART NUMBER
WRAPPED T-BOLT ASSEMBLY	5/16-24 X 3.50	TYPE STAINLESS NON W/.88 WIDE 302,305 STEEL MAGNETIC / WRAPPER	1	
TRUNNION ASSEMBLY	5/16 X .88 X 1.06	301,302,304 INITIAL CONDITION STAINLESS STEEL ANNEALED	1	
NUT	5/16-24	TYPE STAINLESS HEX SILVER 18-8 STEEL NUT PLATED 800°F	1	
RETAINER	93 SERIES .090	TYPE 304 INITIAL CONDITION STAINLESS STEEL ANNEALED	3	
BAND	.062 X 1.125	TYPE 301,302,304 1/2 #2 FINISH STAINLESS STEEL HARD #5 EDGE	1	

REVISIONS			
LTR	DESCRIPTION	DATE	APP'D
A	REVISED DRAWING FROM A STANDARD PRODUCTION DRAWING TO A STANDARD SALES DRAWING	08-29-01	FRITZ

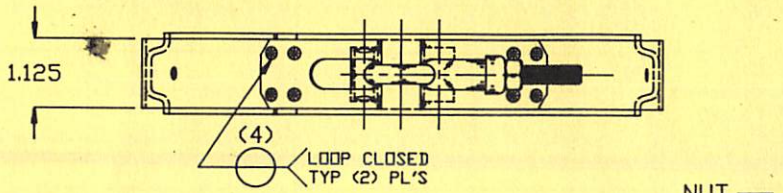
DRAWN FRITZ DATE 05-10-95
CHK'D DATE
APP'D R.G.T. DATE 05-11-95
UNLESS OTHERWISE SPECIFIED ALL DIMENSIONS ARE IN INCHES
FRACTIONS ±1/32"
2 PLACE DECIMALS ± .030"
3 PLACE DECIMALS ± .010"
ANGLES ± 1/2°
ALL SURFACES MACHINED–
125 MAXIMUM SURFACE CONDITION
DO NOT SCALE DRAWING
REMOVE ALL BURRS

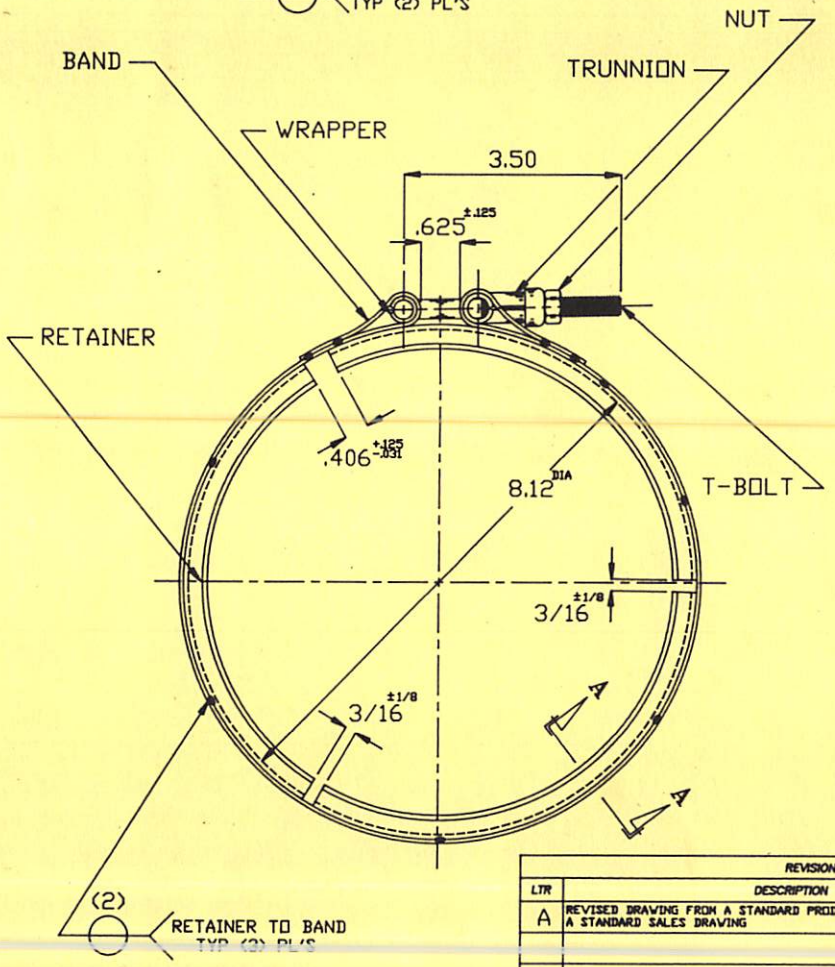
CLAMPCO
WORLDWIDE CLAMPING SPECIALISTS
CLAMPCO PRODUCTS INC.
1743 WALL ROAD
WADSWORTH, OHIO 44281 U.S.A.

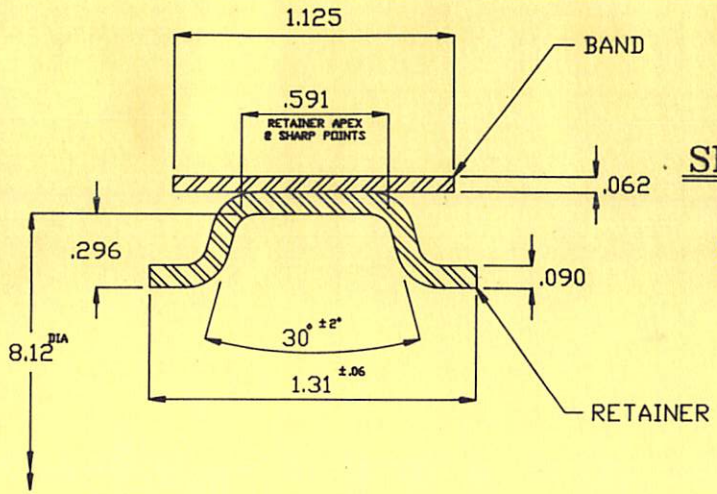
DRAWING TITLE: V01393DFN-1012-H

SIZE B | DRAWING NUMBER 999DF-1012 | REV A

AUTOCAD 13 | 999DF1012 | SCALE: 1/2 SIZE | FSCM 54648 | SHEET: 1 OF 1







SECTION A–A
2 x SIZE
93 SERIES

GENERAL NOTES:

1) NON STANDARD MARKING REQUIREMENTS:
PER CUSTOMER SPECIFICATION, COUPLING WILL BE MARKED AS FOLLOWS:
UNIVERSAL (DATE CODE)

2) DIMENSIONS SHOWN APPLY WHEN COUPLING IS ON A STEEL TEST MANDREL WITH A NOMINAL DIAMETER OF (8.120"), AND (100 In-Lbs.) OF TORQUE IS APPLIED TO THE NUT.

BILL OF MATERIAL

NAME	SIZE	MATERIAL SPECIFICATION	QUAN	PART NUMBER
WRAPPED T-BOLT ASSEMBLY	5/16-24 X 3.50	TYPE STAINLESS NON W./.88 WIDE 302,305 STEEL MAGNETIC / WRAPPER	1	
TRUNNION ASSEMBLY	5/16 X .88 X 1.06	301,302,304 INITIAL CONDITION STAINLESS STEEL ANNEALED	1	
NUT	5/16-24	TYPE STAINLESS HEX SILVER 18-8 STEEL NUT PLATED 800°F	1	
RETAINER	93 SERIES .090	TYPE 304 INITIAL CONDITION STAINLESS STEEL ANNEALED	3	
BAND	.062 X 1.125	TYPE 301,302,304 1/2 #2 FINISH STAINLESS STEEL HARD #5 EDGE	1	

REVISIONS			
LTR	DESCRIPTION	DATE	APP'D
A	REVISED DRAWING FROM A STANDARD PRODUCTION DRAWING TO A STANDARD SALES DRAWING	06-29-01	FRITZ

DRAWN FRITZ DATE 05-10-95
CHK'D DATE
APP'D *R.G.T.* DATE 05-11-95
UNLESS OTHERWISE SPECIFIED ALL DIMENSIONS ARE IN INCHES
FRACTIONS ± 1/32
2 PLACE DECIMALS ± .030"
3 PLACE DECIMALS ± .010"
ANGLES ± 1/2°
ALL SURFACES MACHINED–
125 MAXIMUM SURFACE CONDITION
DO NOT SCALE DRAWING
REMOVE ALL BURRS

CLAMPCO
WORLDWIDE CLAMPING SPECIALISTS
CLAMPCO PRODUCTS INC.
1743 WALL ROAD
WADSWORTH, OHIO 44281 U.S.A.

DRAWING TITLE V01393DFN-0812-H

SIZE B | DRAWING NUMBER 999DF-0812 | REV A

AUTOCAD 13 | 999DF0812 | SCALE: 1/2 SIZE | FSCM 54648 | SHEET: 1 OF 1

APPENDIX C

Pressure Burst Test

Report Number: 17010350

Quotation Number: P17-0110 Revision 2

Report for:	**Super-Dry Systems Inc.** 2104 Francis-Hughes Laval (Qc) Canada H7S 1N7
Attention:	Marc A. Rayle, president
Telephone:	1-888-828-1122 Ext. 222
Report Date:	January 12, 2018

1.0 INTRODUCTION

At request of Super-Dry Systems Inc., Infinity Testing Solutions (ITS) conducted pressure burst tests for four (4) compressed air dryer assembly samples. The samples were received on December 22, 2017, assigned with ITS sample numbers and described as below. The drawings are attached in Appendix B.

The tests were performed on January 5 and 8, 2018.

Sample Numbers	Descriptions and Sample ID	Sample Inlet Connections
17010350-1	Super-Dry D1 Drawing No. D-1 Body Rev.0 & D-1 Assembly Rev.0	1"NPT
17010350-2	Super-Dry D2 Drawing No. D-2 Body Rev.0 & D-2 Assembly Rev.2	1 ½"NPT
17010350-3	Super-Dry D3 Drawing No. D-3 Assembly Rev.1	2"NPT
17010350-4	Super-Dry D4 Drawing No. D4-BODY Rev.0	3"NPT

2.0 TEST APPARATUS

The tests were performed using a computer controlled servo hydraulic pressure testing system at ambient temperature. Test medium was water. Each sample was pre-assembled by the client prior to shipping to ITS testing facility. NPT adapters shown in the Table above were used for pressure input as shown in test setup figures. Each assembly was pre-filled with water and free of entrapped air before testing was performed.

3.0 TEST PROCEDURE

The test pressure was increased at a constant ramp rate until ultimate failure occurred. The pressure time history and maximum pressure were recorded by a 0 - 5,000 psig precision pressure transducer.

4.0 RESULTS

The test results are listed in the following table:

Sample No.	Test Rate (psi/s)	Trial #	Results	Figures
17010350-1	15	1	Sample failed at Lid/Clamp at 787 psi	3, 4
17010350-2		1	Sample failed at Lid/Clamp at 936 psi	7, 8
17010350-3		1	Sample failed at Lid/Clamp at 650 psi	10, 11

Test results continued:

Sample No.	Test Rate (psi/s)	Trial #	Results	Figures
17010350-4	N/A	1	Leaking at 3” NPT outlet at city water pressure level	N/A
	Removed fitting and reinstalled it with thread sealant			
	15	2	Sample failed at Lid(crack on lid) at 428 psi	15, 16

TSSA inspector, Mr. Albert Chen (NB No. 12474), reviewed the test setup, witnessed the entire testing procedure, and signed the “Pressure Test Records” sheet as attached in Appendix A.

Infinity Testing Solutions Inc.

Prepared by:

David Astorous
Test Technologist

Reviewed by:

Rob Banach
Manager, Pressure Testing

This report refers only to the particular samples provided, and is limited by the test and/or analysis performed. Similar articles may not be of like quality, and other testing and/or analysis methods might give different results.

Figures (8 pages)

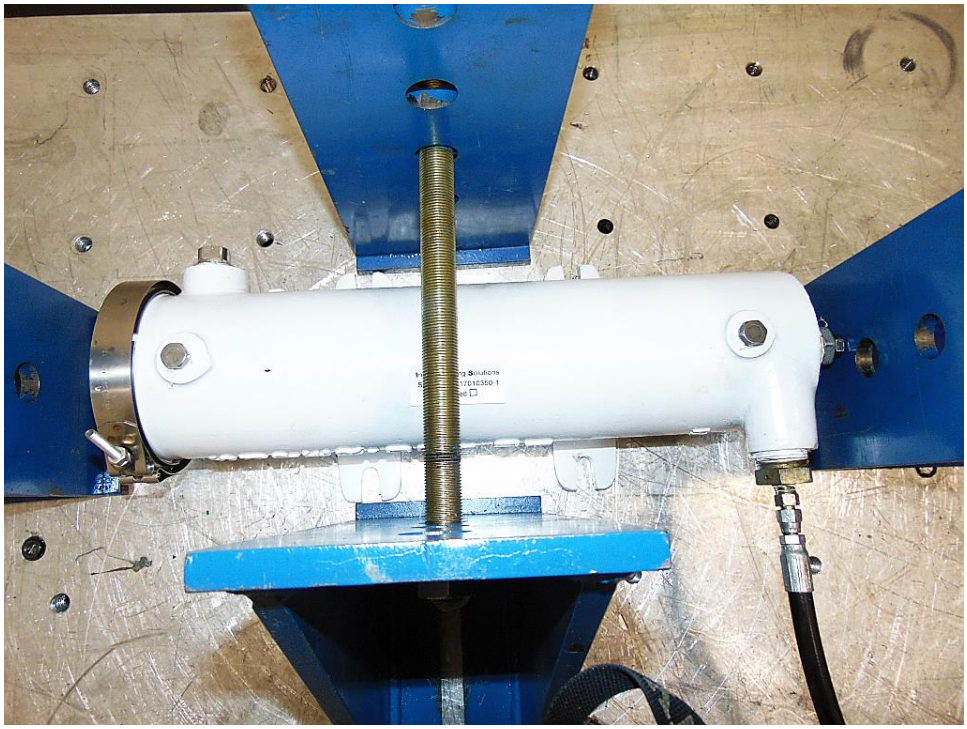


Figure 1: Sample 17010350-1 Trial #1 overall setup inside the pressure test chamber

Figure 2: Sample 17010350-1 Trial #1 inlet connection

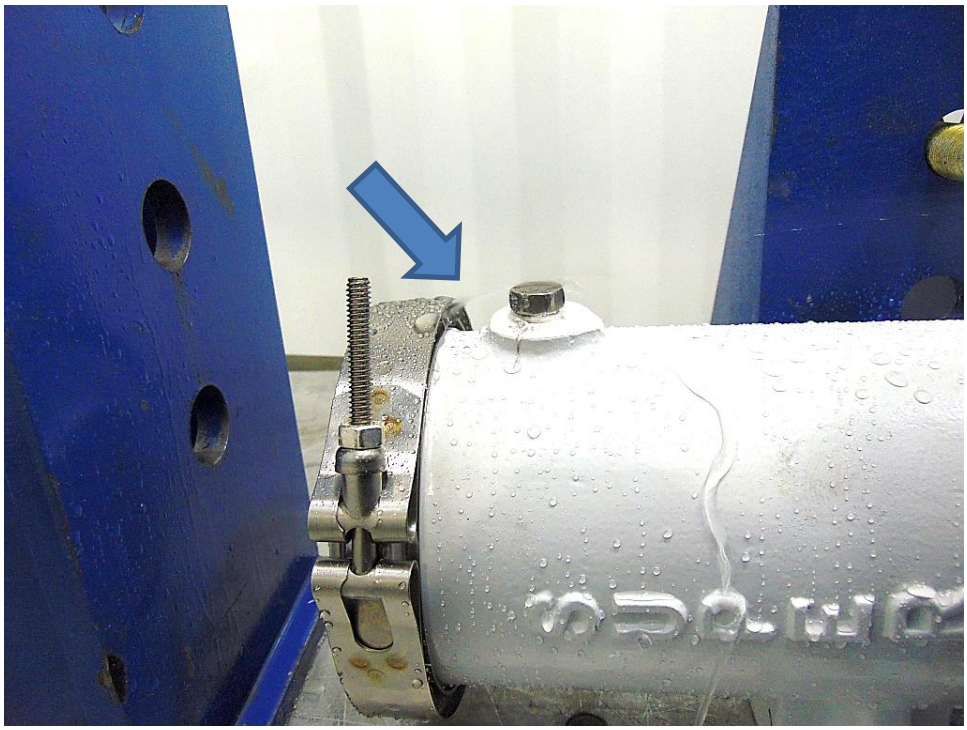


Figure 3: Sample 17010350-1 Trial #1 failed at lid/clamp at 787 psi

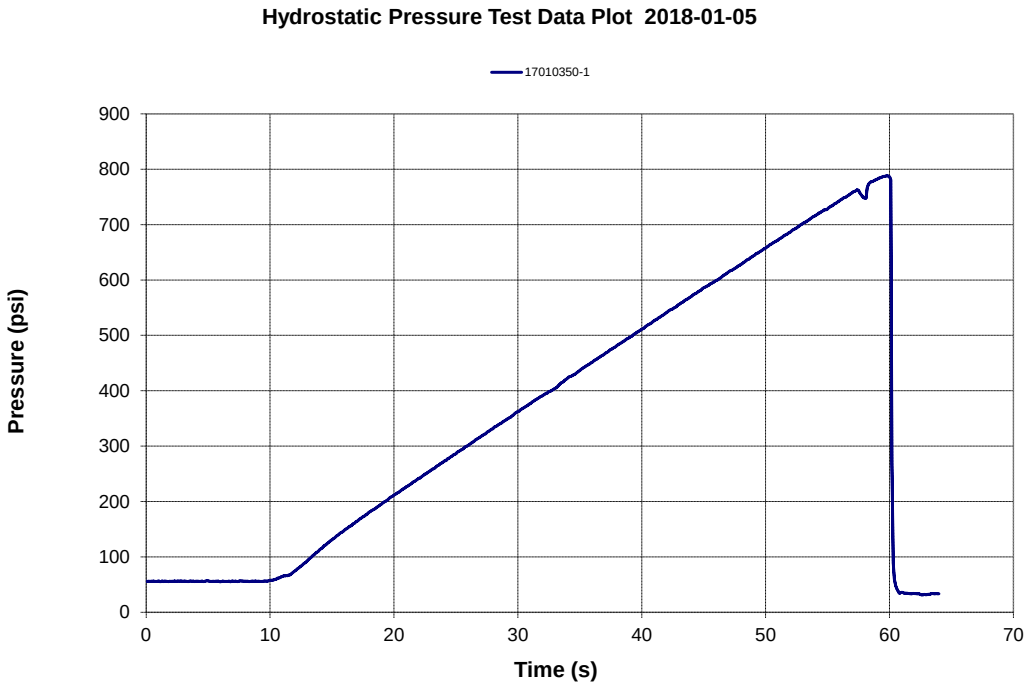


Figure 4: Sample 17010350-1 test pressure chart

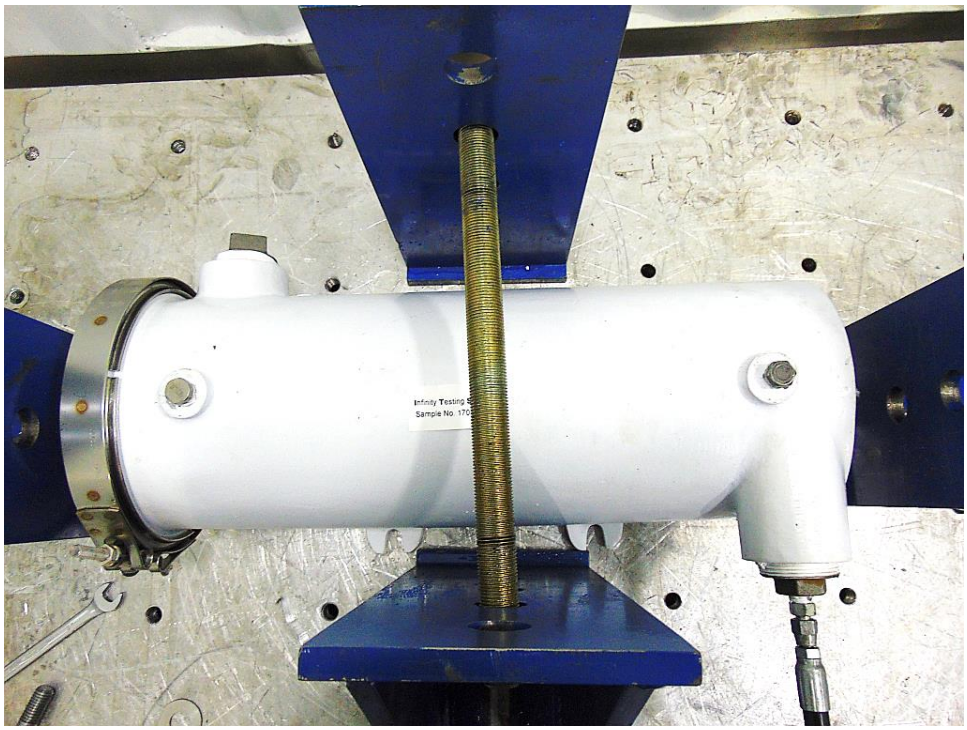


Figure 5: Sample 17010350-2 Trial #1 overall setup inside the pressure test chamber

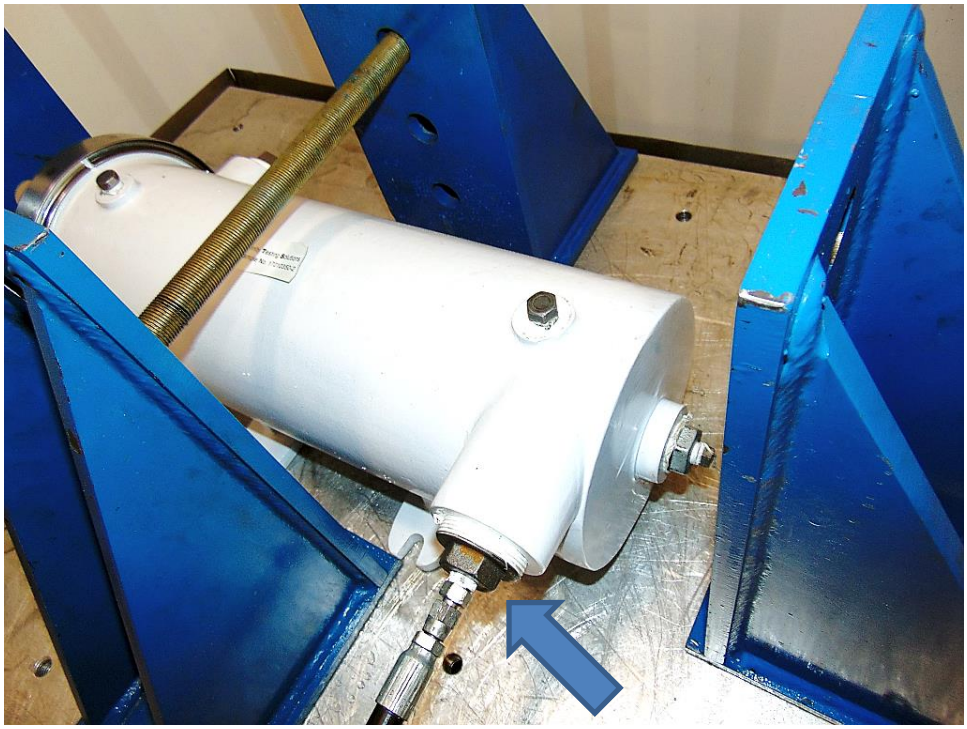


Figure 6: Sample 17010350-2 Trial #1 inlet connection

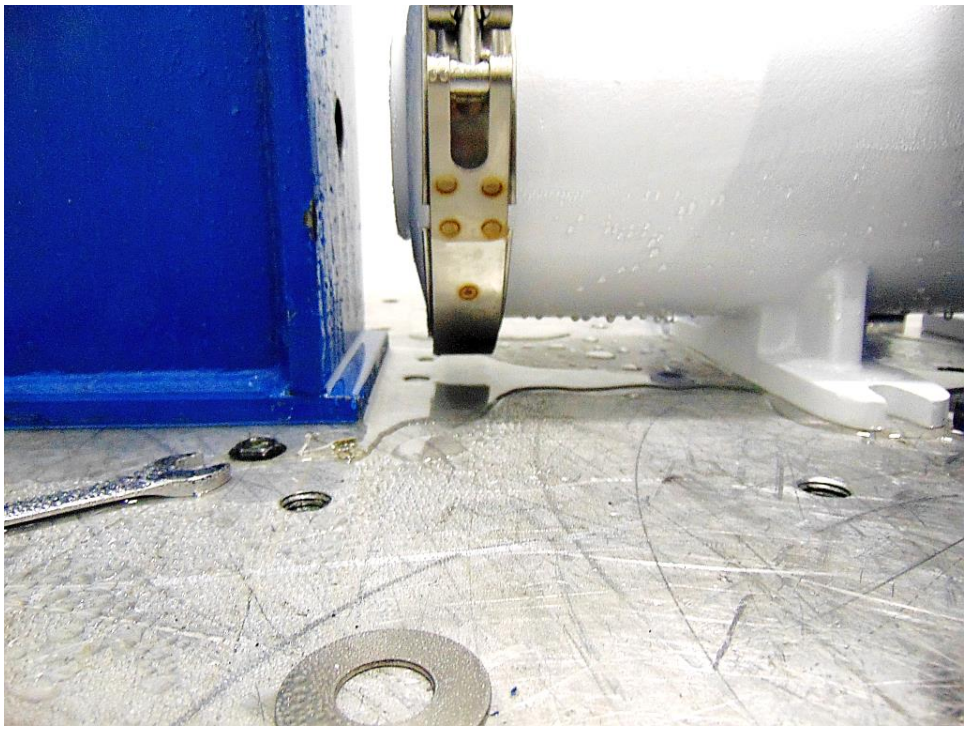


Figure 7: Sample 17010350-2 Trial #1 failed at lid/clamp at 936 psi

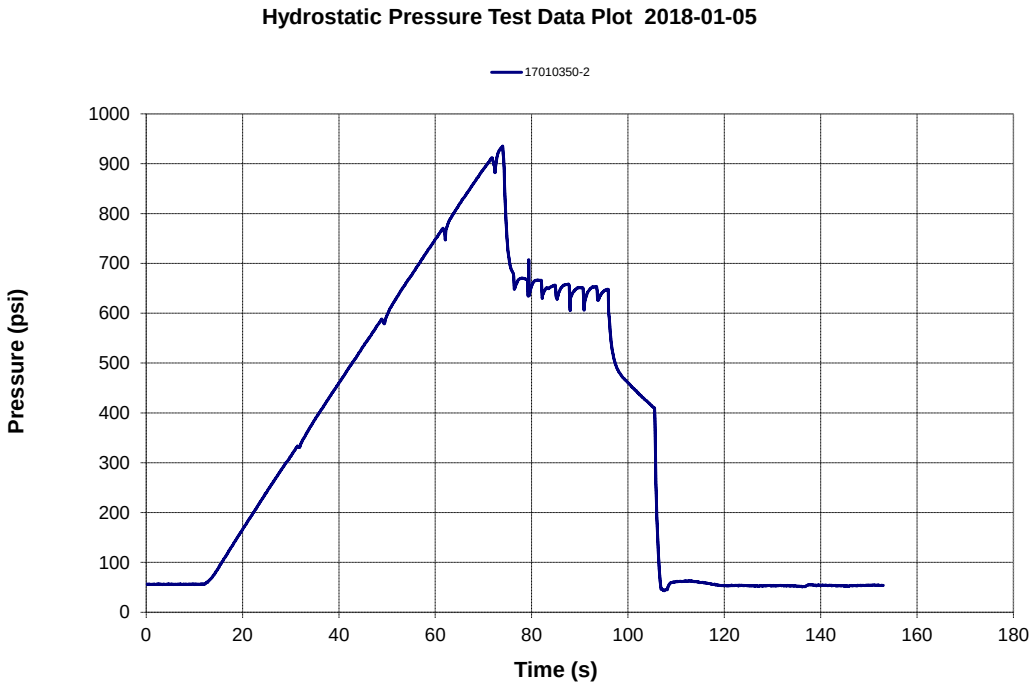


Figure 8: Sample 17010350-2 test pressure chart

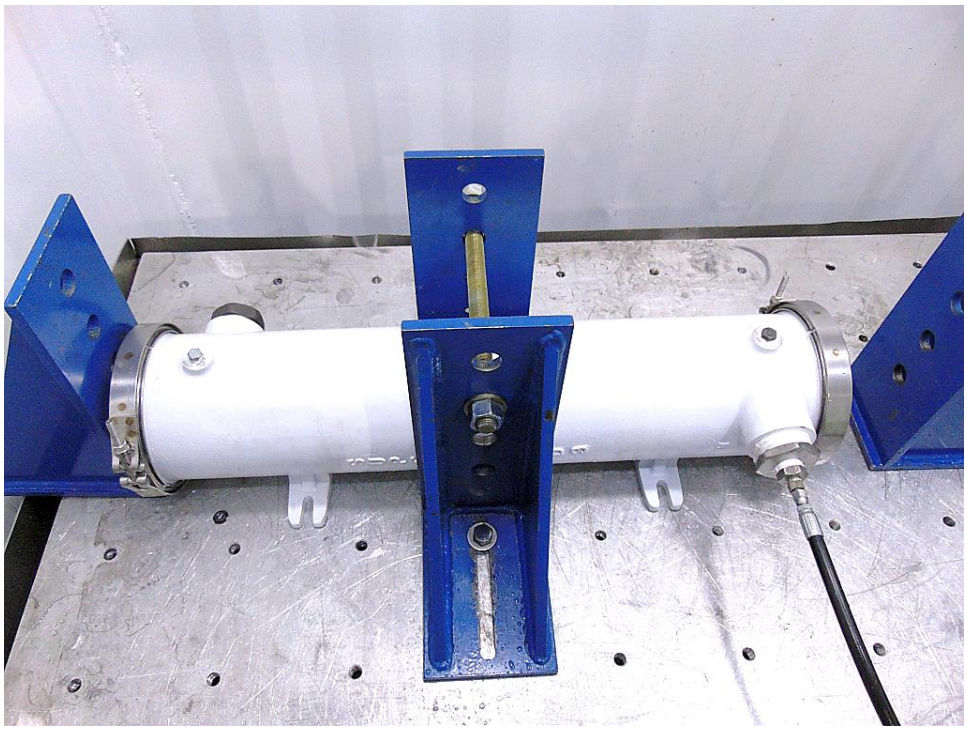


Figure 9: Sample 17010350-3 Trial #1 overall setup inside the pressure test chamber

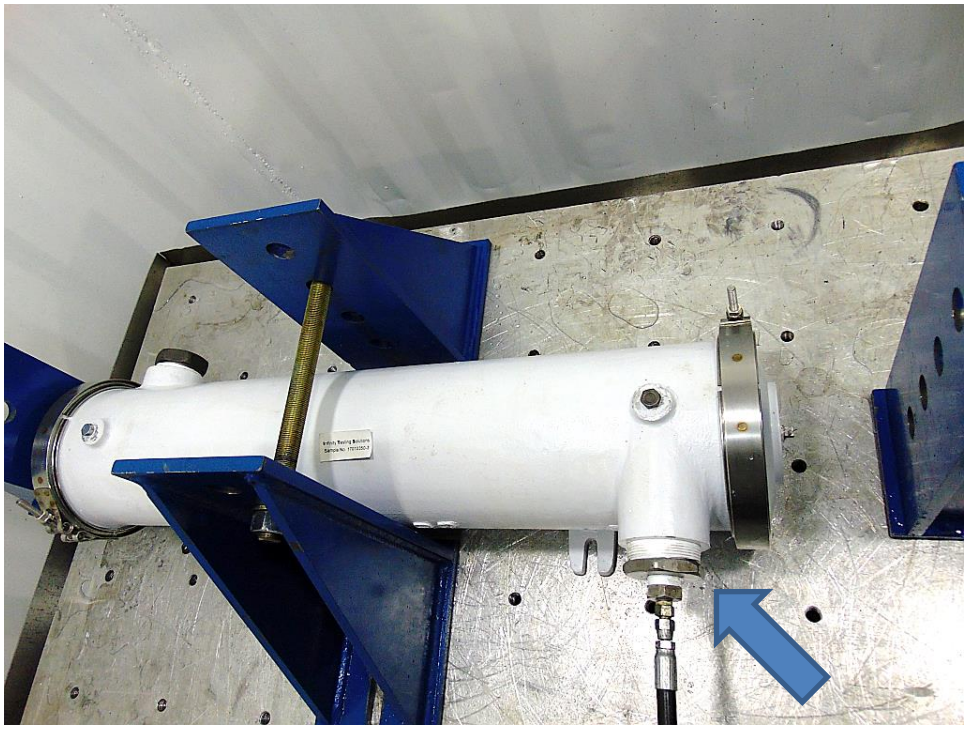


Figure 10: Sample 17010350-3 Trial #1 inlet connection

Figure 11: Sample 17010350-3 Trial #1 failed at lid/clamp at 650 psi

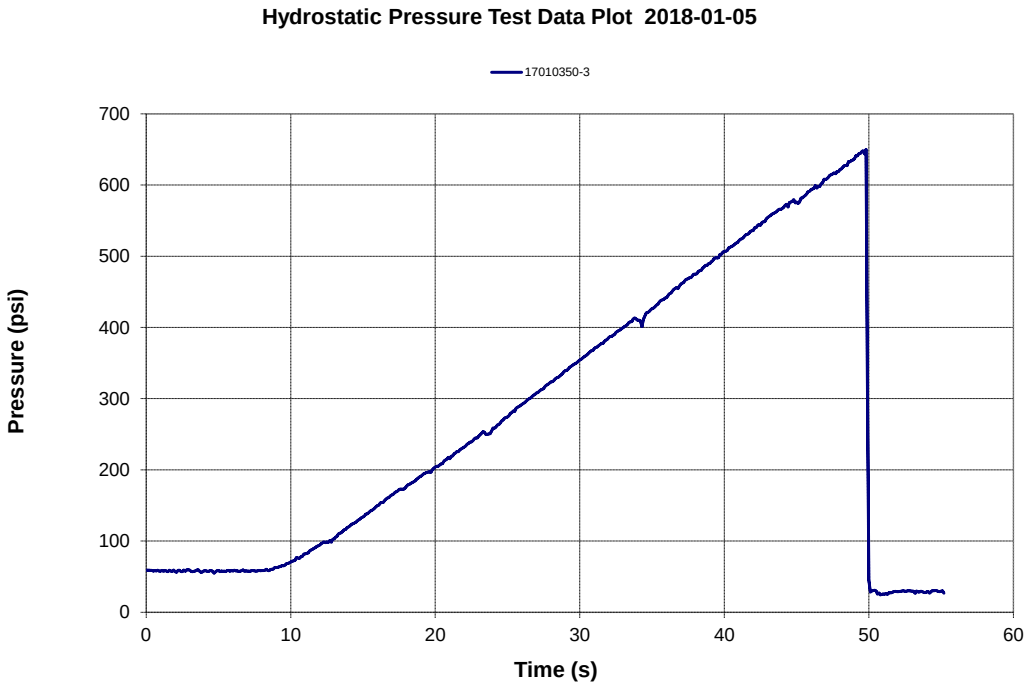


Figure 12: Sample 17010350-3 test pressure chart

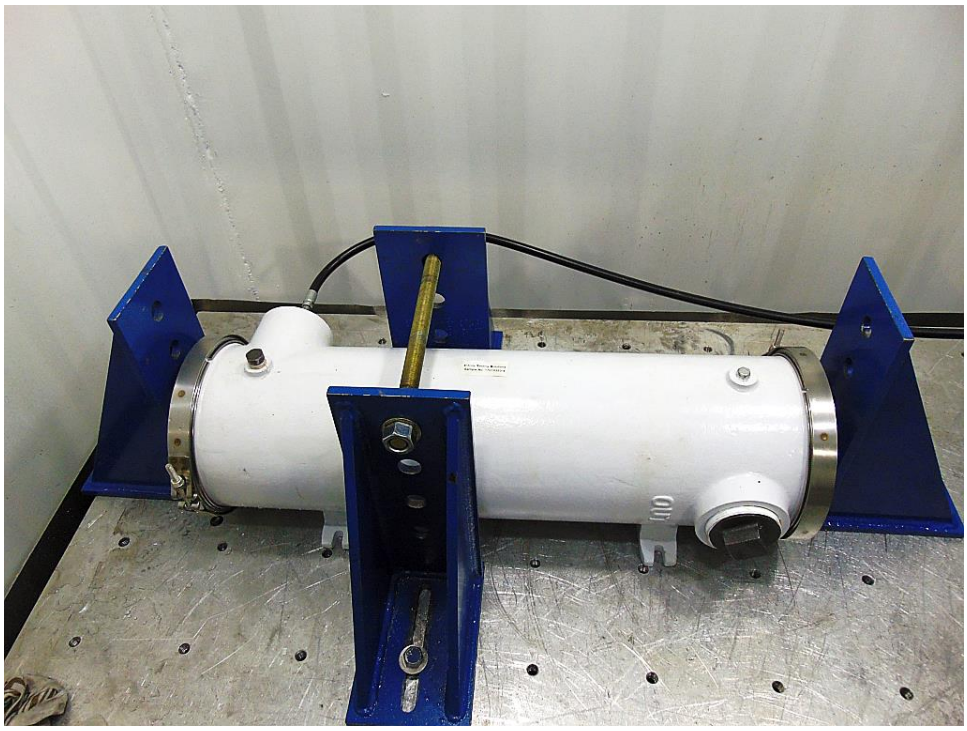


Figure 13: Sample 17010350-4 Trial #2 overall setup inside the pressure test chamber

Figure 14: Sample 17010350-4 Trial #2 inlet connection

Figure 15: Sample 17010350-4 Trial #2 cracked at lid at 428 psi

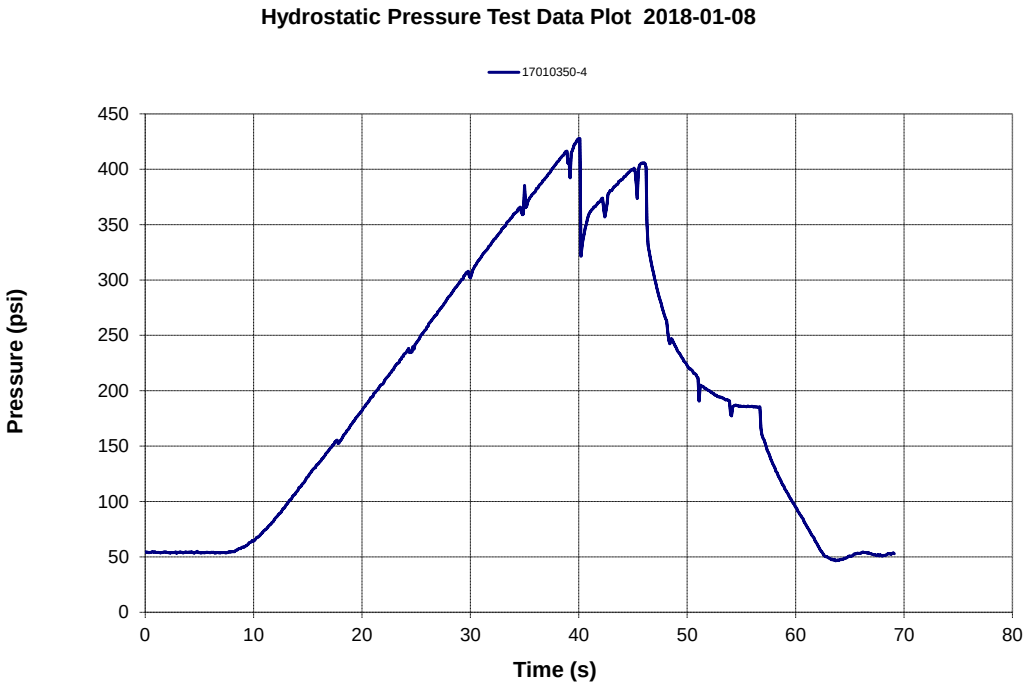


Figure 16: Sample 17010350-4 Trial #2 test pressure chart

APPENDIX A: PRESSURE TEST RECORD SHEET

(1 page)

Infinity Testing Solutions

Pressure Testing Records

Project Number	17010350
Client Name	Super-Dry Systems Inc.

Sample Information:

Sample No.	Sample Descriptions / Sample ID
17010350-1	Super-Dry D1 Drawing No. D-1 Body Rev.0 & D-1 Assembly Rev.0
17010350-2	Super-Dry D2 Drawing No. D-2 Body Rev.0 & D-2 Assembly Rev.2
17010350-3	Super-Dry D3 Drawing No. D-3 Assembly Rev.1
17010350-4	Super-Dry D4 Drawing No. D4-BODY Rev.0

Test Results:

Sample No.	Test Rate (psi/s)	Trial #	Results	Testing Date
17010350-1	15	1	Sample failed at Lid/Clamp at 787 psi	2018-01-05
17010350-2		1	Sample failed at Lid/Clamp at 936 psi	
17010350-3		1	Sample failed at Lid/Clamp at 650 psi	
17010350-4	N/A	1	Leaking at 3" NPT outlet at city pressure level	2018-01-05
	Removed fitting and reinstalled it with thread sealant			
	15	2	Sample failed at Lid(crack on lid) at 428 psi	2018-01-08

Testing performed according to ASME Sec.VIII Div.I, UG-101 (m).

Test Instrumentation:

Instrument Name	ITS Instrument ID	Range	Serial Number	Calibration Due
STI Stellar Pressure Transducer	M0082	0-5,000 psi	1507555	2018-02-27

Tested by:

Infinity Testing Solutions Inc.

David 2018-1-8
David Astorous, Test Technologist

Reviewed by:

Infinity Testing Solutions Inc.

2018-01-08
David Wang, P.Eng.

Witnessed by:

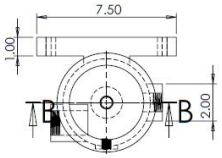
TSSA

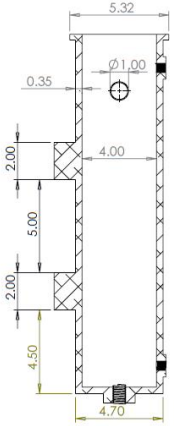
1/8/2018
Albert Chen NB No. 12474

Page 1 of 1

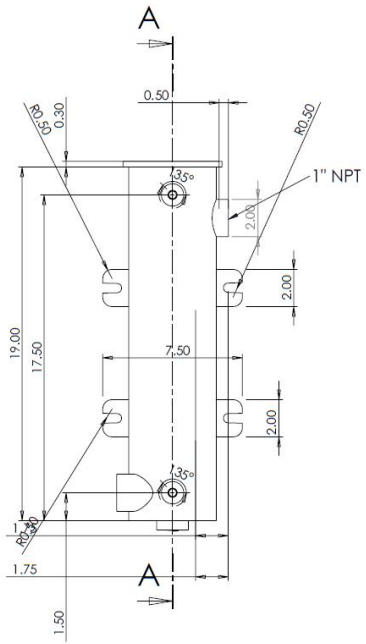
APPENDIX B: SAMPLE DRAWING

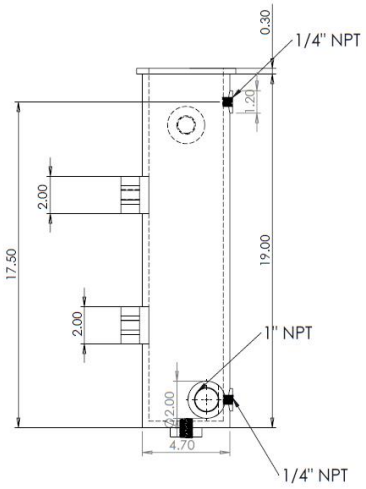
(6 pages)

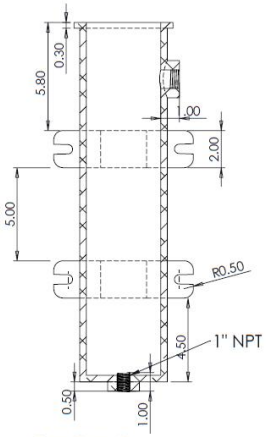




SECTION A-A







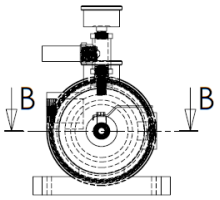
SECTION B-B

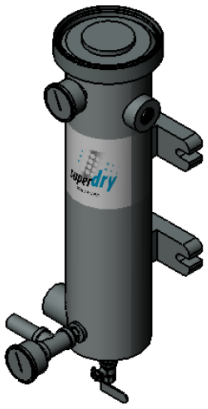
				NAME	DATE
		UNLESS OTHERWISE SPECIFIED:	DRAWN	MM	08-07-13
		DIMENSIONS ARE IN INCHES TOLERANCES: FRACTIONAL ± ANGULAR: MACH ± BEND ± TWO PLACE DECIMAL ± THREE PLACE DECIMAL ±	CHECKED		
			ENG APPR.		
			MFG APPR.		
			Q.A.		
		INTERPRET GEOMETRIC TOLERANCING PER:	COMMENTS:		
		MATERIAL			
NEXT ASSY	USED ON	FINISH			
APPLICATION		DO NOT SCALE DRAWING			

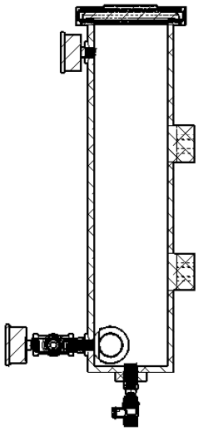
TITLE:

Universal Compressors Inc.

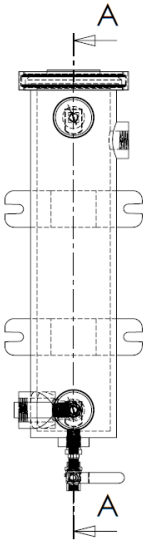
SIZE	DWG. NO.	REV
C	D-1 Body	0
SCALE: 1:5	WEIGHT:	SHEET 1 OF 1

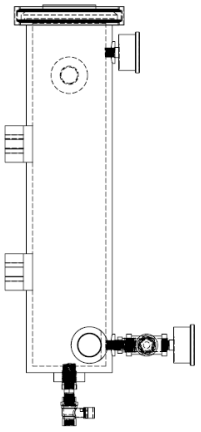


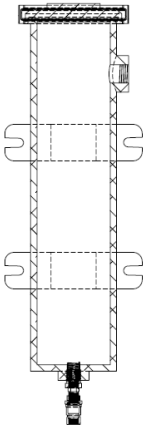




SECTION A-A







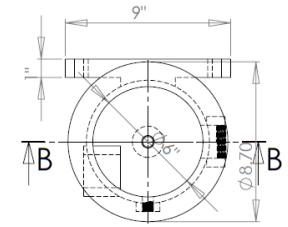
SECTION B-B

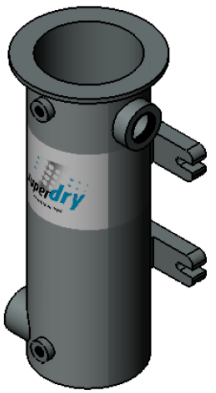
		UNLESS OTHERWISE SPECIFIED:		NAME	DATE
		DIMENSIONS ARE IN INCHES TOLERANCES: FRACTIONAL ± ANGULAR: MACH ± BEND ± TWO PLACE DECIMAL ± THREE PLACE DECIMAL ±	DRAWN	MM	12-07-13
			CHECKED		
			ENG APPR.		
			MFG APPR.		
		INTERPRET GEOMETRIC TOLERANCING PER:	Q.A.		
		MATERIAL	COMMENTS:		
NEXT ASSY	USED ON	FINISH			
APPLICATION		DO NOT SCALE DRAWING			

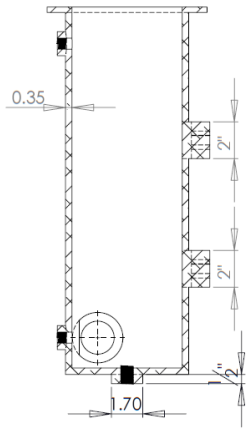
TITLE:

Universal Compressors Inc.

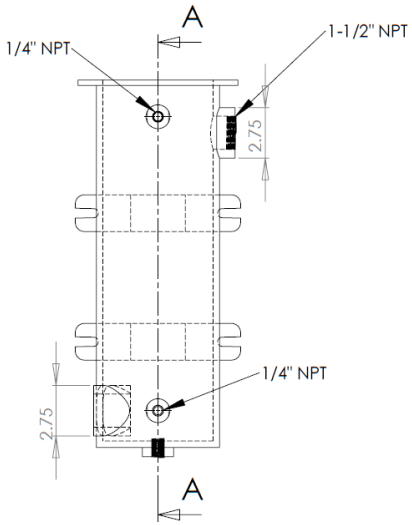
SIZE	DWG. NO.	REV
C	D-1 ASSEMBLY	0
SCALE: 1:5	WEIGHT:	SHEET 1 OF 1

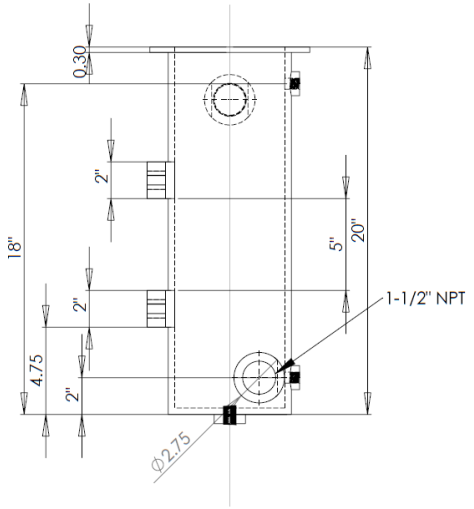


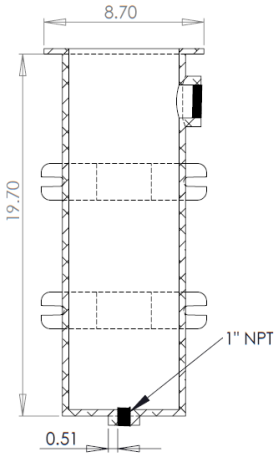




SECTION A-A







SECTION B-B

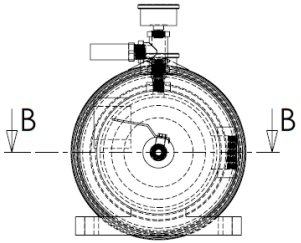
				NAME	DATE
		UNLESS OTHERWISE SPECIFIED:	DRAWN	MM	09-07-13
		DIMENSIONS ARE IN INCHES TOLERANCES: FRACTIONAL ± ANGULAR: MACH ± BEND ± TWO PLACE DECIMAL ± THREE PLACE DECIMAL ±	CHECKED		
			ENG APPR.		
			MFG APPR.		
		INTERPRET GEOMETRIC TOLERANCING PER:	Q.A.		
		MATERIAL	COMMENTS:		
NEXT ASSY	USED ON	FINISH			
APPLICATION		DO NOT SCALE DRAWING			

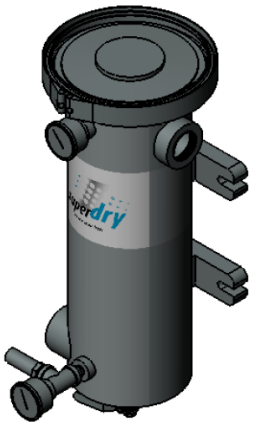
TITLE:

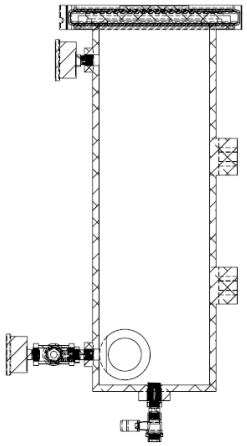
Universal Compressors Inc.

SIZE	DWG. NO.	REV
C	D-2 Body	0

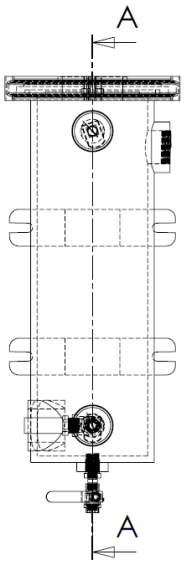
SCALE: 1:5 WEIGHT: SHEET 1 OF 1

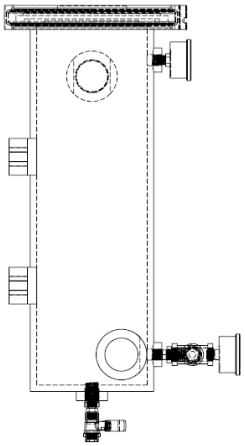


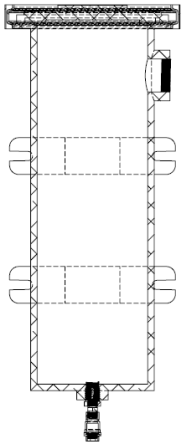




SECTION A-A







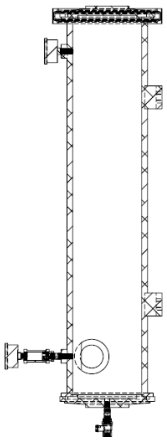
SECTION B-B

		UNLESS OTHERWISE SPECIFIED:		NAME	DATE
		DIMENSIONS ARE IN INCHES TOLERANCES: FRACTIONAL ± ANGULAR: MACH ± BEND ± TWO PLACE DECIMAL ± THREE PLACE DECIMAL ±	DRAWN	MM	15-07-13
			CHECKED		
			ENG APPR.		
			MFG APPR.		
		INTERPRET GEOMETRIC TOLERANCING PER:	Q.A.		
		MATERIAL	COMMENTS:		
NEXT ASSY	USED ON	FINISH			
APPLICATION		DO NOT SCALE DRAWING			

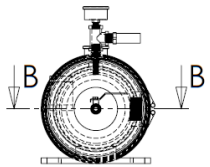
TITLE:

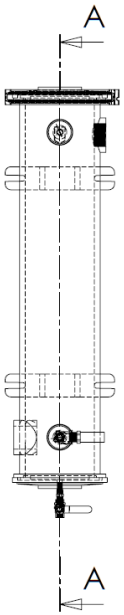
Universal Compressors Inc.

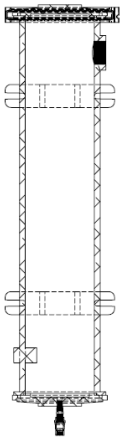
SIZE	DWG. NO.	REV
C	D-2 Assembly	0
SCALE: 1:5	WEIGHT:	SHEET 1 OF 1



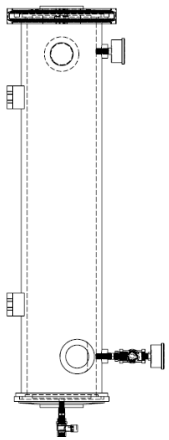
SECTION A-A







SECTION B-B



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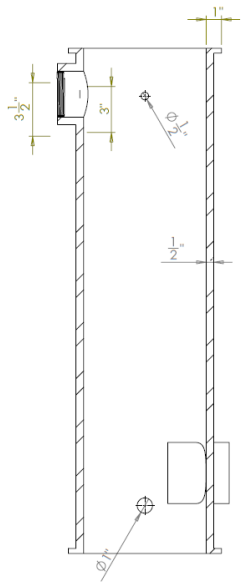
		UNLESS OTHERWISE SPECIFIED:		NAME	DATE
		DIMENSIONS ARE IN INCHES TOLERANCES: FRACTIONAL ± ANGULAR: MACH ± BEND ± TWO PLACE DECIMAL ± THREE PLACE DECIMAL ±	DRAWN	MM	12-08-13
			CHECKED		
			ENG APPR.		
			MFG APPR.		
		INTERPRET GEOMETRIC TOLERANCING PER:	Q.A.		
		MATERIAL	COMMENTS:		
NEXT ASSY	USED ON	FINISH			
APPLICATION		DO NOT SCALE DRAWING			

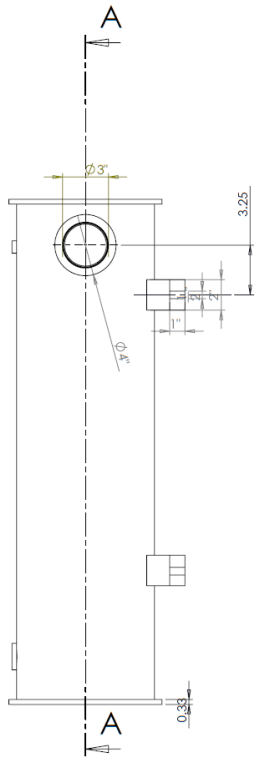
TITLE:

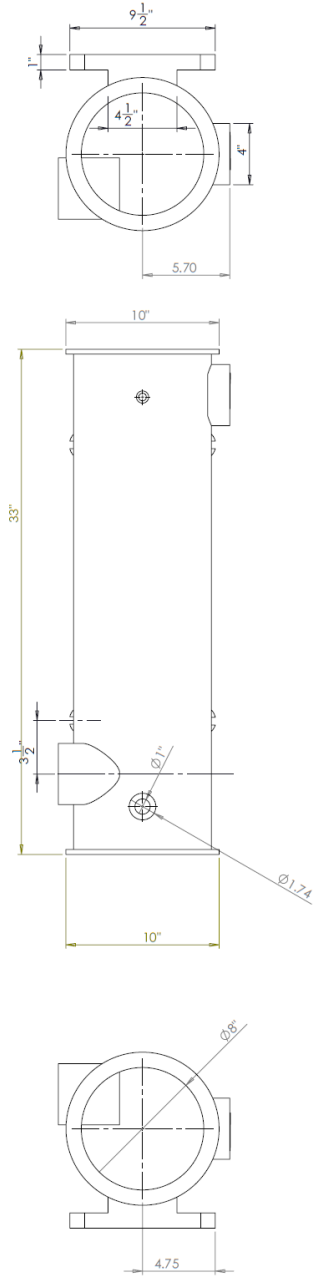
Universal Compressors Inc.

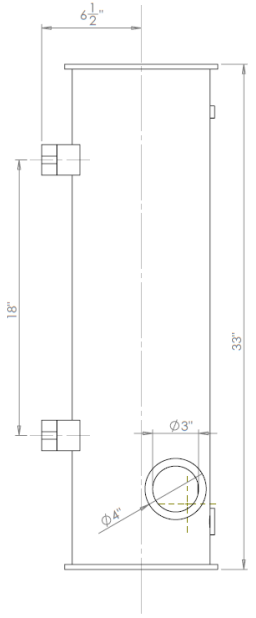
SIZE	DWG. NO.	REV
C	D-3 Assembly	1
SCALE: 1:8	WEIGHT:	SHEET 1 OF 1

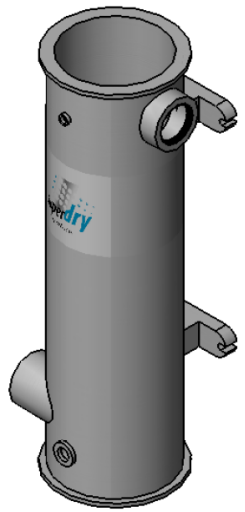


SECTION A-A









				NAME	DATE
		UNLESS OTHERWISE SPECIFIED:	DRAWN	MM	24-06-13
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			ENG APPR.		
			MFG APPR.		
		INTERPRET GEOMETRIC TOLERANCING PER:	Q.A.		
		MATERIAL	COMMENTS:		
NEXT ASSY	USED ON	FINISH			
APPLICATION		DO NOT SCALE DRAWING			

TITLE:

Universal Compresseurs Inc.

SIZE	DWG. NO.	REV
C	D4-BODY	0

SCALE: 1:6 | WEIGHT: 68 Kg | SHEET 1 OF 1