LEAH Compressor Parts	**Components Data Sheet**	(Case No.)

1. General data

This datasheet is created for collection of all relevant information for a complete technical offer for main compressor wear parts / modifications. Please select the product(s) requested and fill in the data on the chapters in the brackets. Information marked with * are mandatory. E-mail shanghai.jwu@outlook.com for more informaton.

Valves (1.) (2.)	☐	**Piston & Rider rings** (1.) (3.)	☐
Main packing complete (1.) (5.)	☐	**Main packing rings** (1.) (4.)	☐
Intermediate packing complete (1.) (7.)	☐	**Intermediate packing rings** (1.) (6.)	☑
Oil packing complete (1.) (9.)	☐	**Oil packing rings** (1.) (8.)	☐
Actuators (none) (1.) (2.) (10.)	☐	**Lubricators (none)** (1.) (11.)	☐

Compressor user		**Compressor type**	
Country		**Serial no.**	
Application		**Customer Tag no.**	

Available original compressor documents						
API Datasheet	☐	Manu al	☐	P&ID	☐	Drawings ☐

Compressor data						
Units	Dimensions	☑ mm		☐ inch es		
	Pressures	☐ bar a	☐ bar g	☑ MPa a	☐ psi a	☐ psi g
	Temperatures	☑ °C		☐ °F		
Cylinder design *		☐ lube	☑ non-lube			

Stage (HE = Head End, CE = Crank End)	1	2	3	4	5	6
Compressor speed [rpm] *						
Stroke *						
Cylinders per stage *						
Cylinder bore ∅ *						
Piston rod diameter ∅ *						
"D"ouble or "S"ingle acting (if S: HE or CE) *						
Volumetric clearance HE / CE [%]	/	/	/	/	/	/

Operating data						
Flow ☐ m3/h ☑ Nm3/h ☐ kg/h			Power consumption [kW]			
Stage	1	2	3	4	5	6
Suction pressure *						
Suction temperature *						
Discharge pressure *						
Discharge temperature *						

LEAH Compressor Parts	**Components Data Sheet**	**(Case No.)**

Gas analysis

Gas composition * (in ☑ Vol.% or ☐ Wt.%)	%					
Stage	1	2	3	4	5	6
Total molecular weight [g/mol]						
Corrosives	☐ Yes		☑ No			
Sticky build-up	☐ Yes		☑ No			
Wet gas	☐ Yes		☑ No			
Liquids	☐ Yes		☑ No			
Solid debris	☑ Yes		☐ No			

General compressor sketch, comments

Filled out by	
Name	**Date**
Phone no. / E-mail	

2. Valves

General information	
Current valve type / brand	Current lifetime MTBO [h]

To complete the required data for valve quotation the dimensions of the original valves and the amount/type of valves per stage is required. For the valve dimension please send us the drawings of the currently installed valves or use the dimensional datasheet alternatively.

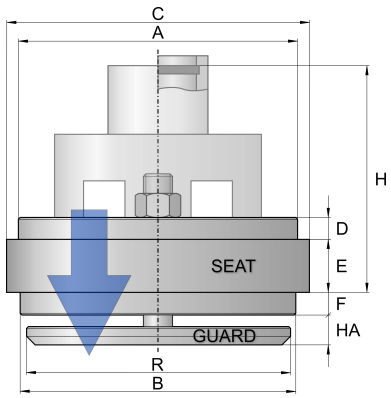
Valve dimensions*			
Option 1		Option 2	
Valve drawings available	☐	No drawings available, proceed with (page 4)	☐

Use below table to add the amount of valves per stage depending on the type of valve (CSV, SV, DV).

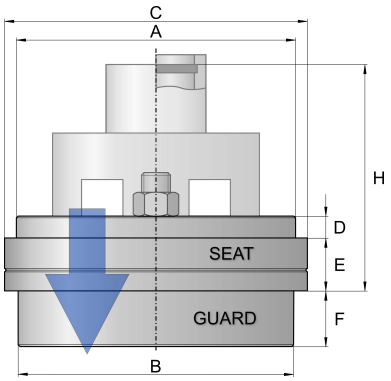
Amount of Valves per stage (CSV controlled suction valve; SV suction valve; DV discharge valve)*						
Stage	1	2	3	4	5	6
CSV						
SV						
DV						

Valve dimensions

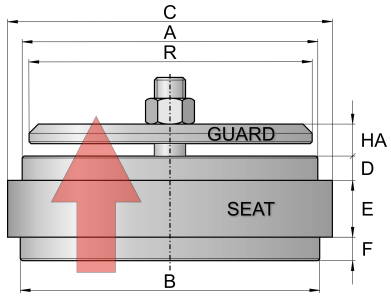
Suction Valve with hanging guard ☐



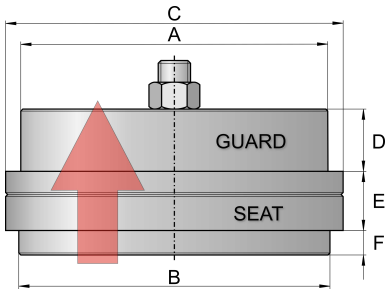
Suction Valve with safety guard ☐



Discharge Valve with hanging guard ☐



Discharge Valve with safety guard ☐



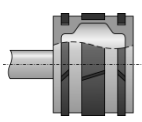
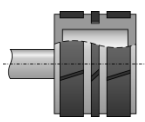
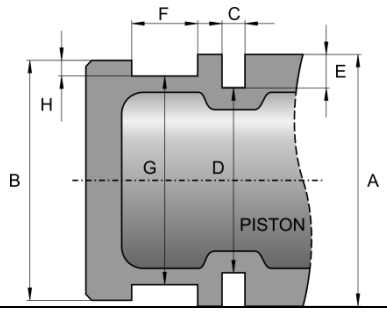
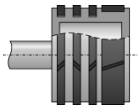
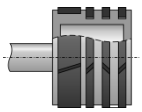
Existing valve design

Stage	A	B	C	D	E	F	R	HA	HS	H
1 SV										
1 DV										
2 SV										
2 DV										
3 SV										
3 DV										
4 SV										
4 DV										
5 SV										
5 DV										
6 SV										
6 DV										

3. Piston and rider rings

General information		
Satisfied with current rings/lifetime	☐ yes ☑ no	Current lifetime MTBO [h]
If not, what will be expected		Current ring material

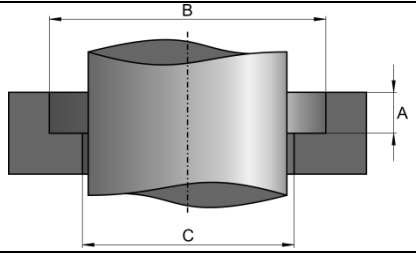
Existing piston and rider ring design							
Stage		1	2	3	4	5	6
Standard “S” or Step piston “SP”							
“O”ne piece or “T”wo piece or “B”uilt up							
Cylinder inclination from horizontal [°]							
Liner material *							
Piston diameter	A						
Slip over	B						
Piston weight or length (without rod)							
Piston rod weight or length							
Tail rod weight							
Piston material (CI, Al, …)							
Cylinder heat dissipation (uncooled, cooling jacket)							
No. of piston rings *							
No. of rider rings *							
Piston ring groove axial *	C						
Piston ring groove Ø *	D						
Piston ring groove depth	E						
Rider ring groove axial *	F						
Rider ring groove Ø *	G						
Rider ring groove depth	H						
Current piston ring design							
Are the rider rings split? “Y”es or “N”o							

Placement of rider rings		Piston
stage 1 ☐ stage 4 ☐ stage 2 ☐ stage 5 ☐ stage 3 ☐ stage 6 ☐ 	stage 1 ☐ stage 4 ☐ stage 2 ☐ stage 5 ☐ stage 3 ☐ stage 6 ☐ 	
stage 1 ☐ stage 4 ☐ stage 2 ☐ stage 5 ☐ stage 3 ☐ stage 6 ☐ 	stage 1 ☐ stage 4 ☐ stage 2 ☐ stage 5 ☐ stage 3 ☐ stage 6 ☐ 	

4. Main packing rings

General information		
Satisfied with current rings/lifetime	☑ yes ☐ no	Current lifetime MTBO [h]
If not, what will be expected		Current ring material

Existing packing ring design						
Stage	1	2	3	4	5	6
No. of pressure breakers						
No. of sealing elements						
No. of side loaded elements						
Rod coating / treatment *						
Rod material						
Cylinder side						
1. Cup depth A						
1. Cup ID (Ø B / C)	/	/	/	/	/	/
2. Cup depth A						
2. Cup ID (Ø B / C)	/	/	/	/	/	/
3. Cup depth A						
3. Cup ID (Ø B / C)	/	/	/	/	/	/
4. Cup depth A						
4. Cup ID (Ø B / C)	/	/	/	/	/	/
5. Cup depth A						
5. Cup ID (Ø B / C)	/	/	/	/	/	/
6. Cup depth A						
6. Cup ID (Ø B / C)	/	/	/	/	/	/
7. Cup depth A						
7. Cup ID (Ø B / C)	/	/	/	/	/	/
8. Cup depth A						
8. Cup ID (Ø B / C)	/	/	/	/	/	/
9. Cup depth A						
9. Cup ID (Ø B / C)	/	/	/	/	/	/
Crank side (Flange)						

Cooling *	☐ Yes ☐ No	
Vent *	☐ Yes ☐ No	
Buffer or purge gas *	☐ Yes ☐ No	

5. Main packing complete

General information		
Satisfied with current rings/lifetime	☐ yes ☐ no	Current lifetime MTBO [h]
If not, what will be expected		Current ring material

Existing main packing design							
Stage		1	2	3	4	5	6
No. of pressure breakers							
No. of sealing elements							
No. of side loaded elements							
Rod coating / treatment *							
Rod material							
Flange Ø *	A						
Stud hole PCD Ø *	B						
Bore Ø *	C						
Packing Ø *	D						
Packing recess Ø *	E						
Max. flange thickness *	F						
Max. Packing length *	G						
Distance	H						
Recess depth *	I						
Stud hole * Ø K / Quantity		/	/	/	/	/	/
L (Type / Dimension) *		/	/	/	/	/	/

Sketch

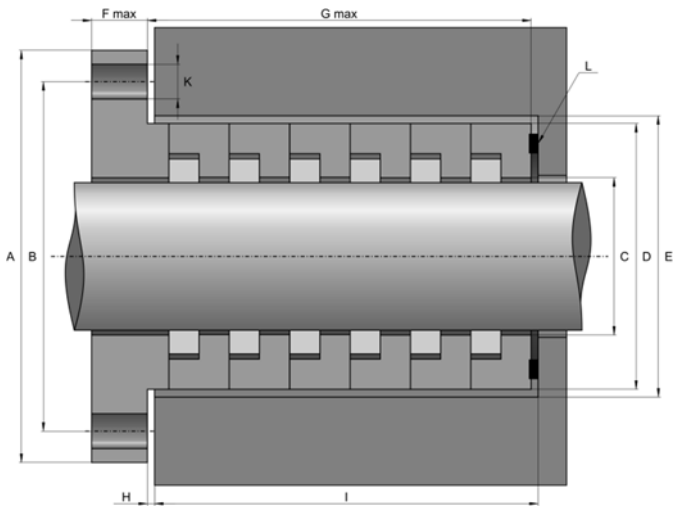
Hole pattern, position and dimensions of connections

Cooling * ☐ Yes ☑ No

If yes, maximum allowable working pressure*

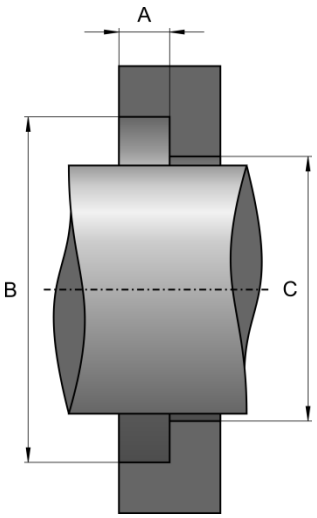
Vent * ☐ Yes ☑ No

Buffer or purge gas * ☐ Yes ☑ No



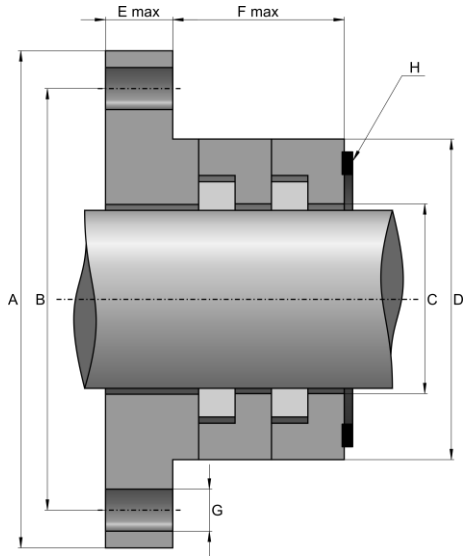
6. Intermediate packing rings

General information		
Satisfied with current rings/lifetime	☐ yes ☐ no	Current lifetime MTBO [h]
If not, what will be expected		Current ring material

Existing intermediate packing ring design			
No. of sealing elements		Vent *	☐ Yes ☐ No
No. of side loaded elements			
Rod coating / treatment *			
Rod material			
Cylinder side			
1. Cup depth A			
1. Cup ID (Ø B / C)	/		
2. Cup depth A			
2. Cup ID (Ø B / C)	/		
3. Cup depth A			
3. Cup ID (Ø B / C)	/		
Crank side			

7. Intermediate packing complete

General information		
Satisfied with current rings/lifetime	☐ yes ☐ no	Current lifetime MTBO [h]
If not, what will be expected		Current ring material

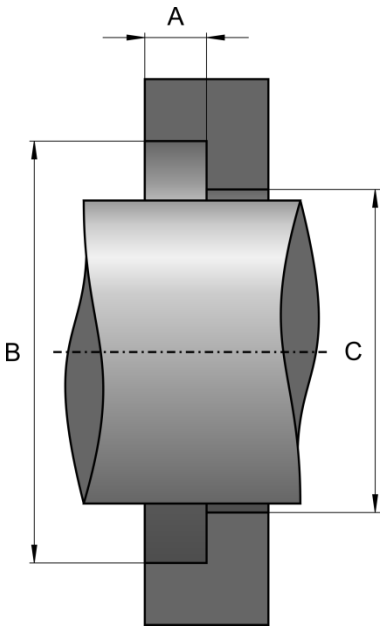
Existing intermediate packing design			
No. of sealing elements		Vent *	☑ Yes ☐ No
No. of side loaded elements			
Rod coating / treatment *			
Rod material			
Flange Ø * A			
Stud hole PCD Ø * B			
Bore Ø * C			
Packing Ø * D			
Max. flange thickness * E			
Max. flange thickness * F			
Stud hole * Ø G / Quantity	/		
H (Type / Dimension) *	/		

Sketch
Hole pattern, position and dimensions of connections

8. Oil packing rings

General information		
Satisfied with current rings/lifetime	☐ yes ☐ no	Current lifetime MTBO [h]
If not, what will be expected		Current ring material

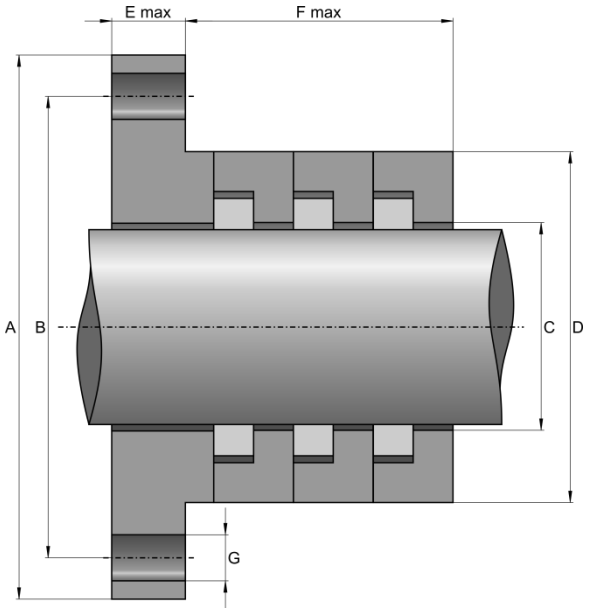
Existing oil packing ring design			
No. of sealing elements			
No. of side loaded elements			
Oil scrapers			
Rod coating / treatment *			
Rod material			
Cylinder side		**Oil drain ***	
1. Cup depth A		☐ Yes ☐ No	
1. Cup ID (Ø B / C)	/		
2. Cup depth A		☐ Yes ☐ No	
2. Cup ID (Ø B / C)	/		
3. Cup depth A		☐ Yes ☐ No	
3. Cup ID (Ø B / C)	/		
4. Cup depth A		☐ Yes ☐ No	
4. Cup ID (Ø B / C)	/		
Crank side			



9. Oil packing complete

General information		
Satisfied with current rings/lifetime	☐ yes ☐ no	Current lifetime MTBO [h]
If not, what will be expected		Current ring material

Existing oil packing design		
No. of sealing elements		
No. of side loaded elements		
Oil scrapers		
Rod coating / treatment *		
Rod material		
Flange Ø *	A	
Stud hole PCD Ø *	B	
Bore Ø *	C	
Packing Ø *	D	
Max. flange thickness *	E	
Max. flange thickness *	F	
Stud hole * Ø G / Quantity		/



Sketch
Hole pattern, position and dimensions of connections, oil flow channel