

Installation (ship): Sulzer  
 Engine type: Sulzer

Cylinder head No.: Vms Recon 3110  
 Engine No.:

Ordrenr: 11662

## RECONDITIONING OF CYLINDER HEAD

### 1. Cleaning and washing:

- Sand Blast Machine
- Washing Machine
- Pressure Washing

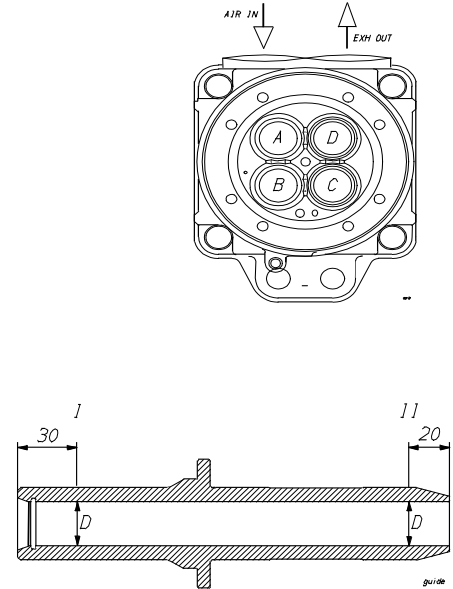
### 2. Pressure testing

- Pressure tested air  4 Bar
- Pressure tested water  Bar

### 3. Recon of valves and seat rings

- |                              | A                                   | B                                   | C                                   | D                                   |
|------------------------------|-------------------------------------|-------------------------------------|-------------------------------------|-------------------------------------|
| Grinding of valves           | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/>            | <input type="checkbox"/>            |
| Grinding of valve seat rings | <input type="checkbox"/>            | <input type="checkbox"/>            | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |
| Change of valves             | <input type="checkbox"/>            | <input type="checkbox"/>            | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |
| Change of valve seat rings   | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/>            | <input type="checkbox"/>            |
| Rotocaps renewed             | <input type="checkbox"/>            | <input type="checkbox"/>            | <input type="checkbox"/>            | <input type="checkbox"/>            |
| Oversize valve seat          |                                     |                                     |                                     |                                     |
| Angle (deg.)                 | 30                                  |                                     | 30                                  |                                     |
| Change of valve guides       | <input type="checkbox"/>            | <input type="checkbox"/>            | <input type="checkbox"/>            | <input type="checkbox"/>            |

### VALVE GUIDES



Nominal diameter: **Wear limit:**  
 Reference diameter:  
 Deviations in 1/100 mm.

### 4. Injection valve sleeve

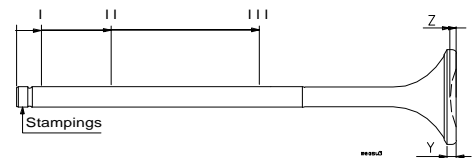
- Valve sleeve renewed
- Valve sleeve reused

INLET	A	I	5	EXHAUST	D	I	5
		II				II	
B	B	I	5	C	C	I	6
		II				II	

### 5. Starting valve:

- Visual inspection / cleaning
- Overhaul of starting valve

### VALVES



### 6. Safety valve:

- Visual inspection / cleaning
- Overhaul of safety valve  Bar

### 7. Lapping of sealing surface

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Min x dia valve surface inlet  
 Min x dia valve surface exh  
 Burn-off area: Zmax=  
 Valve Y - Min  
 Max outer dia valve seat:

### 8. Machining of sealing surface

- /100mm

Stem stampings	Valve location
	<b>A</b>
	<b>B</b>
	<b>C</b>
	<b>D</b>

### 9. Rotocap:

- Inspection no overhaul
- Inspection full overhaul

Reference diameter

Wear limit valve stem 23.95 mm

### 10. Valve spring Inspection

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Deviations to be given in 1/100 mm.

INLET	A	I	19.99	EXHAUST	A	I	New
		II				II	
		III				III	
		Z	0			Z	
		Y	5.7			Y	
B	B	I	19.99	B	B	I	New
		II				II	
		III				III	
		Z				Z	
		Y	5.8			Y	

### 11. Valve yoke:

- Adjusted

### 12: Tightening with torque:

- Injection valve
- Starting valve
- Rocker arm
- Safety valves