

27<sup>th</sup> of December 2017Revised 6<sup>th</sup> of May 2020

## Technical Notification (TN) 07-17

**Subject: Inspection & Maintenance schedule for TMC 7-27  
Feed Air Compressors**



### **Introduction:**

This Technical Notification is an attachment to TN 03-17 or TN 04-17 and must be considered as an integrated part of the supplied PRISM® Membrane Nitrogen Generator System.

### **References:**

*TN 03-17: Applies to Large Capacity PRISM® Membrane Nitrogen Generator Systems*

*TN 04-17: Applies to Small and Medium Capacity PRISM® Membrane Nitrogen Generator Systems*

## Standard Service Chart TMC 7-27

### Service Schedule

- 1) Checkpoints before/when starting
- 2) After first 300 hours and then once a year
- 3) Every 1500 hours or once a year \*
- 4) Every 3000 hours or once a year \*
- 5) Every 9000 hours or every 2<sup>rd.</sup> year \*
- 6) Every 20000 hours
- 7) Every 35000 hours

\* Whichever comes first.

Operation	1	2	3	4	5	6	7
Check controller display for alarms	X						
Check function water separator	X						
Check oil level**	X						
Check hoses for leakages	X						
Check running temperature	X						
Tighten electrical cables		X	X				
Tighten connections and screws		X	X				
Check contactor contacts			X				
Replace oil filter		X	X				
Change oil */**			X				
Check and grease load spring, inside discharge valve*****			X				
Replace oil separator cartridges				X			
Check and clean orifice for oil return				X			
Replace air filter				X			
Replace electric el.box filter*****			(X)	X			
Change belts				X			
Clean cooler inside (water cooled compressors)					X		
Clean cooler externally (air cooled compressors)			X				
Check operation of pressure relief valve				X			
Replace Rep. kit inlet valve					X		
Replace Rep. kit Discharge valve					X		
Change Solenoid valve for load function					X		
Change Solenoid valve for drain					X		

Change oil thermostat element					X		
Change membrane in valve PS 2 (optional)					X		
Replace air and oil hoses					X		
Check air end and motor pulleys				X			
Re-greasing of bearings in el. motor*/***				X			
Replace motor bearings						X	
Replace compressor Air End with a factory reconditioned unit.							X
Automatic condensate level drain****				X			

- \* For oil & grease recommendation-see instruction manual “oil and lubrication recommendation”, motor name plate or motor manual.
- \*\* Stop the compressor for at least 10 minutes before checking oil. See also number 4 in the list below for more information.
- \*\*\* All models except for TMC 7 and TMC 10 models which have enclosed bearings that shall not be lubricated
- \*\*\*\* Optional equipment. Check yearly & replace rep.kit when if required
- \*\*\*\*\* Replace electrical el.box filter every 1500 hours on all SA compressors
- \*\*\*\*\* If load spring inside discharge valve is detected to malfunction, replace with Rep. Kit Discharge valve.

## Maintenance of Compressor

1. Do not fill oil between oil changes without knowing the reason for the oil consumption. Keep a log for oil filling between oil changes stating amount of oil and type of oil filled. **Never mix oil and grease types.**
2. The compressor need to be started minimum once a week and to be loaded for one hour to secure that all water condensate in the oil system is evaporated.
3. As a guideline, the running temperature of the compressor need to be minimum 50°C above the cooling media or ambient temperature, whatever is highest.

Check condensate after water separator daily. The condensate shall never be more than light milky white in color.

***Cautions:***

- All alarms and service signals from the compressor controller must be followed.
- Do not mix different oil or grease types as this will lead to high risk of oxidation.
- Always adjust service counter in controller when servicing the compressor.  
Different installations, ambient temperature and running conditions might lead to different service schedule.
- Intervals are based on synthetic screw compressor oil ISO VG 46.