

Pioneering nitrogen membrane technology worldwide

www.airproducts.no

Mail: aftsskrs@airproducts.com

27<sup>th</sup> of December 2017

# **Technical Notification (TN) 08-17**

# Subject: Inspection & Maintenance schedule for TMC 86-124 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



### www.airproducts.no

# Mail: aftsskrs@airproducts.com

### Standard Service Chart TMC 86-124

#### Service schedule

- 1) After commissioning max.300 hours
- 2) Checkpoints before/when starting
- 3) Every 1500 hours or once a year\*
- 4) Every 3000 hours or once a year\*
- 5) Every 9000 hours or every 3rd year\*
- 6) Every 3rd year
- 7) Every 20000 hours
- 8) Every 35000 hours
- \* Whichever comes first.

Operation	1	2	3	4	5	6	7	8
Tighten electrical cables	Х							
Tighten connections and screws	Х							
Replace oil filter	Х							
Check controller display for alarms		Х						
Check function water separator drain		Х						
Check oil level**		Х						
Check hoses for leakages		Х						
Check running temperature (see # 4)		Х						
Tighten electrical cables			Х					
Tighten connections and screws			Х					
Replace oil filter			Х					
Change oil */**			Х					
Check pipe coupling elements for			Х					
leakage								
Check flexible drive coupling element			Х					
visually								
Check condition of main contactors			Х					
Re-greasing of bearings in el. motor*			Х					
Replace oil separator kit				Х				
Replace strainer for oil return				Х				
Clean oil return line				Х				
Replace flexible pipe coupling element on discharge valve				Х				



# Pioneering nitrogen membrane technology worldwide

### www.airproducts.no

# Mail: aftsskrs@airproducts.com

Replace air filter		Х				
Replace el. box filters		Х				
Replace coil on solenoid inlet valve		Х				
Clean cooler if needed		Х				
Clean electrical motor externally		Х				
Check operation of safety valve		Х				
Replace service kit on automatic		Х				
condensate level drain***						
Replace service kit inlet valve			Х			
Replace service kit for modulation control***			X			
Replace service kit discharge valve			Х			
Replace service kit check valve			Х			
Change solenoid valve for condensate			Х			
drain						
Replace blow down hose from receiver				Х		
to inlet valve	 	 				
Replace oil return orifice			X			
Replace oil return line (outside receiver)			Х			
Replace oil return line (inside receiver)			Х			
Replace complete discharge valve				Х		
Replace all flexible pipe coupling and				Х		
inserts						
Replace oil hoses				Х		
Replace oil thermostat element (TMV)				Х		
Replace fan in electrical cabinet				Х		
Replace air-end shaft seal kit					Х	
Replace complete inlet valve					Х	
Replace motor bearings					Х	
Replace flexible drive coupling element					Х	
Replace compressor Air End with a						Х
factory reconditioned unit.						
Replace vibration dampers for motor						X
and air-end						

- \* 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 3 in the list below for more information.
- \*\*\* Optional equipment.



www.airproducts.no

Mail: aftsskrs@airproducts.com

### 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. Before starting the compressor after a week stand still, open the drain valve in the bottom of the separator receiver tank and check that no water is detected in the oil reservoir. If water is found drain out before starting the compressor.
- 4. As a guideline, the running temperature of the compressor need to be minimum 50°C above the cooling media or the ambient temperature, whatever is highest.
- 5. 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.