

SA/PA Separation System Service Manual



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Contents

1	Change of Circuit Board	5
1.1	Circuit Board Temperatures.....	7
2	Cleaning in Place (SA only)	9
2.1	Cleaning in Place, Separator.....	9
2.2	Cleaning in Place, Heatpac® CBM Heater.....	10
2.3	Cleaning in Place, Separator and Heater.....	12

1 Change of Circuit Board

If a circuit board has to be changed, proceed as follows:

Note down the run time (days only) as shown in the function list of the EPC 50.

Change the board according to the instructions below.

Go to parameter Fa 90, and insert the run time.

OP-Board

- Switch power off.
- Remove the snap-in transparent cover.
- Disconnect the two cable plugs (do not remove the cables from the plugs).
- Disconnect the flatcable connector at the top.
- Unscrew the five hexagon nuts.
- Mount the new board, and connect in reverse order.

I/O-Board

- Switch power off.

If there is no optional board installed:

- Disconnect all the cable plugs on the large board (do not remove the cables from the plugs).
- Unscrew the hexagon nuts. Take care to note where the special nuts for optional board(s) are located.
- Mount the new board, and connect in reverse order.

If one or more optional board is installed:

- Switch power off.
- Disconnect the cable plug(s) on the optional board (do not remove the cables from the plug(s)).
- Disconnect the flatcable connector at the top.
- Unscrew the three hexagon nuts.
- Note the position of the board and remove the board.
- Disconnect all the cable plugs on the large board (do not remove the cables from the plugs).
- Unscrew the hexagon nuts. Take care to note where the special nuts for optional board(s) are located.
- Mount the new board in the same position as the old, and connect in reverse order.

1.1 Circuit Board Temperatures

Circuit board temperature information can be read as follows:

- Set Pr 7 = 2.
- Push '+' and '-' at the same time ('Standst.' now shows on the display).
- Push '-'

The actual temperature, max. temperature, and the number of times the temperature has been above 70 °C for the transducer scrolls across the display.

- For further circuit board temperatures, push the '-' button.
- To leave the list push the '+' and the '-' buttons at the same time.
- Reset Pr 7 = 0.

2 Cleaning in Place (SA only)

The use of Cleaning In Place (CIP) equipment is recommended for best separation results. For further information concerning the CIP equipment, see the CIP booklet, bookno. 1817261.

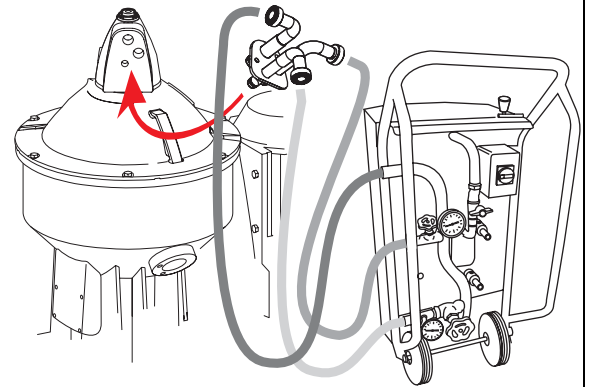
Before connecting the CIP equipment to the Separation Unit, the switch on the control cabinet must be turned to the CIP position. This is so that oil is not accidentally pumped when the pipeline is opened up.

2.1 Cleaning in Place, Separator

- 1** Remove the pipe connecting plate with pipes from the separator.
- 2** Attach the CIP equipment as shown in the illustration.

NOTE

**The top outlet on the CIP unit should be connected to the top inlet on the separator.
The middle inlet on the CIP unit should be connected to the middle oil outlet on the separator.
The lower CIP inlet should be connected to the lower water outlet on the separator.**



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2.2 Cleaning in Place, Heatpac[®] CBM Heater

For systems including a Heatpac[®] CBM heater, cleaning in place of the heater should be carried out circa every 6 months, or according to experience. Cleaning in place of the heater should also be carried out in the event of a pressure drop increase greater than 0.3 – 0.5 bar (which indicates that the heater is beginning to clog).

We recommend that you use Alfa Laval cleaning liquids. These are specially suitable for the materials used in the Heatpac[®] CBM heater. Liquids that are corrosive to copper or stainless steel, for example hydrochloric acid, phosphoric acid, or nitric acid, must not be used.



Burn hazard

Shut off the oil flow and the heating medium flow before starting maintenance work.



Corrosion hazard

Pay strict attention to the safety instructions for the cleaning liquid used.



Use only specified cleaning liquids. Other cleaning agents may corrode the metal surfaces.

Proceed as follows:

- 1** Close the valves before and after the heater.
- 2** Open the heater drain valve until oil remaining in the heater has drained.
- 3** Close the drain valve.
- 4** Loosen the turnable connections before and after the heater. Turn the connections 90 ° so that the special CIP connections can be connected.
- 5** Connect the CIP equipment. The top inlet on the CIP unit should be connected to the oil outlet on the heater. The hose from the heater inlet should be inserted into the tank and secured with the help of the cover.

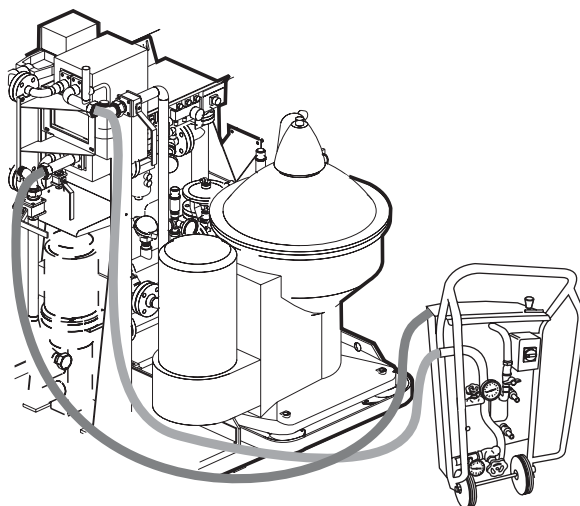
NOTE

The middle and lower CIP unit outlets must be closed.

- 6** Clean with CIP fluid.
- 7** Flush with water.

After cleaning:

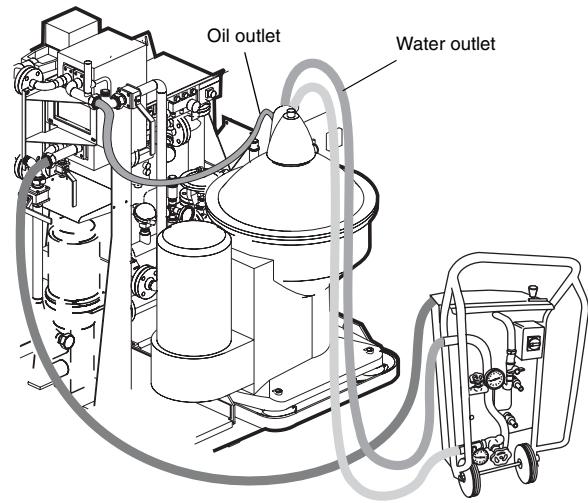
- 1** Open the heater drain valve until the flushing water has drained.
- 2** Close the drain valve.
- 3** Remove the CIP connections.
- 4** Return the turnable connections to their former positions and re-tighten.
- 5** Re-open the valves before and after the heater.



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2.3 Cleaning in Place, Separator and Heater

Connect the CIP equipment as shown in the illustration. Proceed with cleaning as described above.



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