

Manual for installation, maintenance and operation of OEG - Twin Aggregate SMG 2200

The positioning place of the aggregate should be close to the oil tank and render possible inspections and adjustments.

In order to avoid eliminiations of gas or air the vacuum should be kept lower than -0.4 bar; -0.6 bar must not be exceeded. The diameters of suction and pressure pipes have to concord with the connections of the aggregate. In no case reduce diameter on the suction side, it may make sense, however to use the nominal diameter next in size to reduce the pipe resistance. On the delivery side of the aggregate the pipe diameter may be reduced according to the quantities by the burner.

- 1. Pipes and fittings must be free of dirt and loose particles.
- 2. All connections and pipes have to be assembled stress-free and leakproof.
- 3. Pumps, strainers and, if necessary, suction channel have to be filled with oil. **The pumps must not run dry!**
- 4. Electric connections of the motor only be use of the protective motor switch with controll lights (indication of operating state). Observe the correct sense of rotation (see direction sign on motor or pump) when connecting the motors according to the motor connection diagramme.
- 5. Open all shut-off devices on the suction side and the ball valve on the delivery side of the aggregate. Switch on the motor. The ball valves on the suction side of the pumps have to be closed only when pumps are removed.
 If SMG 22.. is used as closed circular pipeline aggregate the pressure of the circular pipeline can be adjusted only by a pressure relief valve installed in the circular pipeline. The pressure relief valve installed in the pump serves as safety valve (when the circular pipline is blocked). Please observe the varying adjustments, e. g. pressure of circular pipeline about 0.8 bar, pump safety valve about 3 bar.
- 6. Close the ball valve (for a brief period only if the pressure is higher than 6 bar) on the delivery side of the pump when testing or adjusting the pressure relief valve of the pump, remove plug screw of the pressure relief valve on the suction side of the pump. Turn the set screw below to the right for increasing, to the left for reducing the pressure (setting range on pressure stage 2 between 2 and 9 bar).
- 7. If necessary deaerate the delivery side during initial operation. Please check wether the vacuum measured range within a "reasonable" proportion according to the real distance between oil tank and aggregate. Shut-off devices of vacuum meter and pressure gauge may be opened for tests and adjustments only, otherwise keep closed always.
- 8. Regular cleaning of strainers is recommended, all other parts of the aggregate are maintenance-free.



Internal geared wheel pump equipped with overflow-valve as safety valve.

In order to grant a steady oil supply a pressure relief valve (pressure maintaining valve of circular pipeline) should be integrated into the circular pipeline.

- for fuel oil "EL"
- maximum suction pressure of pumps -0.6 bar
- the letters imprinted on the pump stand for:
 - "A" suction side
 - "S" delivery side
 - Protective system of motor IP 54

This operation manual is for the exclusive use of the engineering specialist.

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