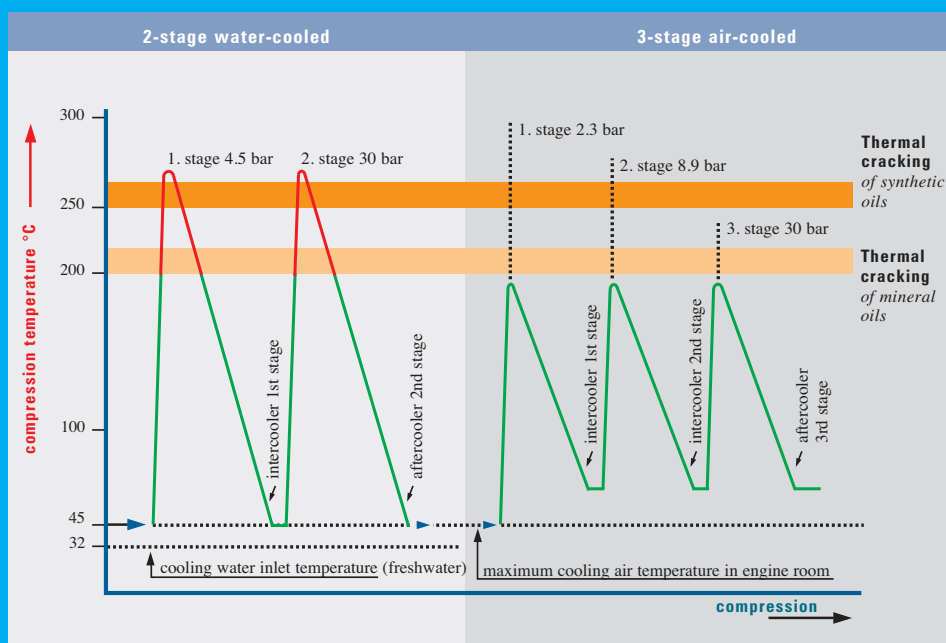




Sauer Compressors

Your Advantages by using the

Sauer low maintenance 3-stage air-cooled Compressors



- less temperatures
- less maintenance costs
- less installation costs

Your Advantages as a shipowner

Rising demands of the shipowners to reduce maintenance and crew costs were the reasons for Sauer & Sohn to develop in the beginning of the 70ties starting-air compressors in 3-stage air-cooled design for shipboard applications.

Due to the physical laws air is heated during compression. The final compression temperature is dependant on the compression-ratio in each stage. By dividing up the total compression-ratio into 3 stages, lower compression temperatures in the cylinders and valves can be achieved compared to 2-stage water-cooled compressors.

... less temperatures

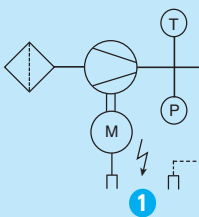
Due to the lower compression temperatures the thermal cracking of the lubricating oil will not be reached and consequently the compressor valves will not be soiled by oil coke. Thus Sauer & Sohn can guarantee maintenance intervals of 2,000 hours for the valves which reduce the maintenance costs compared to 2-stage water-cooled compressors.

The reduced compression temperatures allow the use of standard mineral oil SAE 30 as it is used e. g. in 2- and 4-stroke diesel engines. The use of expensive synthetic oil ist not required for proper performance.

... less maintenance costs

By abolishment of the cooling water circuit with its flanges, packings, fittings and cooling water pumps a higher reliability and an easier control and supervision of the compressors is achieved.

The simple way of cooling is also the reason for more and more shipyards to prefer air-cooled compressors. In addition to the fact that an auxiliary with less interfaces is installed, the weight and space is smaller thus enabling lighter and less expensive foundations. The total ventilation of the ship has not to be increased. The compressors have only to be taken into consideration in arrangement of the ventilation.

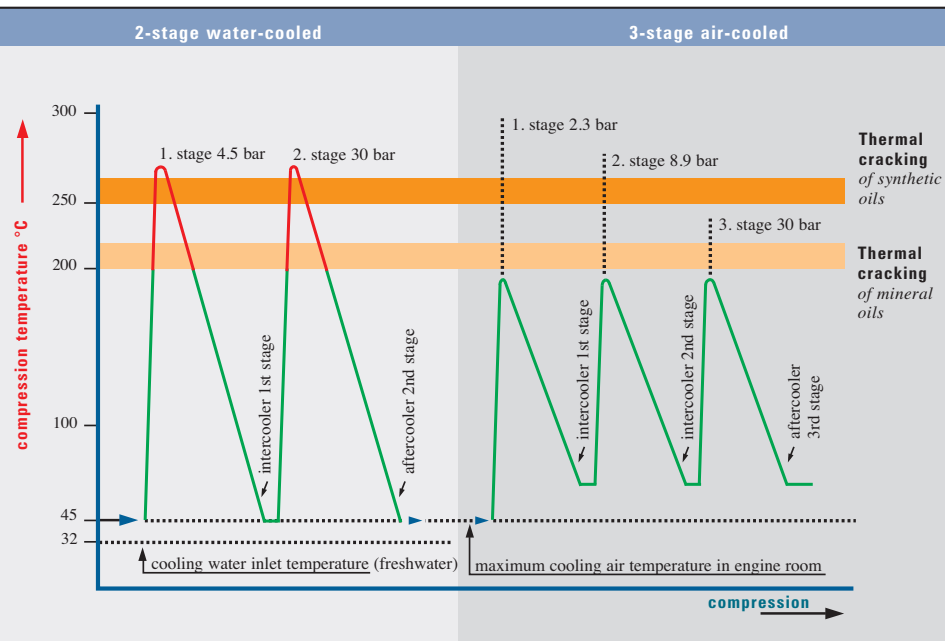


... less installation costs

**Special Features
of low maintenance
3-stage air-cooled
compressors
by Sauer & Sohn:**

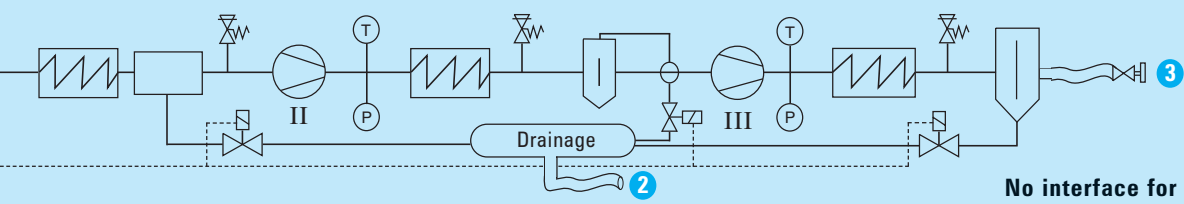
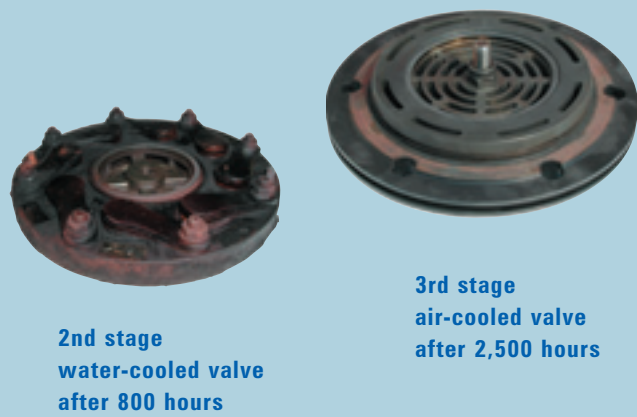
- Available from 66 up to 365 m³/h capacity
- Final pressure 45 bar
- Suitable for continuous running 24 hours by 24 hours
- Mounted seperator after each stage
- Reliable and safe operation up to 60°C
- More than 10.000 units sold since 1977

and as a shipbuilder ...



Temperature rises of air during compression. Temperatures calculated based on the physical laws and technical regulations. Above mentioned temperatures occur in the cylinders/valves and can not be compared with temperatures displayed on compressors by standard thermometers.

- Extended life time of the valves due to lower temperatures
- Reduced crew costs due to easy maintenance
- Reduced spare part consumption due to lower compression temperatures
- Designed for use of standard mineral oil SAE 30



- No cooling water lines and fittings.
- No cooling water control system.
- Less interfaces.
- Smaller central SW/FW heat exchanger possible.
- Cost saving for the yard up to 7.500 USD per ship.

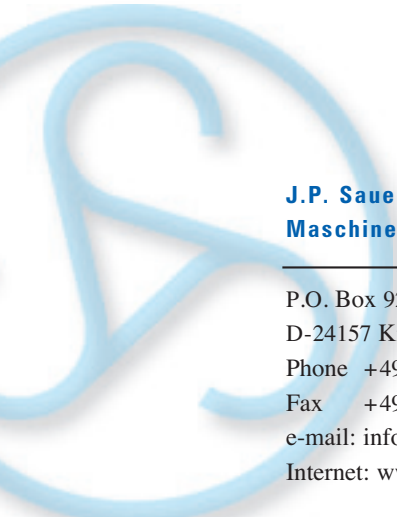
- No interface for cooling water required!
Only 3 interfaces:
- Electric
 - Drainage (1 flexible hose)
 - Compressed air outlet

Firms of high reputation around the world rely on Sauer 3-stage air-cooled compressors



Upon request, Sauer & Sohn will provide you with further information and references. Please contact us by Fax +49 (0)4 31/39 40-24 or e-mail: info@sauersohn.de

Your local agent:



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