

Technical – Economical Comparison of air- and water-cooled starting air compressors of lower capacity

When using low capacity air compressors mostly 2-stage air-cooled machines are installed.

The following advantages are arguments in favor of using air-cooled compressors as seen by shipyards & operators:

- Simpler design gives a more favorable price when compared with water-cooled compressors.
- Lower space requirement and weight.
- Low cooling air requirement and special ventilation is not necessary. Cost saving.
- Water-cooled compressors always require an individual supply of the cooling medium.
- The maintenance, i.e. checking valves-requires less expenditure for air-cooled than for water-cooled machines. For example no draining of cooling water is necessary no matter what kind of maintenance has to be performed.
- More advantages are offered due to less supervision and control of air-cooled compressors. i.e. There is no need for monitoring of cooling water circuit.
- The maintenance of the lamellar valves in air-cooled compressors WP 15 L to WP 65 L offer a minimum 2000 working hours compared to maximum 800 hours for water-cooled machines of comparable sizes.
- Safe operation is even guaranteed in ambient temperatures of up to 60 °C.