



**Naval Know-how
for the world market**

More than 53 of the world's navies rely on Sauer Compressors in their aircraft carriers, destroyers, frigates, corvettes, patrol boats, submarines and mine hunters.

Navies that appreciate such special design features as:

- easy maintenance and accessibility
- low noise signature
- high reliability
- low-weight, compact design



Based on the feedback of navies' experience, Sauer's know-how results in a steady stream of innovations, e.g. the WP5000 HP air compressor with its 100% balanced free inertial forces.

References



Korvette K 130 – German Navy
with 2 x WP 5500, 80 m³/h @ 300 bar
and 1 x SC22, 100 m³/h @ 8 bar



F125 Frigate – German Navy
with 2 x WP 5000, 160 m³/h @ 300 bar



T45 Destroyer – Royal Navy
with 3 x WP 5500, 54 m³/h @ 276 bar



AWD Hobart Class Destroyer – Australian Navy
with 2 x WP 5000, 160 m³/h @ 300 bar
and 2 x SC52, 350 m³/h @ 8 bar



Frigate P 22 – Pakistan Navy
with 2 x WP 5500, 80 m³/h @ 250 bar



Fremm Frigate – Italian Navy
4 x WP 4351, 100 m³/h @ 330 bar
and 1 x WP 4331, 30 m³/h @ 330 bar
diesel driven

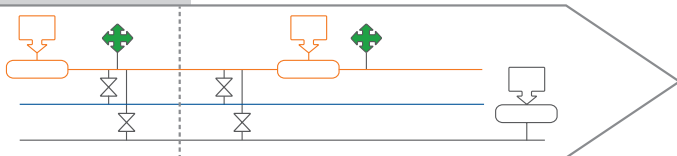


Advantages of the Centralized High Pressure System

The selection of a centralized high pressure system in your warship will provide lowest life-time-costs and is a prerequisite for up-to-date and affordable warship design.

- **lowest capital costs**
- **lowest ILS costs**
- **lowest maintenance costs**

The centralized air-system provides air for all consumers via a ring-main directly or if required through pressure reducing stations. It is versatile and flexible even if in a later stage of the design or operation other consumers requiring air supply will be installed. Space and weight is considerably lower than the alternative “point of use” system which requires dedicated air compressors for each application in a warship. Whilst also initial costs are reduced – the major savings in design and operation will come through the reduced number of compressors installed.



Less number of compressors and types installed → less integration, ILS and support cost!

Fremm Italian Navy	Horizon Italian Navy
4 x 100 m ³ /h @ 330 bar	2 x 60 m ³ /h @ 30 bar
1 x 30 m ³ /h @ 330 bar dieseldriven	4 x hand operated emergency compressor
	1 x low pressure compressor 350 m ³ /h @ 8 bar
	3 x breathing air compressors 30 m ³ /h @ 330 bar
	2 x portable breathing air compressors 15 m ³ /h @ 330 bar
	2 x weapon air compressors 30 m ³ /h @ 160 bar

Guess which solution is easier and less costly to operate and maintain?