

# **WEBASTO - CHILLED WATER SOLUTIONS FOR MILITARY FAST PATROL VESSELS**

**SHOWN HEREUNDER : YONCA 29 M 50+ KNOTS - FITTED WITH WEBASTO 3-COMPRESSOR CHILLER**



## **CHILLED WATER : Advantages compared to Central Air Conditioning :**

- 1) The central Chilled Water Units from Webasto are significantly lighter in weight than the classical open type compressor systems. Webasto systems pack the biggest capacity per volume. For example our HCSC488 - 488000 BTU unit only weighs 675 Kgs (without pumps) for a volume of 1.1 m3 only. All aluminium Fancoil housings+trays = important weight savings.*
- 2) These units are based on SCROLL rotary compressors by Copeland. Scroll compressors benefit from an outstanding reputation and are extensively used for heavy industrial and military use : TGV Fast Trains; Cooling Modules for transatlantic and transpacific containers, Leclerc heavy tanks, etc*
- 3) The 4 compressor series allow for a very flexible set-up : with a redundancy factor of 2, the unit will normally only run on 2 compressor with or without automatic staging (client's choice); the end-user can also specify auto-rotation of all compressors so as to obtain equalized running hours.*
- 4) Much improved split capacity mode avoids short-cycling when BTU requirements are low (Spring, Winter, Autumn)*

### **ADDITIONAL ADVANTAGE OF FANCOILS :**

- 4) In a typical chilled water system the different volumes of the vessel (wheelhouse, mess, cabins, etc) are all fitted with recirculation fancoils with sufficient capacity to obtain the desired cooling effect. This means that each volume can be regulated in a completely independant manner according to the wishes and needs of the occupants. So you can have a set-point temperature of 25°C in one cabin and 20° in another cabin.*
- 5) It is even possible (with the optional Webasto Duct Heaters) to force heat-cycle operation in one cabin or volume even when the main system is running in cool cycle.*
- 6) Because Fancoil capacity is always adequate, the Webasto Fresh-Air units introduce the required fresh-air (to obtain the desired air-changes in each volume) at neutral temperature i.e. when the average set-point of the vessel is 20° C, fresh-air will be introduced around that figure. Thus fresh-air introduction will never be obtrusive or felt as a nuisance (too cold or too hot or too noisy).*
- 7) Fancoils air-speeds can be finely tuned in a completely individual manner so as to obtain the best possible environment for each volume (for example during night time when BTU requirements are lowest, the sleeping cabin fancoils can be reduced to a whisper to obtain the lowest possible noise level.*
- 8) All Webasto Cabin Controls can be delivered with an optional infra-red remote controls which give direct and distant access to : Set-points, Blower speed settings and On/Off.*

**WEBASTO MULTI-COMPRESSOR CHILLER  
&  
ACCESSORY COMPONENTS**



**Webasto**  
*Feel the drive*



**MORE PHOTOS OF VESSELS FITTED WITH WEBASTO CHILLERS :**

**YONCA 29 M FAST PATROL : 10 VESSELS OPERATIONAL  
ALL FITTED WITH WEBASTO CHILLED WATER AIR-CONDITIONING**



**OTHER MILITARY FAST PATROL VESSELS EQUIPPED WITH WEBASTO CHILLER UNITS :**

**OCEA 32M - ALU PATROL VESSEL FOR THE KOWEIT NAVY : HCSC448/D - 4 COMPRESSOR 448000 BTU MAIN CHILLER UNIT + FANCOILS + FRESH AIR UNITS**

**HMS GLAENOR - 16 M PATROL VESSEL FOR THE BRITISH NAVY - HCSC50/D Twin 50000 BTU CHILLER**

**HMS SABRE + HMS SCIMITAR - 14 M PATROL VESSELS FOR THE BRITISH NAVY - HCSC40/D Twin 40000 BTU CHILLER**