

# Wärtsilä NACOS Platinum Solid State S-Band Radar

**PRODUCT LEAFLET** 



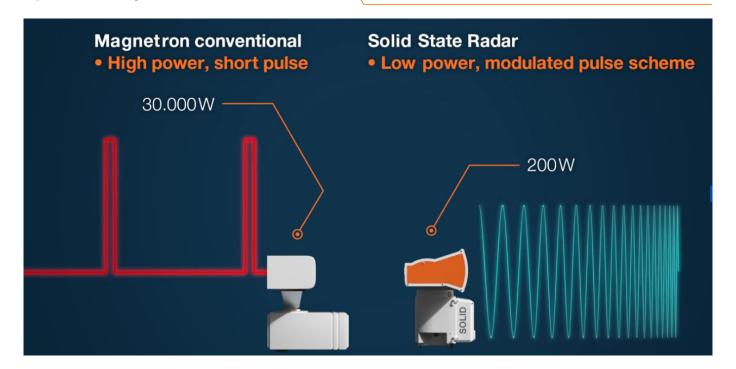
The new NACOS Platinum Solid State S-Band Radar is a next generation marine radar system using a stabilized high power solid state transceiver. It utilizes advanced signal processing technology and comes with a 14 ft antenna.

# **Benefits**

The major advantages for customers are the added safety provided through optimized target detection under all environmental conditions, reliability thanks to the compactly designed transceiver, gearbox and antenna, and reduced lifecycle costs as a result of drastically reduced maintenance (no magnetron).



Fig.1 Conventional Magnetron vs Solid State Radar



### **Transceiver**

The Solid State pulse compression transceiver is incorporated within a compact housing in the Gearbox. The major advantages of the new Transceiver are:

- Low peak power, high energy radiation
- Fully coherent design
- Doppler processing for quick hazard recognition
- Adaptive pulse train, allowing optimized energy transmission
- Fully digital signal generation and processing
- Multiple user selectable frequencies
- Range resolution up to 10 times finer compared to magnetron Radar
- Improved target tracking by independent signal processing and pulse generation for PPI and ARPA
- Low maintenance

# Optimized target presentation

The advanced signal processing and intelligent filter algorithms make first class target presentation possible. Utilizing the built-in doppler processing, advanced clutter suppression can be achieved. Further advantages of this new technology include better long range target detection, and the elimination of the need for preheating and tuning.

# Easy to retrofit

The new Solid State S-Band is fully compatible with all NACOS Platinum Navigation Systems, since it features the same IP-based radar system. Retrofitting is, therefore, simplified with a minimum of installation requirements.



