

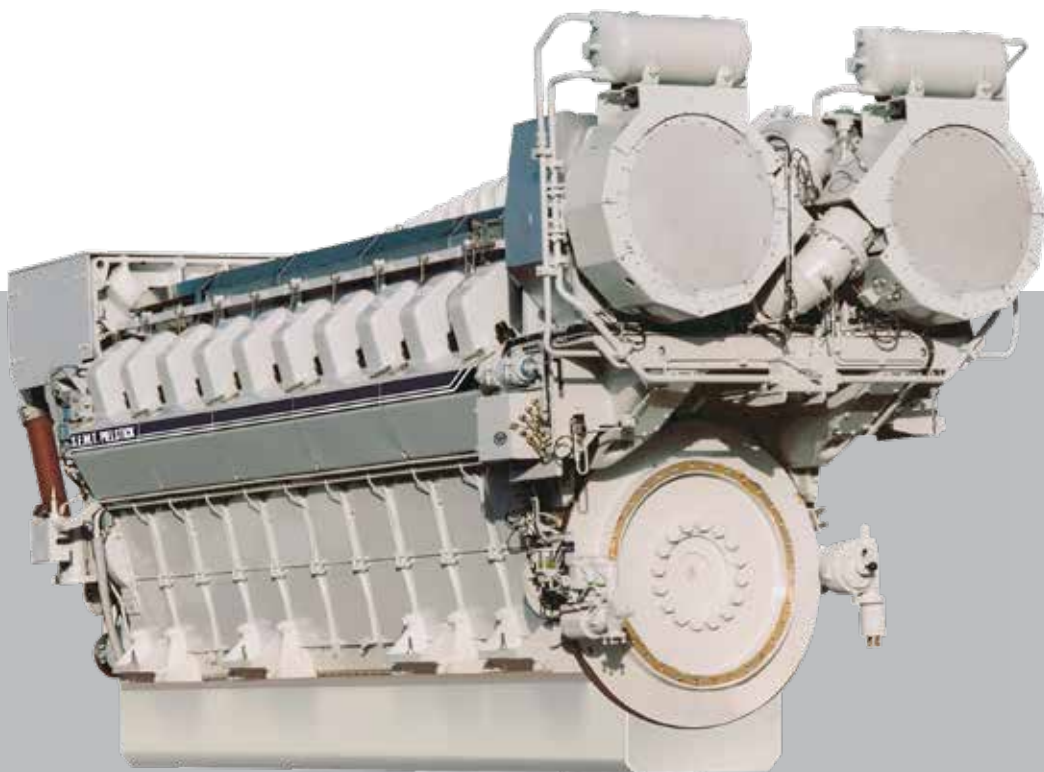
# S.E.M.T. Pielstick PA6 B STC

## Propulsion

The Pielstick PA6 is the most widely used engine for military ships: nearly 900 PA6 engines were installed worldwide for the propulsion of military ships (mainly 1st rank vessels like frigates, aircraft carriers), making this engine the No. 1 choice of 23 navies among similar bore engines. Fitted with a sequential turbocharger, STC, the PA6 B performs equally at low loads and at high loads with a wide torque curve providing a high power reserve.

### Benefits at a glance

- High reliability
- High operating efficiency across the full power range
- Designed to meet Military specifications: shock, optical, IR and acoustic signature
- Easy to operate
- **Best in class** power/weight ratio
- Sequential turbochargers optimized for part load and full load operation
- Low smoke



# S.E.M.T. Pielstick PA6 B STC

## Propulsion

### Output

Bore 280 mm, Stroke 330 mm	12V	16V	20V
Rated power output MCR 100% (kW)	4,860	6,480	8,100
Load profile Navy (ICFN)	5,346	7,128	8,910
rpm	1,050	1,050	1,050

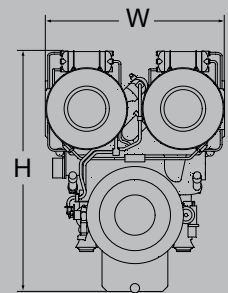
### Specific fuel oil consumption (SFOC) to ISO conditions

Engine rating	ICFN stop power	MCR 100%	MCR 85%
Load profile 'Navy'	213 g/kWh	205 g/kWh	200 g/kWh

Specific lube oil consumption <sup>1)</sup>: 0.7g/kWh (at MCR 100%).

Figures on theoretical propeller curve for distillates according to ISO 8217 DMA, with all driven pumps.

ICFN, 1 hour every 6 operating hours



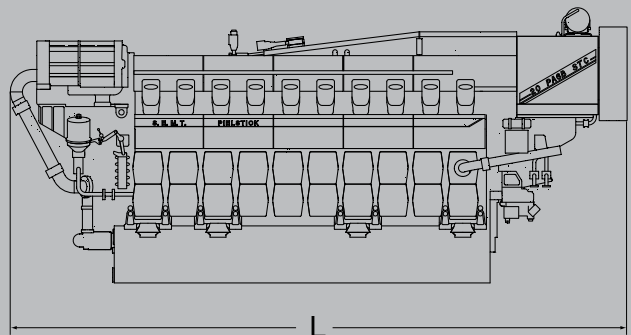
### Dimensions

Cyl. No.	12V	16V	20V
L (mm)	6,035	6,948	8,167
H (mm)	3,170	3,170	3,620
W (mm)	2,444	2,444	2,714
Dry mass (t)	31	37	43

Engine fuel: distillate according to ISO 8217 DMX to DMB. Capabilities with JP-5 and bio-fuel.

Shock qualified.

<sup>1)</sup> Related to 100% actual engine load.



### General

- Four-stroke sea-proven engine
- Conservative Brake Mean Effective Pressure (BMEP) resulting in a low mechanical stress fatigue and consequently a high reliability factor and long TBO: 32 000 Hrs
- Engine base qualified for nuclear applications

### Main features

- Conventional reliable fuel injection
- Sequential turbochargers (high efficient MAN turbochargers) optimized for part load and full load operation
- Seawater, LT and HT integrated driven pumps
- Integrated lubrication system
- Built-on combined cooler for oil and cooling water

- Air start
- MAN control system
- IMO Tier II compliant EPA

### Fuel & Lube oil

Distillate marine fuels according to ISO 8217:

- DMX, DMA, DMZ and DMB
- NATO F-76 & F-75
- Biodiesel B20, B30

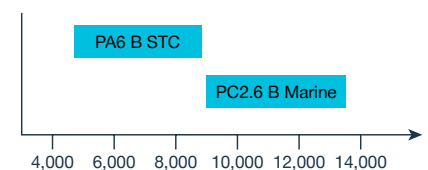
Lube oil:

- SAE 40
- MC30 (code NATO O-278)

### Military specific features

- Shock resistant (real test)
- Full blackout capability (no electrical supply)
- Low airborne & structure borne noise
- Low smoke (optical signature)
- Low Heat emission (IR signature)
- Driven fuel pump with black start capability

### Rated power output (kW)



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