



MARINE
PUMPS
OFFSHORE
SOLUTIONS

OCEAN PROOF

SAER has an extensive range of pumps for the marine, naval and off shore fields.

With **an average delivery time of three weeks** and a network of distributors located in over **100 Countries worldwide**, you can rely on a quick response for all of your special requirements.

SAER provides hundreds of **tailored solutions** to withstand sea water for applications such as ballast, sea water cooling, boiler feed, HVAC, fire fighting and many others.

Thanks to the precision cast parts and high quality construction, **maintenance is simple** and **life cycle costs** are kept to a **minimum**, making SAER pumps **OCEAN PROOF**.

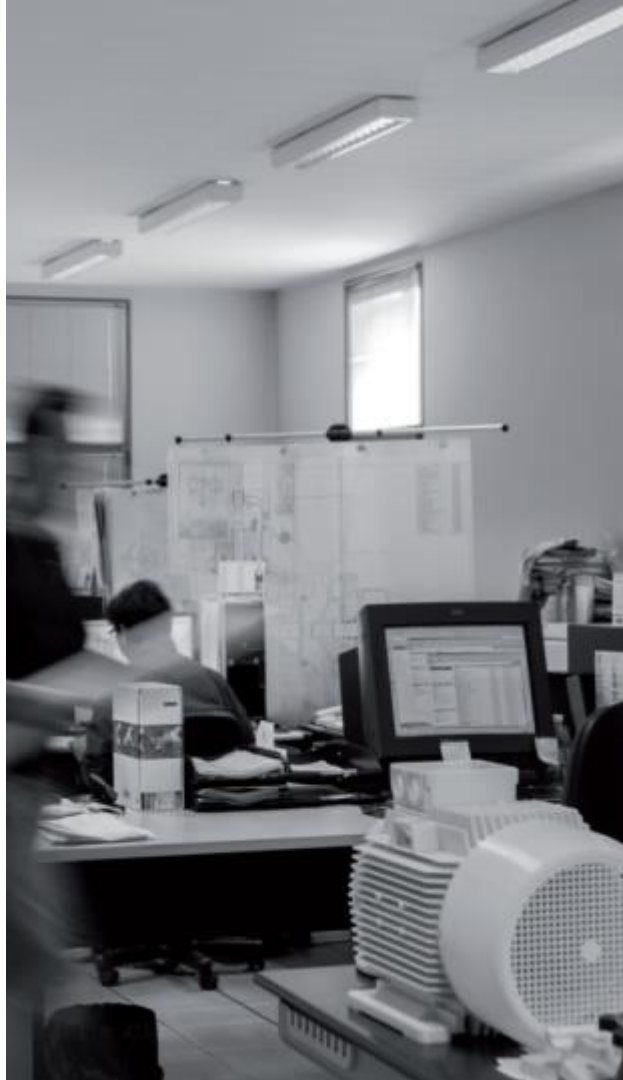


**OUR
PRODUCTS
ARE MADE
BY OUR
CUSTOMERS**



SAER provides pump solutions built to last, with a complete range from surface to submersible pumps and motors with power up to 400HP, flow up to 5000 m³/h and 60 bars of head, available in SS 316, bronze, DUPLEX, carbon steel and cast iron. Since 1951 we provide efficient solutions made in Italy.

Customized solutions to meet every need.



Wide choice of materials for different applications.

Pumps available in **many configurations** with possibility of selection among many materials both for the pump and motor components.

Precision casted parts for high reliability.

Easy maintenance and low operating costs.

Motors in **different efficiency class** (IE1, IE2, IE3), low and medium voltage.

Choice among **electric motors, diesel engine and hydraulic motor** to provide ideal solutions for any needs.

All **approvals for marine classifications** available from our testing rooms

FOCUS ON QUALITY

MATERIALS | DIMENSIONS | VALUES

Every year **we invest more than 6% of our turnover in research, to search for new and efficient solutions.**

Our R&D dept. works with state of the art software, and prototyping system

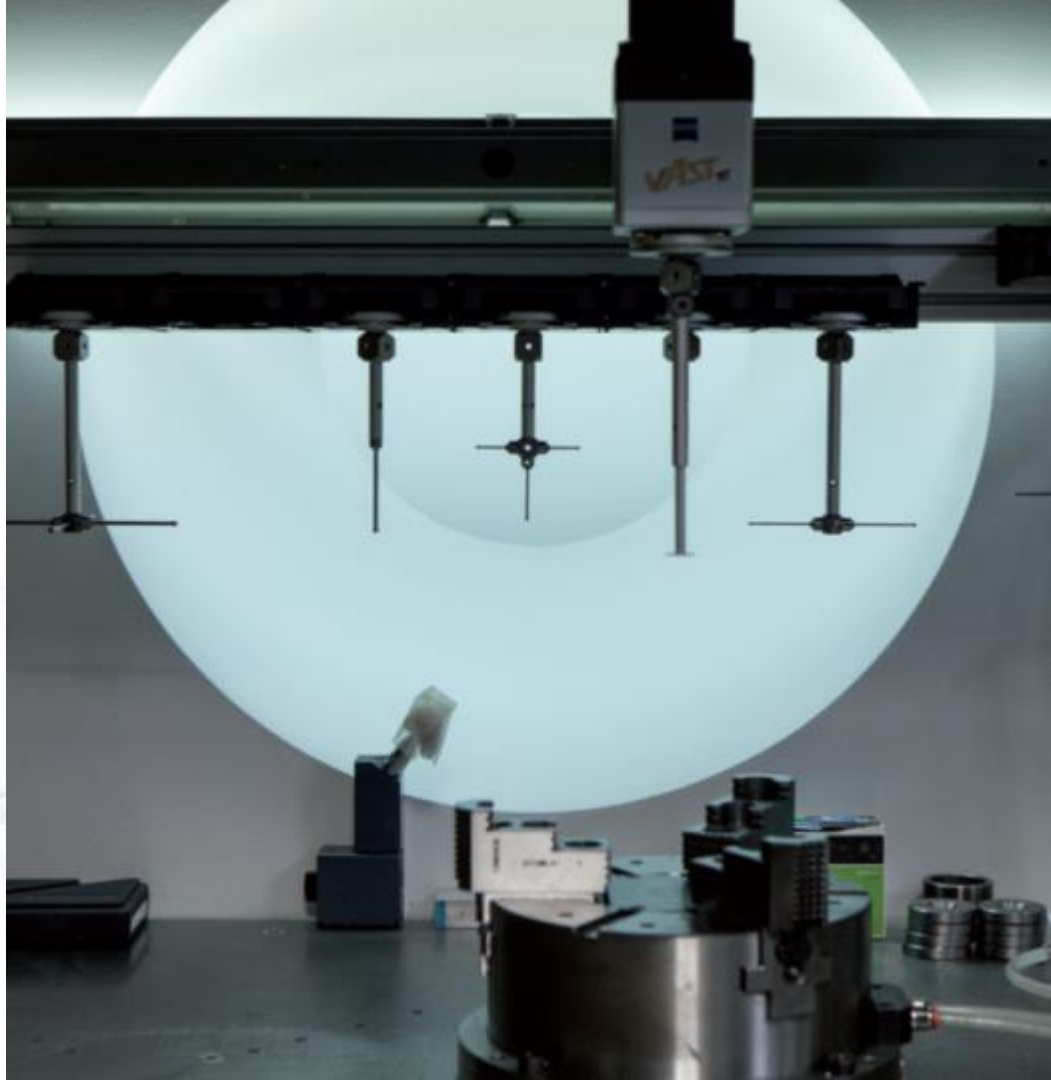


RECOGNIZED EXCELLENCE MADE IN ITALY GUARANTEE

6 different lines to test the pumps
under different conditions up to
2400m³/h 300kW.

New testing room up to **5000m³/h 500
kW.**

Third parties witnessed tests can be
performed directly in our facilities.



APPLICATIONS



our pumps

CLEAN WATER GENERATOR

IR

NCB-NCBK

MG

MK

SEA WATER CIRCULATION

IR

NCB-NCBK

MK

TM

BOILER

IR

NCB-NCBK

MG

MK

SKD

ENGINE ROOM

IR

NCB-NCBK

MG

MK

FIREFIGHTING

MG

NCB-NCBK

MK

TM

S

BALLAST

M

MG

PRODUCTS

A close-up, high-contrast photograph of a mechanical component, possibly a pump housing or impeller. The surface is dark and textured, with a prominent ribbed section on the right side. The lighting creates strong highlights and shadows, emphasizing the metallic texture and the curved shape of the part. The word "PRODUCTS" is overlaid in white, bold, sans-serif capital letters on the left side of the image.

END SUCTION

One of the most extended range in the pump market, combines top performances with low operating costs

APPLICATIONS

Shipbuilding industry
HVAC
Fire fighting
Fresh water circulation pump

MOTOR

Electric motor/Diesel Engine/ Hydraulic motor
Easy maintenance with back pull-out design.



Close-coupled pumps

High efficiency and versatile pump, compact and with reduced overall dimensions

50 Hz

Qmax: 400 m³/h, Hmax: 100 m
Power: up to 37 kW

60 Hz

Qmax: 525 m³/h, Hmax: 113 m
Power: up to 37 kW

Materials: Stainless Steel, Cast iron, Bronze



**IR
Series**

Stub-shaft pumps

Exclusive project that allows the pump to be combined to any normalized electrical and hydraulic motor.

50 Hz

Qmax: 255m³/h, Hmax: 102 m
Power: up to 75 kW

60 Hz

Qmax: 260 m³/h, Hmax: 113 m
Power: up to 37 kW

Materials: Stainless Steel, Cast iron, Bronze.



**MG
Series**

Bare shaft pumps according to the norm EN 733.

50 Hz

Qmax: 675 m³/h, Hmax: 129 m
Power: up to 160 kW

60 Hz

Qmax: 2400 m³/h, Hmax: 122 m
Power: up to 400 kW

Materials: Stainless Steel, Cast iron, Bronze



**NCB
Series**

Bare shaft pumps exceeding the norm EN 733.

50 Hz

Qmax: 2300 m³/h, Hmax: 97 m
Power: up to 355 kW

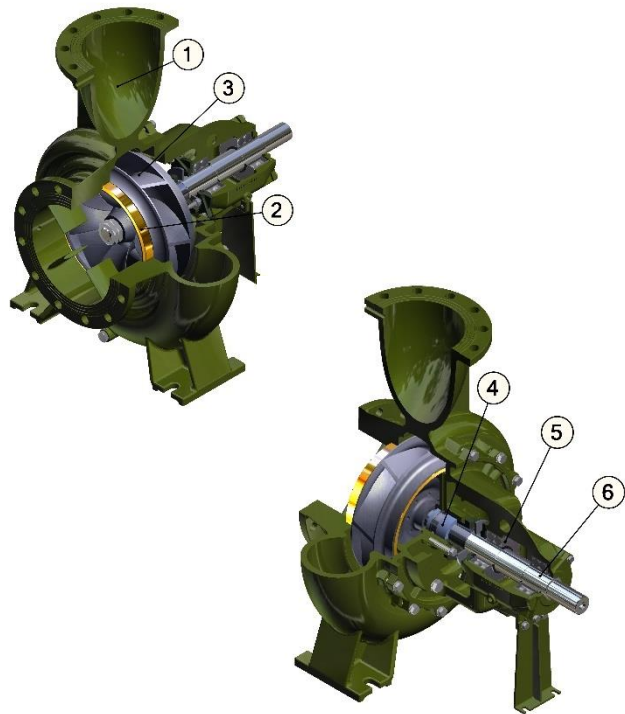
60 Hz

Qmax: 2400 m³/h, Hmax: 122 m
Power: up to 400 kW

Materials: Stainless Steel, Cast iron



**NCBK
Series**



1. Reliability

standard for all versions, wear rings, easy to replace, to protect the pump body and the impeller.

3. High Hydraulic efficiency

pump designed with CFD systems.

5. Solution for all needs

different configurations of mechanical seal or gland packing.

2. More resistance

pump body and seal holding disk designed with suitable thickness to guarantee life to the exercise pressures.

4. Reduced life cycle cost

oversized ball bearings and protected from outer agents to offer a reduced working noise. Available versions with oil soaked bearings and with a constant-level oil feeder .

6. Quality

standard stainless steel AISI 431 shaft designed to resist to the bending-torsion load generated and protected by anti-wear systems. Suction profile conceived to increase the suction capacity and to reduce the NPSH and possibility of cavitation.

MULTISTAGE

The series offers a wide range of products able to meet the requirements of the end user.

APPLICATIONS

Systems of high pressure lifting,
Refrigeration
HVAC
Condensed extraction
Tank washing
Fire and general services
Boiler feed

MOTOR

Electric motor/Diesel Engine/ Hydraulic motor.



Vertical multistage pumps

50 Hz

40 m³/h Hmax: 394 m Power: up to 30 kW

60Hz

Qmax: 45 m³/h Hmax: 385 m
Power: up to 37 kW

Materials: cast iron, Stainless steel 316, Stainless steel 304



**MK
Series**

50 Hz

Qmax: 700 m³/h Hmax: 630 m
Power: up to 500 kW

60 Hz

Qmax: Qmax: 900 m³/h Hmax:
630 m Power: up to 500 kW

Materials: cast iron, Stainless steel 316, Stainless steel 304



**TMV
Series**

Horizontal multistage pumps

50 Hz

Qmax: 700 m³/h Hmax: 630 m
Power: up to 500 kW

60 Hz

Qmax: Qmax: 900 m³/h Hmax:
630 m Power: up to 500 kW

Materials: cast iron, Stainless steel 316, Stainless steel 304



TMBZ



TMB

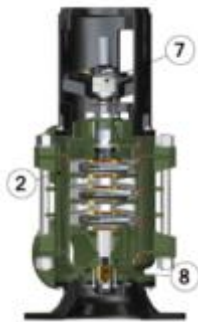


TM

**TM & TMB
Series**



TMB



TMV



TM



TMS

1) Reduction system of axial loads on all versions : balance drum, impellers with holes and return pipe.

3) Different configurations of mechanical seal or gland packing according to the user's requirements, based on the fluid characteristics and the use conditions.

4) Oversized ball bearings and protected from outer agents to offer a reduced working noise and a long service life. Available versions with oil soaked bearings and with a constant-level oil feeder on demand.

5) Wear ring front and rear, easy to replace, to protect diffusers, stage bodies and impellers.

2) Last stage diffuser for radial loads removal.

7) Thrust bearings used to support axial residual loads.

8) TM and TMV series: Bushings made of antifriction materials.

6) TM series: suction profile conceived to increase the suction capacity and to reduce the NPSH and the possibility of cavitation.

9) TM80 – TM 100: available also in TMS version, with coupling flange according to SAE3 for diesel engine.

SUBMERSIBLE

One of the most complete line of submersible pumps with water-filled or oil-filled motors for water applications.

APPLICATIONS

Bottom intake
Dewatering
water supply
Lifting
Offshore
bboster .

MOTOR

Electric motor/Hydraulic motor
Verical or horizontal installation





**S
Series**

Semi-axial submersible pumps

From 6" up to 14" , tested and proven over many years, S pumps ensure a high degree of reliability and suitability for a wide range of applications.

50 Hz

Qmax: 725 m³/h Hmax: 388 m
Power: up to 300 kW

60 Hz

Qmax: 725 m³/h Hmax: 388 m
Power: up to 300 Kw

Materials: cast iron, Stainless steel 316, Bronze , DUPLEX.

Diffusers



Bronze



Stainless steel
AISI-316

Impellers



Bronze



Stainless steel
AISI-316

Rotor for motor MS with Shaft



Stainless steel AISI-431

SPLIT CASING

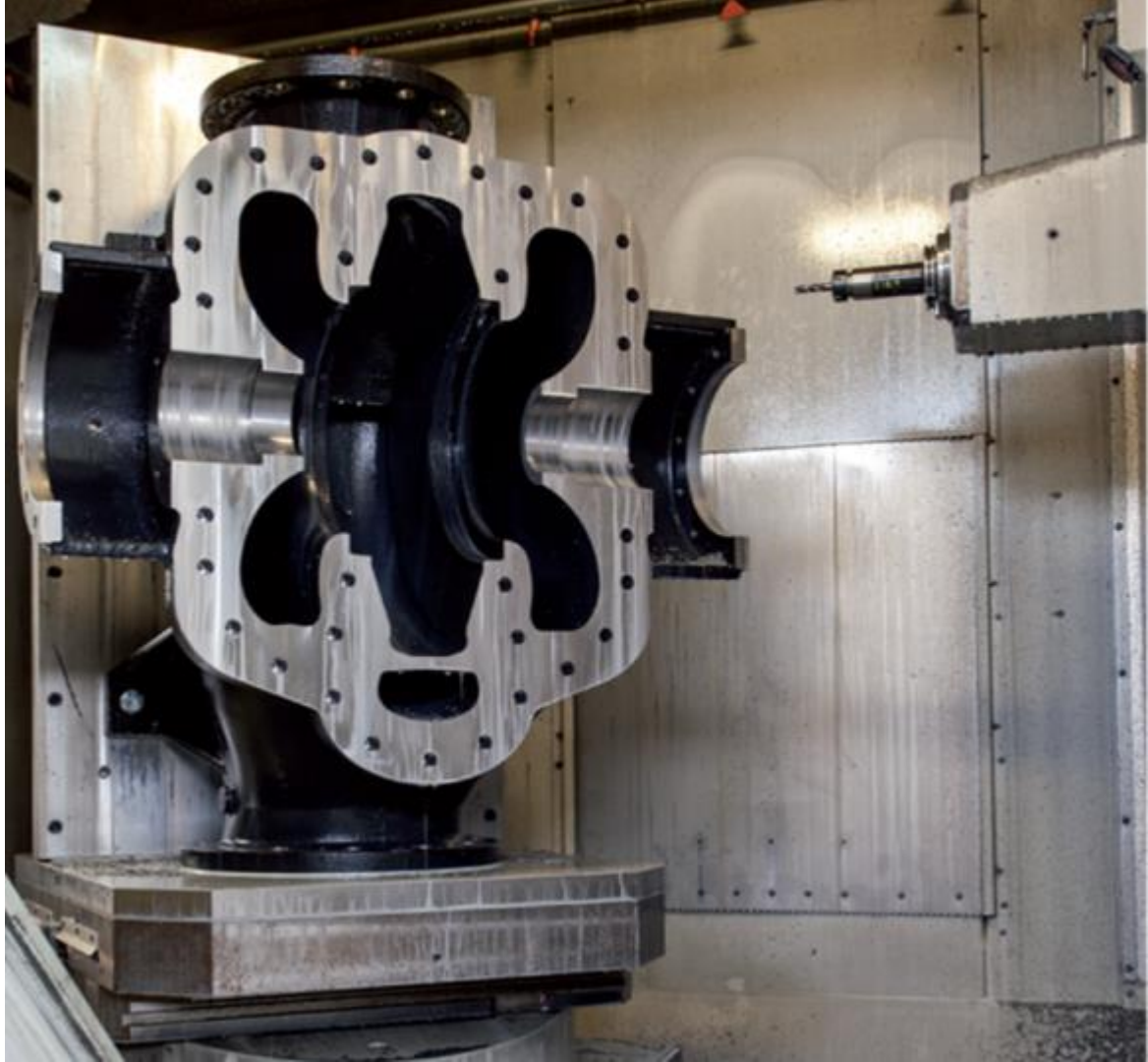
Made in Italy project and construction, each component studied and optimized through rapid prototyping systems

APPLICATIONS

Water supply systems
Freshwater circulation
Freshwater generator
Water treatment
HVAC
Fire and general services

MOTOR

Electric motor/Diesel Engine/ Hydraulic motor





**SKD
Series**

Split casing pump

High efficiency and versatile pump, compact and with reduced overall dimensions and **available also in vertical.**

50 Hz

Qmax: 5000 m³/h Hmax: 220 m Power: up to 1100 kW

60 Hz

Qmax: 5000 m³/h Hmax: 220 m Power: up to 1100 kW

Materials: cast iron, Bronze

7. Bearings

Two heavy duty type bearings
grease lubricated with grease
flush through the bearing housing.

Bearing bracket carefully sealed
off

Bearing protected from liquid entry
by means of rubber seals

Long life bearing designed for an
average life of 100.000 hours,
continuous running (MTBF).

6. Impeller

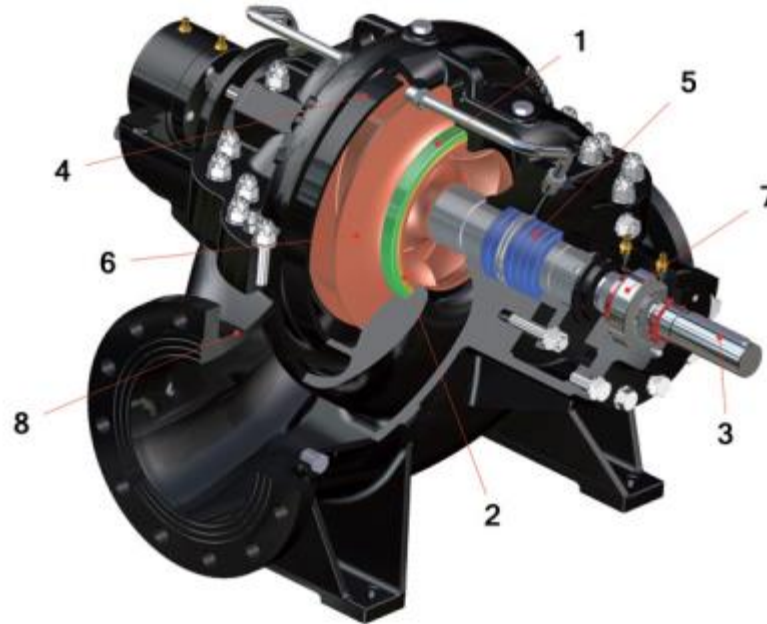
One piece casted impeller, with
double suction.

Due to the impeller double suction
design there's no axial thrust on
the bearings

Impeller keyed to the shaft and
axially fixed by two half rings:
simple maintenance and impeller
dismantling

1/2. Wear ring

double wear ring, pump
fitted with casing wear ring
and impeller wear ring



3. Shaft

stainless steel, adequately sized
for the loads transmitted.

Protection through the stuffing box
with stainless steel or bronze
sleeve.

The sleeves are fitted with O rings
with inside diameters to eliminate
leakage between the shaft and the
sleeve.

4/8. Casing

Double design volute:
the radial thrust on the
bearing is minimum

TAILORED SOLUTIONS

THE CASE OF THE BALLAST – SM SERIES

*Thanks to the flexibility that distinguishes the Company, SAER is **able to design and produce** in a short time even **products on demand**, integrating them in its wide range.*

*That's the case of the ballast pump, **SM series**, pumps that are used primarily in **the marine industry, to empty dry docks, civil, oil & gas and mining**. At this time SM can be realized up to 10" (400 m³ / h, 7 bar, 45 kW).*

MATERIALS AVAILABLE: AISI 316 and marine bronze G-CuSn10.

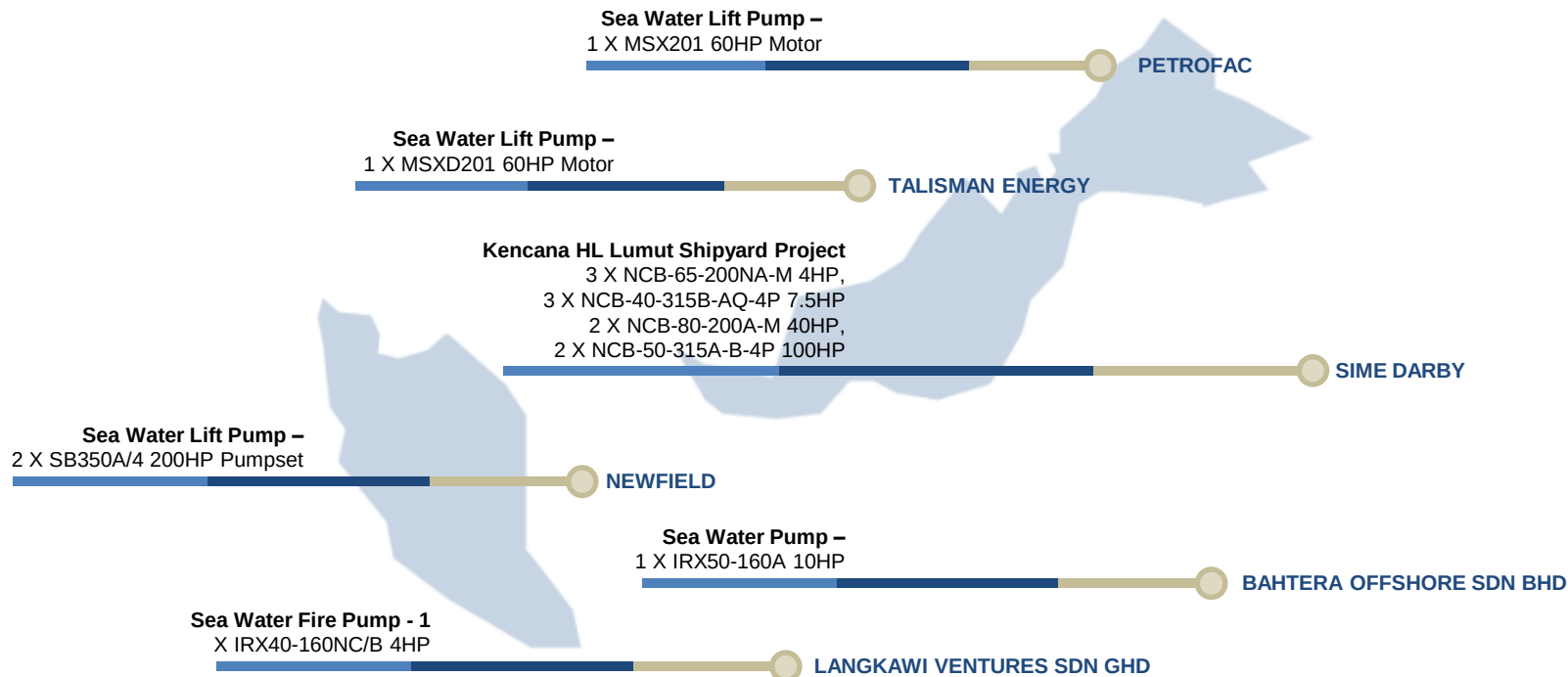




CASE STUDIES

SAER MALAYSIA

CLIENTS & PROJECTS



SAER NORWAY

SOLUTIONS FOR RIGS

SAER through his Norway partner has supplied 6XS 253A/4A for a rig. The system had to achieve as big as possible water buffer against the flame tower.

The pumps achieved a diameter on 30-40 m
On this test the spray nozzle is placed approx. 2,5 m above the pier so you see more or less only the upper part of the water circle. We got 292m³/h @ 17bar. (approx.. 1700-20000 C in the flame itself, and there are 30-35°C On the Rig side of the water)



THANK YOU

*For your tailored solutions,
please contact us.*



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