



Lloyd's
Register

Quality Scheme Certificate

This is to certify

SEIM S.r.l.
Via Alessandro Volta, 17
20090 Cusago (MI) - Italy

has been assessed by Lloyd's Register EMEA for approval against the requirements set out in:

THE QUALITY ASSURANCE SCHEME FOR MACHINERY

The quality system and procedures at these works covering production methods, inspection and testing, quality control and general standards of workmanship have been examined and are approved for the manufacture of the undernoted product(s).

Such items will be eligible for fitting in ships or other installations classed or intended for classification subject to satisfactory installation under the usual conditions of survey and testing.

This approval is conditional upon the product(s) manufactured and certified under this Scheme being in accordance with the relevant requirements of the Rules and Regulations for the Classification of Ships and the organisation and procedures being audited by the Surveyors at agreed intervals.

This Certificate relates solely to:-

VOLUMETRIC SCREW PUMPS

For details of the scope of approval see pages 2 and 3.

Approval No.	QAM 129
Original Issue	12 October 2017
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Sheet	1 of 4



Roberto Costantino
South Europe Quality Assurance Engineering Scheme Coordinator
Lloyd's Register EMEA
a member of Lloyd's Register Group

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Quality Scheme Certificate

Scope of approval includes following:

Manufacturing, assembly and testing as applicable of Volumetric Screw Pumps:

Product – Pump Family	Type - Description	
PB series: <ul style="list-style-type: none"> • Applications: Transfer, fuel supply, lubricating, boiler, booster, feeder, separator • Capacity: Up to 170 LPM – 10,2 m³/h • Diameter: from 25 to 38 mm • Typical fluid: Fuel oil HFO – DO – LSMG0 – Hydraulic and Lube oils • Suction pressure: from -0,5 to 10 bar • Delivery pressure: Up to 40 bar (from 1000 to 3600 rpm) • Operating temperature range: from 0 to 150°C 	SUCTION PB020 Ø in 25mm PB025 Ø in 25mm PB032 Ø in 50mm PB040 Ø in 50mm	DELIVERY Ø out 25mm Ø out 25mm Ø out 38mm Ø out 38mm
PHS series: <ul style="list-style-type: none"> • Applications: Transfer, fuel supply, lubricating, boiler, booster, feeder, separator • Capacity: Up to 170 LPM – 10,2 m³/h • Typical fluid: Fuel oil HFO – DO – LSMG0 – Hydraulic and Lube oils • Suction pressure: from -0,5 to 10 bar • Delivery pressure: Up to 16 bar (from 1000 to 3600 rpm) • Operating temperature range: from 0 to 150°C 	SUCTION PH025 Ø in 25mm PH032 Ø in 40mm PH040 Ø in 40mm	DELIVERY Ø out 25mm Ø out 25mm Ø out 40mm
PZ series: <ul style="list-style-type: none"> • Applications: Transfer, fuel supply, lubricating, boiler, booster, feeder, separator • Capacity: Up to 5400 LPM – 324 m³/h • Typical fluid: Hydraulic and Lube oils – DO – MDO - HFO • Suction pressure: from -0,5 to 10 bar • Delivery pressure: Up to 16 bar (from 1000 to 3600 rpm) • Operating temperature range: from 0 to 150°C 	SUCTION PZ032 Ø in 32mm PZ040 Ø in 50mm PZ045 Ø in 50mm PZ055 Ø in 80mm PZ060 Ø in 80mm PZ072 Ø in 100mm PZ083 Ø in 150mm PZ102 Ø in 150mm PZ126 Ø in 250mm PZ156 Ø in 250mm	DELIVERY Ø out 32mm Ø out 50mm Ø out 50mm Ø out 80mm Ø out 80mm Ø out 100mm Ø out 150mm Ø out 150mm Ø out 250mm Ø out 250mm
PXF series: <ul style="list-style-type: none"> • Applications: Lube oil pump • Capacity: Up to 5400 LPM – 324 m³/h 	SUCTION PX025 Ø in 51mm PXF032 Ø in 51mm PXF040 Ø in 51mm	DELIVERY Ø out 26mm Ø out 38mm Ø out 38mm

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<ul style="list-style-type: none"> • Typical fluid: Hydraulic and Lube oils • Suction pressure: from -0,5 to 10 bar • Delivery pressure: Up to 30 bar (from 1000 to 3600 rpm) • Operating temperature range: from 0 to 150°C 	<table> <tr><td>PXF045</td><td>Ø in 63mm</td><td>Ø out 51mm</td></tr> <tr><td>PXF055</td><td>Ø in 63mm</td><td>Ø out 51mm</td></tr> <tr><td>PXF060</td><td>Ø in 99mm</td><td>Ø out 63mm</td></tr> <tr><td>PXF072</td><td>Ø in 99mm</td><td>Ø out 63mm</td></tr> <tr><td>PXFE083</td><td>Ø in 120mm</td><td>Ø out 99mm</td></tr> <tr><td>PXF083</td><td>Ø in 125mm</td><td>Ø out 100mm</td></tr> <tr><td>PXF102</td><td>Ø in 150mm</td><td>Ø out 125mm</td></tr> <tr><td>PXF126</td><td>Ø in 150mm</td><td>Ø out 150mm</td></tr> <tr><td>PXF156</td><td>Ø in 250mm</td><td>Ø out 250mm</td></tr> </table>	PXF045	Ø in 63mm	Ø out 51mm	PXF055	Ø in 63mm	Ø out 51mm	PXF060	Ø in 99mm	Ø out 63mm	PXF072	Ø in 99mm	Ø out 63mm	PXFE083	Ø in 120mm	Ø out 99mm	PXF083	Ø in 125mm	Ø out 100mm	PXF102	Ø in 150mm	Ø out 125mm	PXF126	Ø in 150mm	Ø out 150mm	PXF156	Ø in 250mm	Ø out 250mm
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<p>2SP series:</p> <ul style="list-style-type: none"> • Applications: Lube oil pump, Cargo pump, Stripping • Capacity: Up to 19000 LPM - 1140 m³/h • Typical fluid: Lubricating, non lubricating low and medium viscosity and corrosive fluids. Suitable for fresh water, light chemical and petrochemical products, fuel and heavy fuel oil. • Suction pressure: from -0,7 to 10 bar • Delivery pressure: Up to 16 bar (from 1000 to 3600 rpm) • Operating temperature range: from 0 to 150°C 	<table> <thead> <tr> <th></th> <th>SUCTION</th> <th>DELIVERY</th> </tr> </thead> <tbody> <tr><td>2SP090</td><td>Ø in 150mm</td><td>Ø out 150mm</td></tr> <tr><td>2SP110</td><td>Ø in 150mm</td><td>Ø out 150mm</td></tr> <tr><td>2SP130</td><td>Ø in 200mm</td><td>Ø out 200mm</td></tr> <tr><td>2SP170</td><td>Ø in 250mm</td><td>Ø out 250mm</td></tr> <tr><td>2SP210</td><td>Ø in 300mm</td><td>Ø out 300mm</td></tr> <tr><td>2SP270</td><td>Ø in 400mm</td><td>Ø out 400mm</td></tr> </tbody> </table>		SUCTION	DELIVERY	2SP090	Ø in 150mm	Ø out 150mm	2SP110	Ø in 150mm	Ø out 150mm	2SP130	Ø in 200mm	Ø out 200mm	2SP170	Ø in 250mm	Ø out 250mm	2SP210	Ø in 300mm	Ø out 300mm	2SP270	Ø in 400mm	Ø out 400mm						
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Supplementary Terms and Conditions

The Quality Scheme is based on the understanding that the manufacturer's recommendations and instructions and any relevant requirements of the Rules and Regulations for the Classification of Ships are complied with.

Lloyd's Register EMEA reserves the right to cancel or withdraw this Certificate in accordance with the Quality Scheme Procedure.

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Quality Scheme Certificate

Surveillance Audit 1

Date Completed

Signature

Surveyors Name (Print)

Surveillance Audit 2

Date Completed

Signature

Surveyors Name (Print)

Surveillance Audit 3

Date Completed

Signature

Surveyors Name (Print)

Surveillance Audit 4

Date Completed

Signature

Surveyors Name (Print)

Surveillance Audit 5

Date Completed

Signature

Surveyors Name (Print)

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