

Quality Scheme Certificate

This is to certify

KRAL GmbH Bildgasse 40 Industrie Nord 6890 Lustenau Austria

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:

Electrically driven Screw Spindle Pumps and Flow-Meters

For details of the scope of approval see pages 2/3

Approval No. QAM186/A1

Date of Issue 16 January 2024

Date of Expiry 15 January 2027

Sheet 1 of 3

Burkhard Schiwkowski

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Hamburg Office

Lloyd's Register EMEA

Burkhard Schiwkowski Marine Quality Schemes Co-Ordinator NEUR Lloyd's Register EMEA

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Quality Scheme Certificate

Scope of Approval:

Electrically driven Screw Spindle Pumps						
Series:	Size:	Max. Capacity: [l/min]	Max. Pressure: [bar]	Description:		
К	5 2900	3500	7 - <16 bar	Screw pump with radial shaft seal/mechanical seal or magnetic coupling		
CL	5 851	4250	> 16	Screw pump with radial shaft seal/mechanical seal or magnetic coupling		
CK	5 880	2100	> 16	Screw pump with radial shaft seal		
CG	15 3550	4250	> 16	Screw pump with radial shaft seal/mechanical seal or magnetic coupling		
L	5 085	205	> 16	Screw pump with radial shaft seal/mechanical seal or magnetic coupling		
М	118 210	505	> 16	Screw pump with radial shaft seal/mechanical seal or magnetic coupling		
ALP	015 280	660	7 - ≤ 16	Screw pump with mechanical seal or magnetic coupling		
R	015 210	500	> 16	Screw pump with mechanical seal or magnetic coupling		
Z	3000 11000	13200	> 16	Screw pump with mechanical seals		
DL/DS	150 6000	130	0 - ≤ 6	Screw pump double station with radial shaft seal/mechanical seal or magnetic coupling		
DLC	450 9000	205	> 16	Screw pump double station with radial shaft seal/mechanical seal or magnetic coupling		
DKC	200 13000	280	7 - ≤ 16	Screw pump double station with radial shaft seal/mechanical seal or magnetic coupling		
DALP	0015 0085	205	7 - ≤ 16	Screw pump double station with mechanical seal or magnetic coupling		

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Lloyd's Register EMEA

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DKB	200 13000	280	7 - ≤ 16	Screw pump double station with radial shaft seal/mechanical seal or magnetic coupling			
Flowmeters							
OMG	013 140	15 7500	40 250	Flowmeter, max. design pressure depending on flowmeter size			
OMP	013 052	15 525	40	Flowmeter			

Notes:

n/a

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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