



Quality Assurance Engineering Scheme Certificate

Manufacturer	Woodward L'Orange GmbH
Address	Porschestrasse 8, Stuttgart, 70435, Germany
Scheme Type	Quality Assurance Scheme for Machinery (QAM)
Approval Number	QAM101
Place of Production	Woodward L'Orange GmbH Rudolf-L'Orange-Strasse 1, Glatten, 72293, Germany
Product Type	Fuel Oil Injection Components
Product Name	Pumps / Injectors / Rails / Valves / Pressure Pipes

This is to certify that the above named manufacturer has been approved in accordance with the requirements set out in the Quality Assurance Scheme for Machinery (QAM) within the Lloyd's Register Rules and Regulations for the Classification of Ships.

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) at the stated place(s) of production.

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.

For details of the scope of approval see subsequent pages of this certificate.

Burkhard Schiwkowski

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This certificate is issued to the named manufacturer and is valid until the expiry date specified. Lloyd's Register is to be notified of any change that may affect the validity of this certificate and reserves the right to cancel or withdraw this certificate.

The Quality Assurance Scheme for Machinery 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.

Scope of products covered by the scheme:

1. Pumps / Injectors / Rails / Valves / Pressure Pipes

Pump Types: DCO.../PCO.../PYO.../PDO.../PDW.../PEM.../PEO.../PFO.../PGO...

Injector Types: VSW.../VTO.../VUM.../VUO.../VWL.../VWO.../VXO...
(Injection valves)
VWL.../VWO.../VVO.../VVL.../KYO...
(Injection units)
VUO.../VTO.../VVO...
(Nozzle holders)

Rail Types: CKO.../VUO.../CLO.../CHL...
(Rails / Accumulators)

Other Types: PEO.../VVO.../CKO...
(Pipe / Jumper line / Adapter)
CHL.../DCO.../PEO.../PDO.../VTO.../VUO...
(Safety-, Flow limiting-, Limp Home-, Delivery valves)
PDO.../PYO...
(Pressure pipes)