



Scherzinger Pumpen



Specialized DEF dosing solutions for your SCR system

Customized SCR dosing modules
and deNOx applications



Scherzinger
pump technology

Initial situation

When ships like the Queen Mary 2 spend a week in the port of Hamburg with their diesel engines running, they emit roughly as much nitrogen oxide as 1.5 million mid-range diesel cars. In total, this means that around 38% of all nitrogen oxides in such cities are caused by ships in port.

There is another way to protect the environment - namely this: exhaust gas systems with SCR dosing systems from SCHERZINGER reliably ensure that the proportion of nitrogen oxides is reduced to a fraction.

Selective Catalytic Reaction (SCR)

SCR is an exhaust gas aftertreatment technology in which a urea-based reducing agent DEF / Urea / AdBlue® is injected into the exhaust gas flow. In a special catalytic converter, the reducing agent converts the nitrogen oxides into nitrogen and water. This means that the exhaust gas emitted is practically nitrogen oxide-free.

The injection of the reducing agent must be constantly, quickly and precisely adjusted to the actual amount of exhaust gas produced - especially when the load changes or the performance requirements change.

Safety in your exhaust system

Guidelines & standards

The selected pump system for exhaust gas aftertreatment complies with **IMO MARPOL regulations**. Scherzinger pumping and conveying systems and their subcomponents bear a CE mark and comply with the current legal regulations. For larger dosing and delivery volumes, the pumps can be approved by the classification societies DNV GL and Lloyds Register.

Service life

For reliable and long-term use in ships, Scherzinger dosing modules impress with an extremely long service life of up to 30,000 hours in continuous operation.

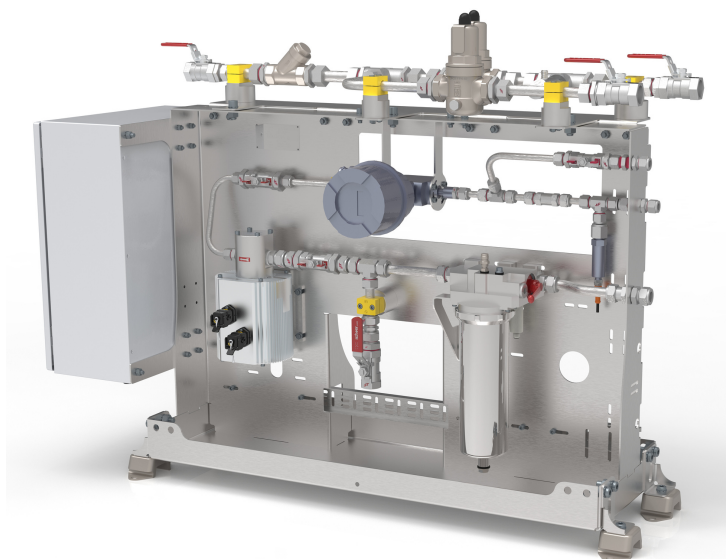


After that, simply replace the pump head for another 20,000 hours of trouble-free operation.

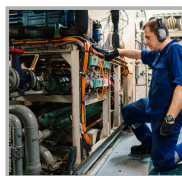
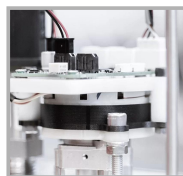
Atomization concepts

Scherzinger offers both **air and airless systems** and can therefore be ideally integrated into your mixing concept. You have the option of achieving the maximum deNOx effect either by means of the original pressure or via additional air atomization, supplemented with a corresponding blow-out module. The optimum air flow is regulated by the intelligence in the dosing module.

The benefits for your SCR system



Scherzinger SCR-Dosingsystem



- Precise and load-dependent dosing of all liquid reducing agents like DEF, Adblue® and UREA
- Modular design from the simple pump to the complete intelligent dosing unit
- Individual system configuration adapted to the respective application
- Very long service life & therefore reliable functionality
- Wide metering range for dual-fuel engines
- Compliance with standards according to IMO MARPOL regulations, DNV GL, Lloyds Register
- For airless systems as well as air-supported installations
- With air-assisted systems, the air flow can also be controlled (incl. filter, sensors & blow-out)
- Simple maintenance & spare parts service
- Simple update capability

Technical Data

Flow rate	0.13 to 1.350 GPH (US) (for several pumps with different flow rates)
Differential pressure	max. 116 psi
Viscosity range	1.0 mPas up to 2.5 mPas
Suction height	up to 9,8 ft
Temperature range	12,2° F up to 176° F



Good to know

How is the UREA quality monitored?

Monitoring of the urea quality is absolutely necessary to comply with the exhaust gas values. This can be done either outside the Scherzinger urea dosing modules or via a quality sensor integrated in the filter.

Is the dosing module also suitable for retrofitted exhaust gas purification systems?

Retrofitting is possible at any time with Scherzinger pumps and can be adapted to all systems thanks to the various equipment options.

Which power supply is possible?

For flow rates below 300 l/h, motors with 24V direct current and three-phase motors can be used. For higher flow rates, three-phase voltages such as 230/400V, 50 Hz are used.

Which media can be conveyed with the dosing system?

The system is specially designed for AUS32, AUS40 and aqueous ammonia. However, other aqueous media and alkaline solutions such as caustic soda for scrubbers can also be dosed.

Get in touch with us!

Do you have an individual application that you would like to discuss with us? Or would you like a quote for your application?

Then get in touch with us - we look forward to selecting the right system for you.



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