

MODULAR, FLEXIBLE AND SCALABLE:  
EXHAUST AFTERTREATMENT  
WITH L'ONOX

## L'ONOX – OUR SOLUTION FOR SCR CATALYTIC CONVERTERS FOR LARGE ENGINES

Urea injection for SCR catalytic converters and fuel injection systems for large engines have similar requirements: robust in design, precise in injection and atomization. The expertise of L'Orange in state-of-the-art fuel injection technology for large engines is now also available for exhaust gas after treatment: the new L'ONOX urea injection solution for SCR converters combines modular flexibility for a wide range of engines with a simple system architecture and a precise urea atomization without the need of additional compressed air.



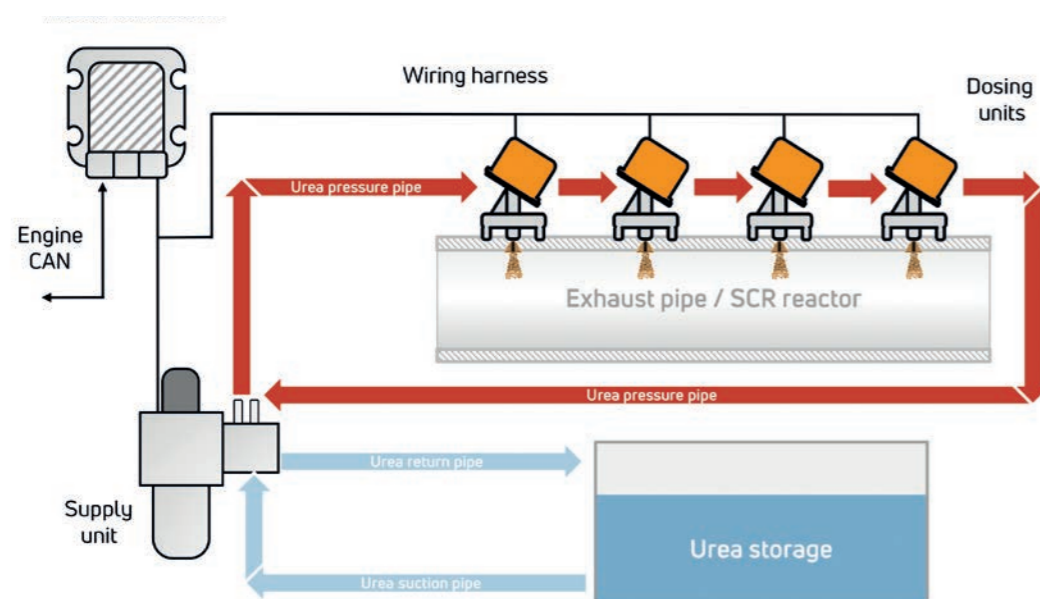
COMPONENT TEST BED



CLIMATE CHAMBER SETUP

## THE L'ONOX SOLUTION IN BRIEF – SYSTEM FEATURES AND BENEFITS

- Simple system architecture based on a scalable “common rail” design – one supply unit to feed several injection units
- Customer-specific configuration for medium- and high-speed engines
- Better fuel economy
- Airless atomization – no additional piping for compressed air required and no compressor needed
- Antifreeze design – integrated heating system available for use in arctic environment with smart heating strategy
- Integrated pressure and temperature sensors for controlled precise injection
- Proven integration of L'ONOX control unit in existing engine control systems with Can-Bus connection (J1939)
- L'ONOX meets higher and critical emission standards for diesel engines



IMO TIER III AND EPA TIER IV EMISSION REGULATIONS REPRESENT A REAL CHALLENGE FOR MANUFACTURERS OF LARGE ENGINES. WE HAVE THE SOLUTION: L'ONOX.

# TECHNICAL SPECIFICATIONS

Flow rate of injection unit	adaptable from 0.75 kg/h up to 31 kg/h
Injection accuracy	small dosing quantity $\pm 4\%$ large dosing quantity $\pm 2\%$
System pressure	10 bar – 15 bar
Injection frequency	1-5 Hz
Atomization quality (SMD)	40 $\mu\text{m}$ with standard nozzle
Heating concept	electrical
Operating voltage	24 V $\pm 30\%$
Operating ambient temperature range	-5°C to +100°C unheated -40°C to +100°C heated
Spray variation	different nozzle angles available
Dosing quantity	nozzles with different max. quantities available

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