



Leistriz cargo pump with instrumentation and control system

## Leistriz Pumpen GmbH

Hall A2 / Stand 215

At this year's SMM 2016, Nuremberg-headquartered Leistriz Pumpen GmbH will demonstrate a recently designed anti-cavitation system on a model of a cargo pump. The automatically controlled system comprises a Leistriz L2 or L5 screw pump (depending on the flow rate) driven by an electric motor and with a variable frequency drive.

Leistriz L2/L5 pumps – with medium-lubricated, epicycloidal, self-gearing profiles – have no external timing gears and are thus four times more reliable thanks to just one double-acting shaft seal and one ball bearing instead of four each, according to Leistriz. Since there are no power losses from power transmission, a cooled oil bath isn't

necessary, and both the ball bearing and the mechanical seal can be easily maintained and replaced.

The pump and motor have a misalignment-tolerant coupling allowing removal and reassembly of elastic parts by detaching them from the metallic half-couplings. Supervision is facilitated by the automatic system, which controls such critical conditions as an overheated mechanical seal and bearing; it also monitors and displays conditions including pump inlet/outlet pressure in a separate control room.

The anti-cavitation system monitors vibrations on the pump with a sensor welded to its casing.