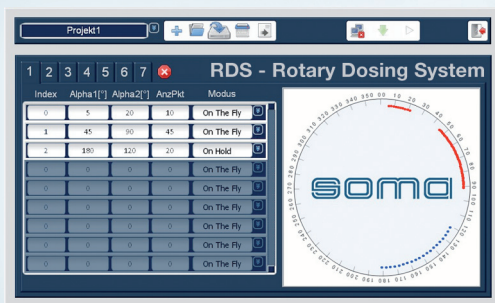


RDS – Rotary Dosing System

Intelligent greasing of rotationally symmetrical products:
configurable, volumetric, contactless



RDS – Rotary Dosing System

Intelligent greasing of rotationally symmetrical products:
configurable, volumetric, contactless

Rotationally symmetrical components form the key elements of many products and are therefore used in virtually all areas of industry. Their use is typically characterised by two components moving in an axial or radial direction relative to one another which form a functional unit.

Reducing friction

Wear produced by friction can be seen in many applications and can be significantly reduced by using a defined volume of appropriate lubricant in a specific location.

SOMA IDV® as the basis of the RDS

The RDS offers great flexibility in the fully automatic dosing of lubricant for rotationally symmetrical products.

Based on use of the proven SOMA impulse dosing valve (IDV)®, when combined with a dosing nozzle driven by a hollow shaft stepper motor, the RDS enables contactless dosing of a definable, constant volume of lubricant with high angle precision.

Parameterising with RDS-Control

RDS-Control is a parameterising software tool developed especially for the requirements of a rotational dosing system which can be used to quickly design dosing processes and upload

them to the dosing control unit. The processes are selected and started using a selector switch. This can also be handled automatically by a superordinate control system.

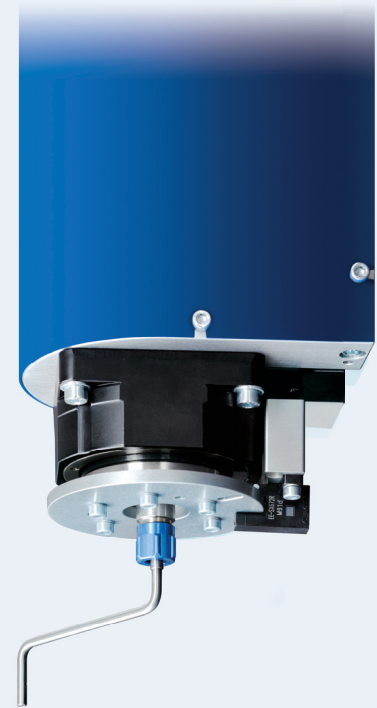
For maximum flexibility, 16 different dosing sequences can be created per dosing process and displayed for checks by the RDS-Control.

For each dosing sequence, the operator can also specify whether dosing takes place during rotation, the “on the fly” method, or whether rotation stops before dosing for maximum precision, the “on hold” method.

The RDS-Controller

All components needed to operate the RDS, such as the stepper motor controller, the voltage supply, the optional heating regulator and the digital interface to a superordinate system control, are organised in a compact, industry-compliant housing.

The RDS-Controller is therefore equally well suited to be installed in process cells and as a desk-mounted unit for semi-automatic workstations. The RDS-Controller is connected with the RDS using the non-interchangeable connector plugs on its rear. Status indicators on the front provide constant information about the current operating status.



RDS features at a glance

- ✦ Continuously adjustable, reproducible constant dosing volume
- ✦ Contactless dosing with high angle precision
- ✦ Parameters can be set for number of dosing pulses per dosing sequence (“on hold” method) for targeted variation of dosing volume
- ✦ Process reliability thanks to integrated dosing piston stroke monitoring
- ✦ Manual or automatic selection of seven (7) different parameter-based dosing processes
- ✦ Optional: Valve heating with temperature regulator to improve the way in which viscous lubricants can be dosed
- ✦ Option of circulating dosing on inner and outer diameter using specific dosing needles

Technical data

Input pressure of medium: P_{max} = 217.5 psi (15 bar)
 Compressed air supply: P = 43.5–87.0 psi (3–6 bar)
 Voltage supply: 230V AC, 50–60 Hz
 Dosing volume: V = 2–40 mm³/dosing pulse
 Dosing frequency: f_{max} = 20 Hz
 Dimensions: 80 mm (w) x 100 mm (h) x 250 mm (d)