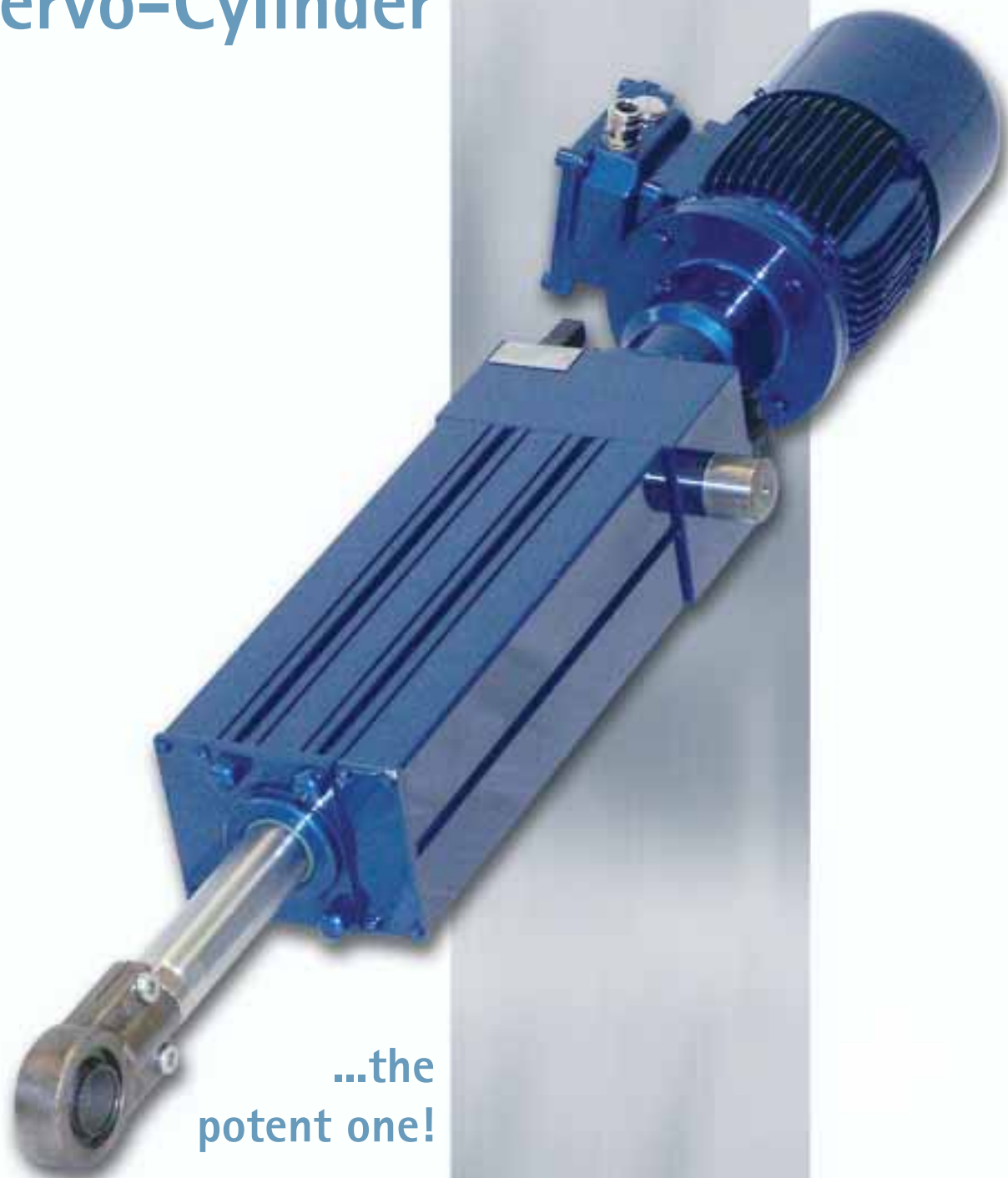


**EMC**

**ESZ**

# Electro- Servo-Cylinder



...the  
potent one!

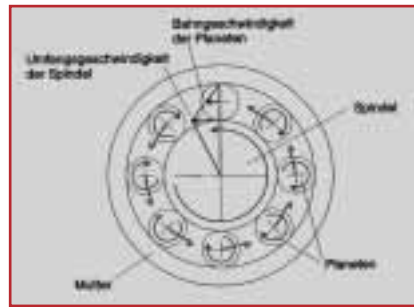
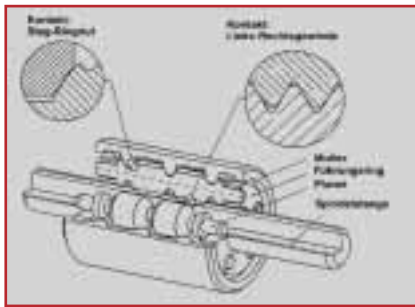
## Design

The Electro-Servo-Cylinder developed by EMG converts by means of a Planetary Gear Thread (PGT) the rotation generated by a threephase current motor into a linear movement.

The obvious advantages of the PGT are:

- simple function principle
- high drive speed, small motor torque
- high load transmission at low dead weight
- high positioning accuracy
- low friction, robust and reliable
- clean and environmentally friendly, because of no hydraulic fluid
- requiring little maintenance

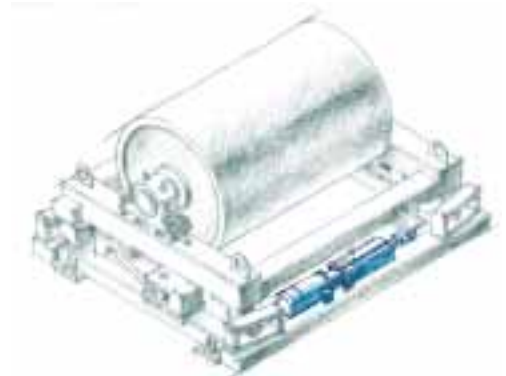
The function principle is based on a rolling motion at low friction and consequently low wear.



## Applications

To be used as control or position drive with high demands on resolution and repeatability. Alternative to hydraulic or pneumatic cylinders.

- exact positioning of parts
- precise adjustment of butterfly valves, nozzles and rotors etc.
- bigger handling systems
- steering rolls for strip guiding, especially in thermal processing
- coiler with medium weights



## Mechanical Design of the Electro-Servo-Cylinder

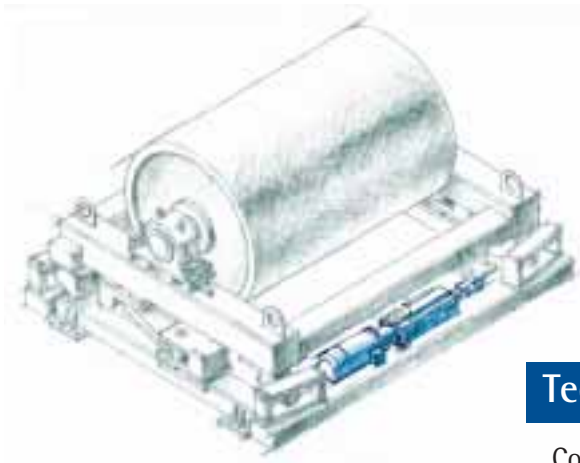
The standard model of the Electro-Servo-Cylinder consists of the following components:



- threephase asynchronous motor
- spindle with safety clutch
- planetary gear thread, thrust housing and piston rod with knuckle
- rotating lock of piston rod
- housing with pivot

Options:

- analogue, digital stroke transducer
- built-in limit switches, adjustable from outside
- locking brake
- mounting kit
- control electronics
- automatic grease lubrication in centre position in connection with Universal MicroController, drive motor and control according to customer's request.



## Technical Data

Connected load:	0.55; 1.1; 2.2; 4 and 7.5 kW
Max. load:	5; 10; 25; 50 and 100 kN
Protection class:	IP 54
Ambient temperature:	0 ... +50 °C
Nominal stroke:	100 ... 500 mm
Nominal speed:	55 mm/s, by controlled frequency converter

With the help of our experts, even direct at work location, we ensure the proper application of the **Electro-Servo-Cylinders**.



