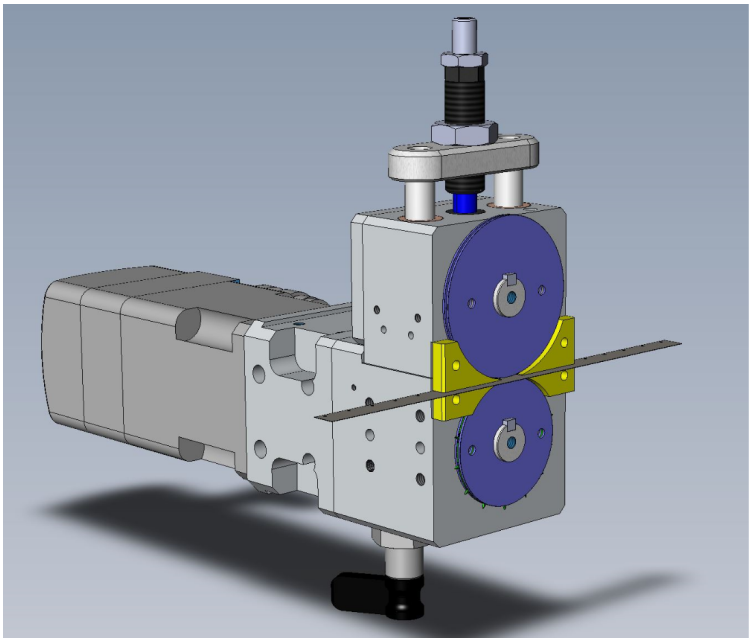
SR-40

Spiked Wheel Retraction



1.0 Scope of Application

- The SR-40 is a servomotor-driven spiked-wheel feeder with electronic intermittent venting.
- The SR-40 can be used as a “stand-alone” feeder or in combination with an existing roller or gripper feeder (push/pull).
- Designed specifically for processing thin strips in high-volume punching operations, the SR-40 serves to support strip feed. The SR-40 is mounted behind the die and ensures constant baseline tension in the strip. This results in extremely high reliability in the punching process.
- The SR-40 can be mounted on all standard punching and forming machines.
- It can be used for both pushing and pulling applications, even with two combined units
- Process integration tailored to customer requirements:
  a) as a fully integrated application,
  b) as an integration via an I/O interface, or
  c) via an I/O interface and an external encoder for 100% synchronization with existing machines
- Flexible solution thanks to an interchangeable spiked wheel. Spiked wheels can be supplied depending on the specific application (pitch and diameter of the viewing hole).

2.0 Performance Characteristics

Feed length:	unlimited
Speed:	depends on strip length/weight, pinion pitch, and diameter
Strip widths:	depends on the shape of the workpiece strip <=50 mm; custom solutions are available
Strip thicknesses:	0.01 to 1 mm; thicker strips available upon request
Weight:	10 kg
Servo motor:	Beckhoff, Siemens; other manufacturers possible upon consultation
Intermediate ventilation:	Electronic ventilation via torque reduction (with a servomotor) or mechanically via a pneumatic or servo drive
Contact force:	max. 200 N, adjustable via spring force from 0 N to 200 N (Contact force is only relevant to a limited extent with a spiked wheel)

3.0 Design

3.1 Mechanical Design

- Spiked wheel
- Counter wheel
- Lifting (manual lifting of the counter wheel)
- Belt guide
- Servo drive

3.2 Electronic Design (Example: Stand-alone system with its own control cabinet)

- Servo controller und servo motor
- Control system
- Touch panel
- I/O interfaces

Optional:

- External absolute encoder for retrofitting to existing machines, for synchronized operations
- Safety interface for safe speed control

4.0 Options

- Two or more spiked wheels for double-row or multi-row viewer holes in the die-cut strip
- Pneumatic or servomotor-driven lifting (raising the counter-wheel)
- Coated spiked wheel
- Spiked wheel for rectangular or other shaped viewer holes