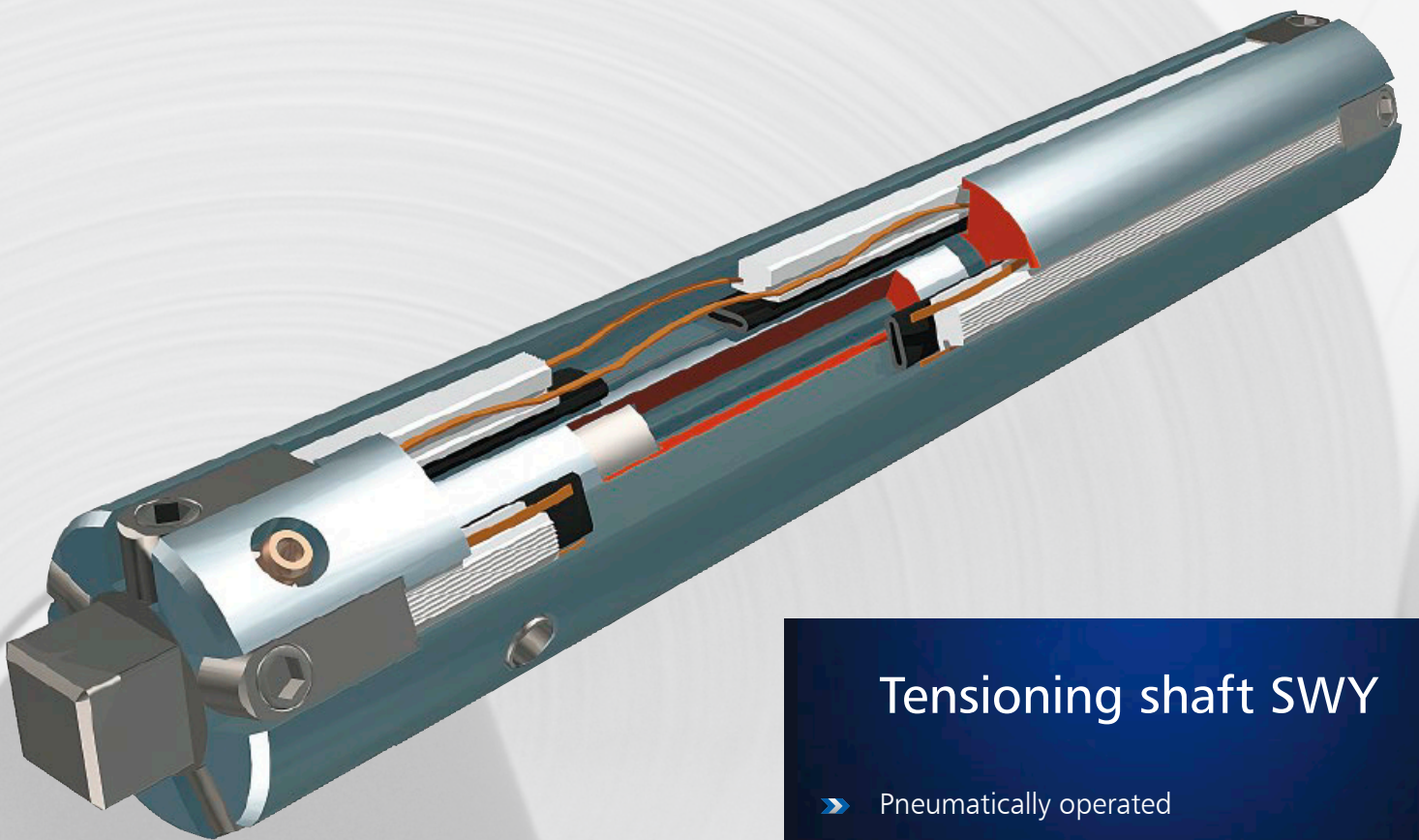
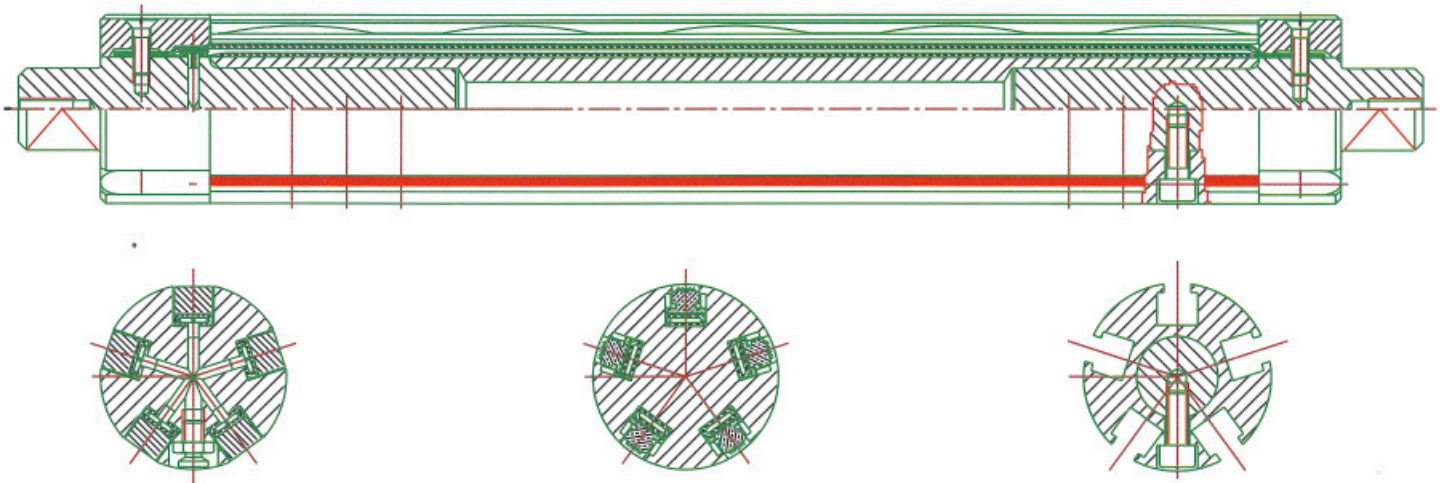


Tensioning shaft SWY



Tensioning shaft SWY

- ▶ Pneumatically operated
- ▶ For clamping multiple- or single-use cardboard, steel or PVC bushes
- ▶ Five external clamping strips with flat tubes
- ▶ Aluminium or rubberised plastic clamping strips
- ▶ Aluminium or steel support
- ▶ Axial or radial air supply



Tensioning shaft SWY

Technical description

We dimension and design each SWY tensioning shaft in accordance with technical data supplied by our customers, such as torque transmission, deflection and maximum load for the tensioning shaft. The tensioning shaft journals are adapted to the existing receivers.

A filler pistol is used to press the compressed air with 6 bar through the radial or axial filler valve into the external flat tubes, whereby the continuous clamping strips are pressed against the cores. This enables several narrow cores and cores of different widths to be tensioned.

On venting, the strips slide through the integrated springs into the grooves, so that the panels can be pulled off without any problems.

If the SWY tensioning shaft is equipped with precentering strips, the cores are aligned automatically on the tensioning shaft.

Loosening two clamping pieces enables the strip and the tube to be pulled out easily.

Available in different diameters.

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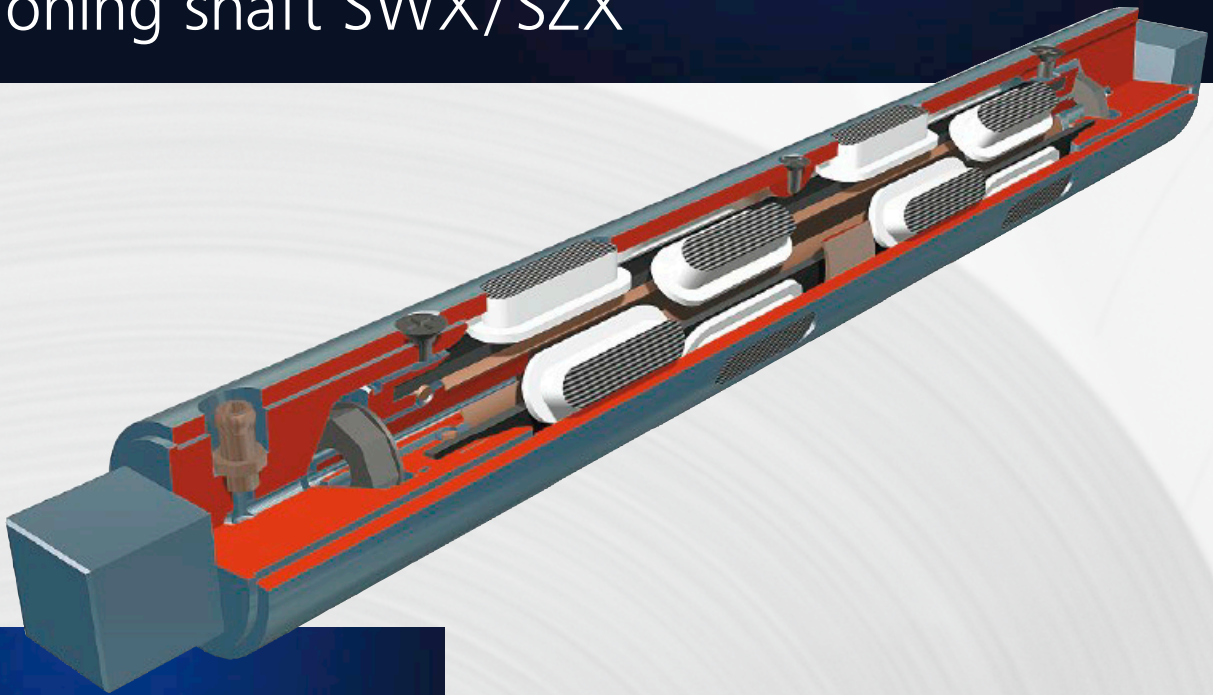
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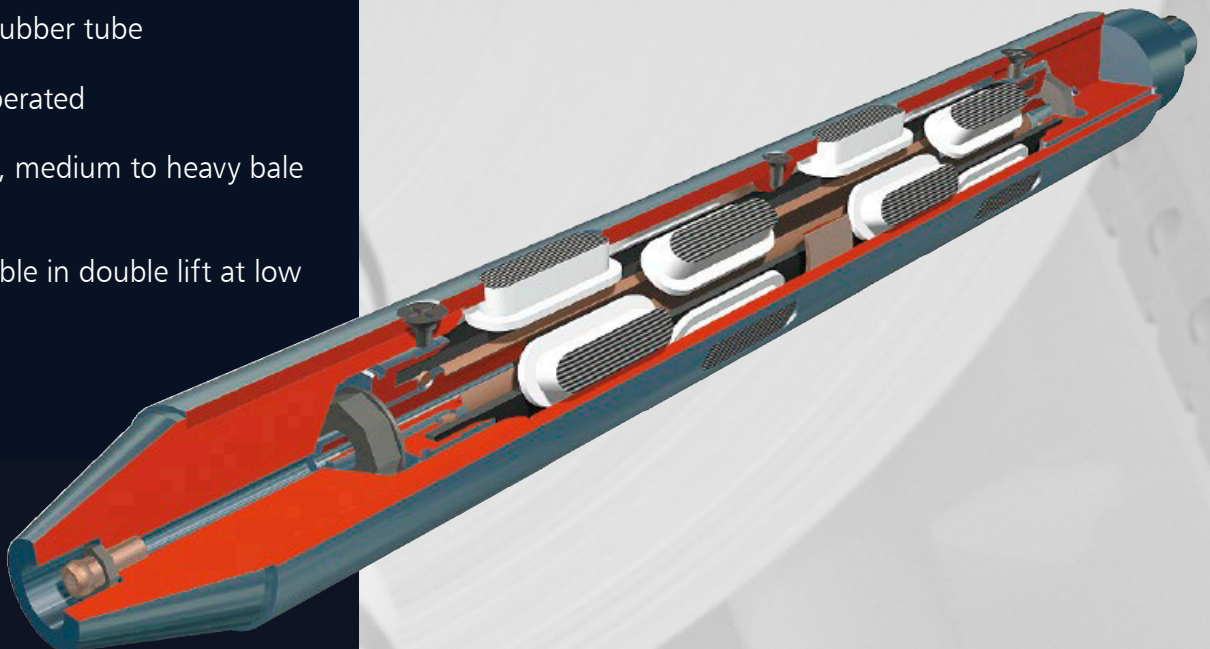
Tensioning shaft SWX/SZX

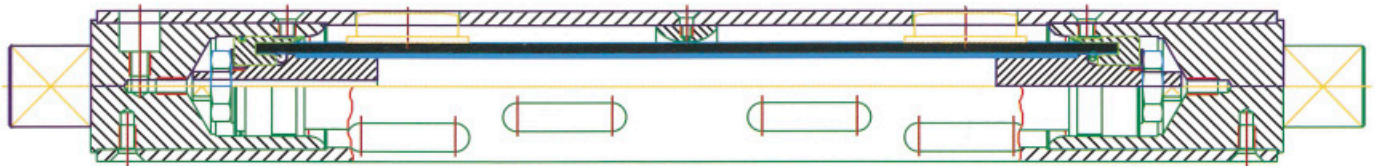


Tensioning shaft SWX

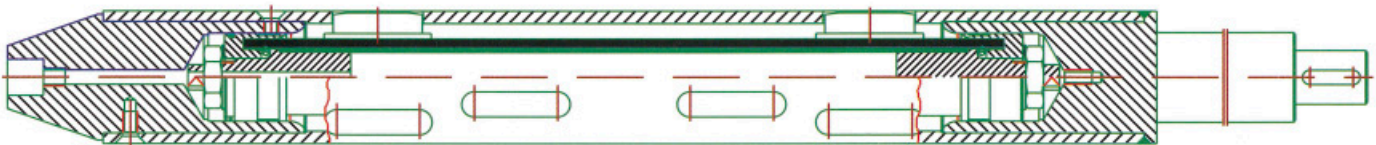
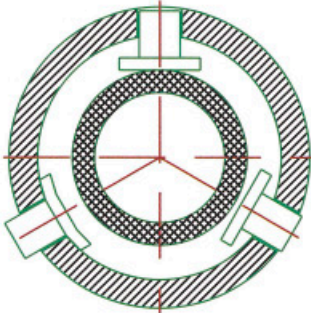
Tensioning spindle SZX (one-sided bearings)

- Low-maintenance
- With centre tube
- Easy-to-replace rubber tube
- Pneumatically operated
- Material in webs, medium to heavy bale weight
- Operations possible in double lift at low speed
- Large torque transmission





Type SWX



Type SZX

Tensing shaft SWX

Tensing spindle SZX (one-sided bearings)

Technical description

The axle tube has a number of independently functioning clamping elements, depending on the bale weight, bale width and torque.

The inside rubber tube is filled with air at 6 bar through the filler valve, so that the clamping elements are pushed outwards.

To prevent the different types of core slipping through, clamping elements can be used made of different materials and with lengthways or cross grooves.

The axle tube can also be made of steel, aluminium or carbon-fibre reinforced plastic.

Available in different diameters.

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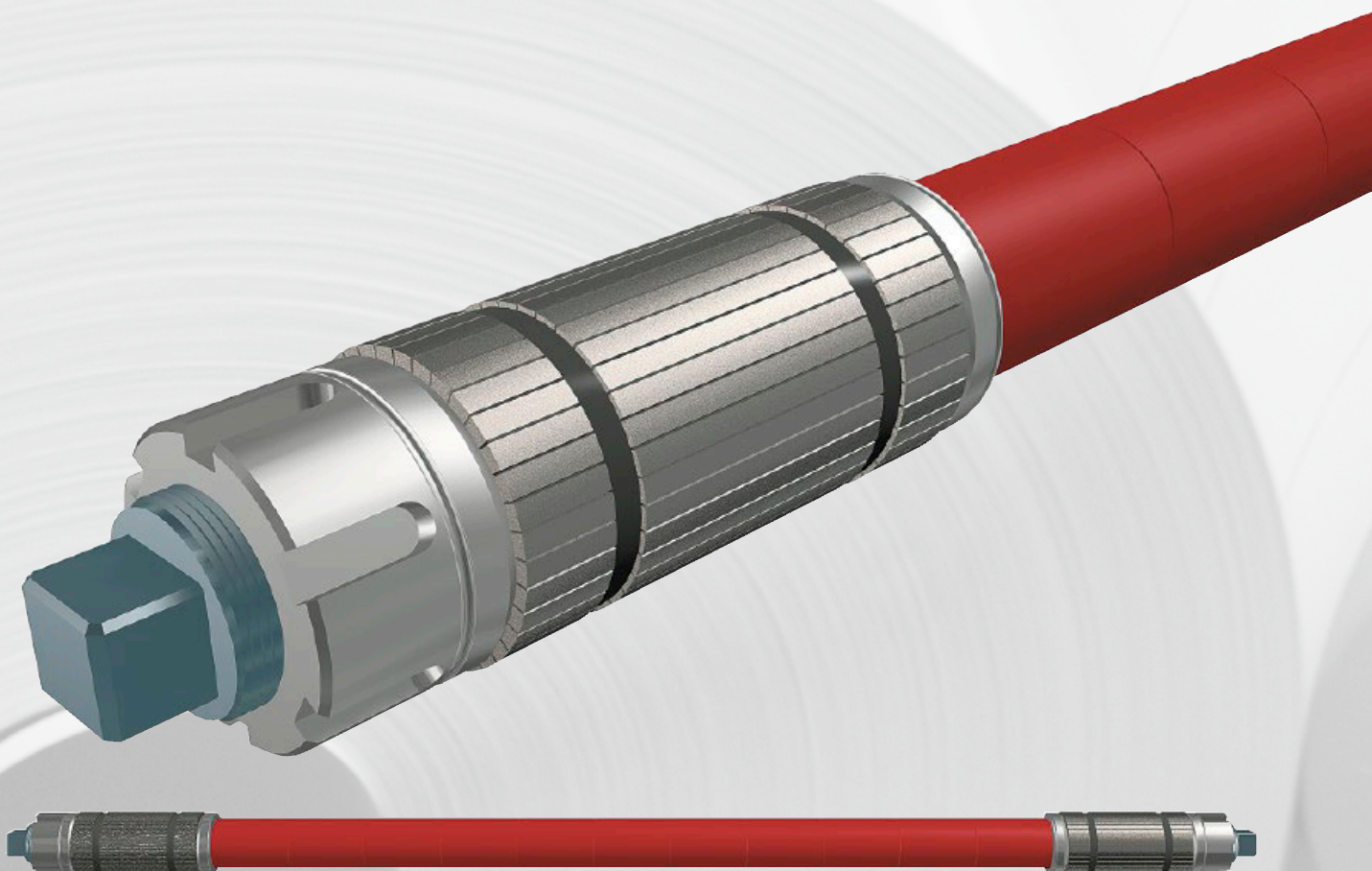
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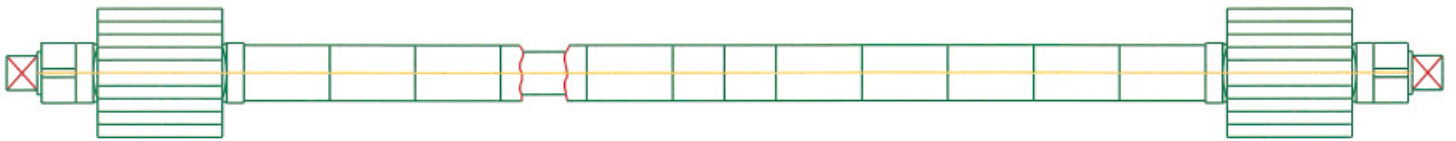
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Tensioning shaft SWS



Tensioning shaft SWS

- Self-centring
- Mechanically operated
- Web material, high bale weights
- Large clamping range ensures the self-centring of coil cores with large diameter deviations



Tensioning shaft SWS

Technical description

The clamping elements can be moved on the axle and are expanded with a sickle spanner through cones led through shaft grooves. The clamping elements are adapted to the coil core length by moving the distance sleeves.

Interchangeable split taper sockets with diameters up to 400 mm can be supplied so that cores with different diameters can be used.

The core shaft diameter and the number of clamping elements depend on the weight and the arrangement of the bales used.

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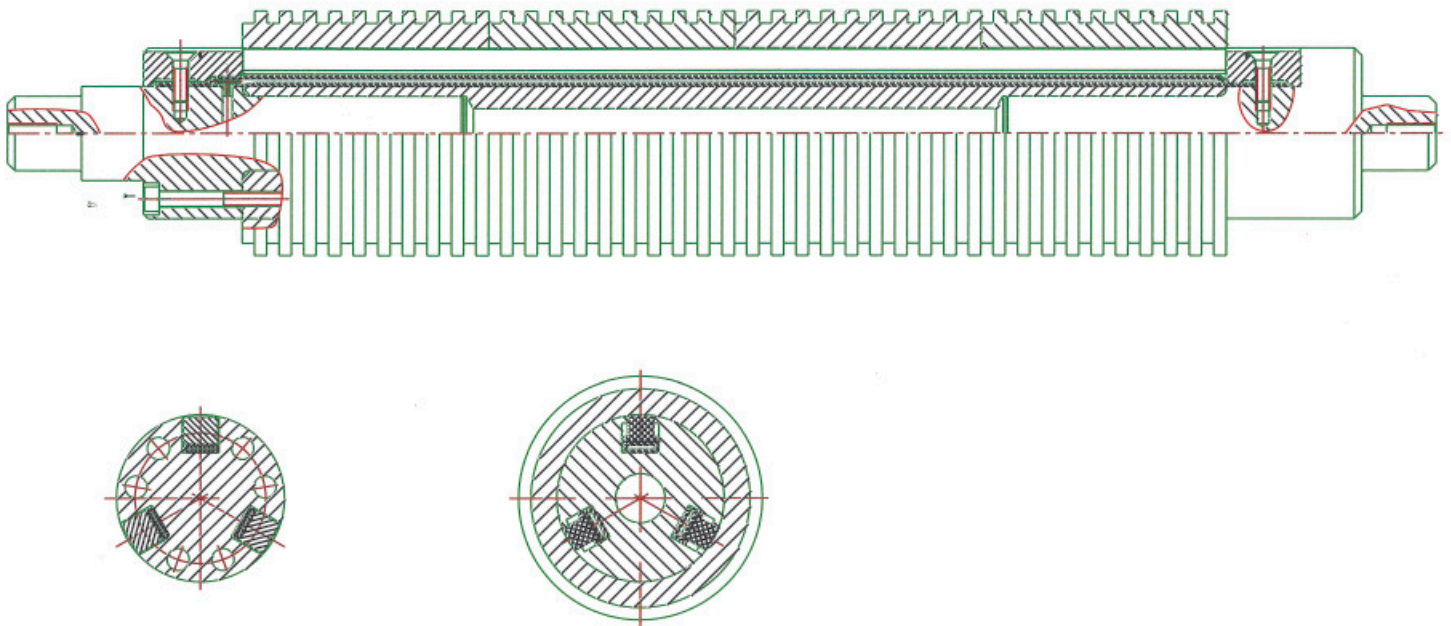
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Tensioning shaft UMW

Tensioning shaft UMW

- Pneumatic lower blade shaft
- Quick-action central clamping of the cutting cores
- Piercing die bushes slide easily onto the hard chrome-plated precisely ground lower blade shaft





Tensioning shaft UMW

Technical description

Compressed air is pressed with a filler pistol with 6 bar axially or radially through the filler valve, or through a stationary air supplier into the outside flat tube. Lateral displacement or slipping of the cutting cores is excluded by pressing the clamping strips outwards against the cutting cores.

The shaft body of the dynamically balanced lower blade shaft is hard-chrome-plated and ground with slight tolerance to the inside diameter of the piercing die core, so that the lower blade slides easily.

The UMW tensioning shaft can be supplied for cutting cores with an inside diameter of 68-400 mm, and on request in other sizes.

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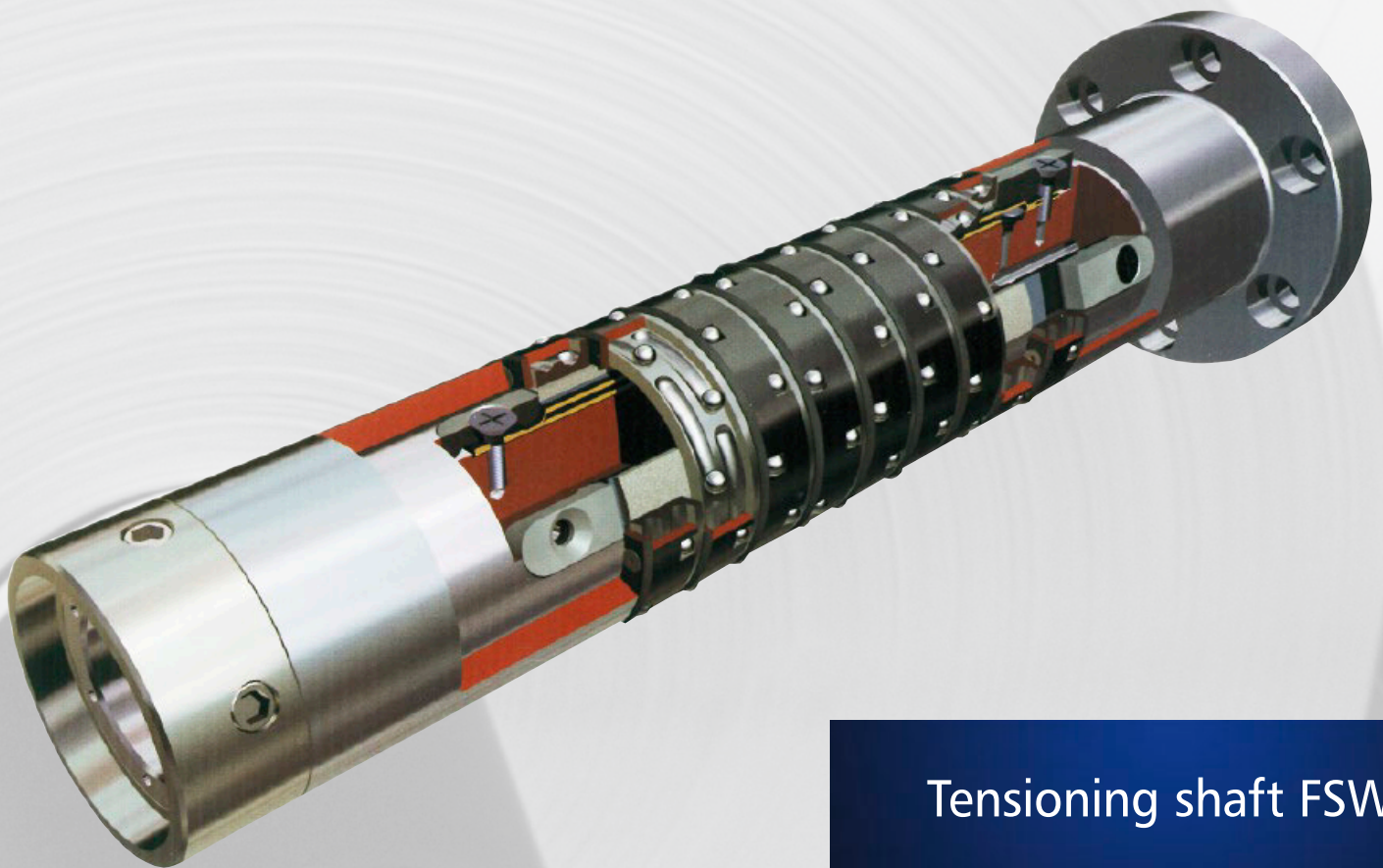
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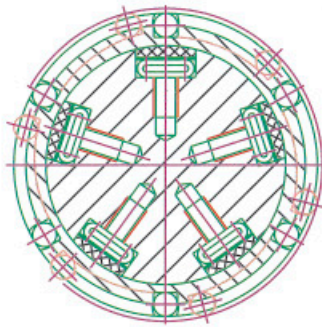
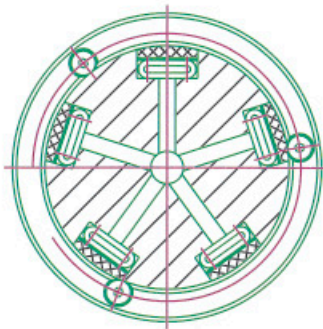
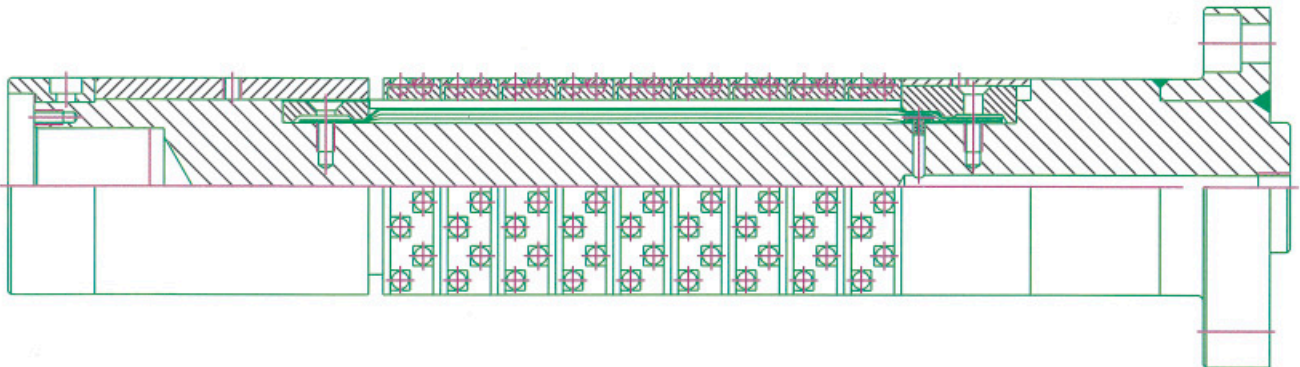
Tensioning shaft FSW



Tensioning shaft FSW

Friction shaft, controllable pneumatically, self-centring for coiling:

- Rolls with different web clamps
- Rolls with different web widths
- Rolls with different outside diameters (material if different thickness)



Tensioning shaft FSW

Technical description

The friction rings on the hard chrome-plated and ground bearer shaft clamp the hard cardboard with narrow tolerances in the direction of rotation with a brief turn.

A stationary air supply supplies the flat tubes with the required air pressure. The compressed air varies between 0 and 7 bar, depending on the roll diameter and the given web pull. This presses the friction linings above this against the inside rings of the friction body. The friction force this generates transmits the required torque to the individual coils that are to be wound.

In order to achieve even coiling or slipping of the rolls the friction shaft speed must be up to 5 % faster than the speed of the web.

Finished coiled rolls can be pulled off easily after a short turn in the direction of running.

Available in different diameters.

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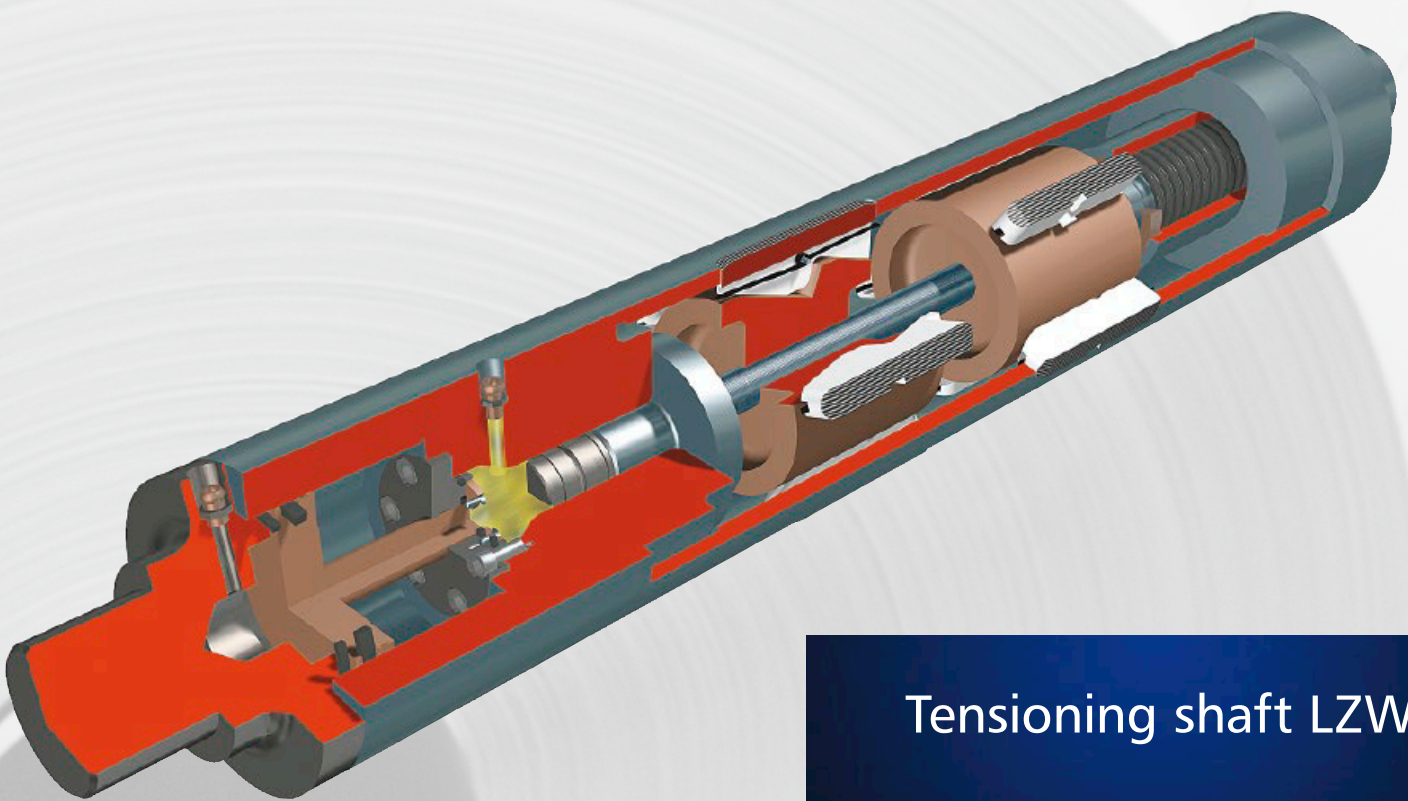
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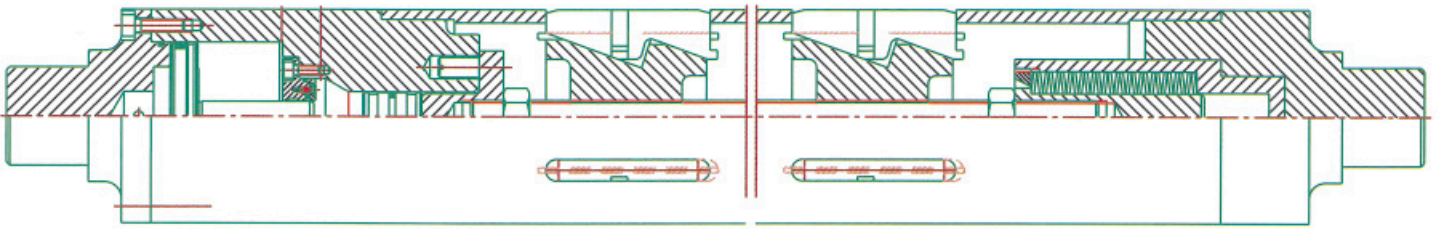
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Tensioning shaft LZW



Tensioning shaft LZW

- Tensioning shaft, self-centring, pneumatically operated, mechanically expanding, for coiling and uncoiling
- Central tensioning of cores
- High torque transmission through the piston force and a hydraulic pressure intensifier
- Smooth running, even with heavy rolls and fast web speeds
- Quick tensioning and releasing of the cores through low air volume



Tensioning shaft LZW

Technical description

A filler pistol is used to press the compressed air with 6 bar through the radially or axially located filler valve.

Through the axial displacement of the pneumatic piston the piston rod penetrates the hydraulic area, the hydraulic liquid displaces the hydraulic piston, this moves a threaded rod equipped with wedge guides, so that the clamping wedges are pressed over a slanted plane centrally outwards against the core. The height of the clamping wedges located at the circumference can be adjusted in sets through the wedge guides which are fitted with internal threads.

The central tensioning of the core is enabled through the even expansion of the clamping wedges.

If the cylinder space is vented, an opposing pressure spring pushes the threaded rod with

the clamping wedges and the clamping wedges with the leg springs into the starting position. The core is now released and the tensioning shaft can be withdrawn from the roller.

The tensioning shaft LZW can be supplied with an inside diameter of 70-400 mm, and on request in other sizes.

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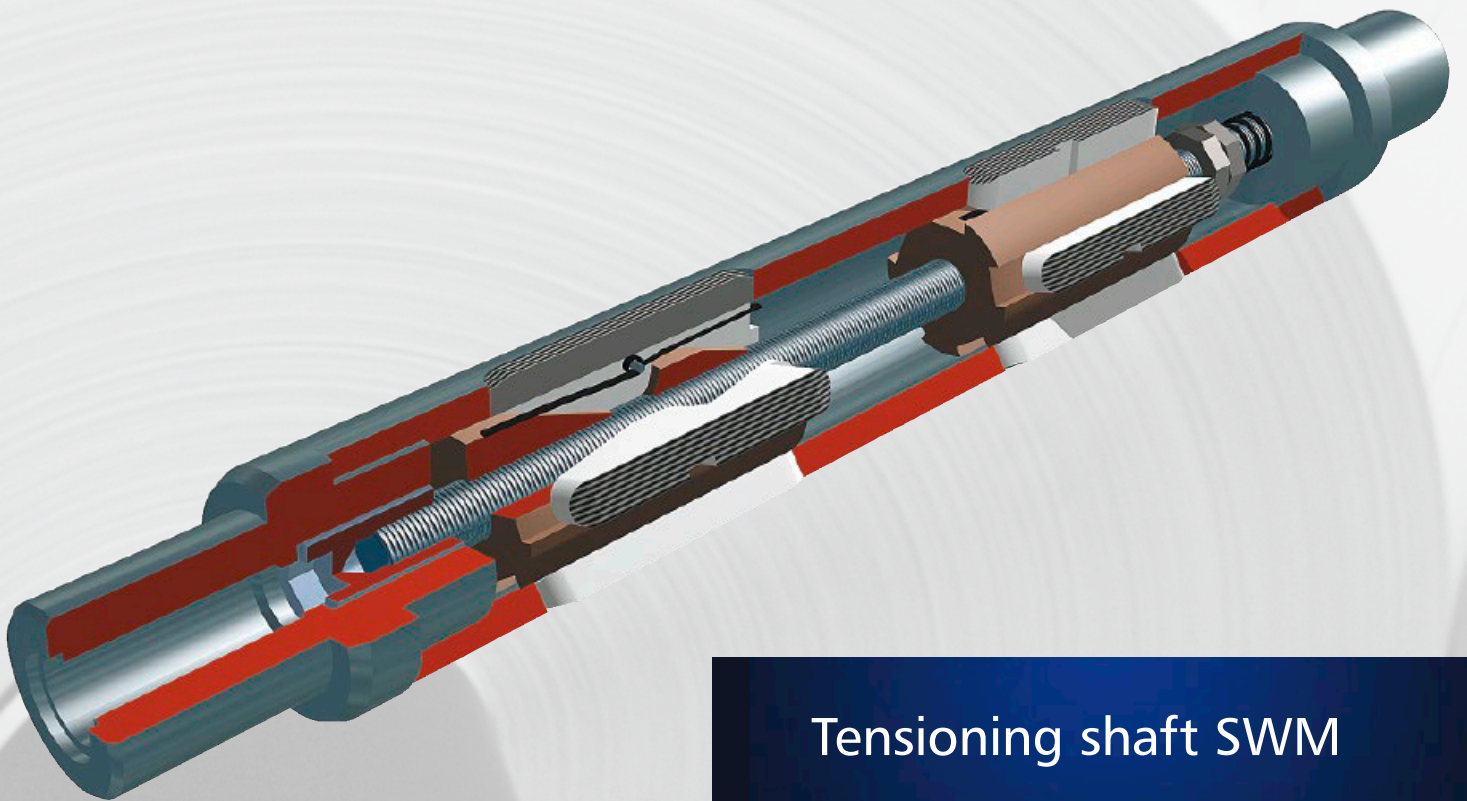
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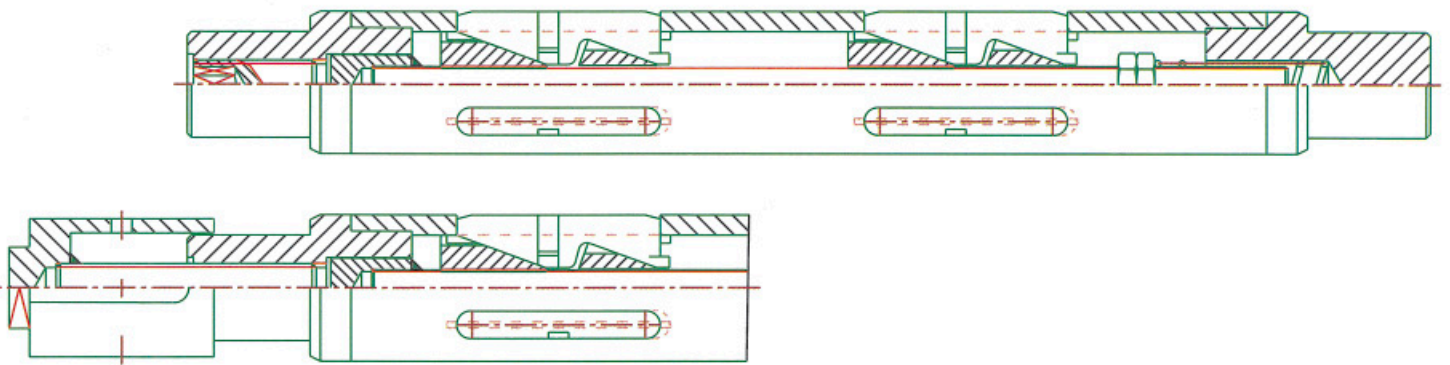
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Tensioning shaft SWM



Tensioning shaft SWM

- » Mechanically self-centring tensioning shaft, with inside or outside clamping nut
- » Easy to use
- » Low-maintenance
- » For coil cores from 70 mm inside diameter
- » Quick tensioning and releasing of the coil cores
- » Smooth running even at high speeds thanks to the central tensioning
- » High torque transmission



Tensioning shaft SWM

Technical description

The inside tensioning screw is turned manually with a socket spanner so that the clamping wedges are pressed over a slanted plane centrally outwards against the core.

The wedge guides are moved axially in the axle tube by means of a threaded spindle. When the tension is released the inside parts are pushed back to the start position through a pressure spring, and the clamping wedges also move back to the zero position through spring force.

The tensioning shaft journals can be adapted to the existing receivers.

Different detachable clamping wedges made of rubber, aluminium or steel with parallel grooves are used for different types of cores.

Available in different diameters.

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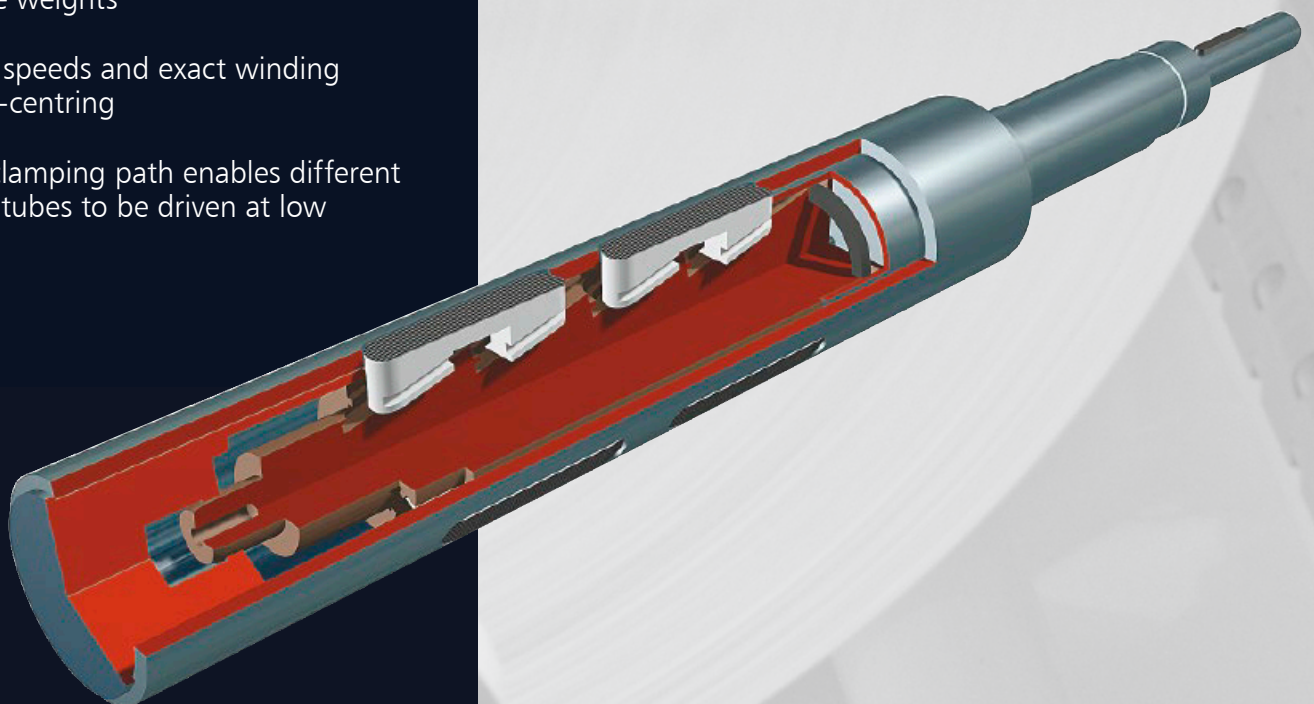
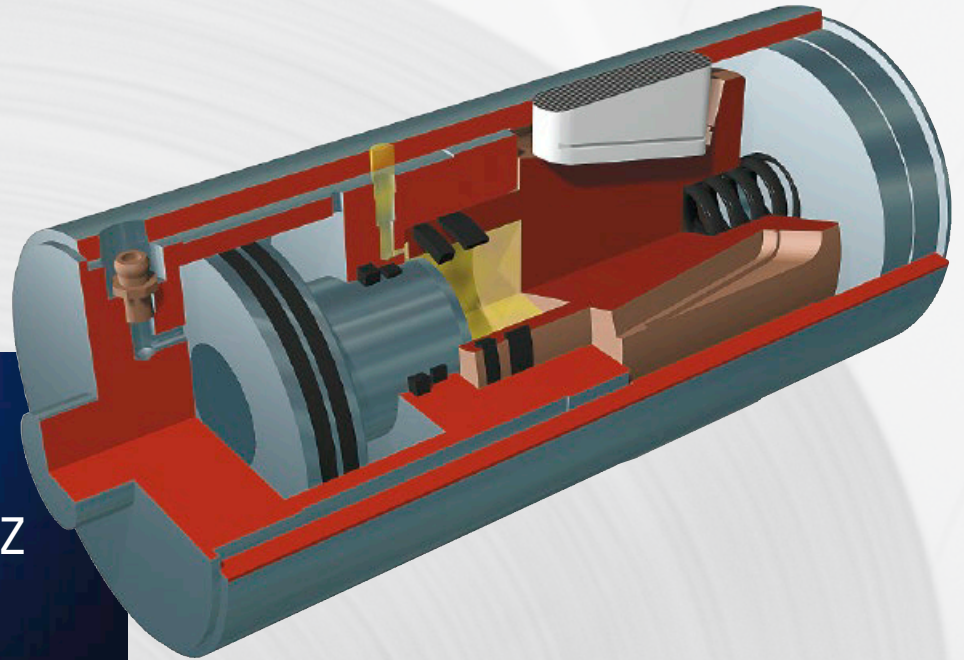
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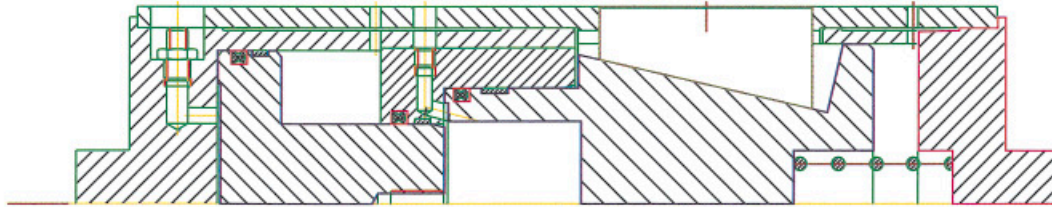
Clamping shaft SWL/SDZ

Clamping shaft SWL

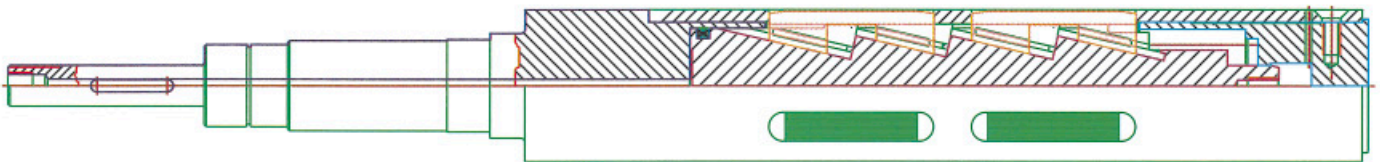
Tensioning spindle SDZ (one-sided bearings)

- Central tensioning
- Pneumatically operated
- Low-maintenance
- Web materials,
high bale weights
- For high speeds and exact winding
tube self-centring
- 12 mm clamping path enables different
winding tubes to be driven at low
speeds





Type SWL



Type SDZ

Clamping shaft SWL **Tensioning spindle SDZ (one-sided bearings)**

Technical description

Clamping wedges are pressed centrally outwards from the axle tube. Good force transmission enables heavy weights to be clamped in the area of self-locking, where applicable with force transmission and spring clamping.

The axle tube is equipped with a number of clamping elements depending on the bale weight, bale width and torque. It can be made optionally of steel, aluminium or carbon-fibre reinforced plastic.

The pistons are made of aluminium or steel and have special gaskets.

The SDZ tensioning spindle corresponds to the tensioning width of type SWL, but has bearings on one side.

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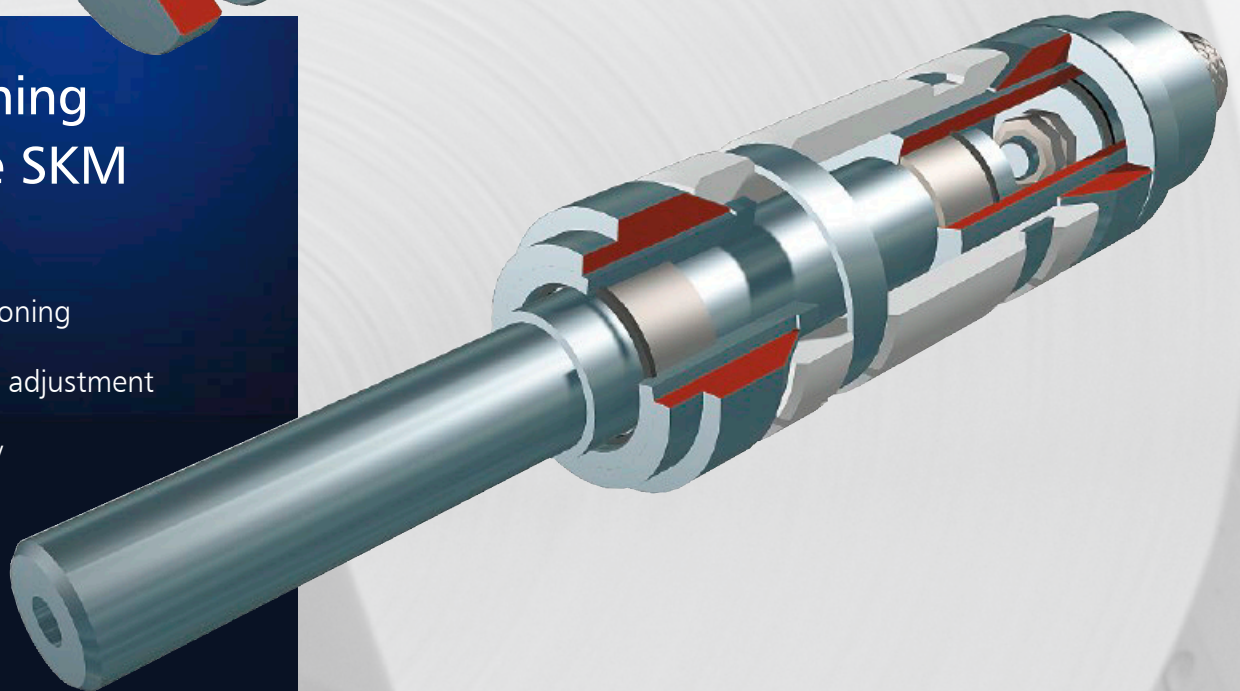
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Tensioning spindle SKA/SKM



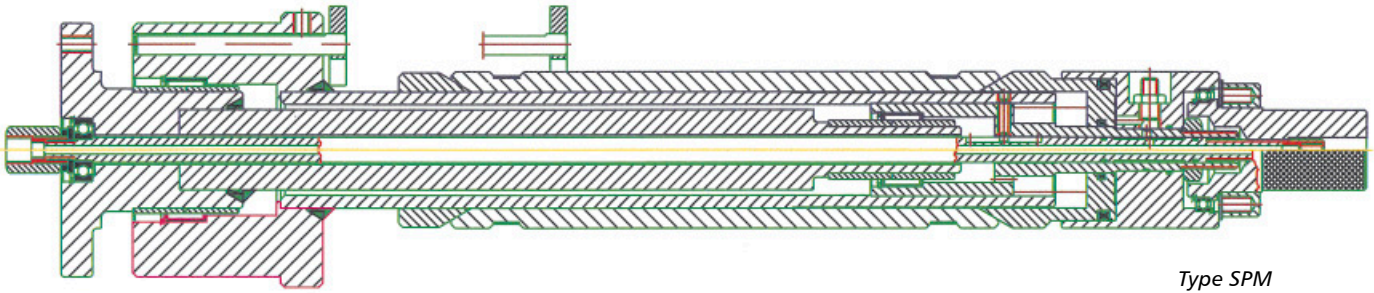
Tensioning spindle SKM

- » Driven
- » Central tensioning
- » Manual axial adjustment
- » Mechanically expanding

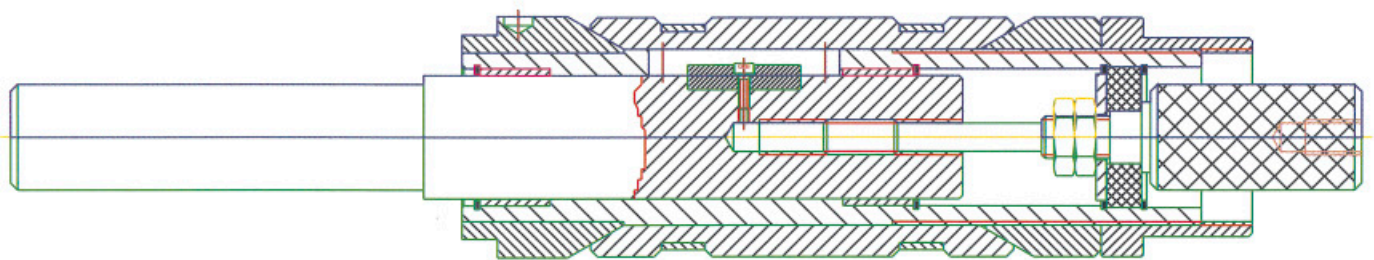


Tensioning spindle SKA

- » Coil axle
- » Central tensioning
- » Pneumatically operated
- » Manual axial adjustment
- » Pneumatic air supply



Type SPM



Type SKA

Tensioning spindle SKA/SKM

Technical description

Tensioning spindle SKA:

Tensioning spindle designed as coil axle. The braked roll is uncoiled with the help of the web pull. The roll is tensioned with the help of external clamping jaws. Force transmission is pneumatic with permanent air supply through rotary distributors. Axial displacement is possible with the help of the right-hand knurled screw.

Tensioning spindle SKM:

Tensioning spindle on bearings and driven in the machine housing. Tensioning and axial displacement are carried out with the help of a knurled nut. Force transmission is by means of cones onto the three-part split taper socket.

Available in different diameters.

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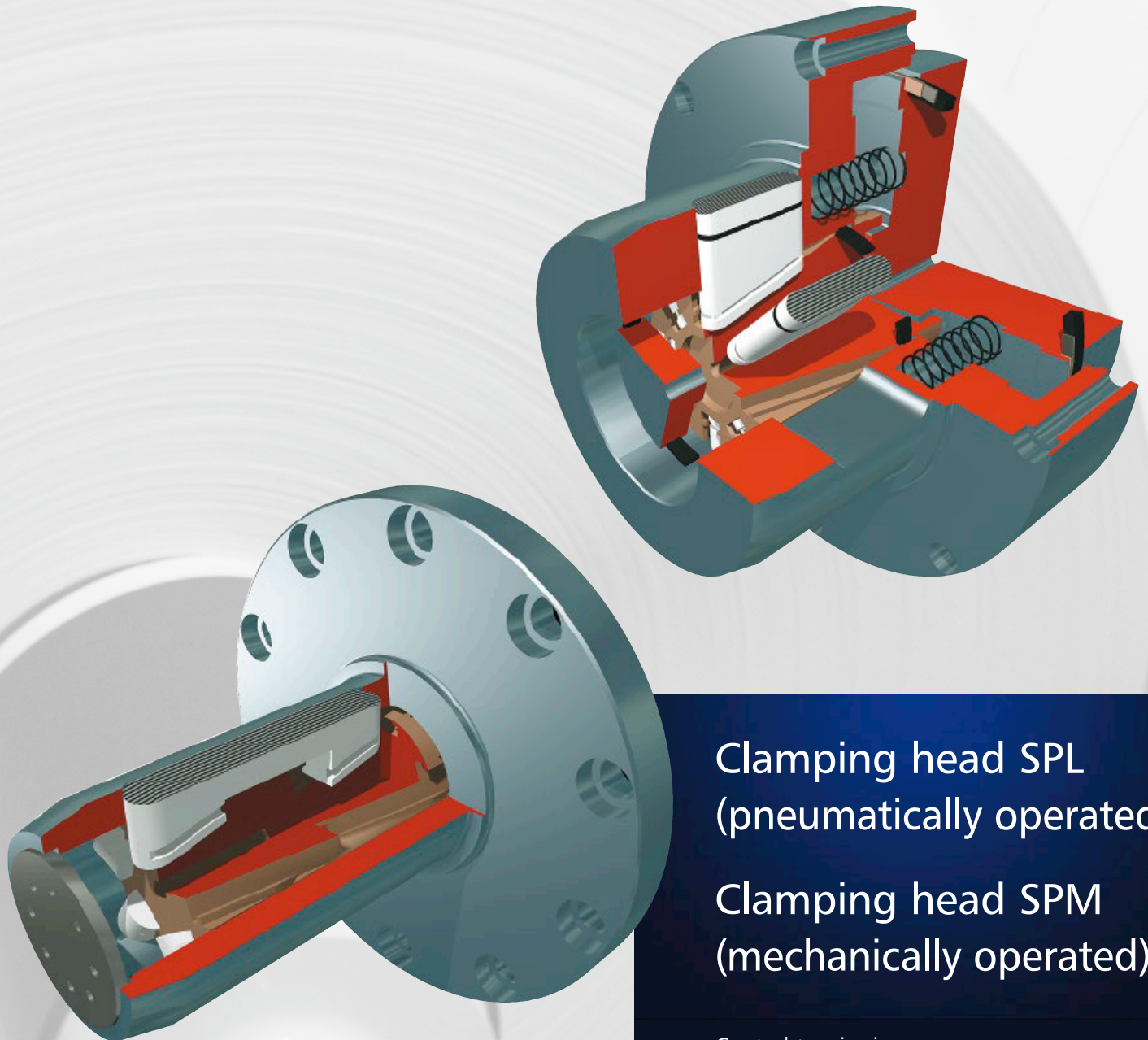
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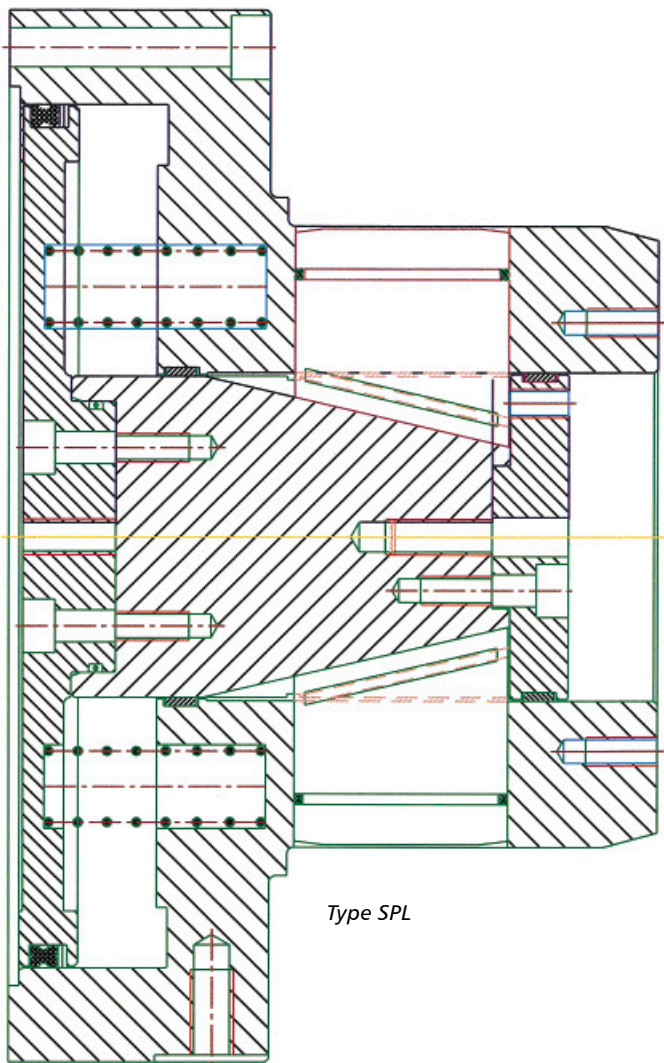
Clamping head SPL/SPM



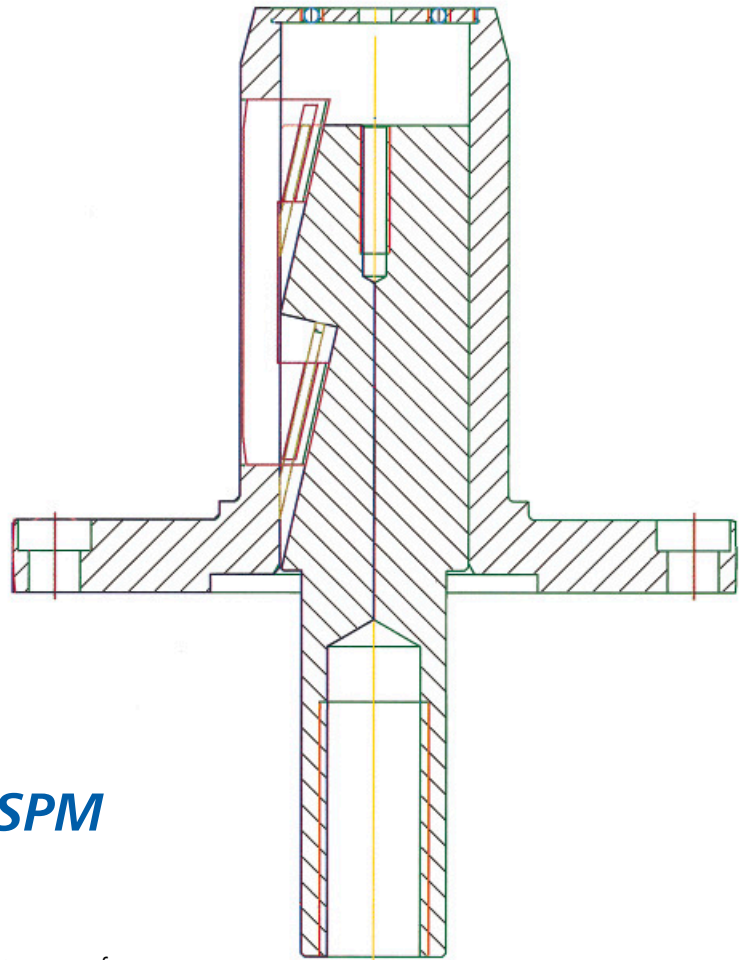
Clamping head SPL
(pneumatically operated)

Clamping head SPM
(mechanically operated)

- Central tensioning
- Web materials
- High bale weights
- Clamping path to 12 mm



Type SPL



Type SPM

Clamping head SPL/SPM

Technical description

Conical clamping wedges with maintenance-free coating integrated in the lifting lugs are pressed outwards pneumatically (clamping head SPL) or mechanically (clamping head SPM) with the help of good power transmission. The bale is clamped in the area of the self-locking device.

The SPL clamping head can be filled with air either through the shaft or radially at the clamping head. The cylinder connection dimensions are designed in dependence on the weight of the bale and the torque.

Depending on the application, the pistons can be made of aluminium or steel, whereby special gaskets are used. The thrust carrying pieces in the stay pipe are secured against ejection.

Adapters can be placed on the clamping head to enable larger core diameters to be clamped.

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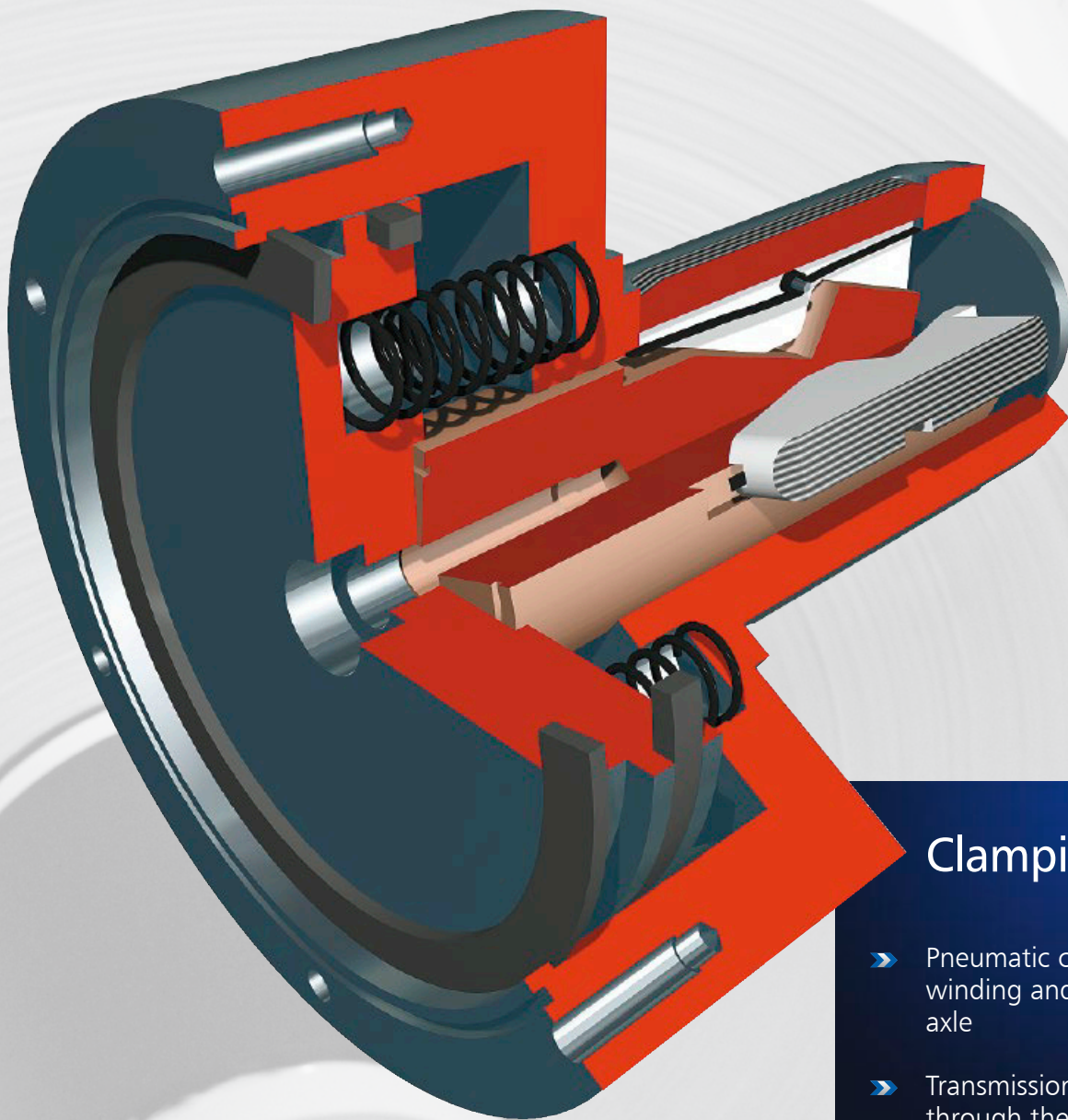
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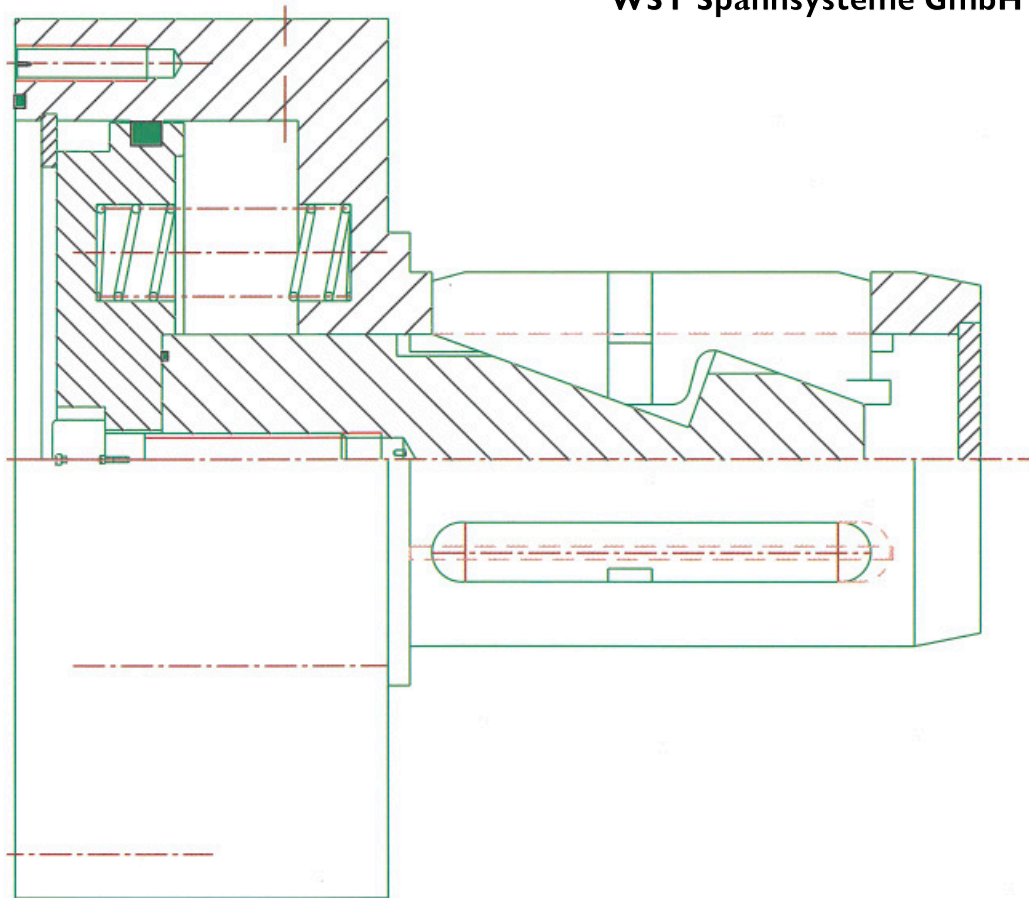
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Clamping head LSK



Clamping head LSK

- Pneumatic clamping head for winding and unwinding without axle
- Transmission of high torques through the piston force, in particular with pressure intensifier
- Central clamping of various core diameters possible with a single clamping head
- Radial or axial ventilation installation for clamping the core



Clamping head LSK

Technical description

Compressed air with a pressure of 6 bar and supplied radially or axially moves the pneumatic pistons and wedge guide axially, so that the clamping wedges are pressed centrally outwards against the core over a slanted plane and in this way transmit the required torque.

After venting, the wedge guide is pushed back into the starting position by a pressure spring, and the clamping wedges are moved to their starting position by a leg spring. Depending on the core material, the surfaces of the clamping wedge are rubberised or made of steel with parallel grooves.

The clamping head can also be expanded by a connecting rod.

Adapters can be placed on the clamping head to enable larger core diameters to be clamped.

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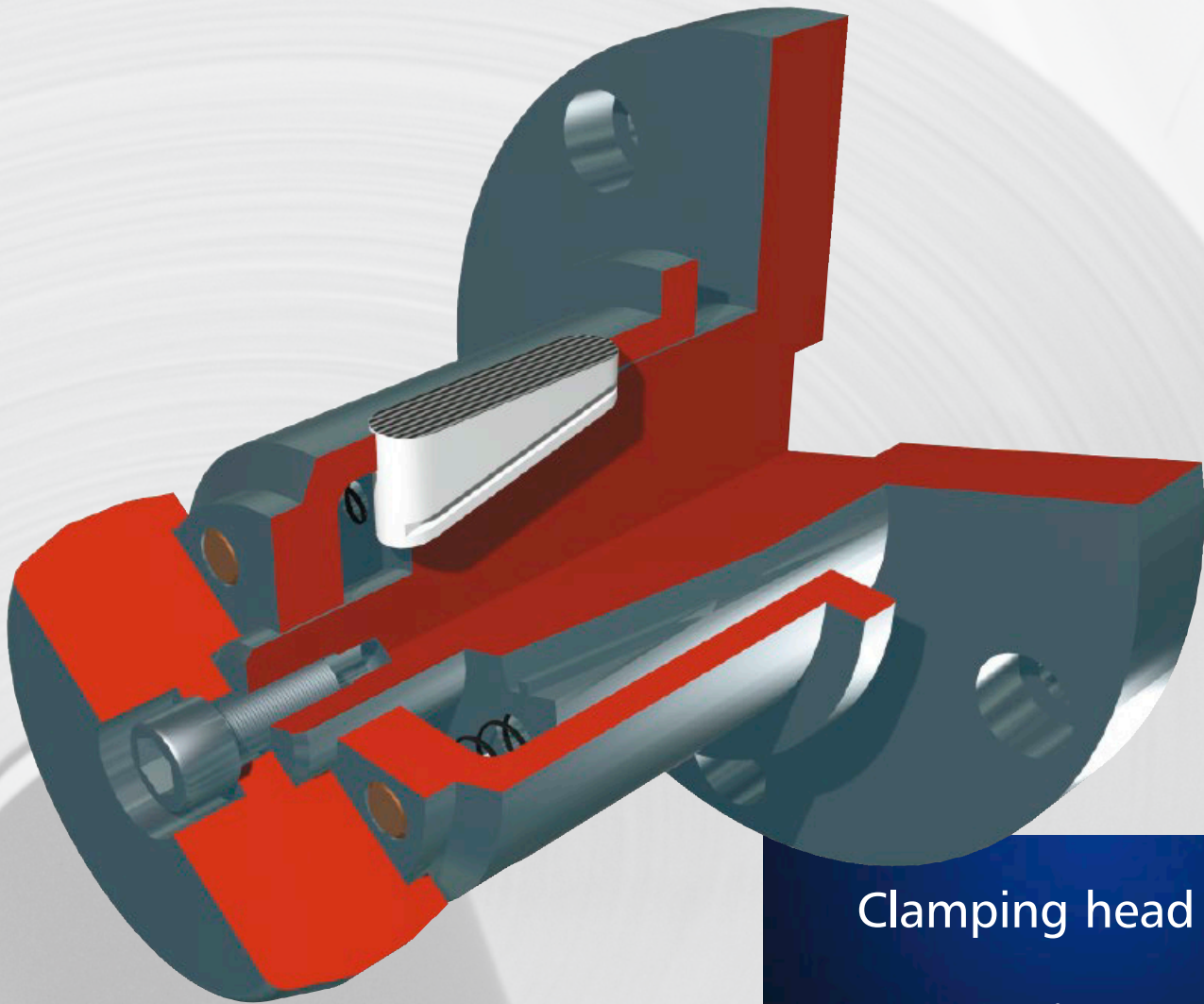
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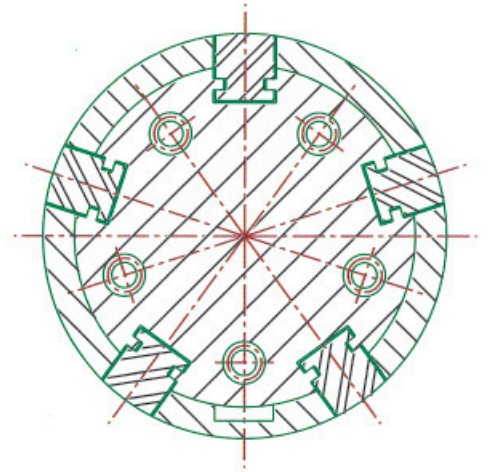
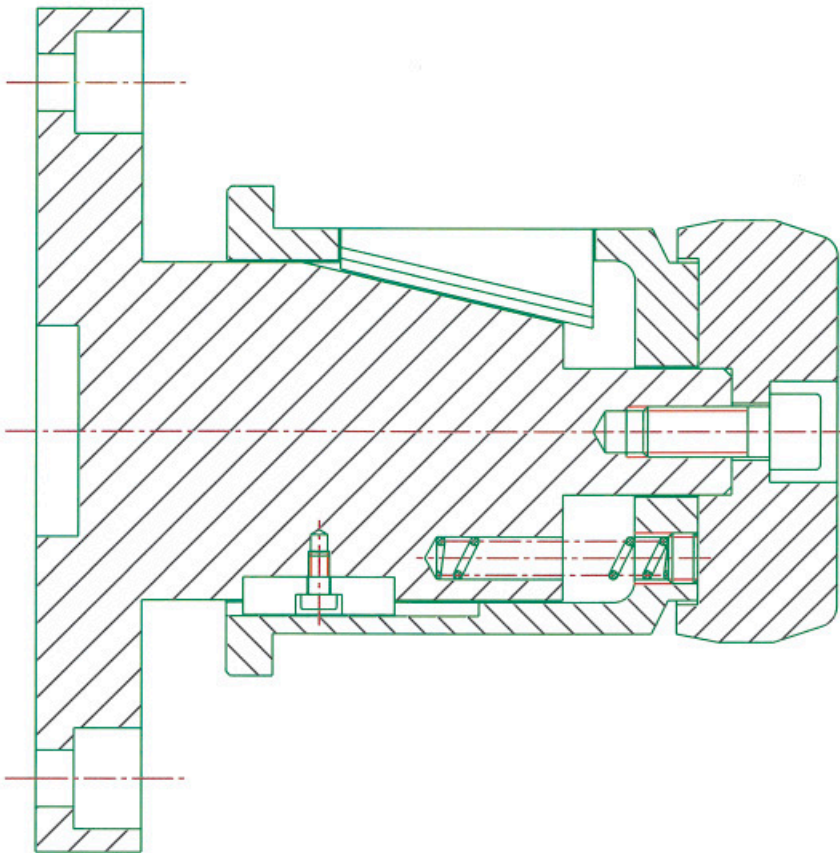
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Clamping head ASK



Clamping head ASK

- Clamping head for winding and unwinding without axle
- Quick-action clamping and releasing
- Quick-change clamping heads for different core diameters
- Low-maintenance
- Central clamping of the bushes through an axial displacement force
- Can also be supplied without centring lug



Clamping head ASK

Technical description

The clamping head flange is screwed with the existing shaft flange.

The casing of the clamping head is displaced laterally through the core that is to be clamped and through the shearing force to be applied by the installation. The clamping wedges are pressed centrally on the fixed wedge guide outwards against the core.

To avoid premature expansion, the clamping heads are equipped with a fixed centring lug.

The axial shearing force determines the torque to be transmitted.

The ASK clamping head can be supplied with an inside diameter of 60-400 mm, and on request in other dimensions.

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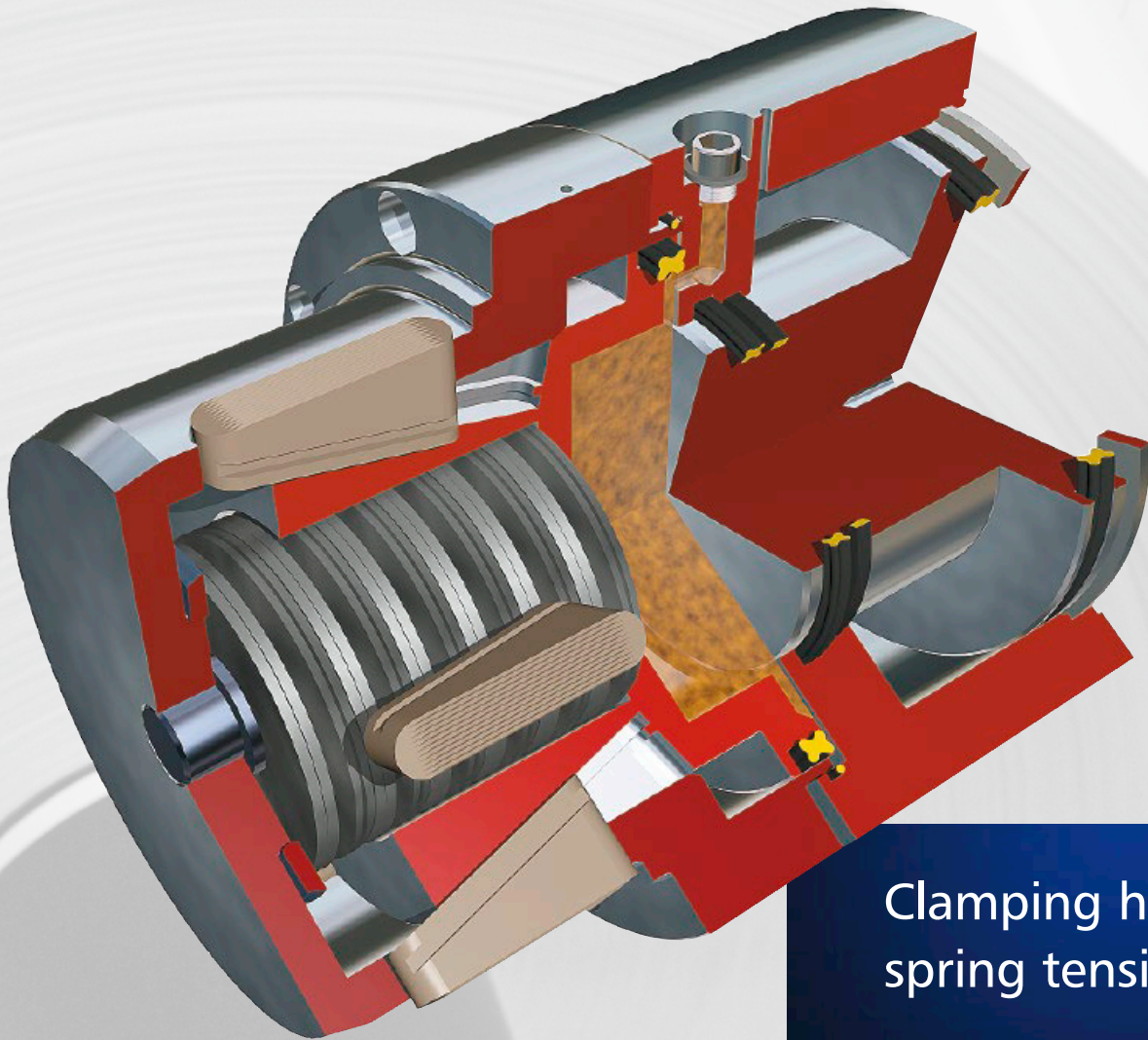
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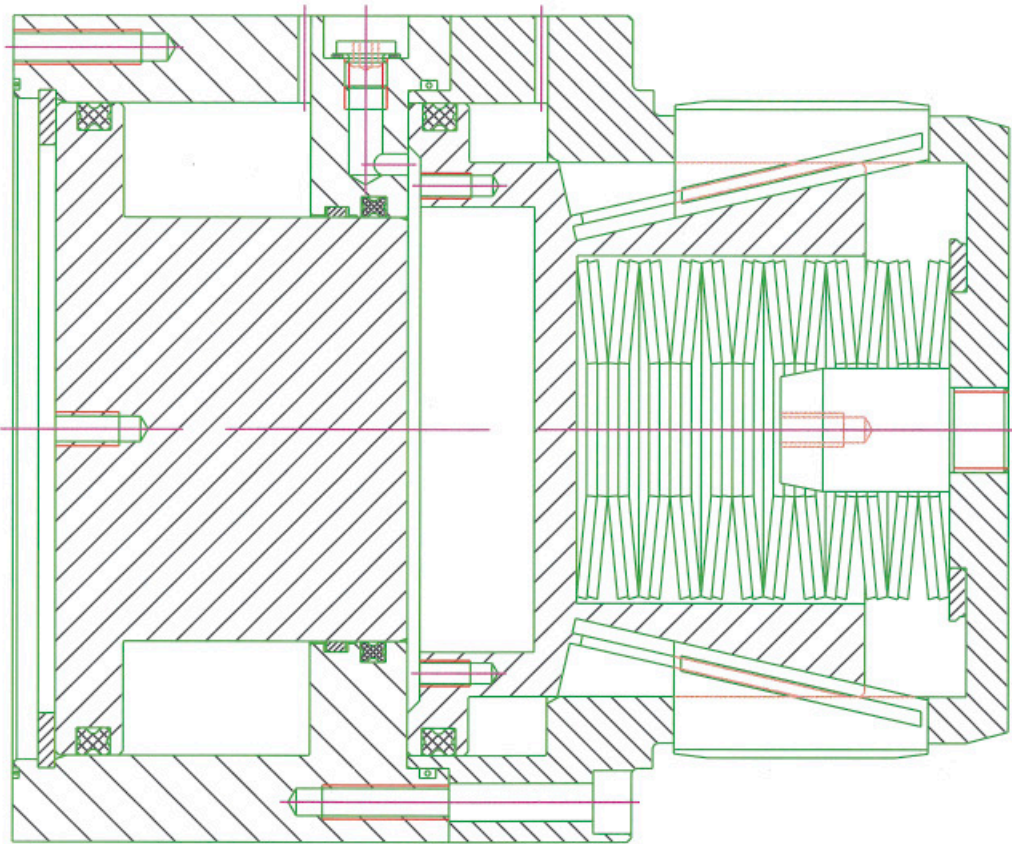
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Clamping head SPS



Clamping head SPS, spring tensioned

- Pneumatic clamping head for coiling and uncoiling without axles
- Transmission of high torques through the piston power, in particular with pressure intensifier
- Self-centring of different core diameters possible with a single clamping head
- To clamp the cores the ventilation can be installed radially or axially



Clamping head SPS, spring tensioned

Technical description

This clamping head guarantees absolute clamping safety through spring prestressing.

The spring assembly is prestressed with the help of a hydraulically driven piston and hydraulic power transmission, whereby the clamping rows reach their smallest diameter. After the bale or the core is slid on the air is let out and the spring power tensions the wedges.

If larger core inside diameters are to be clamped, adapters can be pushed onto the clamping head.

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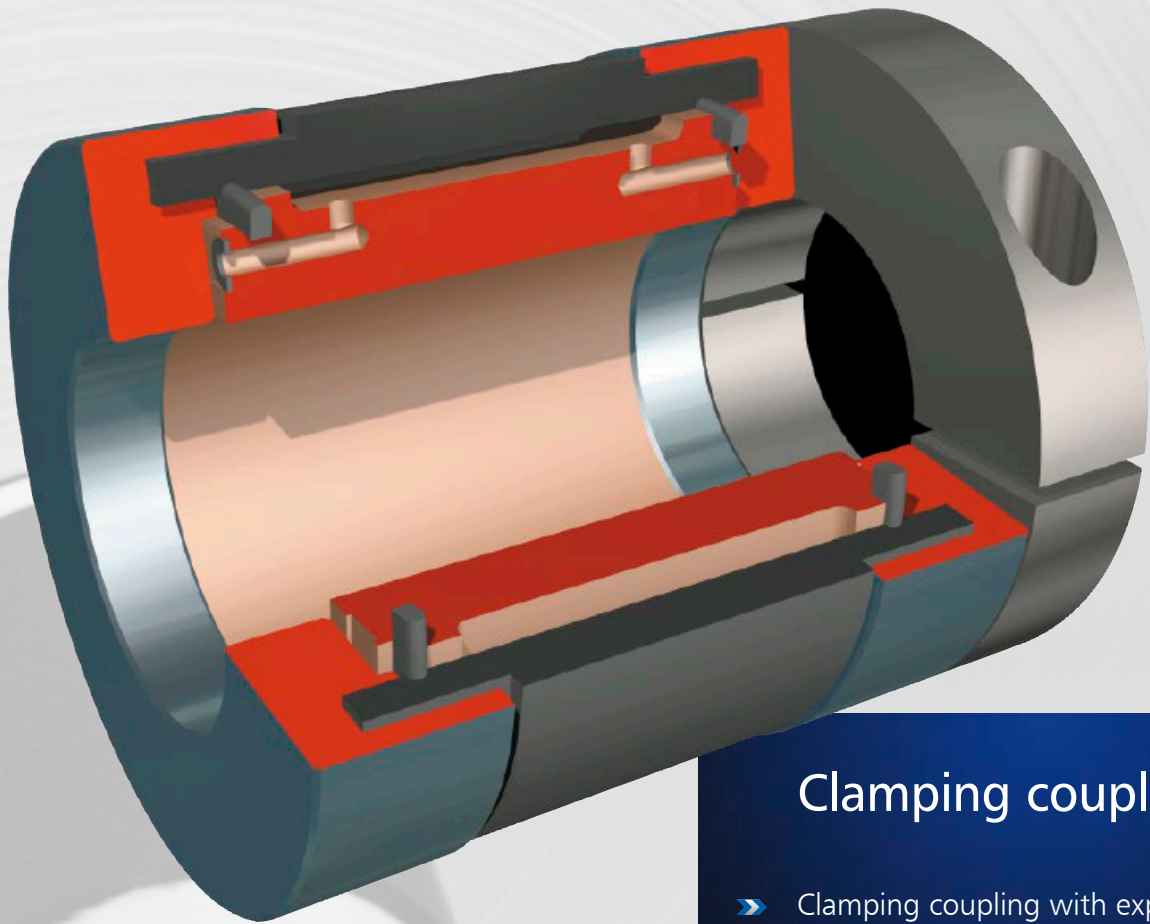
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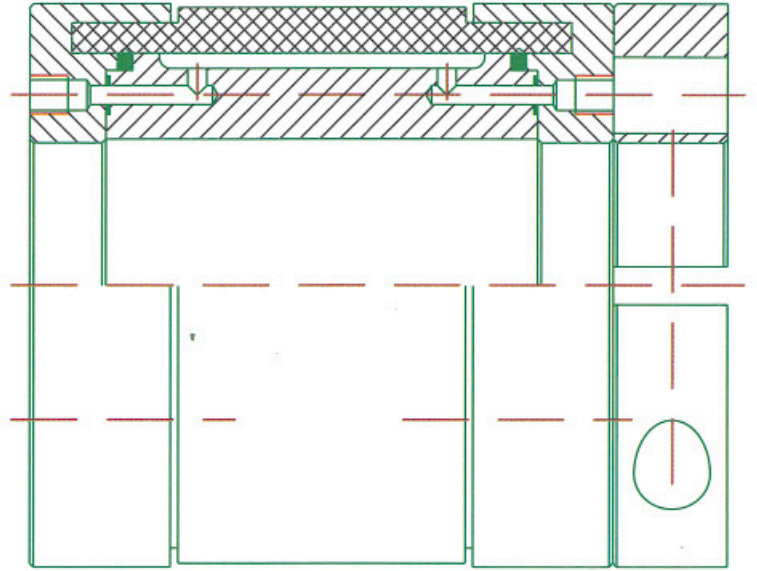
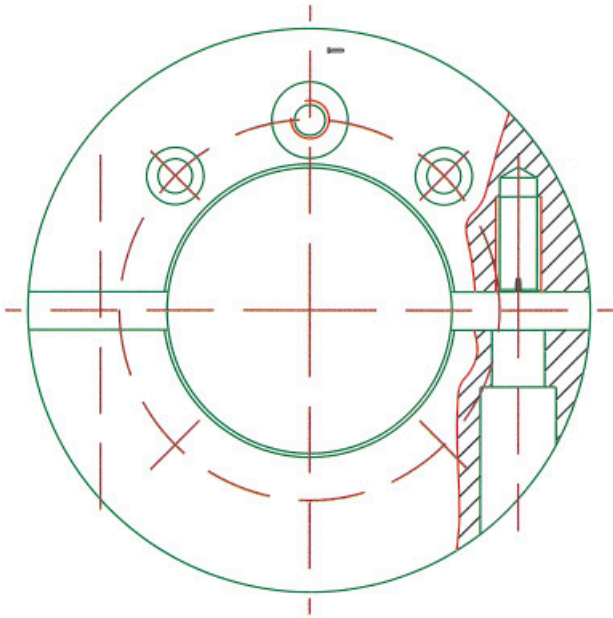
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Clamping coupling ADX



Clamping coupling ADX

- Clamping coupling with expansion bands
- Pneumatically operated
- Movable in accordance with roll width
- For clamping coil cores made or cardboard, steel, plastic, etc., with an inside diameter of 148-155 mm



Clamping coupling ADX

Technical description

With a clamping range of 146-155 mm the clamping couplings are slid in pairs, depending on the roll width, onto an existing tensioning shaft, e.g. type SWX or SWL, or onto an axle tube, and clamped in place.

A compressed air pistol fills the coupling with 5-7 bar through the radially or axially located quick-action ventilation valve. Venting can take place for each coupling separately or in pairs.

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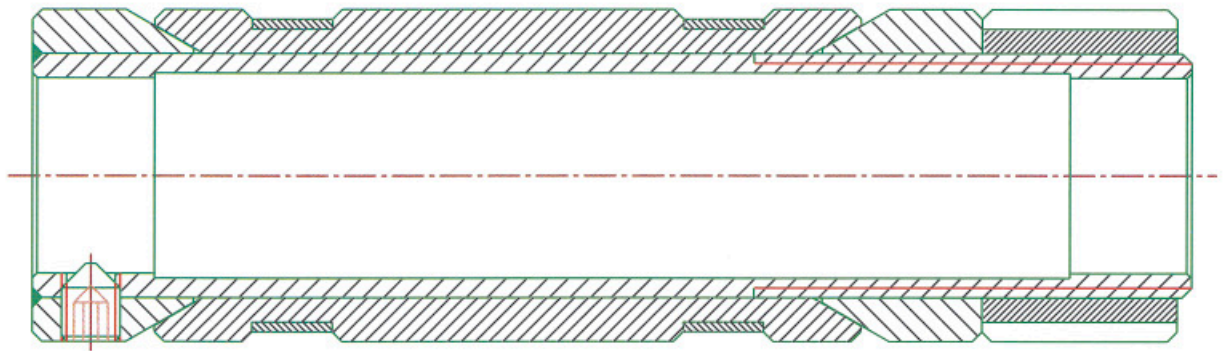
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Clamping coupling SK



Clamping coupling SK

- Mechanically operated
- Web materials, high bale weights
- Self-centring of different core diameters possible with a single clamping coupling
- Variable axial position of the clamping coupling
- Can be placed on existing axles and clamped
- Different core diameters can be clamped by replacing the split taper sockets



Clamping coupling SK

Technical description

SK clamping couplings are generally placed on existing axles and fastened, whereby they can be freely positioned axially. The cores are clamped with the help of a sickle spanner and the clamping range may vary between 8 and 10 mm. This enables cores with large diameter tolerances to be driven on a single clamping coupling.

Interchangeable split taper sockets with diameters up to 400 mm can be supplied so that cores with different diameters can be used.

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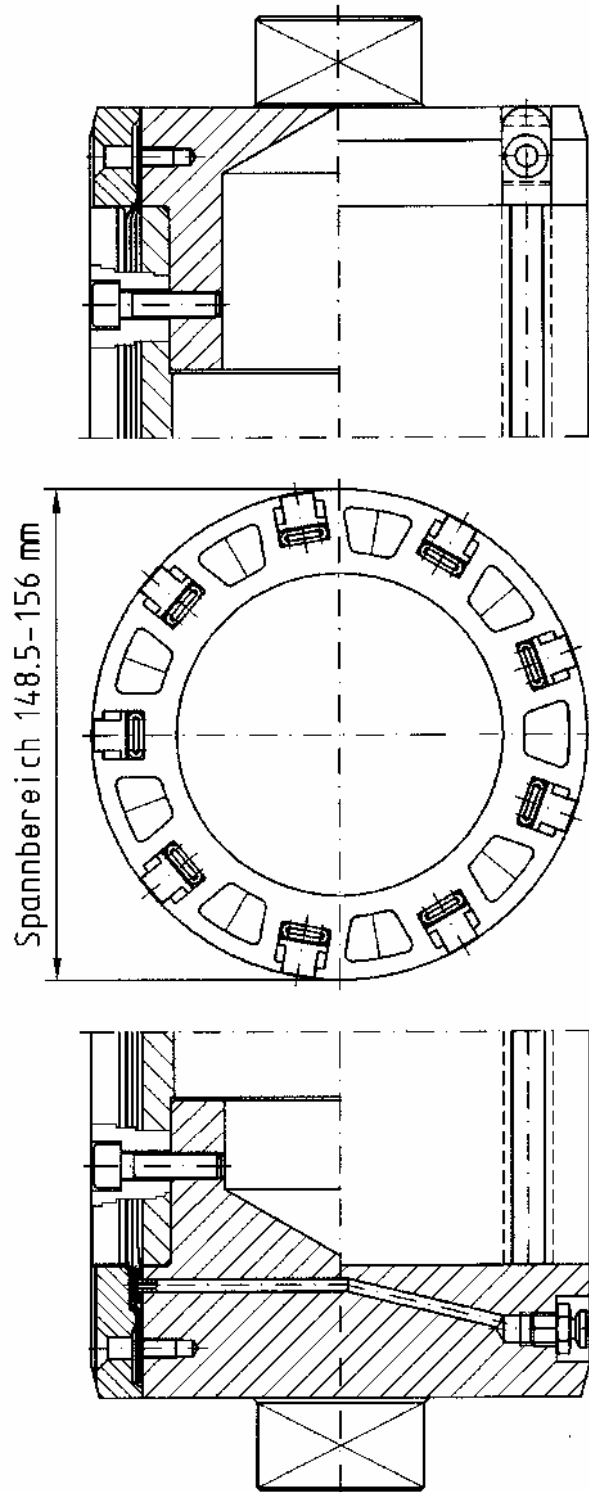
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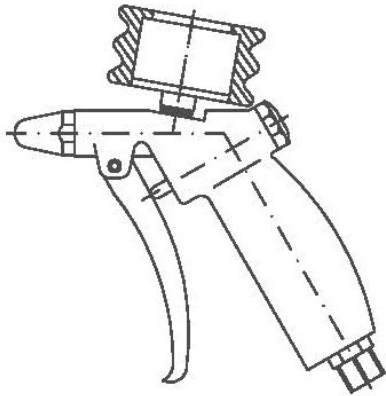
Spannwelle SWY15



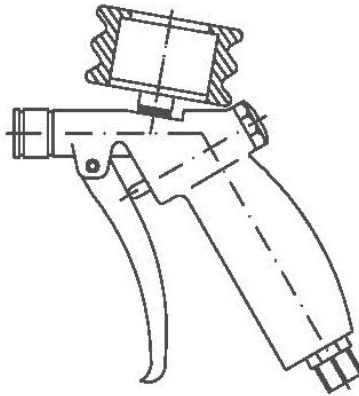
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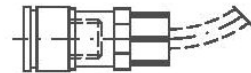
Pneumatically filling-systems






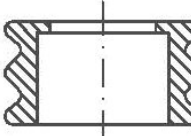

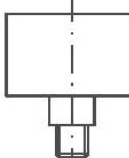


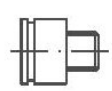

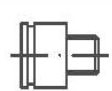

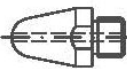



Filling tool "T" with pressure gauge
 and protective cover
 U WNP20 052



Filling tool "W" with pressure gauge
 and protective cover
 U WNP20 045



Valve adapter spout "W"
 U WNP21 010

	Filling valve "T" Thread M10x1 U WNV06 050		Blowing tool E WNP20 010
	Filling valve "W" Thread M10x1 U WNV06 010		Protective cover E WNP84 001A4
	Filling valve "T" Thread 1/8 NPT U WNV06 049		Pressure gauge 0-10 bar E WNP84 101
	Filling valve "TG" Thread M14x1 U WNV06 051		Spiral hose PU 6 W Sc SS-8/6 for filling tool
	Valve insert "W" Thread M12x1,25 E WNP90 049A4		Quick threaded joint E WNP10 266 for filling tool
	Valve insert "W" Thread R1/4 E WNP90 046A4 for valve adapter spout		Gasket R1/8 Al E WNP10 165 for filling tool
	Valve insert "T" Thread M12x1,25 E WNP90 055A4		Elongation M12x1,25 i/a E WNP90 054A4
	Quick threaded joint E WNP10 273 for valve adapter spout		
	Gasket R1/4 Ku E WNP10 166 for valve adapter spout		

Company: _____
 Street: _____
 Plz Town: _____
 Name: _____
 Tel.: _____
 Fax.: _____
 E-Mail: _____
 Date: _____



Spannsysteme

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Technical data

- Core chuck
- Airshaft
- Air mandrel (one-sided bearing purchase)
- centering clamping
- pneumatically actuation
- mechanically actuation
- pneum./mech. actuation

Inquiry

Air input axially radially

- max. speed of bale _____ m/min
- max. bale width _____ mm
- max. weight of bale _____ kg
- min. bale width _____ mm
- min. weight of bale _____ kg
- max. bale diameter _____ mm
- max. track tension _____ N
- max. torque _____ Nm
- max. number of bale _____ piece
- winding material _____
- inner core diameter _____ mm
- corematerial cardboard steel alu plastic other
- art of winding winding unwinding
- distance of bearing _____ mm
- overall length _____ mm
- air pressure _____ bar
- bearing pivot hardened yes no
- form of bearing pivot _____
- Gear / Brake one side both side

Remark:

