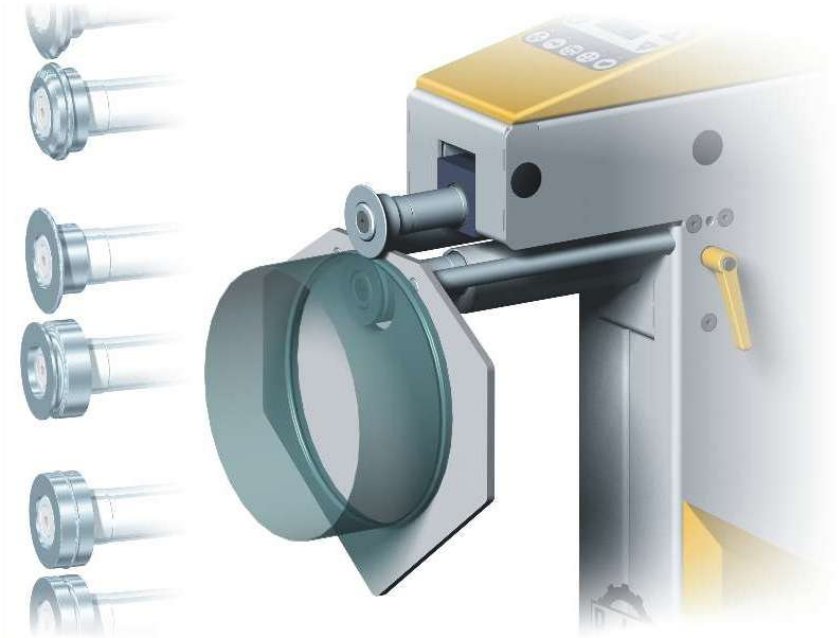
Applications for Swaging Wheels



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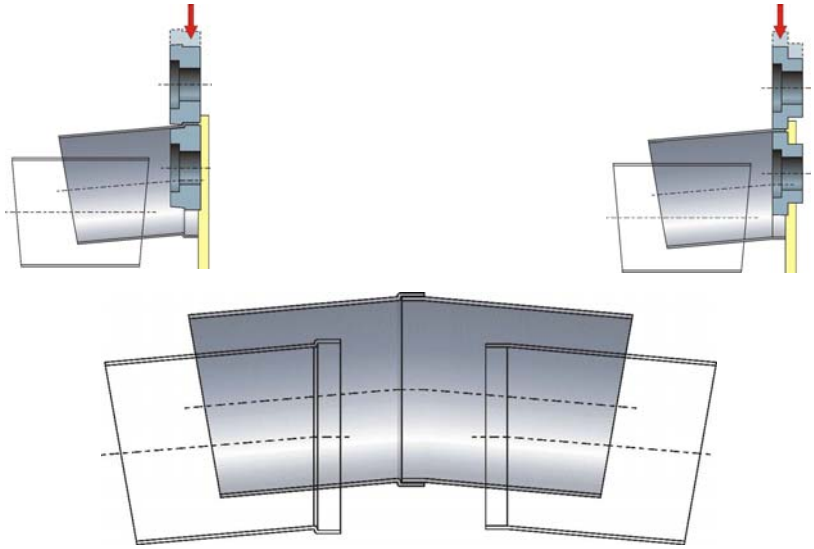
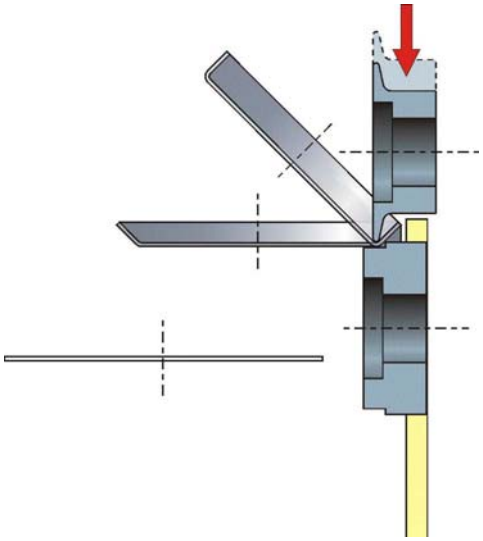
OFFSET WHEELS KA

Application	**Preparation of a pipe connection** ► on cylinders or elbow pipes
Production	**Inside pipe** ► Put pipe in and push it against the stop plate ► Move upper wheel down to the pipe **Outside pipe** ► Put pipe in and push it against the stop plate ► Move upper wheel down to the pipe **Change over to offset-wheels** ► Put outside pipe in and push it against the stop plate ► Move upper wheel down to the pipe ► Move upper wheel further down to the required height
Required option	► RAS 12.35 / 12.65 Standard stop plate ► RAS 12.31 / 12.60 Large stop plate
Available for	► RAS 12.11 / 31 / 35 / 60 / 65



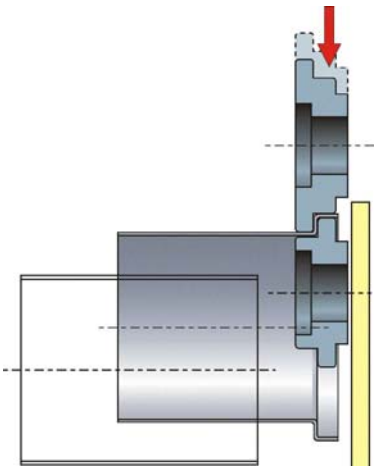
Flanging Wheels BC

Application	**Production of a flange** ► typically on end caps.
Production	► Put flat disc in and push it against the stop plate ► Move upper wheel down to contact the material ► Move upper wheel further down slowly and press a groove line into the material ► Push disc slowly up to a 45 degree position
Required Option	► RAS 11.35/15, 12.35, 12.65 none ► RAS 12.31 / 12.60 divided stop plate
Available for	► RAS 11.11 / 15 / 31 / 32 / 35, 12.11 / 31 / 35 / 60 / 65



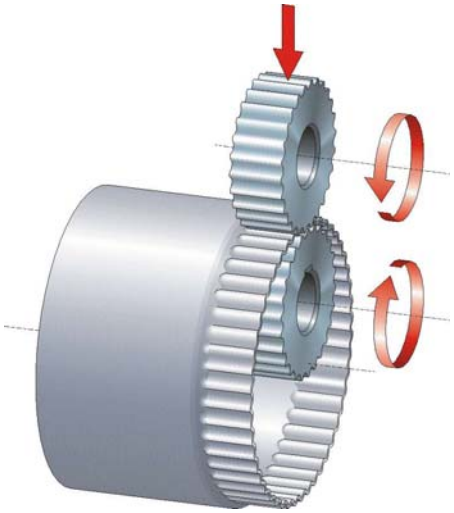
Double Seaming Wheels

Application	**Connection of two pipes** ► One pipe will get a double seam, the other a flange. The outside diameter of the flange needs to be smaller than the inside diameter of the double seam. Both pipes will be pushed in each other. The double seam needs to be manually closed at some points. Then the seam can be closed all the way around in a separate operation. **Closing the end of a pipe** ► Put a disc into the double seam. The double seam needs to be closed manually at some points. Then the seam can be closed all the way around in a separate operation.
Production	► Put pipe in and push it against the stop plate ► Move upper wheel down to the pipe ► Move upper wheel further down slowly and press a groove line into the material ► Move upper wheel down step by step until seam is finished
Required Option	► RAS 11.35/15, 12.35, 12.65 non ► RAS 12.31 / 12.60 divided stop plate
Available for	► RAS 11.11 / 15 / 31 / 32 / 35, 12.11 / 31 / 35 / 60 / 65



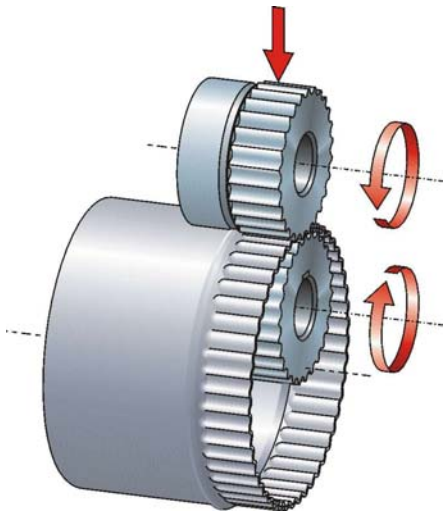
Crimping Wheels

Application	**Reduction of a pipe diameter** ► Diameter of one pipe will be reduced by crimping the material. The pipe can then be pushed into a second pipe of the same original diameter.
Production	► Preparation: Remove slot stone on one shaft, so that the wheel is able to rotate unconnected and free. ► Put pipe in and push it against the stop plate ► Move upper wheel down to the pipe ► Move upper wheel further down slowly and press a groove line into the material ► Produce required crimping depth with a step by step adjustment of the upper wheel
Required Option	► RAS 11.35/15, 12.35, 12.65 none
Available for	► RAS 11.11 / 15 / 31 / 32 / 35, 12.11 / 31 / 35 / 60 / 65



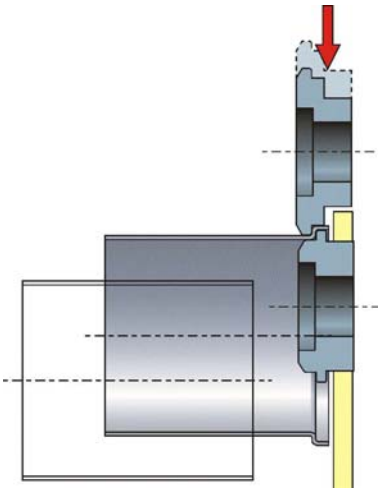
Crimping Wheels with Stop

Application	**Reduction of a pipe diameter** ► Diameter of one pipe will be reduced by crimping the material. The pipe can then be pushed into a second pipe of the same original diameter. At the end of the crimp an additional seam is used as a stop.
Production	► Preparation: Remove slot stone on one shaft, so that the wheel is able to rotate unconnected and free. ► Put pipe in and push it against the stop plate ► Move upper wheel down to the pipe ► Move upper wheel further down slowly and press a groove line into the material ► Produce required crimping depth with a step by step adjustment of the upper wheel
Required Option	► RAS 11.35/15, 12.35, 12.65 none
Available for	► RAS 11.11 / 15 / 31 / 32 / 35, 12.11 / 31 / 35 / 60 / 65



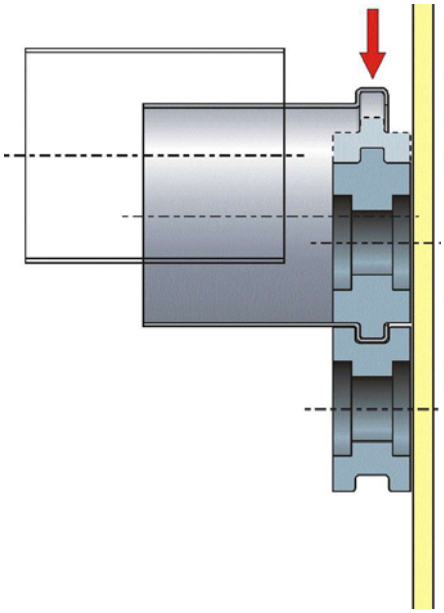
Seaming Wheels F

Application	**Production of elbow pipe segments** ► An seam will be added to an elbow pipe segment on one side and a flange will be added on the opposite side. One segment will be pushed in next. Finally, the seam will be closed with the knee pipe wheels. **Double seam with a tight radius** ► It is possible to produce a seam with a tighter radius than with the double seaming wheels. (On light gauge materials only)
Production	► Preparation: Remove slot stone on one shaft, so that the wheel is able to rotate unconnected and free. ► Put pipe in and push it against the stop plate ► Move upper wheel down to the pipe ► Move upper wheel further down slowly and press a groove line into the material ► Move upper wheel down step by step until seam is finished
Required Option	► RAS 11.35/15, 12.35, 12.65 none ► RAS 12.31 / 12.60 divided stop plate
Available for	► RAS 11.11 / 15 / 31 / 32 / 35, 12.11 / 31 / 35 / 60 / 65



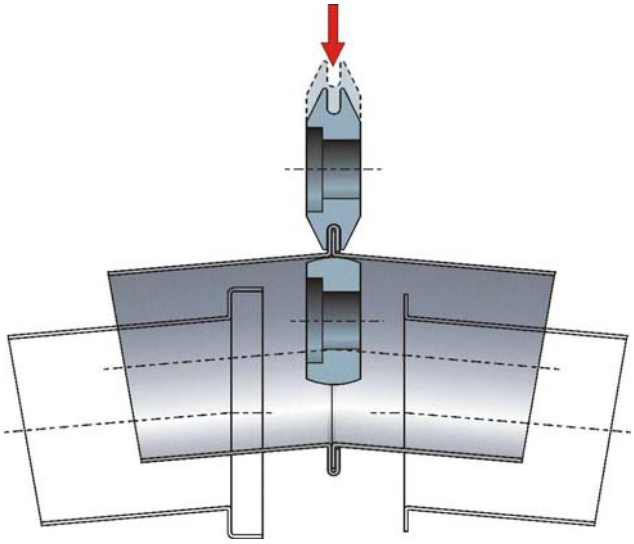
Square Wheels

Application	**Production of a valve sealing cap** (for insulating industry) ► Production of a square seam on one side of the pipe. The height of the flange depends on the width of the square seam.
Production	► Put pipe in and push it against the stop plate ► Move upper wheel down to the pipe ► Move upper wheel further down slowly and press a groove line into the material ► Move upper wheel down step by step until seam is finished
Required Option	► RAS 11.35/15, 12.35, 12.65 none
Available for	► RAS 11.11 / 15 / 31 / 32 / 35, 12.11 / 31 / 35 / 60 / 65



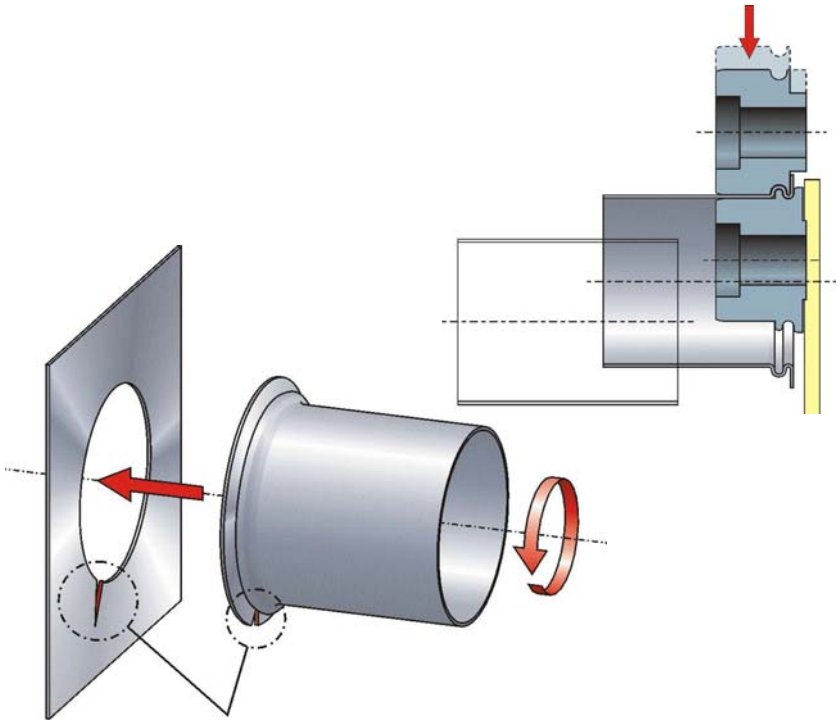
Knee Pipe Wheels

Application	**Closing the seam on an elbow pipe segment** ► Push a pipe with a double seam over one with a flange. ► The seam will be closed by using the knee pipe wheels. ► The throat working depth is relevant for the size of the elbow. Example: a 90° Elbow must come with 5 segments (max. angle/segment 22.5°).
Production	► Put pipe in and push it against the stop plate ► Move upper wheel down to the pipe ► Move upper wheel further down slowly and press a groove line into the material ► Move upper wheel down step by step until seam is finished
Required Option	► RAS 11.35/15, 12.35, 12.65 none
Available for	► RAS 12.11 / 31 / 35 / 60 / 65



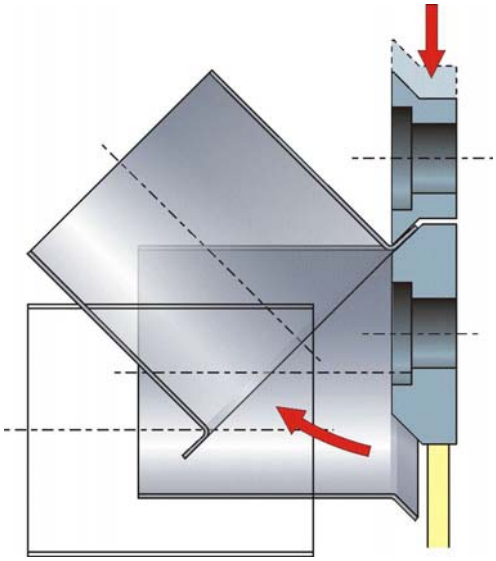
Screw-In Wheels

Application	► A screw-in seam can be used for a distribution box, for a connection between a pipe and a rectangular duct, and for the connection between a pipe and a blank. After the seam is finished, a nose needs to be bend out with a pliers. A nose needs to bend out also on the counter part.
Production	► Put pipe in and push it against the stop plate ► Move upper wheel down to the pipe ► Move upper wheel further down slowly and press a groove line into the material ► Move upper wheel down step by step until seam is finished ► Bend a 6 mm nose out
Required Option	► RAS 11.35/15, 12.35, 12.65 none ► RAS 12.31 / 12.60 large stop plate
Available for	► RAS 11.11 / 15 / 31 / 32 / 35, 12.11 / 31 / 35 / 60 / 65



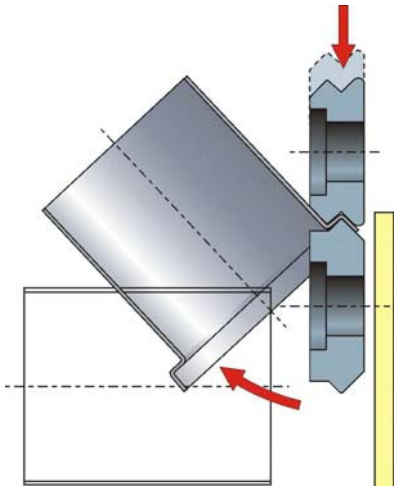
Bevel Flanging Wheels BD

Application	**Production of a flange** ► If a flange needs to be produced on a long pipe, these wheels are more favorable than the flanging wheels, as the pipe needs to be brought up only to a 45 degree position. For light gauge materials only. For flanges of more than 90 degrees.
Production	► Put pipe in and push it against the stop plate ► Move upper wheel down to the pipe ► Move upper wheel further down slowly and press a groove line into the material. Make sure, pipe contacts the stop plate at all time. ► Move pipe slowly up position to finish seam
Required Option	► Special stop plate for Bevel Flanging Wheels BD
Available for	► RAS 11.11 / 15 / 31 / 32 / 35, 12.11 / 31 / 35 / 60 / 65



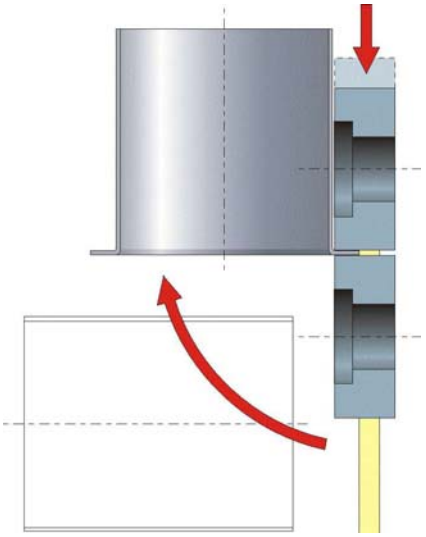
Bevel Double Seaming Wheels

Application	**Connection of two pipes** ► One pipe will get a double seam, the other a flange. Seam can be closed using the knee pipe wheels. **Closing the end of a pipe** ► Put a disc into the double seam. The double seam needs to be closed manually at some points. Then the seam can be closed using the knee pipe wheels. ► Bevel double seaming wheels are typically used for small diameter pipes (up to about 250mm).
Production	► Put pipe in and push it against the stop plate ► Move upper wheel down to the pipe ► Move upper wheel further down slowly and press a groove line into the material ► Move the pipe slowly up to finish seam
Required Option	► RAS 11.35/15, 12.35, 12.65 none ► RAS 12.31 / 12.60 divided stop plate
Available for	► RAS 11.11 / 15 / 31 / 32 / 35, 12.11 / 31 / 35 / 60 / 65



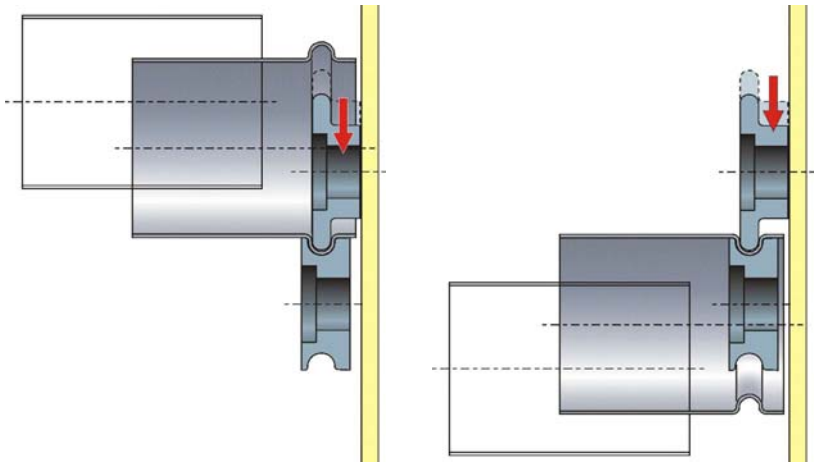
Chamfering Wheels BB

Application	**Production of a flange** ► The flange can be used as a connection flange, for an elbow seam connection and for an end cap. There are separate wheels available in a flat and a knurled execution depending on the material surface requirement. Comment: ► Knurled wheels = higher production speed ► Flat wheels = better optical finish
Production	► Put pipe in and push it against the stop plate ► Move upper wheel down to the pipe ► Move upper wheel further down slowly and press a groove line into the material ► Move the pipe slowly up to a 90 degree position to finish the seam.
Required Option	► RAS 11.35/15, 12.35, 12.65 none ► RAS 12.31 / 12.60 divided stop plate
Available for	► RAS 11.11 / 15 / 31 / 32 / 35, 12.11 / 31 / 35 / 60 / 65



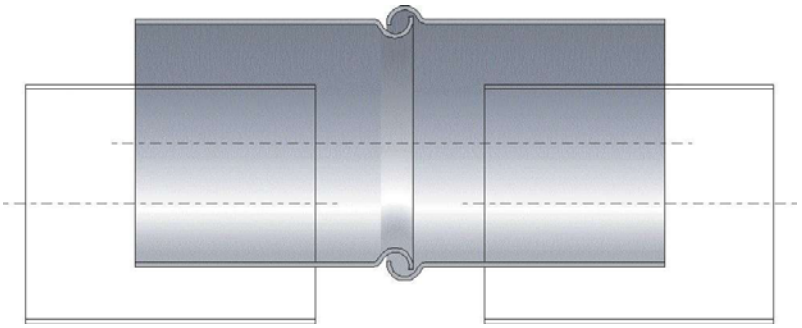
Seaming Wheels S

Application	**Preparing a connection between 2 pipes** (insulating industry) ► Stop seam for pipe connection ► stiffening the end of a pipe ► Safety seam at the end of the pipe (half circle) **Preparing the end of the pipe for a wire inlet** ► The seam will be completed by using the wiring wheels **Safety edge on a tube**
Production	► Put pipe in and push it against the stop plate ► Move upper wheel down to the pipe ► Move upper wheel further down slowly and press a groove line into the material ► Finish seam by moving the upper wheel down step by step
Required Option	► RAS 11.35/15, 12.35, 12.65 — none ► RAS 12.31 / 12.60 — divided stop plate (sometimes large stop plate depending on application)
Available for	► RAS 11.11 / 15 / 31 / 32 / 35, 12.11 / 31 / 35 / 60 / 65



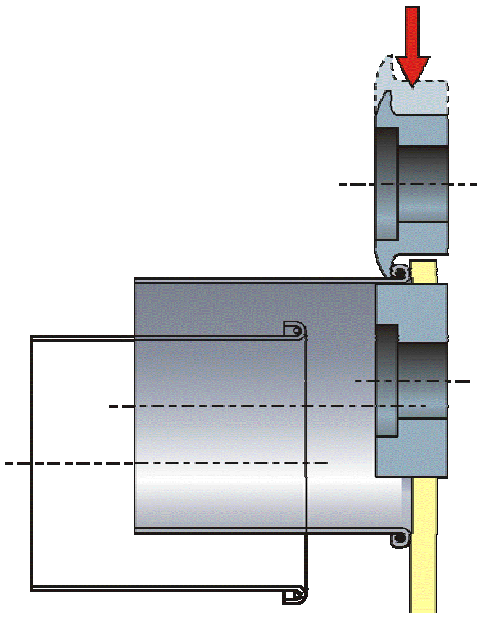
Swaging Wheels V

Application	**Preparing a connection between 2 pipes** (insulating industry) ► The blank will be rounded and screwed together on the long side. Then a seam will be produced on each pipe. The inside pipe will get a seam to the inside. The outside pipe will get a seam to the outside. Next, remove screws on the long side of the outside pipe and put it over the inside pipe. Finally put the screws back into place on the outside pipe. **Preparing the end of the pipe for a wire inlet** ► The seam will be completed by using the wiring wheels **Safety edge on a tube**
Production	► Put pipe in and push it against the stop plate ► Move upper wheel down to the pipe ► Move upper wheel further down slowly and press a groove line into the material ► Finish seam by moving the upper wheel down step by step
Required Option	► RAS 11.35/15, 12.35, 12.65 none ► RAS 12.31 / 12.60 divided stop plate
Available for	► RAS 11.11 / 15 / 31 / 32 / 35, 12.11 / 31 / 35 / 60 / 65



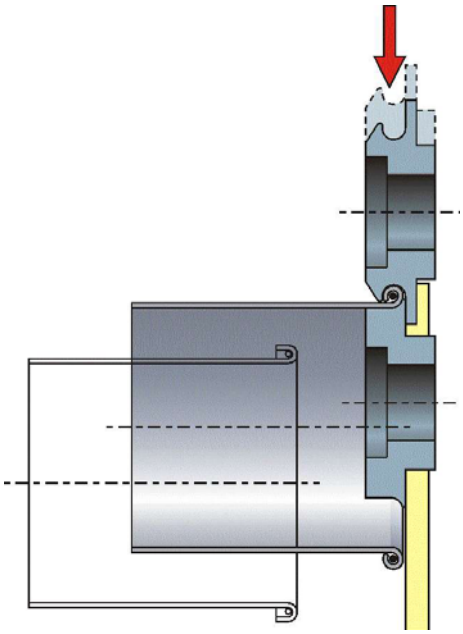
Wiring Wheels ZA

Application	**Safety edge on a pipe** (Wire inlet) ► The edge of the pipe will be formed as far as possible by using the swaging wheels. Next, put a wire into the seam with the corresponding diameter. The seam will be closed with a **straight end** by using the wiring wheels ZA.
Production	► Put pipe in and push it against the stop plate ► Move upper wheel down to the pipe ► Move upper wheel further down slowly and press a groove line into the material ► Finish seam by moving the upper wheel down step by step
Required Option	► RAS 11.35/15, 12.35, 12.65 none ► RAS 12.31 / 12.60 divided stop plate
Available for	► RAS 11.11 / 15 / 31 / 32 / 35, 12.11 / 31 / 35 / 60 / 65



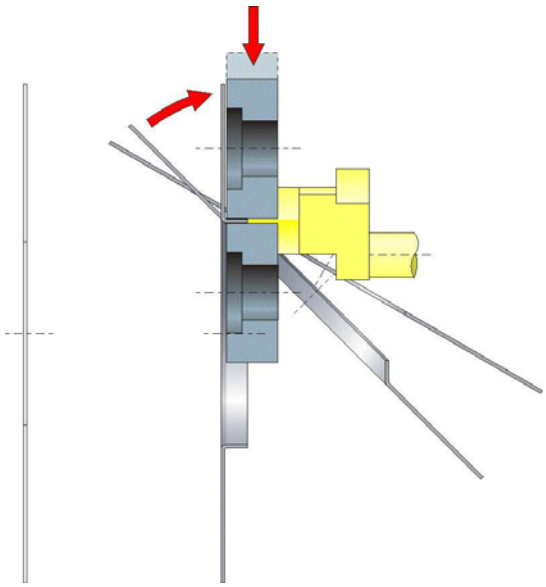
Wiring Wheels ZB

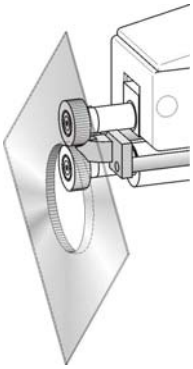
Application	**Safety edge on a pipe** (Wire inlet) ► The edge of the pipe will be formed as far as possible by using the swaging wheels. Next, put a wire into the seam with the corresponding diameter. The seam will be closed with a **round end** by using the wiring wheels ZB.
Production	► Put pipe in and push it against the stop plate ► Move upper wheel down to the pipe ► Move upper wheel further down slowly and press a groove line into the material ► Finish seam by moving the upper wheel down step by step
Required Option	► RAS 11.35/15, 12.35, 12.65 none ► RAS 12.31 / 12.60 divided stop plate
Available for	► RAS 12.11 / 31 / 35 / 60 / 65



Round Stop

Application	**Connection between a pipe and a blank** ► Production of a flange on a hole inside a blank. A pipe or pipe segment can be put over this flange. This allows to connect them with the blank by soldering, riveting, screwing or sticking them together. The pipe can have just a cylindrical shape or can show a flange to the outside.
Production	► Put blank in with the hole directing in a 45° angle position and push it against the stop ► Move upper wheel down to the blank ► Move blank up to a 90 degree position until the flange is finished. Finish seam by moving the upper wheel down step by step
Required Option	► Chamfering Wheels BB, Round Stop
Available for	► RAS 11.15 / 35, 12.35





Tube Seam Wheels

Application	**Connection between tube and small diameter hydraulic hose** (DIN 71 550) ► Used for tight connection between a flexible hose and an aluminum, copper, mild steel or stainless steel tube. The shape of these seams is standardized and described in DIN 71550. A special tool forms these beads in tubes with diameters as little as 10 mm.
Production	► Put straight tube over the lower small diameter lower wheel and push it against the stop ► Move upper wheel down to the tube ► Move blank upper wheel slowly down and form the seam
Required Option	► none
Available for	► RAS 11.15 / 35, 12.35; 12.65