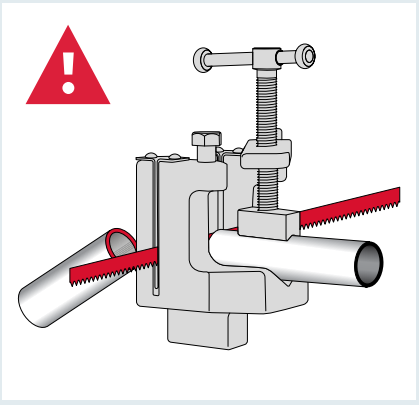
CUTTING RING GAUGE (SRD-LEHRE)

The HANSA-FLEX cutting ring gauge is ideal for checking the final assembly of type SRD cutting rings made of steel and having the marking "HF". It is suitable for sizes 10L to 42L as well as 14S to 38S. The cutting ring gauge can also be used to check whether the pipe has been cut precisely perpendicular to the pipe axis.

PRECISE CUTTING AND DEBURRING OF PIPES

Only by following the correct procedure when cutting the pipe can it be properly prepared for use in assembling a connection that meets the specified requirements. A cutting device helps to cut the pipe exactly perpendicular to its axis. Then a manual deburrer removes burrs from the inside and outside of the pipe to produce an even chamfer.

- A clean, square-cut pipe and a slight, even chamfer are essential to installing the cutting ring correctly. Paying attention to these points minimises the risk of leaks and assembly faults.

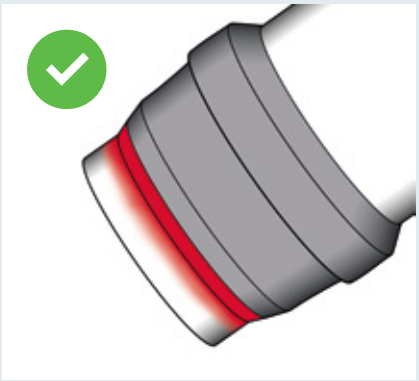


Cut the pipe to length perpendicular to its axis, deburr and clean

CHOOSING THE RIGHT PIPE FOR A RELIABLE CUTTING RING ASSEMBLY

A pipe of the permitted type that is within the specified dimensional limits is required to install the cutting ring correctly. For example, seamless, cold-drawn tubes for precision applications in accordance with DIN EN 10305-4 or stainless steel tubes in accordance with DIN EN 10216-5 meet the tolerance requirements. The pipe and the cutting ring must match each other precisely in order for the connection to perform optimally – a crucial precondition for the system to function reliably. The cutting ring gauge is not suitable for use with cutting rings made of stainless steel or with cutting rings marketed by other companies.

A visual inspection of the shoulder is also necessary to check for correct assembly. Only by compliance with these requirements can you achieve a safe and durable cutting ring connection.



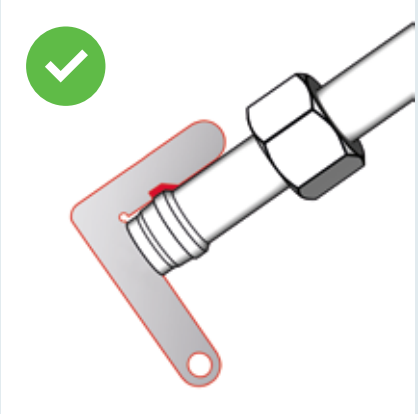
Check the cutting ring for correct seating and shoulder extent (approximately 80% of the front cutting edge covered)

INSTRUCTIONS FOR CHECKING AND FINAL ASSEMBLY OF THE CUTTING RING FITTING

Use the cutting ring gauge as follows to check that the "SRD" type cutting ring is correctly positioned.

- The cutting ring gauge is always used after pre-assembly. (For proof of final assembly state)
- In this context, pre-assembly is normally defined as an assembly in which 1 ½ full turns are applied after the "noticeably increased force" stage.
- Please observe the technical information provided by HANSA-FLEX concerning correct cutting ring assembly.

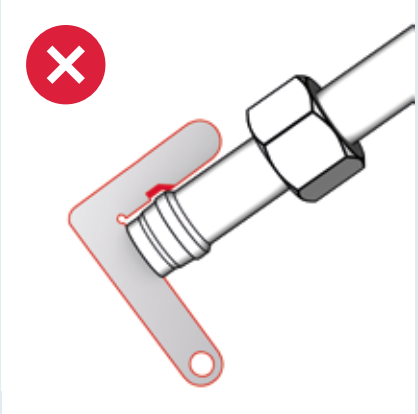
The following figures show the difference between the final assembly and a pre-assembly cutting ring state.



Check the cutting ring for correct seating using the cutting ring gauge, final assembly state

Figure 1: Cutting ring in final assembly state
The gauge lies flat on the pipe, the cutting ring (SRD) is in the correct position and fits exactly into the recess in the profile.

Figure 2: The pre-assembled cutting ring has not yet adequately cut into the pipe, the gauge does not lay flat and the remaining distance shows as a gap between the pipe and the gauge, indicating that the cutting ring is not in the final position.
Repeat the pre-assembly so that the cutting ring cuts further into the pipe. Check for correct seating after the repeated pre-assembly, which should be as shown in Fig. 1.

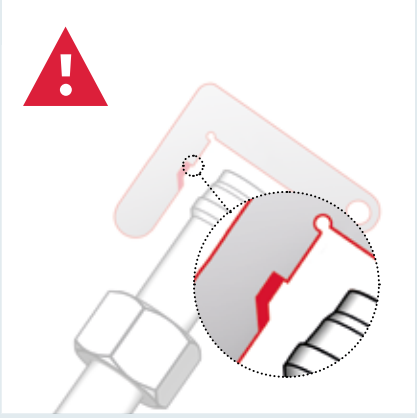


Check the cutting ring for correct seating using the cutting ring gauge, pre-assembly state

REGULAR INSPECTION OF THE SRD-LEHRE

The SRD-LEHRE must be regularly inspected because it is a dimensional measuring instrument. A visual inspection is a suitable method of inspection.

- ✔ Visual inspection for any damage, e.g. bending of the gauge.
- ✔ Degree of wear at the corners in the profile.



Check and visual inspection of the cutting ring gauge

Figure 3: Profile – the magnified circle shows a detailed view
The dimensional shape of the cutting ring gauge is important for the checking process. Look for wear along the whole profile in particular. The smallest deviation or damage of the profile can adversely affect the measuring accuracy.

If signs of wear are apparent, gauge replacement is recommended. The following figure shows the relevant area to be inspected.