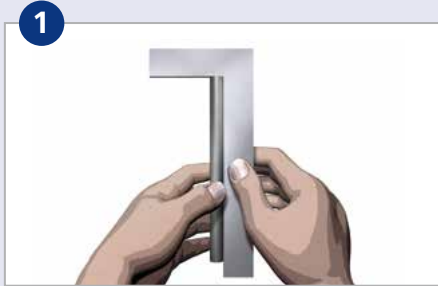




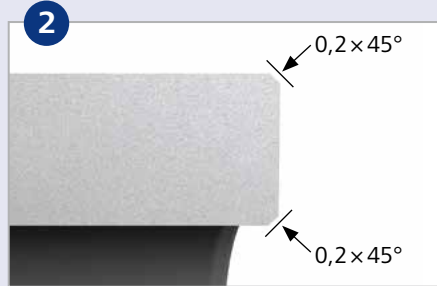
# Make better connections!

## Assembly instructions for carbon steel cutting ring

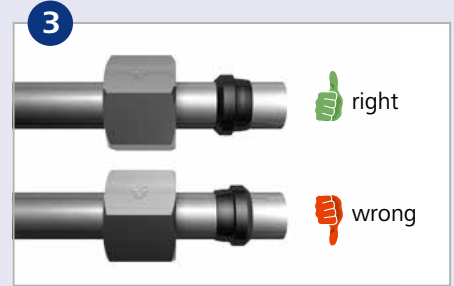
Pre-assembly by suitable machine and proper tooling



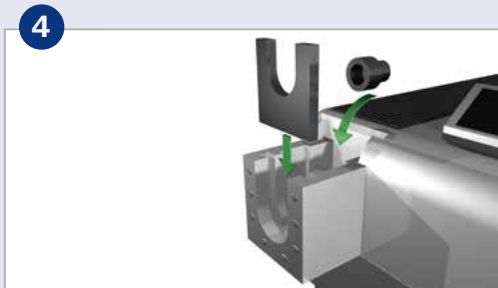
**1. Saw the tube off square.**  
An angular deviation of  $0,5^\circ$  relative to the tube axis is permissible.  
**Please note!!!** Do not use pipe cutters.  
Use reinforcing sleeve with thin wall tubes.



**2. Lightly deburr the tube ends and clean thoroughly.**  
The tube end within the assembly length must be free from swarf, dirt and paint.



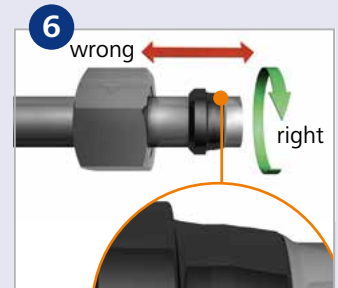
**3. Assembly of cutting ring**  
Place nut and cutting ring on tube as shown.  
**Please note!!!** Ensure that the cutting ring edge is facing the tube end.



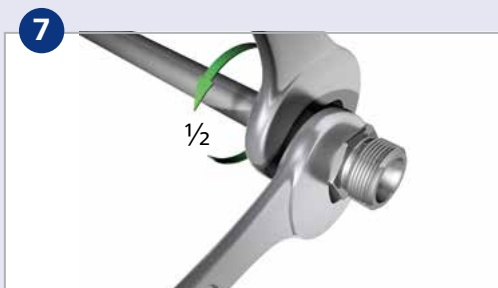
**4. Insert proper tools. Pressure setting according tube dimension.**  
Pay attention to clean work environment. Check for wearout, clean and lubricate regularly.  
**Please note!!!** Set preassembling pressure as per the machine manual.



**5. Insert tube for pre-assembling**  
Place tube with nut and PDR into the tools. Press tube into the tool so that it bottoms out. Hold position, start machine assembling process as per machine manual. After performing pre-assembly, remove tube for visual check.



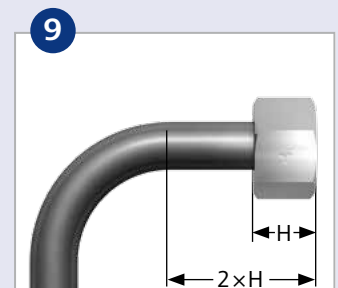
**6. Control**  
Check penetration of cutting edge. A visible ring of material should fill the space in front of the cutting ring end face. Cutting ring may turn on tube but should not be capable of moving in an axial direction.



**7. Final assembly**  
Screw the nut on until a definite increase in torque is felt. Hold fitting body firmly and turn the nut another  $\frac{1}{2}$  turn.  
**Please note!!!** Deviating from the number of turns of the nut reduces the nominal pressure and the service life of the connection.



**8. Repeated assembly**  
Each time the fitting has been loosened, re-assembly must be performed with the same torque as initial assembly. Hold the body rigid. Recommended to use spanner extension as required.



**9. Minimum length of straight tube end for tube bends**  
For tube bends, the length of the straight tube end up to the start of the bend radius must be at least twice the nut length. The straight segment of the tube up to  $2 \times H$  must not be oval or tapered.