

Training on the use of Complex ring



PART 01 How to use the Complex ring

PART 02 Complex ring installation notice

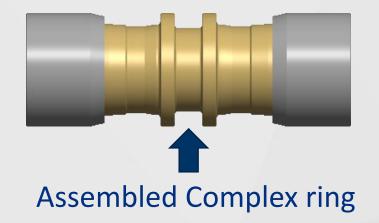
PART 03 Complex ring standard size

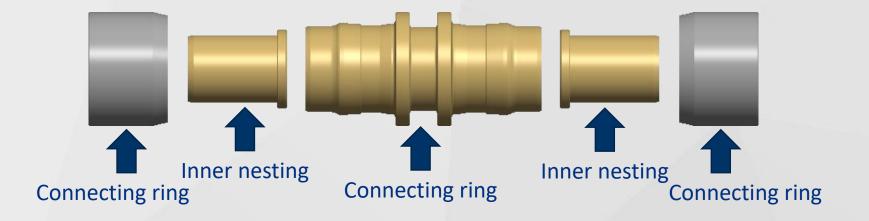
PART 04 Complex ring using skills

PART 05 Complex ring repair instructions



#### **★**Complex ring assembly exploded view

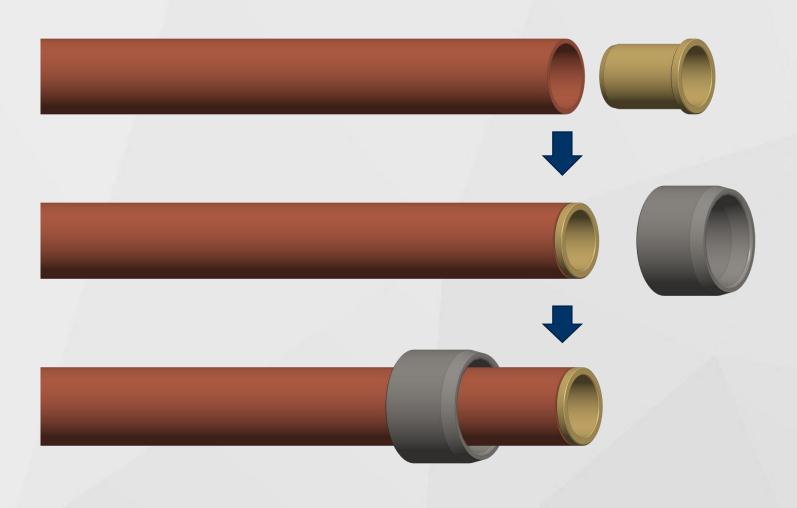




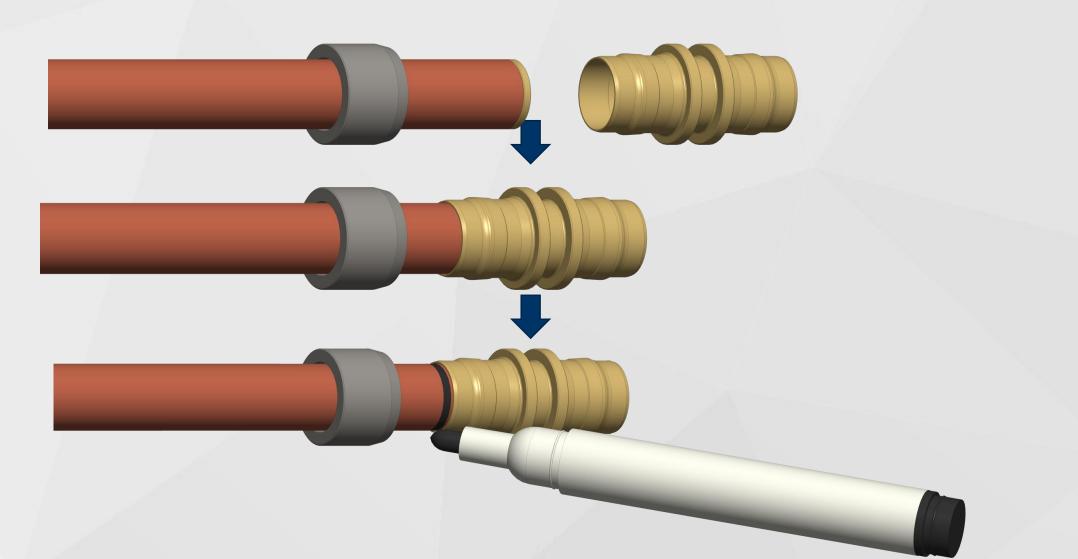
1. Confirm the outer diameter and wall thickness of the pipe, select the corresponding Complex ring and nesting



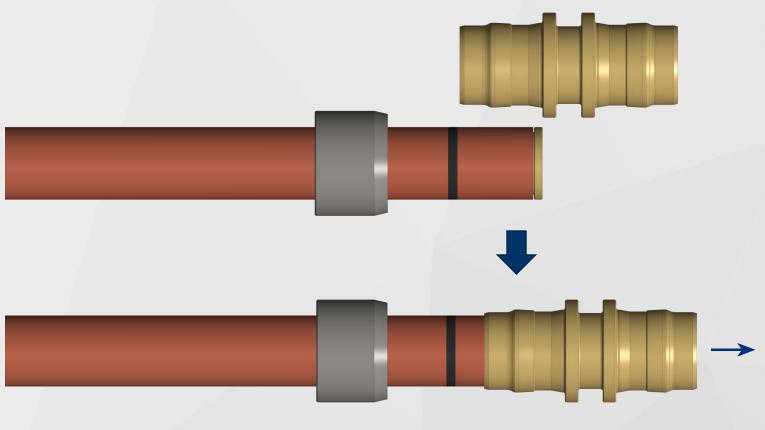
2. Insert the inner nest into the end of the pipe to be connected, and then put the connecting ring outside of the pipe as shown in the following photo.

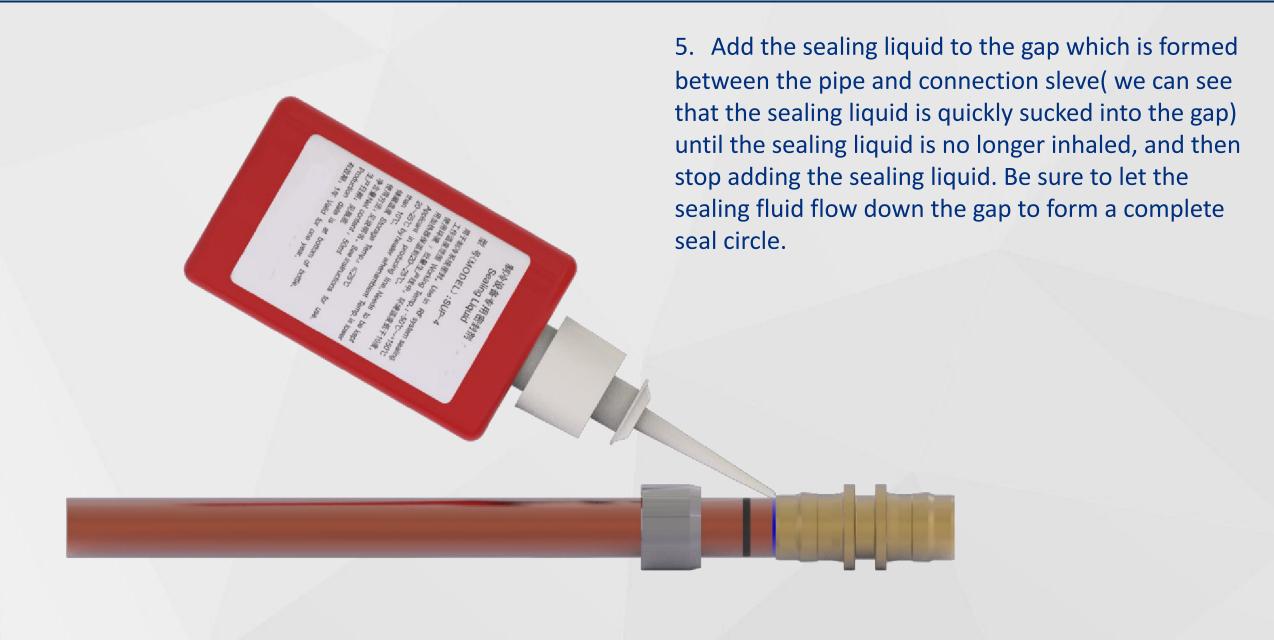


3.Insert the pipe which has been into the inner nestig to one end of the connecting sleeve and draw a marking line on the wall of the connecting sleeve port



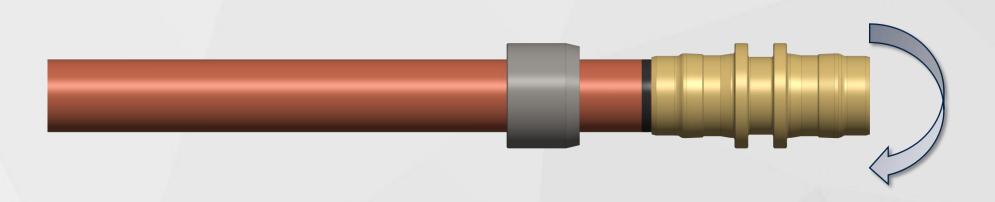
4. Check the length that the tube inserted into the connecting sleeve, then insert the tube into the connecting sleeve again, and then pull the connecting sleeve out of the tube end with 1/3~1/2 length based on the marking line.





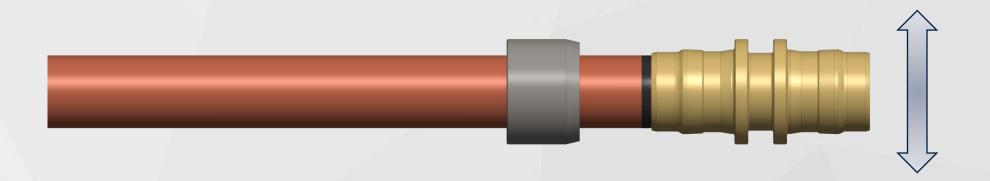
6. Insert the tube into the complex ring sleeve for the last time and reach the reserved mark line position. Note:

① please rotate at least one turn to make the sealing liquid cover evenly in the gap When rotating the complex ring sleeve or tube, also observe the end gap of the connecting sleeve. If the sealing liquid is insufficient, please add a little more. Until the sealing fluid is no longer drawn into the gap;

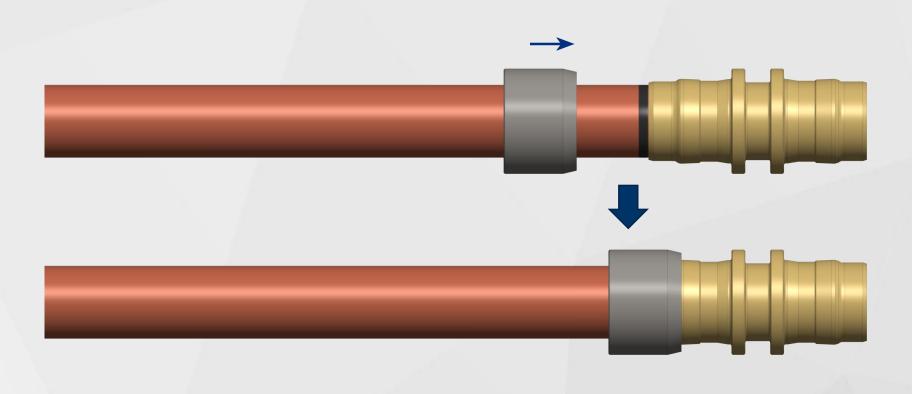


#### Note:

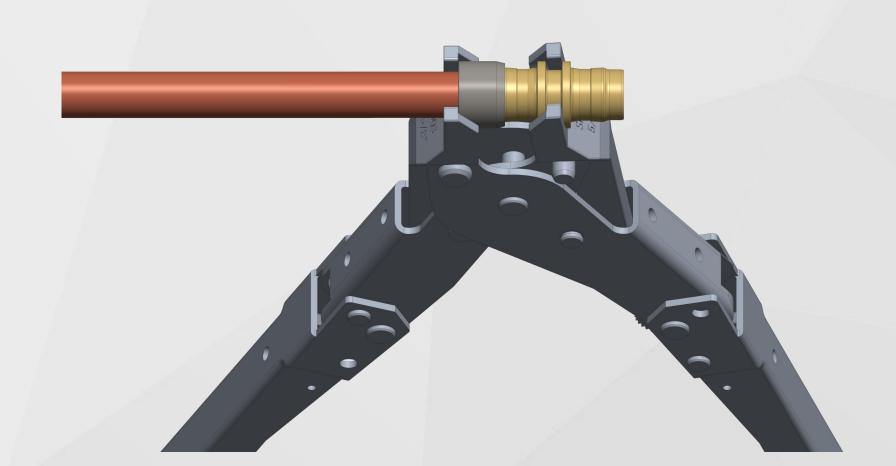
When the Complex ring sleeve or the pipe can't rotate, we can swing the sleeve to upper, lower, front, rear or left and right, which can also make the seal liquid evenly cover in the gap; There is a leakage of the sealing liquid at the gap of the end of the connecting sleeve when shaking or swinging. This overflow won't be a lot, and maybe only a little bit. It will be a ideal suitation that the overflow liquid can be sucked into the gap When shaking. If there is no sealing liquid during the gap, please add a little more until the sealing liquid is no longer sucked into the gap.



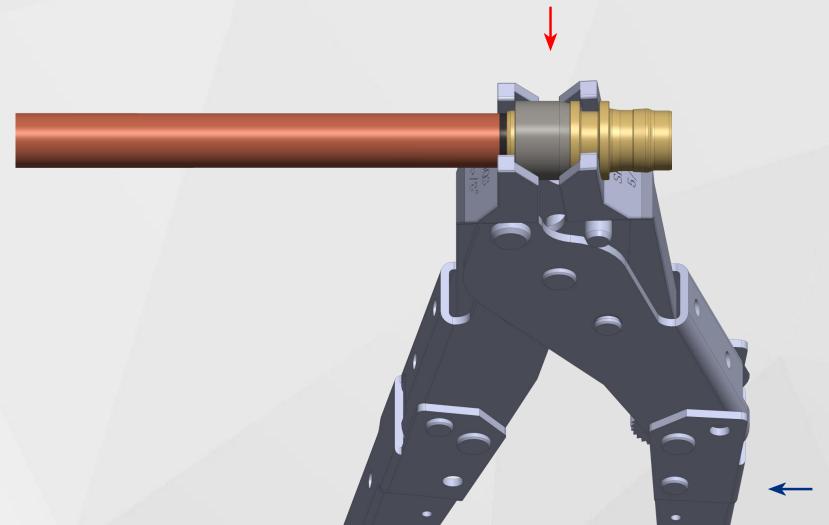
7. Please put the Complex ring in right place After the sealing liquid are fully added.



8. Open the manual crimping pliers SDY-25, insert the connected pipe into the jaws, one jaw is stuck in the middle of the connecting sleeve, and the other jaw is stuck in the outer end of the Suhring.



9.Start shaking the handle, When the complex ring moves to the perfect position of the connecting sleeve, which means no gap between the sleeve and suhring, then stops operating. Repeat the above steps to connect the other end.



★ Tools and products you may required for Solderless connection process of complex ring

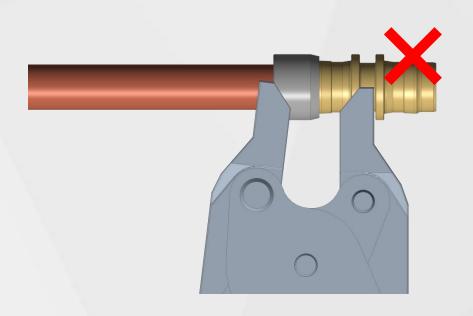


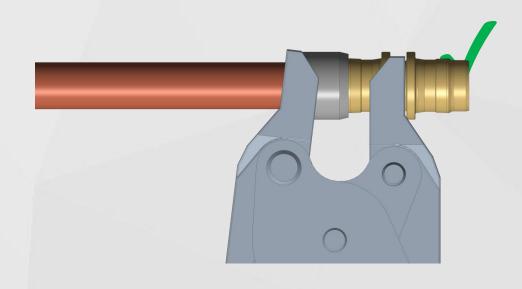
**⑤Manual crimping pliers SDY-25W** 

## 02 The Complex ring installation notice

1. Wrong example: the complex ring is not fully stuck into the clamp head

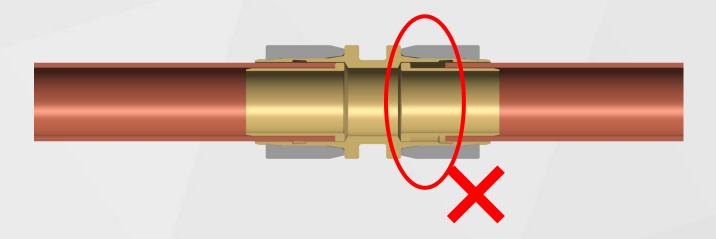
Standard operation: the connecting sleeve and the complex ring are in the bottom of the jaw



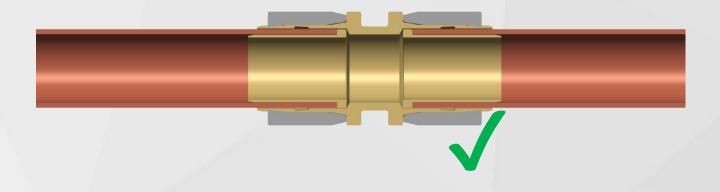


## **02 The Comple ring installation notice**

2. Wrong Sample: The pipe and sleeve are not in the right position

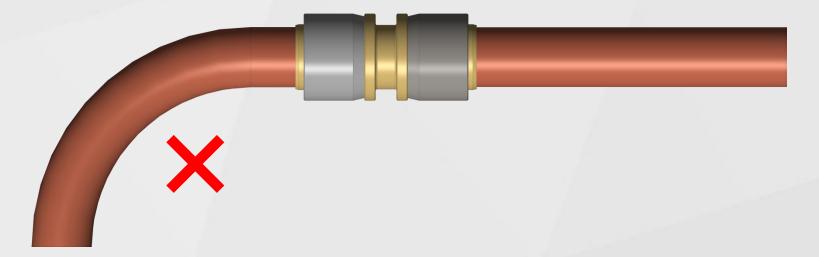


Standard: The pipe and sleeve are in the right position



## **02 The Complex ring installation notice**

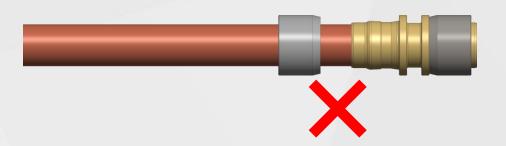
3. Wrong: There is an elbow at the edge of the complex ring after finishing the crimping.



Sandard: Make sure there is a certain straight length beside the complex ring when the crimping is completed, avoid too much bending and twisting for the pipe.

## 02 The Compex ring installation notice

4. Wrong: No use the sealing liquid



Standard: Add enough sealing liquid, make sure it covers the gap evenly



# 03 The Complex ring standard size

Standard tube specifications for complex rings (non-standard specifications can be customized)

| Metric O.D | Inch O.D | Wall<br>Thickness | Metric O.D | Inch O.D | Wall<br>Thickness |
|------------|----------|-------------------|------------|----------|-------------------|
| 6.35mm     | 1/4"     | 0.8mm             | 28.60mm    | 1-1/8"   | 1.2mm             |
| 9.52mm     | 3/8"     | 0.8mm             | 31.75mm    | 1-1/4"   | 1.5mm             |
| 12.70mm    | 1/2"     | 0.8mm             | 34.92mm    | 1-3/8"   | 1.5mm             |
| 15.88mm    | 5/8"     | 1.0mm             | 38.10mm    | 1-1/2"   | 1.5mm             |
| 19.05mm    | 3/4"     | 1.0mm             | 41.30mm    | 1-5/8"   | 1.5mm             |
| 22.22mm    | 7/8"     | 1.2mm             | 44.45mm    | 1-3/4"   | 1.5mm             |
| 25.40mm    | 1"       | 1.2mm             |            |          |                   |

## 04 The Complex ring using skills

1. Pipe treatment: Usually our copper pipe will have internal burrs after being cut with a cutter. It will be quickly to remove the burrs with electric burrs, then use manual tools to clean debris and small burrs.

★Recommendation: Try to buy and use the excellent quality cutter. If the copper tube is cut, the outer diameter of the copper tube will be reduced, and the diameter will be relatively large, even if we remove the burrs with the trimping tool, it is also very difficult to insert the sleeve to the pipe.



PS: When triming the copper pipe, the pipe should maintain a certain slope to avoid debris entering the pipe.

## 04 The Complex ring using skills

2. Pipe surface treatment: If there is oxide scale, impurities, oil, water, etc. on the surface of the pipe, wipe it with a rag, then polish the pipe end with the sandpaper.



## 04 The Complex ring using skills

3. When the outer surface of the connecting sleeve is covered with sealing liquid, the complex ring should not be moved to the position of the connecting sleeve; if the complex ring has moved to the position of the connecting sleeve, please complete the crimping as soon as possible, and do not wait;

When the sealing liquid has been added between the connecting sleeve and the tube, and the ambient temperature is higher than 28°C, please crim it as soon as possible, and do no wait.

## **05 The Complex ring repair instructions**

If there is a leakage due to improper operation, we should cut the complex ring down with tube cutter, and add a connecting pipe to reconnect.





Tks for your time!