

ASSEMBLY INSTRUCTION DS AND S CUTTING RING

Final assembly with EMB OPTICAM and subsequent final assembly in tube fitting

Our final assembly machine OPTICAM offers an optimal and process-safe option for cutting ring assembly in steel and rustproof steel.

1. Minimum dim. H+L

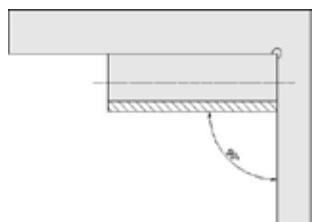
| Series | LL | | | | L | | | | | | | | | | S | | | | | | | | |
|---------|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|
| Tube OD | 4 | 5 | 6 | 8 | 6 | 8 | 10 | 12 | 15 | 18 | 22 | 28 | 35 | 42 | 6 | 8 | 10 | 12 | 16 | 20 | 25 | 30 | 38 |
| H min. | 24 | 25 | 25 | 26 | 31 | 31 | 33 | 33 | 36 | 38 | 42 | 42 | 48 | 48 | 35 | 35 | 37 | 37 | 43 | 50 | 54 | 58 | 65 |
| L min. | 30 | 32 | 32 | 33 | 39 | 39 | 42 | 42 | 45 | 48 | 53 | 53 | 60 | 60 | 44 | 44 | 47 | 47 | 54 | 63 | 68 | 73 | 82 |

2. Oil assembly cones (OPTI/F), i.e. treat high-grade steel cutting rings with EMB lubricant paste.

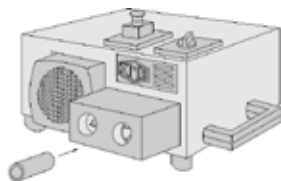
3. Saw off the tube to be laid at a right angle.



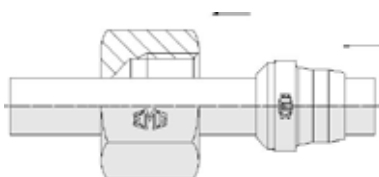
Do not use a pipe cutter!



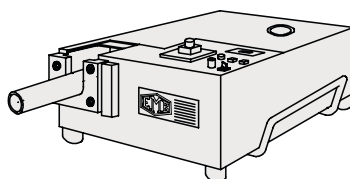
4. Deburr tube on inside and outside, for example using the EMB OPTIGRAT 642.



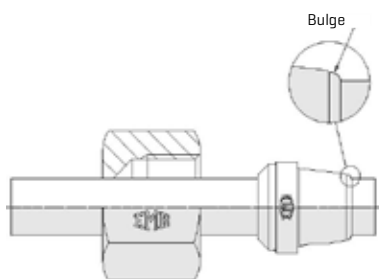
5. Slide the screw connection parts over the end of the pipe as illustrated.



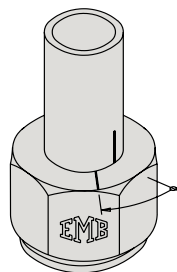
6. Insert the tube into the assembly connecting piece of the EMB OPTICAM assembly machine and press firmly into position at the interior cone. Nut and cutting ring sit in front of the mounting plate. Press start and wait until the machine has completed assembly. Then take out the tube.



7. After assembly it must be examined whether a visible shoulder throw-up is available in front of the first cut. The ring may rotate on the tube but it may not be moveable in an axial direction



8. Insert the thus installed tube into the screw socket and tighten the union nut until there is a noticeable increase in force [pressure point]. Afterwards screw in $30^\circ - 60^\circ$ with a suitable wrench. Hold the screw connection with a suitable wrench.



Tube quality

We recommend the use of seamless precision steel tube with dimensions in accordance with DIN EN ISO 10305 Part 4, Material: E235, NBK.

Tubes made from rust and acid-proof material must be seamlessly cold-drawn, scale-free and heat-treated in accordance with DIN EN 10216-5 - X6 CrNiMoTi17-12-2-CFD and exhibit tolerances in accordance with DIN EN ISO 10305-1.