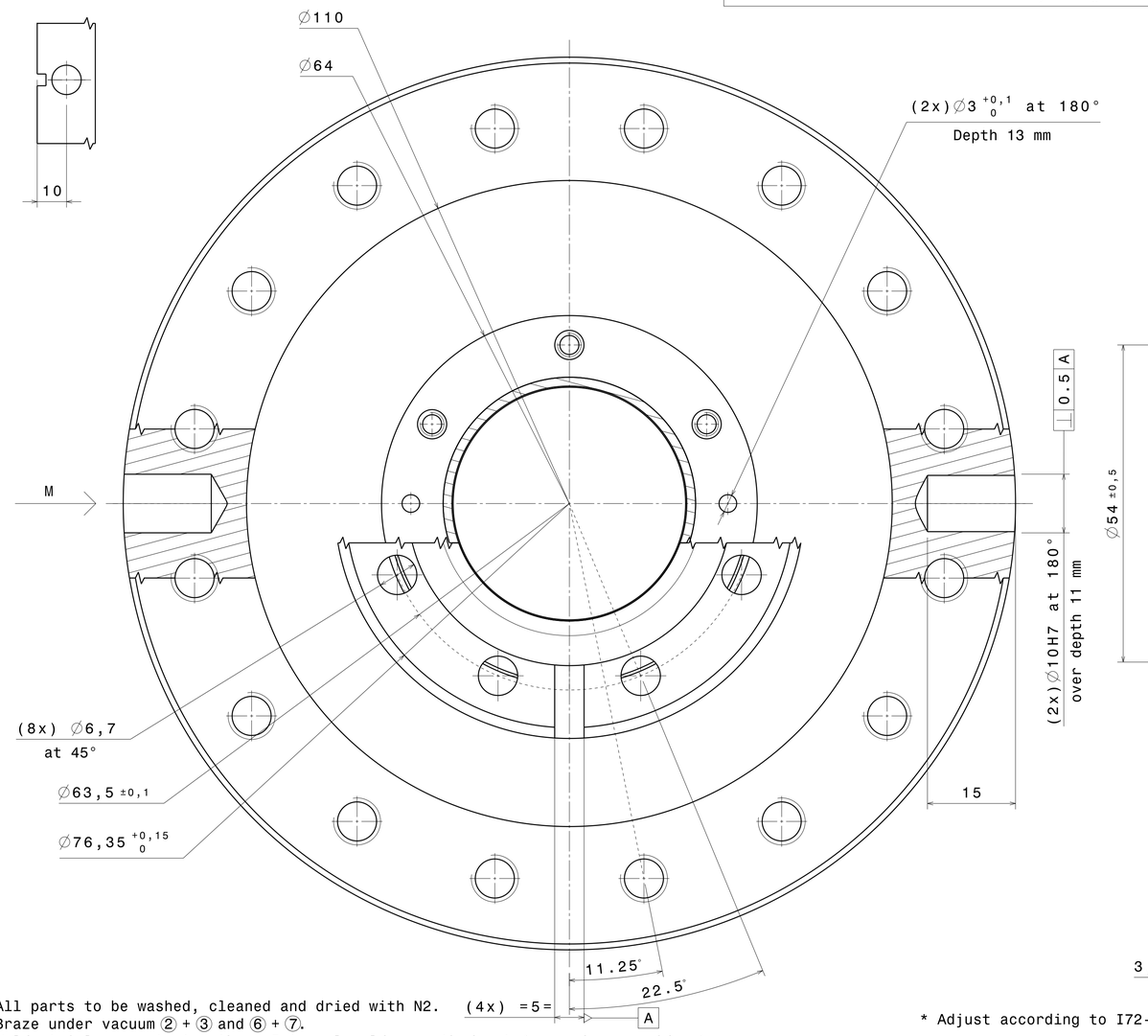
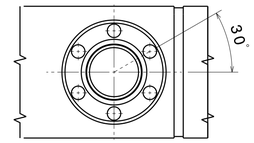
Respect the angular orientation

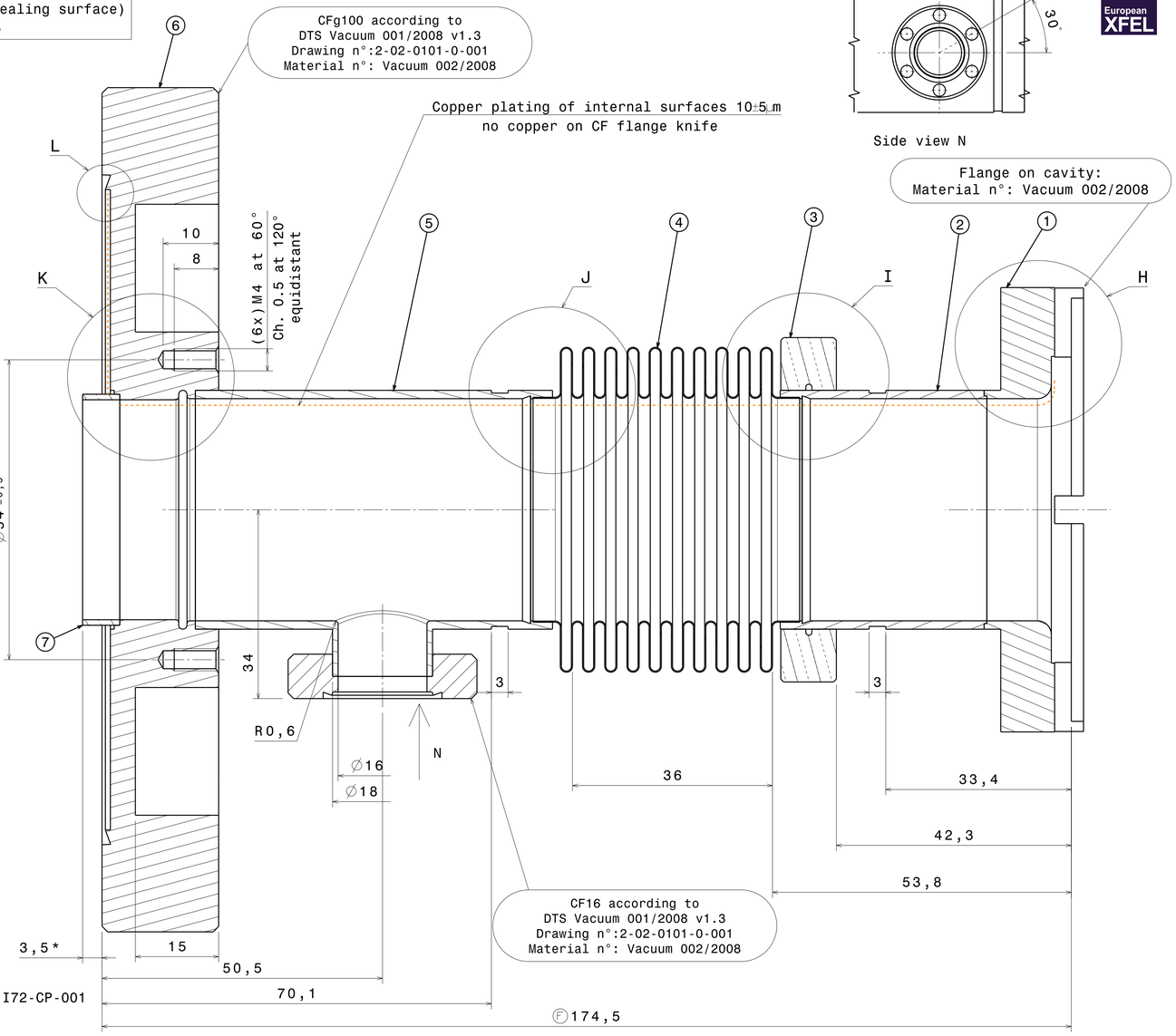
Protect copper ring and flanges (knife or sealing surface) from scratches or any damage.

Side view M





Side view N

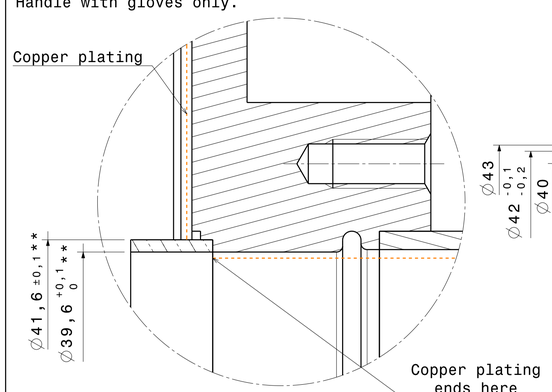


* Adjust according to I72-CP-001

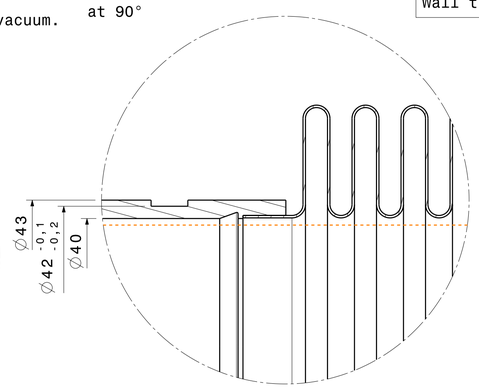
1) All parts to be washed, cleaned and dried with N2.
2) Braze under vacuum ② + ③ and ⑥ + ⑦.
3) Weld stainless parts together. Internal welds smoothed out (no peaks nor ridges).
4) H2 degas in clean vacuum oven at 950°C for 2 hours.
5) Copper plating of internal surfaces 10±5 µm without H2:
   -copper plating also on face of big flange.
   -presence of copper plating inside the tubular junction for CF16 flange is acceptable.
6) Bake the assembly for 2 hours at 400°C under vacuum.

Handle with gloves only.

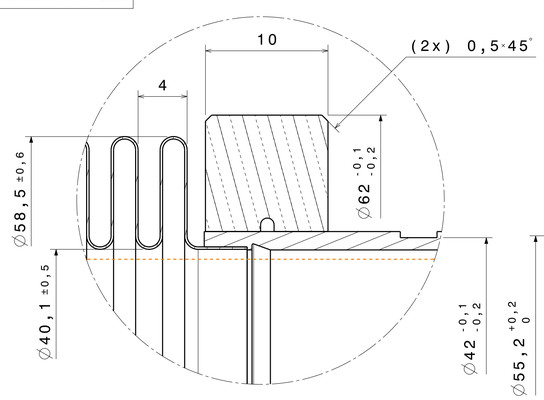
Wall thickness 0.2mm



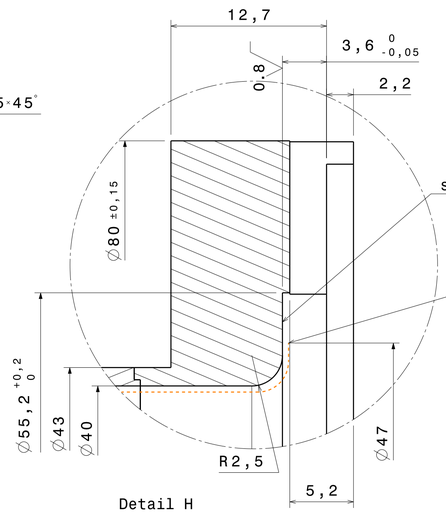
Detail K
Scale : 4:1 ** Re-machine copper ring after brazing



Detail J
Scale : 4:1



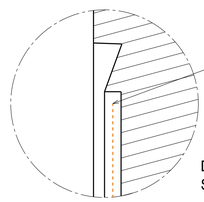
Detail I
Scale : 4:1



Detail H
Scale : 4:1

No radial scratches and no copper on the sealing surface admited

Copper plating ends here



Detail L
Scale : 6:1

Rep.	Designation	Material
1	Flange on cavity	316LN
2	Tube bellow/flange on cavity	316L
3	Copper ring for 4K interface	Cu OFHC
4	Cold bellow (10 waves)	316L
5	Tube bellow/cold big flange	316L
6	Cold big flange	316 LN
7	Copper ring for cold big flange	Cu OFHC

Format A1

Ind.	Date	Modification	By

X-FEL Coupler

Cold Part

Cold external Conductor

Gen. Tol.: -ISO 8015 -ISO 2768 class mH
Surface finish: -ISO 1302 Ra 1.6
Material

Drawn by	Y.PEINAUD	30/11/09
Checked by	M.LACROIX	30/11/09
Approved by	A.FALOU/W-D.MÖLLER	

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Scale 2/1

I72-CP-004

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