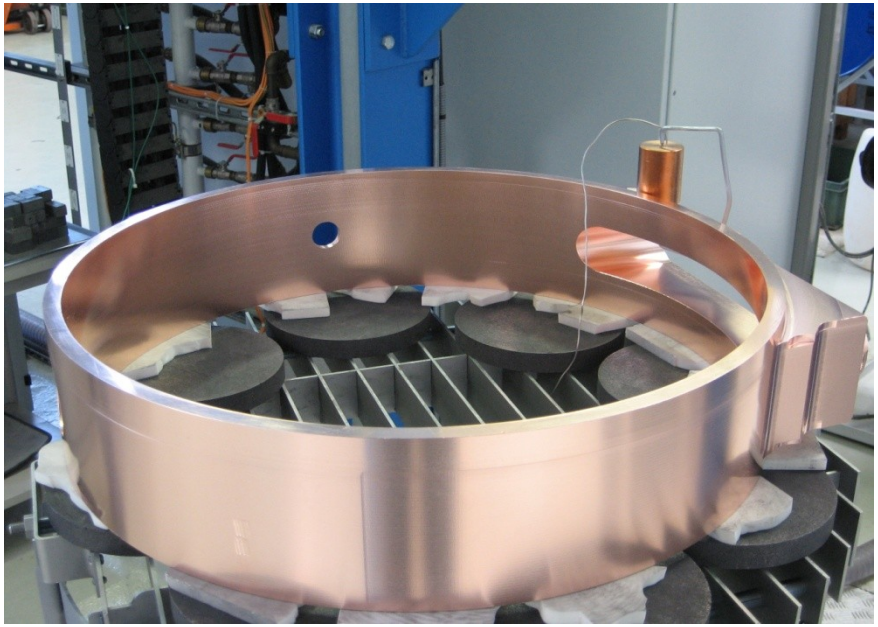
EN Engineering Department

Brazings and heat treatments for the PIMS

A. Vacca

Thermal treatment for copper of central ring



2 thermal treatments and 2 rough machining steps

Program : ↗ 150°/h 600° 3h

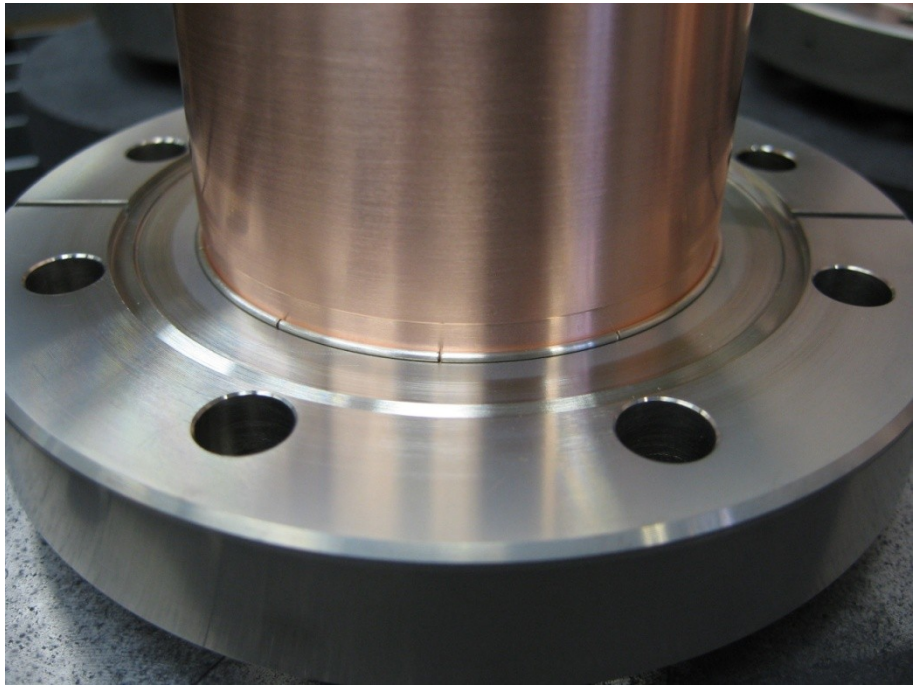
Thermal treatment for stainless steel flanges (waveguide flange)

The flange for the waveguide coupler is rough machined, and then heat treated with:

Programme : ↗ 300°/h 950° 2h

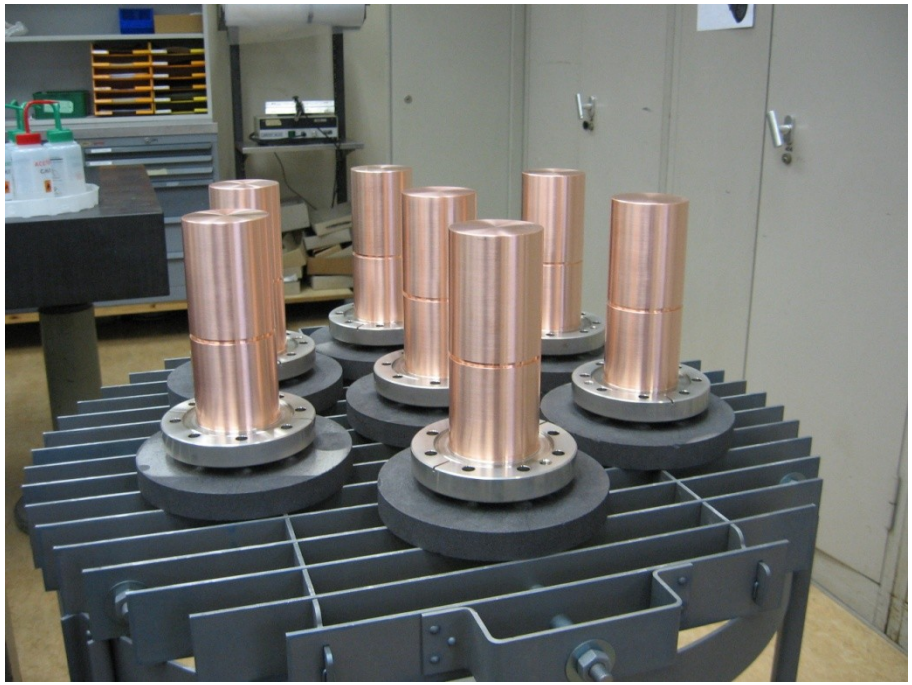
Final machining after heat treatment

Brazing of fixed tuners



Brazing alloy SCP1 (palabraze 5)
Ø1mm.

Program : ↗ 300°/h 780° 2h30’
↗ 100°/h 815° 6’



Brazing of circular flanges on copper tubes

The brazing of the 2 “Conflat” flanges onto the copper tubes is done before the final brazing:

Brazing alloy SCP1 (palabraze 5) Ø1mm.

Program: ↗ 300°/h 780° 2h30’
↗ 100°/h 815° 6’

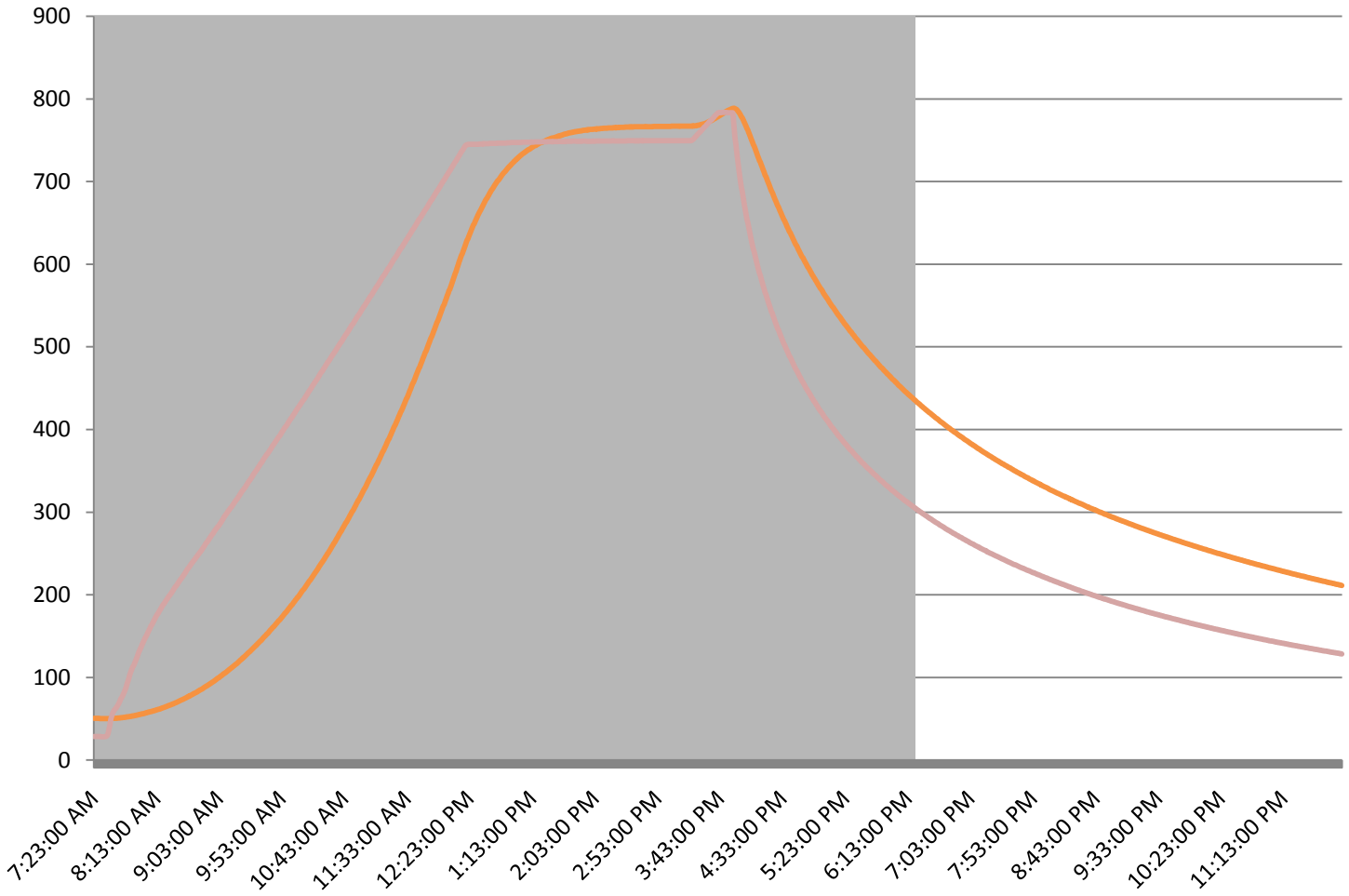
Final brazing of central ring (ring type 4)

Eutectic brazing alloy Ag/Cu Ø1mm.

Program: ↗ 150°/h 765° 3h
↗ 100°/h 785° 12’

2 Thermocouples measure the temperature on the copper and on the waveguide flange.

Final brazing of central ring



Final brazing of central ring