



Commercial : Anca-Stefania Necula, IPT-PI-AT, anca.stefania.necula@cern.ch
contact

Technical : Haavard Haalien, TE-MS-C-MNC, haavard.haalien@cern.ch
contact Roberto Lopez, TE-MS-C-MNC, roberto.lopez@cern.ch

Requirements for the SPS induction brazing machine.

In the SPS tunnel, all the dipole and the quadrupole magnets (MBB, MBA, QD and QF) are connected to the powering system using an induction heater-brazing machine. The pipes diameter is 26 mm, and the material is copper, see figure 1. The joining ring is 33 mm diameter and 20mm height. The brazing string is Silfos AG 150 (Cu 80% Ag 15%). We need a brazing time under 1 minute per connection. The machine requires a power of about 25kW +/- 3kW.

CERN is looking for member state suppliers for the brazing induction heater.

We need the induction heater and appropriate cooler to be transportable on a trolley. The induction coil has to be operated from a 2,5 meter long arm and can be moved freely up and down (120 cm-180 cm) and from side to side 180 degree (figure 3).

A company that can deliver a complete package would be preferable. We need to purchase two complete machines.

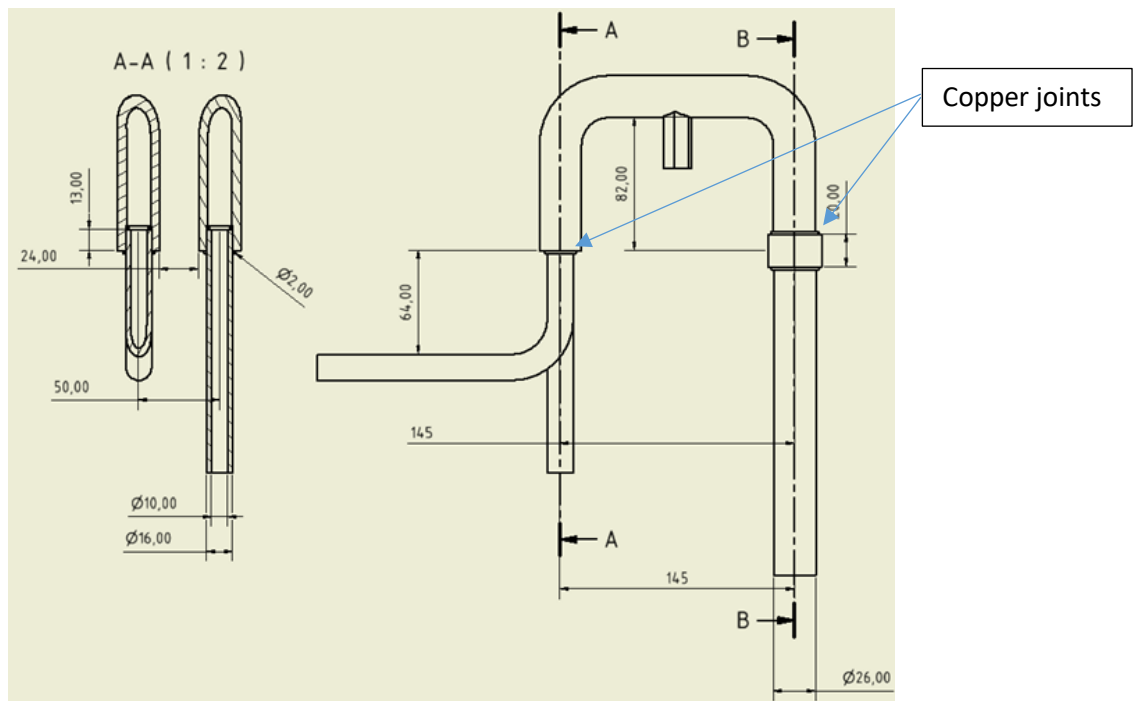


Figure 1 Copper pipes brazed together

The trolley with arm shall be within the dimensions showed in figure 2 and figure 3. The Induction heater and cooler unit shall fit in the room under table (shown in figure 2).

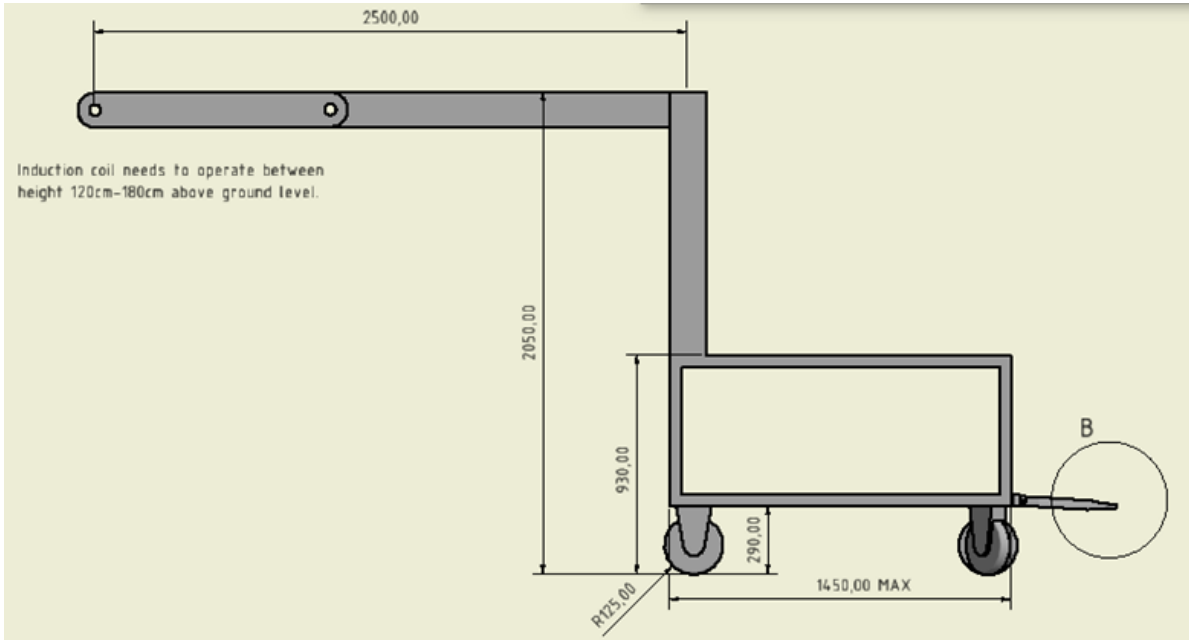


Figure 2 Trolley side view

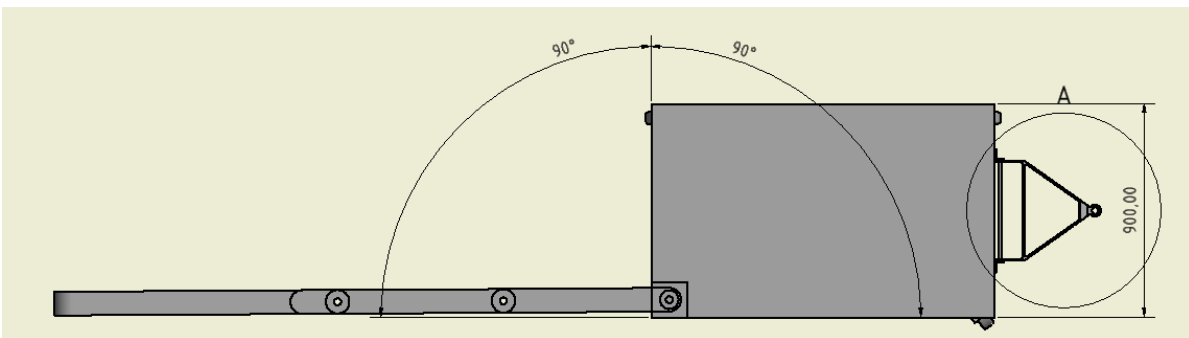


Figure 3 Trolley top view