

# CMS-DT Field Strip Plates @ Torino

- Status report of the production line
- Schedule update
- Material procurement

# Plate Cutting Table

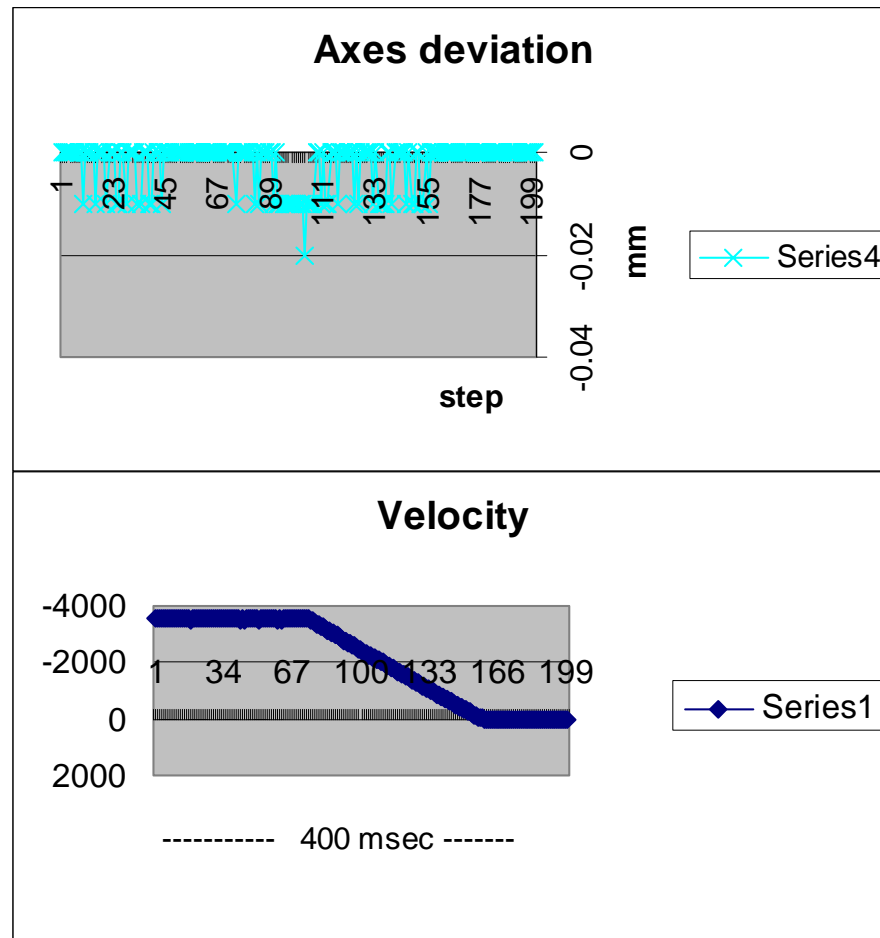
- Table and cutting head assembled and operational. Preliminary cuts on aluminum plates very satisfactory (good cut quality at 120 mm/sec speed) and excellent swarf removal.



# Plate Cutting Table

Main axis moves with satisfactory alignment of the axis tips.

In the plot: position difference of master and slave motors moving the main axis during an emergency stop (see plot below). Maximum deviation is 20 microns (measured on the motor encoder).



# Plate Cutting Table

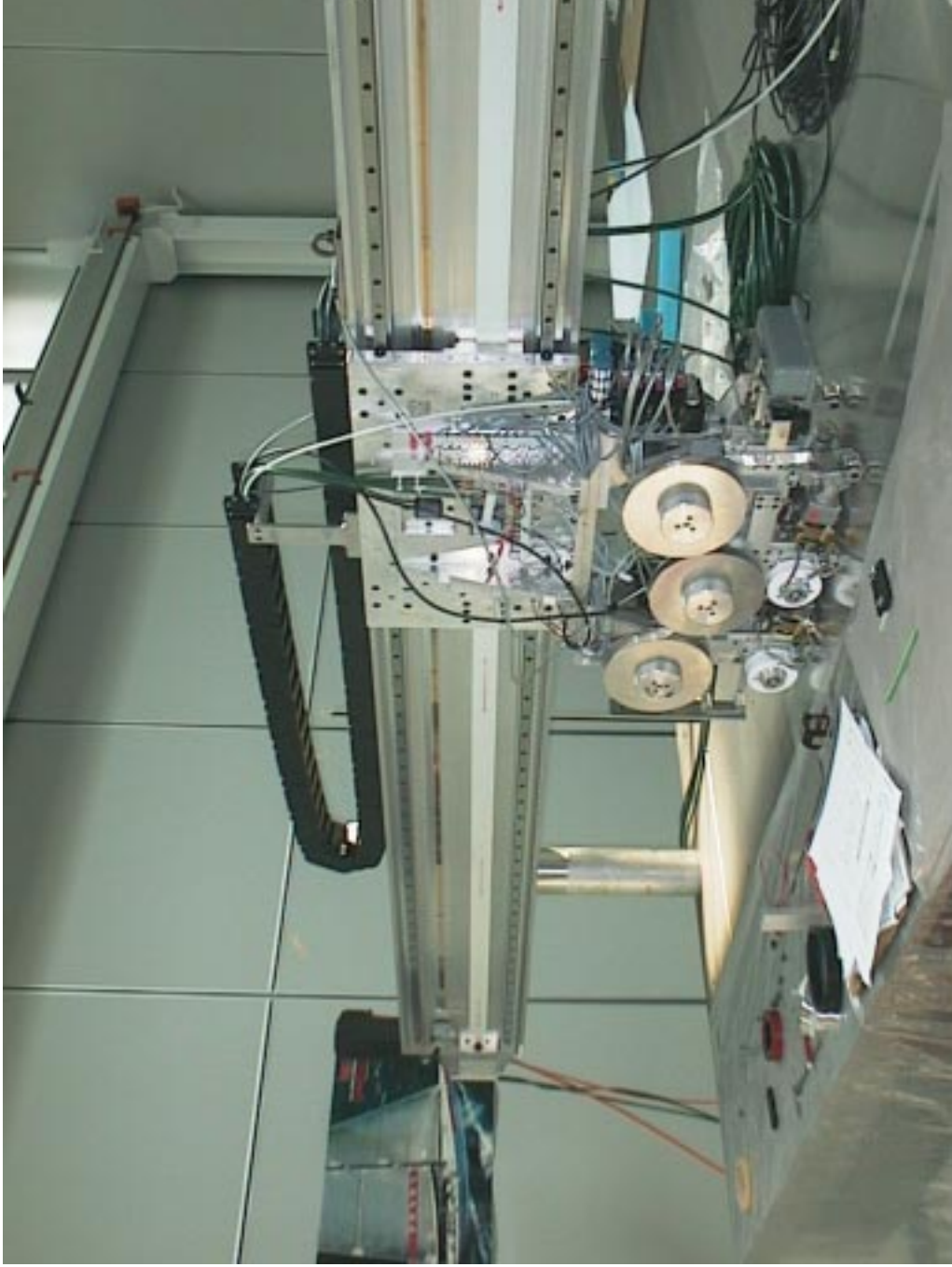
- To do next:
- 1) organize software for easy and friendly human interface
  - 2) calibrate movements on all table surface (preliminary results with nominal calibration constants give errors on position of the order  $100\mu\text{m}$ ).

Table is ready this week to start plate cutting. One month delay was due to lack of assistance from Mannesman in July/August.

# Strip Table

- Similar to Plate Cutter but position monitored with optical bars. Software for homing with different encoder system is ready. Patch panel with relays system for I/O and tool controls is ready.
- The strip dispenser head is ready and operational on the main axis, but not fully debugged (software for camera monitoring to be completed).
- Final cabling of strip dispenser head to be done

# Strip Table



# Strip Table



# Strip Table

- To be done:
  - 1) complete cabling of all devices on table
  - 2) align axis supports and mount main axis
  - 3) complete head cabling
  - 4) complete head debugging and camera monitoring
  - 5) complete software for user-*friendly* utilization

Step 5 will be done in parallel to preproduction.

Time estimated to start deposition of real strips 3-4 weeks.

We will start preproduction and send the first batch of 15 plates (MB2) as soon as it is ready, reasonably within the first decade of November .



# HV Test

- Mechanics, electronics and software is ready. Only cabling is still missing.

Time estimated to have this device fully operational is 1 week.



# Material Procurement

- After many problems in communications between us (Torino and CERN from one side and Pechiney Mercus on the other) Pechiney decided to move the managing of this commitment from Mercus to Issoire (Mme Stabile) which is the place where the plates will be physically made. This will hopefully ease communication exchanges between us and the manufacturer.
- CERN has submitted the order and the first command, we are waiting for Pechiney first delivery (directly to Dubna?).