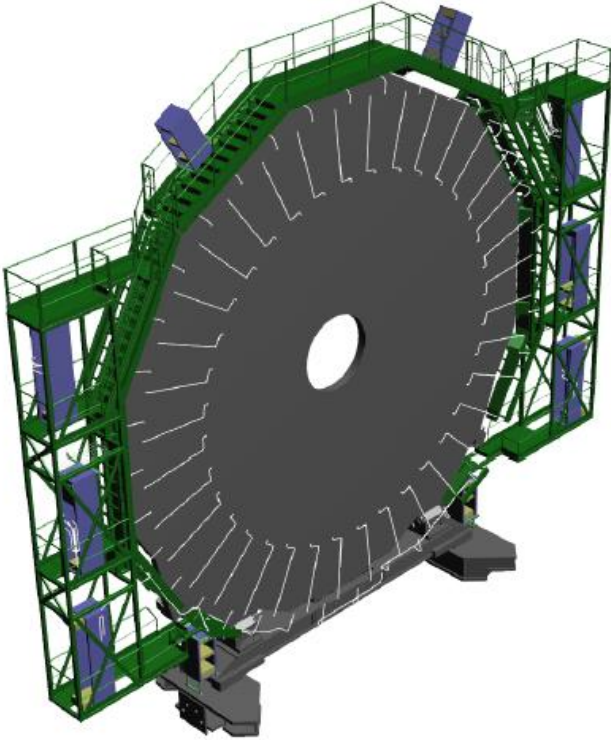
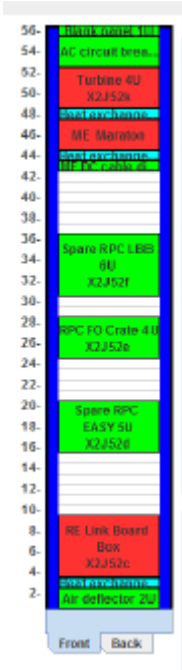


Enlarging through passage at the back of UXC Racks for RE4 Signal Cables

The RE4 require 72 new Signal cables in all 6 racks of both YE3s. However there are only 3 on each Endcap that require larger holes in the floor behind the racks. There are already 96 signal cables from RE3 in each slot..

Rack Wizard

3D Model done by S. Bally



Restricted space behind racks



The cut-out will be smaller (in "Z") than the initial slot. This will allow the 3 Rack cooling pipes to be kept at a safe distance.



The cable tray under the floor will be lowered to give clearance for the cutting.

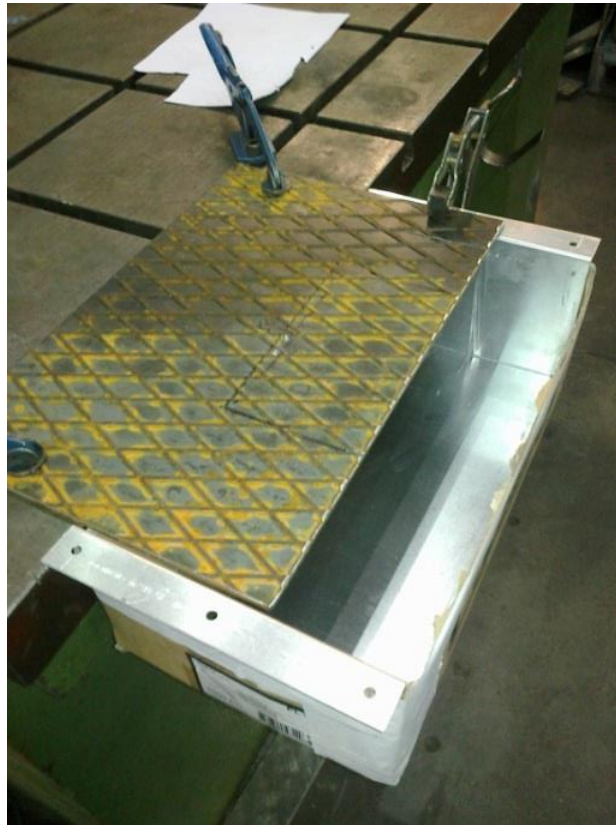


Possible cutting technics for sheet steel 5mm thick

- Grinding Quick, noisy & large hot particle spray area
- Flame cutting Quick, Heat and spray
- Nibbler Very large machine for 5mm and vibrations
- Sawing Low energy , small device
- Drilling holes Messy, poor result.

The sawing possibility was chosen after initial inclination towards the use of a nibbler.

Protection and debris collection is done with a metal protective sheet and card board box taped to the underside of the floor panel. A magnet may be placed in the box. A vacuum clear will be used to recover swarf from the top side of the floor.



Holes are drilled at the corners so the saw can negotiate them.



The first attempts were made with a “Sabre Saw”



This method was not fully mastered.



A smaller jig saw was tried and preferred



The holes for the corners are also far smaller and fewer

The blade is shorter and vibrations of a lesser amplitude > conclusion, the operator preferred choice.



Debris/swarf collection is effective and small.



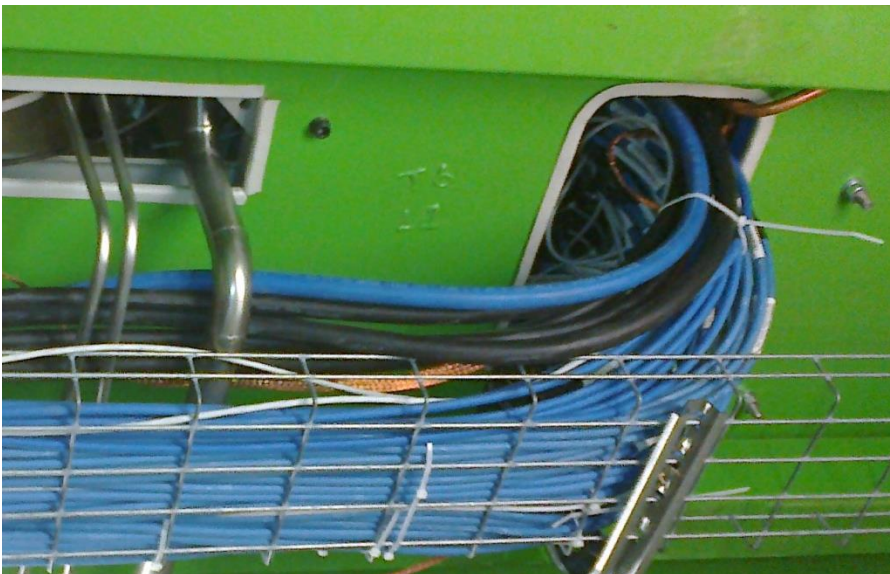
The time estimate is 1 day per hole, most of which is the preparation of lowering the cable trays and service protection. The cutting itself should be short at approx. 1 hour.

The Result finished on 12 August 2013

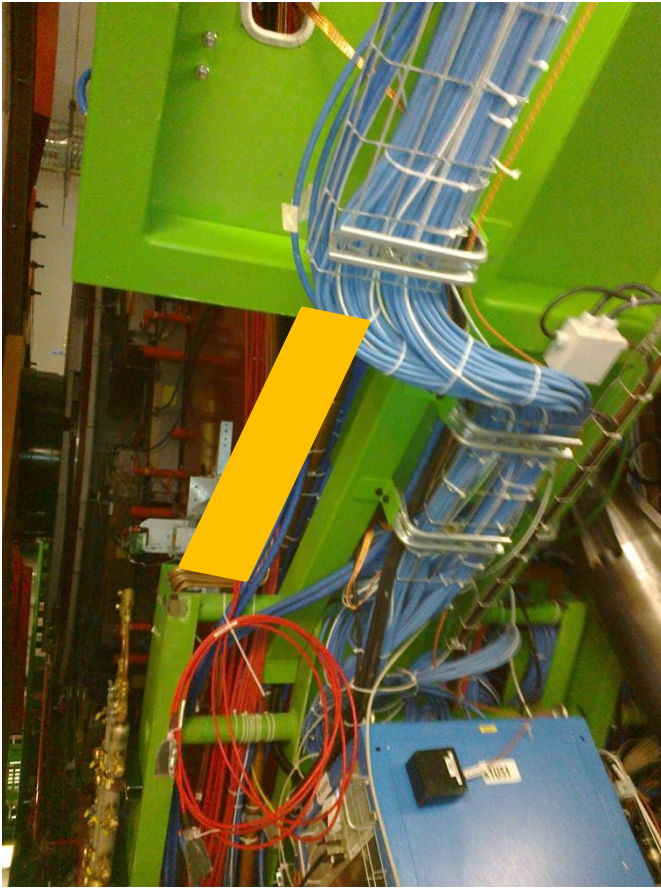
Effective debris/swarf collection



Enlarged access for cable routing.



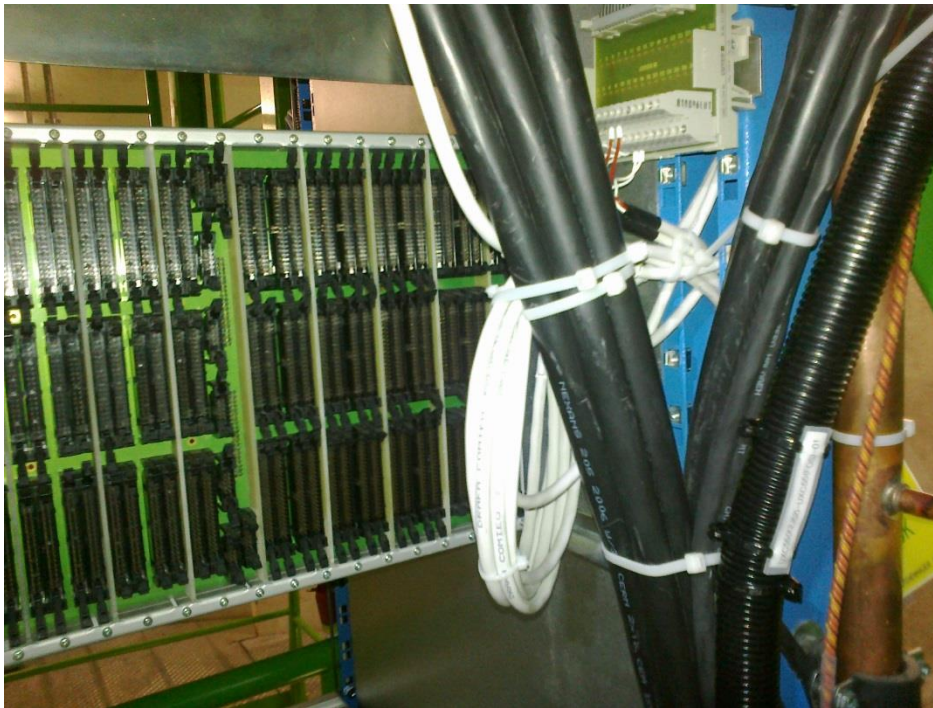
Still more work as we need cables trays added or modified



Interference with CSC boxes where we need an additional Cable tray.



We have an interference with CSC Power cables



Then we can start Signal Cabling as an illustration on X2J52 where we have access to the Yoke from the floor

