



BOOSTER

EOT Cranes works

EN-HE-HM

Why to replace PR137?

- Crane with obsolete electrical components in non reliable working condition;
- Spare parts not available on the market;
- Is the only crane on the BOOSTER dump area and will be Intensively used during LS2;
- Non-conform with actual safety standards;
- Presence of halogen on the electrical cables;

Why to revamp PR's 134, 135 & 136?

- Mechanical structure is in good general condition;
- The parts taken from PR-137 (e.g. motors and gearboxes) can be revised/refurbished and reused if necessary to repair these 3 cranes;
- Electrical components and cables in bad condition;

Replacement of PR137 by PR284

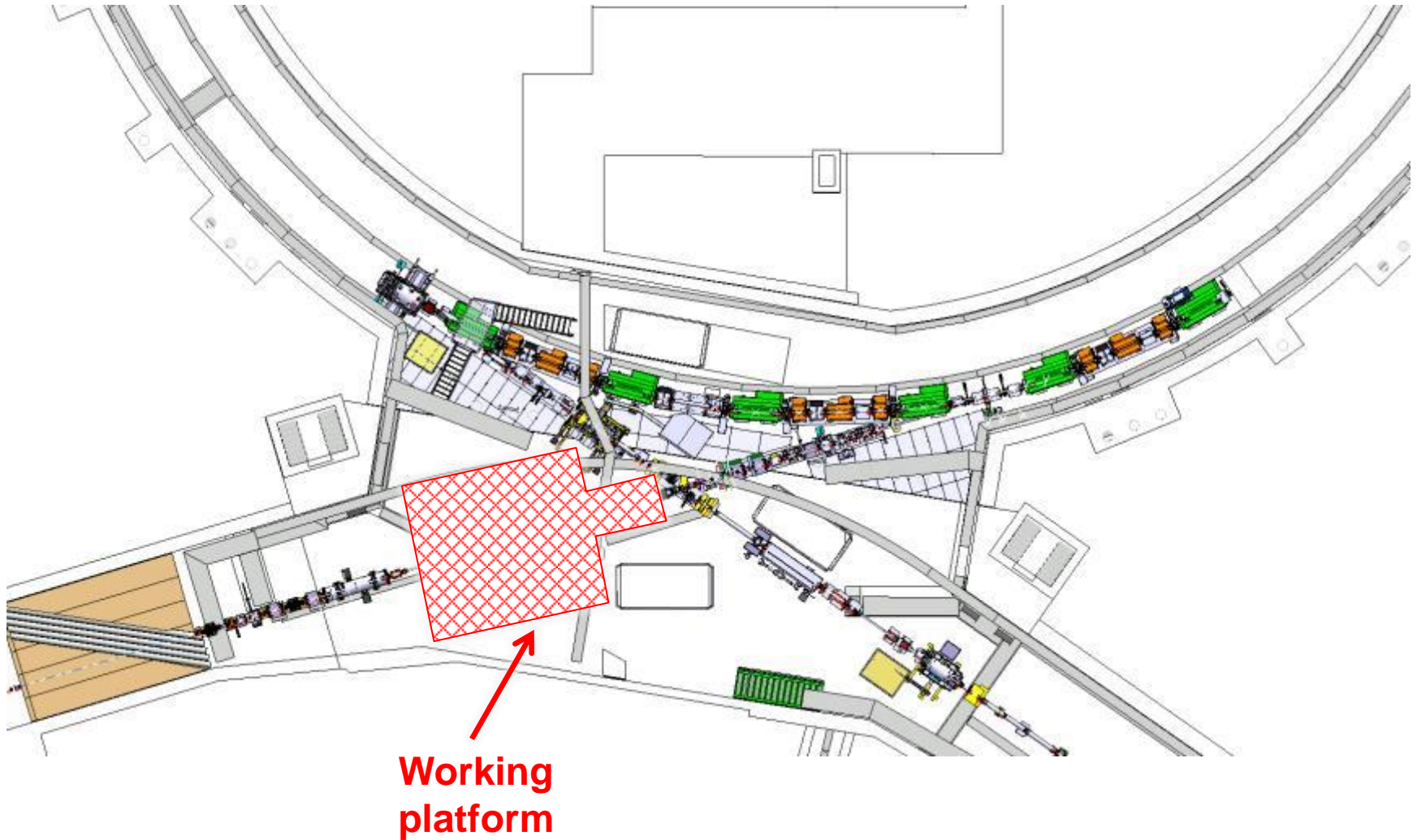
- Start date: **13 January**
- Duration of the works: **3 weeks**
- Location: **BOOSTER Transfer / Dump Line**
- Cost of the project: ~ **105 kCHF**
- Payment: **95821** (78%) + **54340** (22%)



PR137 replacement works

- Working area:
 - Radiation ambience dose ($< 10 \mu\text{Sv/h}$);
 - No critical BOOSTER components around;
- Working platform:
 - Protection to the beam line;
 - Safe access to the works performed at height;
 - Dimension of 5m x 5m / h= 2.1m;
 - Platform maximum load 650 kg/m².

PR137 replacement works



PR137 replacement works

- Overview of the tasks:
 - Assembling of the working platform over the beam line and installation of the auxiliary lifting devices;
 - Transport of PR284 parts to the working area;
 - Assembling of the new crane PR284;
 - Disassembling of the old crane PR137;
 - Electrical connection, tests and last adjustments on PR284;
 - Radiological control and transport of PR137 crane pieces outside the BOOSTER;
 - Disassembling of the working platform and auxiliary lifting devices.

Revamping of PR's 134&135&136

- Start date: **13 January**
- Duration of the works: **6 weeks**
- Location: **BOOSTER** ring
- Cost of the project: ~ **120 kCHF**
- Payment: **53310** (2014 crane consolidation budget)



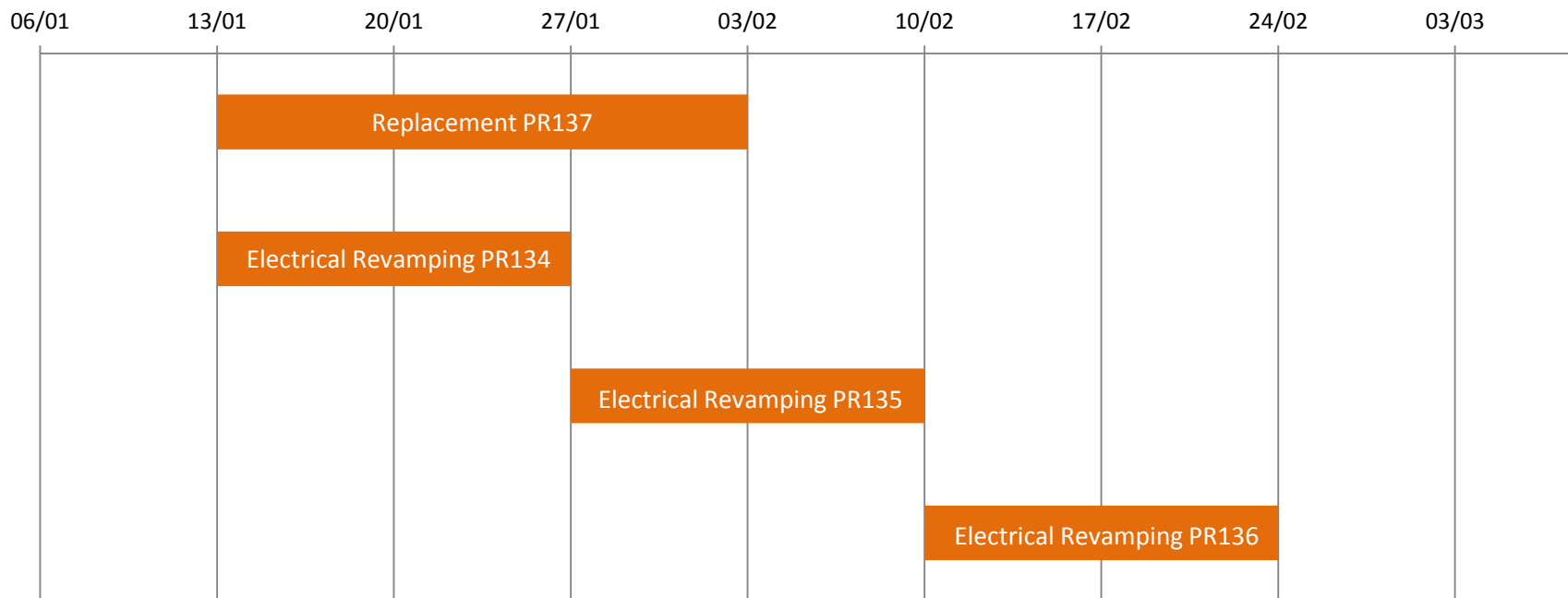
Revamping of PR's 134&135&136

- Working area:
 - Radiation ambience dose ($< 4 \mu\text{Sv/h}$) ;
 - Important BOOSTER components around (extreme care shall be taken)!
- Working platform:
 - Protection to the accelerator components;
 - Safe access to the works performed at height;
 - Dimension of 3m x 4.7m / h= 3m;
 - Platform maximum load 250 kg/m².

Revamping of PR's 134 & 135 & 136

- Overview of the tasks:
 - Construction of the electrical cabinets on the contractor's workshop;
 - Assembling of the working platform on BOOSTER ring and installation of auxiliary lifting devices;
 - Removal of the old electrical cables and cubicles from PR134;
 - Assembling of the new electrical cables and cubicles on PR134;
 - Removal of the old electrical cables and cubicles from PR135;
 - Assembling of the new electrical cables and cubicles on PR135;
 - Removal of the old electrical cables and cubicles from PR136;
 - Assembling of the new electrical cables and cubicles on PR136;
 - Tests and last adjustments;
 - Radiological control and transport of the old pieces outside the BOOSTER;
 - Disassembling of the working platform and auxiliary lifting devices.

Works Planning



Questions / Comments?



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