

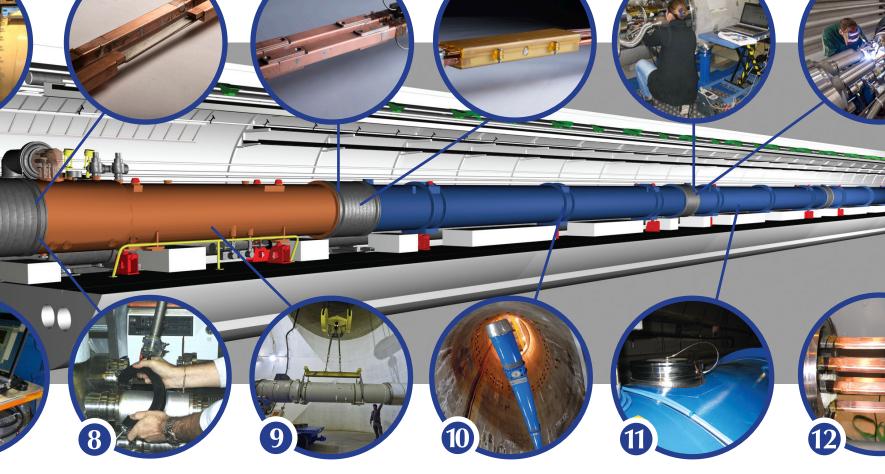
## The main 2013-14 LHC consolidations

1695 Openings and final reclosures of the interconnections Complete reconstruction of 3000 of these splices Consolidation of the 10170 13kA splices, installing 27 000 shunts

3

Installation of 5000 consolidated electrical insulation systems 300 000 electrical resistance measurements 10170 orbital welding of stainless steel lines

6



18 000 electrical Quality Assurance tests 10170 leak tightness tests

3 quadrupole magnets to be replaced

15 dipole magnets to be replaced

Installation of 612 pressure relief devices to bring the total to 1344 Consolidation of the 13 kA circuits in the 16 main electrical feedboxes