





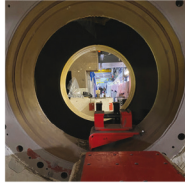





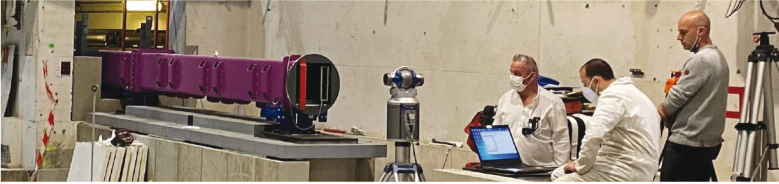



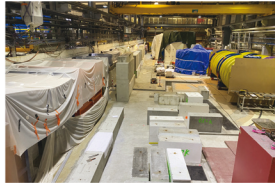

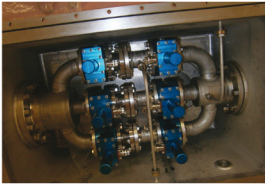





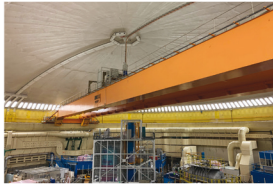
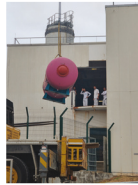








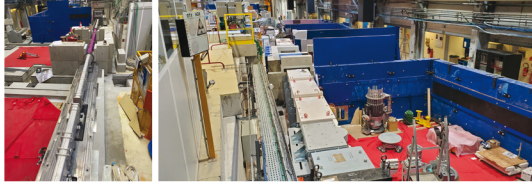






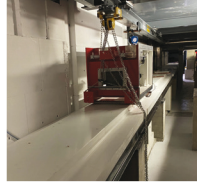
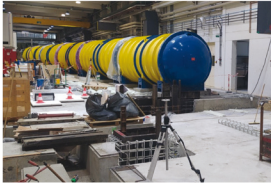
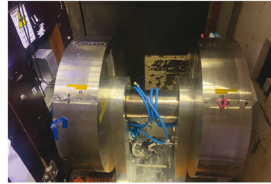
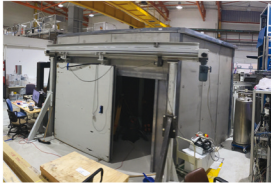


# LONG SHUTDOWN WORK TIMELINE

	Oct 21	Nov 21	Dec 21	Jan 22	Feb 22	Mar 22	Apr 22	May 22	Jun 22
<b>REACTOR SAFETY AND MAINTENANCE</b>	The work on the replacement and seismic reinforcement of the fresh air intake lasted more than a year and was completed in December 2022								
	Reactor shutdown			Removal of H1-H2 beam tube. Maintenance of safety valves	Cutting of H1-H2 beam tube		Installation of new H1-H2 beam tube. Reinforcement of protective housing of reactor circuits	Replacement of reactor core chimney	
									
<b>ENDURANCE</b>									
<b>H1-H2 works</b>		Dismantling of H1-H2 guides in pile and in casemate		Dismantling of H1-H2 guides reactor wall pass-through	Installation of new seismically resistant containment wall penetrations for H1-H2 guides				
		Dismantling of Pink Housing							
<b>H24 works</b>									
	Civil engineering work: removal of old instruments and structures and preparation of new foundations and future flooring			Installation of 35 metres in parallel to civil	of dual guide H241/242 in casemate H2 in guide hall ILL7, engineering work for various instruments in guide hall		Assembly of H241/242 guide support structures, installation and alignment of guides (upstream outside casemate H2)		
<b>H15 works</b>									
	Dismantling of casemates H14, H15 and H16 and associated instruments		Laying of foundations for future guide H15	Laying of flooring for instruments D11+, SAM and SHARP+	Installation of central wall of cold guide casemate				
									
<b>Other projects</b>									
								Civil engineering work and start of installation of tomography stations NeXT/MOTO	
									



# LONG SHUTDOWN WORK TIMELINE continued

>> continued	Jun 22	Jul 22	Aug 22	Sep 22	Oct 22	Nov 22	Dec 22	Jan 23	Feb 23
<b>REACTOR SAFETY AND MAINTENANCE</b>	The work on the replacement and seismic reinforcement of the fresh air intake lasted more than a year and was completed in December 2022								
	CRU: Qualification of emergency core reflood system 	Reinforcement of gaseous effluent outlet pipe 	Fire protection – many improvements throughout the year 	Complete renewal of H1–H2 pool lining 	Completion of H1–H2 beam tube sealing 	Installation of “Carter Pink” housing 	Preliminary clean-up of ILL’s old decontamination facility. Preparation of anchor points for replacement of trolley on polar crane on Level D 	Modifications to instrumentation and control throughout the shutdown 	Installation of H1–H2 safety valve 
<b>ENDURANCE</b>									
<b>H1–H2 works</b>	Preparation of new H1–H2 guides 		Preparation of in-pile guides 		Transfer of “Carter Pink” housing 	Installation of guides in reactor pool 		Installation of guides in casemate on Level C 	
<b>H24 works</b>	Installation of XtremeD monochromator shielding 	Alignment of world’s first borated aluminium guide enabling significant space savings (no need for housing around it) 	Construction of biological shielding of experimental areas and installation of H24 instruments 					Completion of installation of D10+ 	View of new instruments of double guide H24 
<b>H15 works</b>	Creation of concrete blocks to support future guide H15 in cold guide casemate 		Installation of walls of new cold guide casemate 	Installation of roof of new cold guide casemate 	Installation of HDPE shielding in cold guide casemate (reduction of instrument background) New cold guide casemate and preparation of future secondary H15 guide sections (Jan 23) 		Transporting of main beam shutter of primary H15 guide to cold guide casemate 		
<b>Other projects</b>	Transfer of D11 detector tube to its new site 		Installation of PANTHER background choppers 	Installation of instrument casemate for NeXT 	Moving of SHARP+ time of flight chamber 