

CMS hydraulic cooling needs -surface tests - DRAFT

System	Temperature inflow	water system	dissipation (kW) @ 100%	flow (m3/h) @ 100%	Surface Test	Comments
Yoke/ Vac Tank	16-18 °C	demi		2.16	100%	
vacuum pumps	20±2 °C	normal		1-2	100%	
Power converter	20±2 °C	demi	110	5-7	100%	
Busbars	20±2 °C	demi	34	5	100%	
HB, HE, HO-RBX	20±2 °C	demi		3,24	?	
HF-cooling	20±2 °C				0 %	
MB (including racks on balconies)	18-20 °C	demi	<88kW		20% ?	Both muon systems can't be on the same circuit since Al and Cu would cause problems in presence of demineralized water
ME		demi			?	
Tracker/ Preshower/ Pixel (Primary circuit)	chilled	normal			0%	
Ecal: 2 cooling racks, power / regulation	mixed / chilled	demi	200 +15		0%	
Cryogenics coldbox	mixed	normal	2		100%	compressor circuit were already foreseen on the surface
Electronic Racks					?	
Low voltage cables					?	
Other ...						