

**CHP Plant\_Daily Maintenance Schedule**

Note: Schedule modelled on Uniconfort Maintenance Plan, Document ref. OD01-MAN-000100

/01/2021

 \* Status: HB: Hot Boiler  
Operational

CB: Cold Boiler

OT: Turbine

Time:	Time:
Name:	Name:

Time:	Time:
Name:	Name:

Dayshift	Dayshift
NB1	

Dayshift	Dayshift
NB4	

Counter Sign-off (signature)

	Area	Description of task	Status (*)	Reading / Comments	Reading / Comments	Reading / Comments	Reading / Comments
0	GENERAL	Check for any uncommon noises (note in comments cell)	HB				
1	SMOKES AND HOT AIRS	Visual check for communication from Belimo Valves/Confirm position on SCADA	HB				
		Check correct operation of Smoke Recirc Fan 1 (note any irregularities, vibrations or noise in comments)	HB				
		Check correct operation of Smoke Recirc Fan 2 (note as above)	HB				
		Check correct operation of Hot Air Fan 1 (note as above)	HB				
		Check correct operation of Hot Air Fan 2 (note as above)	HB				
		Check correct operation of Main ID Fan (note as above)	HB				
		Record PT400.1	HB	mmH <sup>2</sup> O	mmH <sup>2</sup> O	mmH <sup>2</sup> O	mmH <sup>2</sup> O
		Record PT400.2	HB	mmH <sup>2</sup> O	mmH <sup>2</sup> O	mmH <sup>2</sup> O	mmH <sup>2</sup> O
		Record PT400.4	HB	mmH <sup>2</sup> O	mmH <sup>2</sup> O	mmH <sup>2</sup> O	mmH <sup>2</sup> O
		Record PT405.1	HB	mmH <sup>2</sup> O	mmH <sup>2</sup> O	mmH <sup>2</sup> O	mmH <sup>2</sup> O
		Record PT400.3	HB	mmH <sup>2</sup> O	mmH <sup>2</sup> O	mmH <sup>2</sup> O	mmH <sup>2</sup> O
		Check Pressure sensors' copper pipework/tubing for blockages.	HB				
		Check flue gas ducting for corrosion.	HB				
2	SMOKES TREATMENT	Record Bag Filter Pressure, PT130.1	HB	mmH <sup>2</sup> O	mmH <sup>2</sup> O	mmH <sup>2</sup> O	mmH <sup>2</sup> O

		Record Mainstack Pressure, PT415.1	HB	mmH <sup>2</sup> O	mmH <sup>2</sup> O	mmH <sup>2</sup> O	mmH <sup>2</sup> O
		Check correct operation of Bag Filter, and screw (for clogging)	HB				
		Check for clogging of lime loading	HB				
		Record number of bags of Lime (in stock)	HB	bags	bags	bags	bags
3	COMPRESSOR AND COMPRESSED AIR DISTRIBUTION CIRCUIT	Check correct operation of water/oil separator (is discharging and no leaks)	HB				
		Check air receiver inlet filter indicators (Record: Red/Green)	HB				
		Check for Compressor Alarms	HB				
		Check Air Pressure	HB	bar	bar	bar	bar
		Check Filter Quality	HB				
4	FUEL STORAGE	Check all rams for correct operation.	HB				
		Check Piston retaining circlip is in place.	HB				
		Check for oil leaks.	HB				
		Record Hydraulic oil levels via sightglass (%), topping up if required (note of any top ups in comments)	HB				
5	FUEL EXTRACTION AND TRANSPORT	Check Duplo for blockages.	HB				
		Check vibrations on rotating parts.	HB				
		Empty duplo overflow bin.	HB				
		Check duplo gearbox oil level, topping up if required (note of any top ups in comments)	HB				
		Check duplo gearbox for oil leaks.	HB				
		Visual check of correct operation of redler.	HB				
		Record Redler lubrication level (%), topping up if required (note of any top ups in comments)	HB				

6	COMBUSTOR	Check correct operation of moving grate through sightglass	HB				
		Record pressure on hydraulic oil unit.	HB	bar	bar	bar	bar
		Record Hydraulic oil levels via sightglass (%), topping up if required (note of any top ups in comments)	HB				
7	WATER TREATMENT	Record Regen Tank Salt + Water Levels	HB				
		Record water expansion vessel pressure					
		Check water tank level using inspection glass (Fill Valve position <b>OPEN</b> or <b>CLOSED</b> )					
		Check liquid corrosion inhibitor level	HB				
8	COOLING WATER CIRCUIT & PUMP SKID	Record Pump in Operation	HB				
		Record Delivery Pressure	HB	bar	bar	bar	bar
		Check condition of running pump (note any irregularities, vibrations, noises, leaks, etc.)	HB				
9	DIATHERMIC OIL CIRCUIT & PUMP SKID	Record HT Pump in Operation	HB				
		Record HT Pump Delivery Pressure	HB	bar	bar	bar	bar
		Record LT Pump Delivery Pressure	HB	bar	bar	bar	bar
		Check condition of running pump (note any irregularities, vibrations, noises, leaks, etc.)	HB				
		Check for leaks above pumps	HB				
		Check Emergency Diesel Pump (Fuel Level and Alarms)	HB				
		Check liquid corrosion inhibitor level	HB				
10	STELA BOOSTER PUMP	Record Delivery Pressure	HB	bar	bar	bar	bar
		Record Outlet Pressure	HB	bar	bar	bar	bar
		Check condition of pump (note any irregularities, vibrations, noises, leaks, etc.)	HB				

11	NITROGEN	Record Nitrogen System Pressure	HB	bar	bar	bar	bar
		Record Nitrogen Bottle Pressure	HB	bar	bar	bar	bar
		Record Quantity of Bottles (Note <b>empty</b> and <b>in use</b> )	HB				
12	ASHES EXTRACTION AND TRANSPORT	Visual check correct operation of clapet valves	HB				
		Visual check correct operation of ash redler	HB				
		Check misting system is operational (note if any changes made and reason)	HB				
		Record Ash Redler lubrication level (%), topping up if required (note of any top ups in comments)	HB				
13	ORC	Record Water/Oil HE - inlet pressure	HB	bar	bar	bar	bar
		Record Water/Oil HE - outlet pressure	HB	bar	bar	bar	bar
		Clean cooling finned packs	OT				
		Record power pack oil levels	OT				
		Record PI 200: Front turbine seal return (1.5 +/- 0.5 bar)	OT	bar	bar	bar	bar
		Record PI 216: Rear turbine seal return (0.5 +/- 0.2 bar)	OT	bar	bar	bar	bar
		Record PI 204: Feed pump seal return (1.5 +/- 0.5 bar)	OT	bar	bar	bar	bar
		Record PI 202: Cooling radiator delivery (5.0 +/- 1.0 bar)	OT	bar	bar	bar	bar
		Record PI 203: Rear turbine seal delivery (4.5 +/- 1.0 bar)	OT	bar	bar	bar	bar
		Record PI 217: Spindle cooling delivery (3.5 +/- 0.5 bar)	OT	bar	bar	bar	bar
		Record Diathermic oil HT Inlet temperature	OT	°C	°C	°C	°C
		Record Diathermic oil HT Outlet temperature	OT	°C	°C	°C	°C
		Record Diathermic oil LT Inlet temperature	OT	°C	°C	°C	°C

		Record Diathermic oil LT Outlet temperature	OT	°C	°C	°C	°C
		Record water inlet temperature	OT	°C	°C	°C	°C
		Record water outlet temperature	OT	°C	°C	°C	°C
		Record water inlet pressure	OT	bar	bar	bar	bar
		Record water outlet pressure	OT	bar	bar	bar	bar
		Check if ORC ventilation fans are operational	OT				
		Record ORC Room Temperature from Gradwood Fans Control Panel	OT	°C	°C	°C	°C
		Record Gearboc oil drain tank level (%)	OT				
		Record vacuum pump oil level, through sightglass (%)	OT				
		Record feed pump oil level, through sightglass (%)	OT				
		Record feed pump oil used (ml)	OT	ml	ml	ml	ml
14	AIR COOLER AND TRANSFORMER	Check Water level in Transformer bund.	n/a				
		Check Sica-Gel Colour (Red = OK, Mostly Green = Replace)	n/a				
		Check Emergency pit water level	n/a				
		Check Air Cooler For Leaks	n/a				
15	GRECON	Check Water Level in Tank	n/a				
-	DIATHERMIC OIL EXCHANGER	-	-	-	-	-	-