

UNIT 5&6 MILL GENERAL OVERHAUL SOW

[illegible]

B	Outlet Ducting
1	Inspect the duct casing for erosion areas and repair if required
2	Inspect the condition of the tiles and missing tiles for replacement
C	Classifier
1	Repair classifier inner cone (Top and Bottom) supports
2	Inspect and repair tiling and / or lining in classifier top inner cone
3	Inspect and repair tiling and / or lining in classifier bottom inner cone
4	Adjust all classifier vanes to required setting (45 degree). After adjust ensure that classifier vane are adjustable on load.
5	Vanes to be stroked in such a way that angle internal correspond with the outside angle indicator on top of the classifier
6	Set the correct gap classifier bottom inner cone return skirts/flaps
7	Repair all handrails and gantry plates
8	Repair all threaded holes and remove broken studs
9	Repair ladder on classifier
10	Wash and clean classifier externally
11	Paint classifier
12	Final inspection on mill classifier
D	Mill Body above Plenum Chamber
1	Remove and renew tiles on mill barrel
2	Clean all flange joints
3	Final inspection on mill body
E	Mill Plenum Chamber
1	Inspect the condition of the scrappers and replace if damaged or worn out
F	Mill PA Inlet Ducting and Y- Piece
1	Inspect inlet ducting and Y - Piece to determine scope of work
2	Repair inlet ducting wear and / or damage area
3	Renew all seals on inlet ducting inspection doors
4	Clean inlet ducting on L/H and R/H from y - piece
5	Strip the PA ring line and clean it for bust accumulation using compressed air
6	Final inspection on inlet ducting
G	Inner reject System
1	Renew all inspection cover gaskets
2	Renew operating mechanism
3	Check inner reject slide gate operation
4	Repack inner reject door operating shaft gland
5	Final inspection on inner reject system
H	Outer reject System
1	Inspect the condition of the complete reject box assembly including outer door
2	Modify outer reject door
3	Replace gratings
4	Renew all inspection cover gaskets
5	Replace Audco valve, grease and check operation

6	Repair and unblock reject lines or replace reject line if holed/damage
7	Replace pressure relief valve
8	Install fittings for the reject system pressure gauge after audco valve
9	Install pressure gauge
10	Install water flexible piping with the valve before audco valve and connect to reject box inspection port for cleaning
11	Renew porthole gaskets, packing and sight glass
12	Final inspection on outer reject system
I	Labyrinth- and Air seal
1	Inspect the condition of the labyrinth and air seal for erosion marks
2	Check the gap settings
J	Water seal tank
1	Inspect water seal tank assembly
2	Inspect Chinese hat'
3	Inspect drain valve
4	Renew straight piping, flanges and gasket
5	Renew elbow pipe inside reject box
K	Mill Gearbox (Cold Commissioning)
1	Inspect gearbox spray nozzles
2	Inspect gearbox internally and externally. More attention to be given on the first stage
3	Inspect Gearbox input shaft bibby coupling assembly (Procedure to be followed if need replacement). Put new grease
4	Flush the system and renew gearbox oil
5	Output Coupling bolts to tightened
6	Gearbox breathers to clean and located outside mill using correct brackets
7	Repair oil leak if any
8	Grease gearbox walker seal
9	Renew walker seal if there is larger gaps between walker seal and output coupling
10	Renew gearbox autogreaser on the gearbox input
11	Gearbox side inspection covers to change or rectified (Filtration unit supply)
12	Final inspection on mill gearbox
L	Mill Lub-oil System
2	Replace Lub-oil pump
3	Strip and clean complete lub-oil system
4	Strip and clean oil cooler
5	Renew lub-oil strainers
6	Renew `O-rings on Change -Over valve
7	Renew `O-rings on strainer covers
8	Strip and clean all lube oil piping
9	Remove lube oil motor
10	Renew `O-rings on Strainers
11	Final inspection on mill gearbox lub-oil system
M	Mill Motor

N	Raw Coal Pipes (All sections to be removed and done in the workshop)
1	Strip and Inspect 1 st, 2 nd and 3 rd sections to determine Scope of Work
2	Renew or repairs 1 st section of pipe
3	Renew tiling on the 1 st section of pipe
4	Renew or repairs 2 nd section of pipe
5	Renew tiling on the 2 nd section of pipe
6	Renew or repairs 3 rd section of pipe
7	Renew tiling on the 3 rd section of pipe
8	Install raw coal pipes
9	Renew compensator
10	Renew all gasket on the flanges
11	Final inspection on raw coal pipes
O	Seal air system
1	Disconnect and inspect seal air pipe ring around the mill
2	Clean and re-install
3	Damage pipe or flanges to be replaced
4	All gasket to be renewed
5	Renew seal air compensator
6	Strip all seal air fans
7	Remove all runners, send them away for inspections and repairs including balancing
8	Inspect the existing concrete structure and repair if necessary
P	Maintenance Damper
1	Install Refurbished/new Drive Mechanism
2	Install Complete Maintenance Damper Assembly
3	Inspection, repair or replace surfaces, bolts and seals to ensure effective sealing of the door.
Q	Coal Gate
1	Replace missing tiles and repair worn out areas
2	Do final inspections
R	Mill Inertia Dampers
	Painting
	Commissioning
1	Clean Air Curve
2	Loadline
3	PF Sampling

Mill Feeder	B
Stripping of Feeder	
1	Ensure PTW is obtained and Workman`s Reg signed
2	Open feeder quick release doors and open all access covers
3	Remove feeder back skirt plate and feeder belt
4	Clean feeder internally
5	Remove side skirt Plates
6	Remove Feeder Levelling Bar
7	Remove Head Pulley (Drive Pulley)
8	Remove Indicator Tension Roller and Pivot Arm
9	Remove Tension Roller
10	Remove Take up Pulley
11	Remove Top Support Rollers
12	Remove Belt Support Pan
13	Remove Cleanout Conveyor Take up Gear assembly
14	Remove Cleanout Conveyor Head Shaft Sprocket wheel
15	Remove cleanout chain conveyor
16	Install blank flange between bunker and bunker outlet valve (coal gate)
17	Open and clean coal gate housing
18	Remove Cone on top of feeder inlet Chute
19	Drain oil from Main conveyor belt reduction Gearbox
20	Drain oil from Cleanout Conveyor reduction Gearbox
21	Remove Main conveyor belt reduction Gearbox
22	Strip of coupling
23	Remove Cleanout Conveyor reduction Gearbox
24	Clean feeder internally and externally
Inspection and Repairs	
1	Repair/renew coal feeder inlet chute
2	Repair/renew the condition of the feeder scraper and replace if required
3	Repair/renew coal feeder body internally and externally
4	Renew `No coal on belt` alarm paddle
5	Renew coal outlet blockage alarm paddle.
6	Repair/renew take up pulley upper and lower guide rails
7	Repair/renew clean out conveyor platform supports (3 off)
8	Inspect quick release access door seals. Renew if damaged
9	Repair/renew seals on side and top inspection covers. Renew if damaged
10	Renew bearings, grease pipes, oil seals and bearing cover on belt take up pulley
11	Strip feeder belt take up pulley tension block and tension screw. Renew screws and blocks

12	Remove, Clean and Inspect both bearings, oil seals, grease pipes and fittings on belt tension roller and pivot arm. Renew bearings, seals and pipes if required.
13	Renew bearings and oil seals on the tension roller.
14	Remove, Clean and Inspect bearing, grease pipes and fittings on belt drive pulley. Renew bearing, seals and pipes.
15	Renew pins and rubber bushes on the coupling.
16	Renew dust cap, grease nipple and bearings to all support rollers. Ensure that all dust cap and grease nipple are standard
17	Remove, Clean and Inspect both bearings, oil seals, grease pipes and fittings on cleanout conveyor take up shaft sprocket assembly
18	Remove, Clean and Inspect bearing, grease pipes and fittings on cleanout conveyor head shaft sprocket wheel
19	Inspect feeder cleanout conveyor drive (Head) pulley coupling and coupling bolts
20	Strip feeder cleanout conveyor take up gear assembly tension block and tension screw.
21	Inspect all plain links, wing links and pins on cleanout conveyor chain
22	Clean and inspect main conveyor reduction gearbox and repair if necessary
23	Clean and inspect clean out conveyor reduction gearbox and repair if necessary
24	Inspect and repair feeder coal outlet chute (Square to Round). It must be removed and done in the workshop
25	Renew feeder conveyor belt if damage
26	Drain, clean feeder conveyor belt gearbox and fit new oil
27	Drain, clean feeder clean out conveyor gearbox and fit new oil
28	Renew shearing pin
29	Renew both gearbox breathers
30	Renew both side skirts
31	Renew backplate
32	Renew all bearings on the feeder
33	Renew feeder bar and brackets
34	Paint feeder
Assembly of Feeder	
1	Install the cleanout conveyor reduction gearbox
2	Install the cleanout conveyor drive coupling and head shaft sprocket wheel
3	Install the cleanout conveyor take up shaft sprocket assembly
4	Install the cleanout conveyor chain
5	Install the main conveyor reduction gearbox
6	Install the main conveyor reduction gearbox drive coupling and drive pins
7	Install the main conveyor head pulley
8	Install the main conveyor top support rollers
9	Install the main conveyor tension roller no 2
10	Install the main conveyor tension roller and pivot arm
11	Install the feeder belt support pan
12	Install the main conveyor take up pulley assembly
13	Install and adjust feeder levelling Profile Bar

14	Install and adjust feeder side skirting plates
15	Install cone on top of feeder coal inlet chute
16	Install bunker outlet valve
17	Install and adjust feeder belt main conveyor
18	Install feeder back plate
19	Close all inspection covers
Test	
1	Measure feeder profile area and record
2	Test run Feeder
3	Do final inspection
4	Clear PTW