

**MAINTENANCE INSTRUCTION FOR (NIGATA) ASPHALT PLANT MODEL  
NP 400 FITTED WITH MITSUBISHI DIESEL ENGINE MODEL DB-31**

**PERIODIC MAINTENANCE SCHEDULE FOR MITSUBISHI DIESEL ENGINE**

Group	Nomenclature	Work to done	Daily	Every 10 hrs	Every 60 hrs	Every 120 hrs	Ever y 500 hrs	Every 1000 hrs	Every 1200 hrs
F	Injector pump	1. Check oil level in camshaft case. Make up if necessary			0				
U		2. Change oil in camshaft case.				0			
E		3. Check oil level in governor case make up, if necessary			0				
L		4. Change oil in Governor case.				0			
	Nozzles and holders	1. Adjust injection pressure to 120 Kg/cm <sup>2</sup>				0			
S Y	Fuel filter	1. Draw Off sediments and water.			0				
S		2. Replace filter paper						0	
T E	Fuel tank	1. Draw off sediments and water.				0			
M		2. Disassemble and wash interior					0		





M A	Hours meter	1. Supply engine oil		0				
I N		2. Supply Grease			0			

hrs Note: @ Required only for initial use, \$ For operation on dusty site, \* At start of use and every 30

Appx 'B'

### **DAILY INSPECTION AND MAINTENANCE OF NIGATA ASPHALT PLANT**

Group	Item	Condition	Remedial measures
D	Chain	Loose	1. Adjust the chain with the help of tighter (if adjustable)
R			2. Shorten the chain link , if non adjustable)
I			3. 2% chains slake are available if more slaked replace it with new chain
V		Worn Out	1. Replace
E		Often cut off	1. Replace
	Chain Wheel	Worn-out	1. Replace
		Abnormal sound heard	1. Replace Cain/Chain wheel or both
	Bucket	Damaged	1. Replace
	Shaft bearing	Worn-out	1. Due to lack of lubrication replace.
D	Dryer	Dryer bolts are cut off	1. Replace
R	Dryer	Drum slips off p of downward	1. adjust, change the direction of drum roller shaft
Y		Tranion roller worn out	1. Replace
E		Thrust roller worn out	1. Replace
R	Combustion chamber	Drum driving chain is cut off	1. Replace

		Fire bricks are burn out	1. If not serious, use them as are, if serious, Replace
	Fuel Pump	Pressure fails to rise.	1. Overhaul the pump. Replace easy wearing part.
			2. check the piping connection
	Roots blower	Air pressure fails to rise	1. Increase number of washer to decrease air leaks
			2. Clean air in-let.
	Fuel oil burner	Oil supply is poor	1.Overhaul nozzle if clogged.
			2. Check and clean oil pipes
			3. Check and clean strainer of inlet pipe
			4. Overhaul oil filter.

<b>Group</b>	<b>Item</b>	<b>Condition</b>	<b>Remedial measures</b>
E L	Cold Elevator	Shear Pin cut off	1. Replace and examine chain and bucket for excessive load 2. Adjust chain if twisted.
E V A T O R		Chute liner is worn out	1. Replace
	Hot Elevator	Fuse breaker not opened	1. Check for overload
			2. Check shaft bearing
			3. Check chain and chain wheel for proper engagement.
S C R E E N	Screen	Low capacity	1. clean Mesh
			2. Adjust or replace driving V belt

N			
I		Poor screening capacity than planned.	1. Replace Mesh
N			
G			
U	Storage Bim	Overflow chute clogged	1. Clean
N			
I		Oversize chute clogged	1. Clean
T			

Group	Item	Condition	Remedial measures
M	Mixer	Tips worn out	1. Replace
I		Liner worn out	1. Replace
X		Irregular revolution shaft bearing worn out.	1. Adjust belt tighter and straighten belt
I			
N			
G			
		Strike off gate not smooth	1. Check pipes and air cylinder for leakage
U			2. Clean gate roller shaft bearing
N			3. Clean guide rail
I			4. Adjust gap between mixer and gate
T			

S	Control unit	No increase in pressure	1. Adjust unloader in the compressor
P			2. check pipes for leakage
R		Pilot lamp not working	1. Check wiring
A			
Y			2. Replace pilot lamp.
		Thermometer not working	1. Check wiring for open circuit or bad connections.
U			2. Replace thermo couple if damaged
N			
I		Dial scale not returning to O	1. Adjust it at 'O' with the held of knob located at the upper side of dial.
T			
		Lever not engaging	1. Adjust tare steel yard at 'O'

Group	Item	Condition	Remedial measures
S	Spray Unit	Magnet valve not working	1. Check float
P			2. Check micro switch at float top
R			3. Check wiring
A		Poor spraying	1. Check air pressure
Y			2. Wash pray pipe
		Heat oil temperature fails to rise	1. Check heater and replace it wire is cut off
U			2. Adjust temperature regulator
N			
I	Kettle	Suction pipe leaking	1. Tighten packing gland

T		Excessive Temp rise	1. Adjust burner
		Smoke way burnt	1. Replace or Repair
		Poor oil supply to burner	1. Over haul burner nozzle
		Not ignited	1. Check fuel oil for water accumulate at bottom check and clean burner.
			1.
	Fuel oil pipes	Clogging or leaking	1. Clean or tighten joints
	Asphalt pipes	Poor contact or open circuit	1. Replace poor code and rectify wiring
		Motor rotating in reverse direction	1. Reverse two lines out of three
	Generator	Switch board defective	1. Replace damaged switches and meters
		Excessive out put from Generator	1. Check motor for overload
		Motor revolution too fat	1. Adjust generator revolution at 50
		Relay not working	Send relay to factory for repair
	Reciprocating feeder	Linder Worn-out	Replace
	Accessories	Skirt rubber worn	Replace