|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Measurement card for Hafnia Leopard** | | | | Date: | | Measurement reminder |
| **Machine name** | **Measurement condition** | **Work Parameters** | **RHs** | **RPM** | **Remarks** | **Next measurement should be done up to:** |

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Main Engine auxiliary blowers** | | | | | | |
| Main Engine AUX blower no1 el. motor | During normal operation |  |  | 3545.0 |  | 12-08-2024 |
| Main Engine AUX blower no2 el. motor | During normal operation |  |  | 3545.0 |  | 12-08-2024 |
| **Auxiliary Engines** | | | | | | |
| Auxiliary Engine no1 engine bearings | Expected minimum load: 45% |  |  | 900.0 |  | 13-09-2024 |
| Auxiliary Engine no1 alternator | Expected minimum load: 45% |  |  | 900.0 |  | 13-09-2024 |
| Auxiliary Engine no2 engine bearings | Expected minimum load: 45% |  |  | 900.0 |  | 13-08-2024 |
| Auxiliary Engine no2 alternator | Expected minimum load: 45% |  |  | 900.0 |  | 13-08-2024 |
| Auxiliary Engine no3 engine bearings | Expected minimum load: 45% |  |  | 900.0 |  | 19-08-2024 |
| Auxiliary Engine no3 alternator | Expected minimum load: 45% |  |  | 900.0 |  | 19-08-2024 |
| **LO pumps** | | | | | | |
| Main LO pump no1 el. motor | During normal operation |  |  | 1775.0 |  | 13-03-2024 |
| Main LO pump no1 | During normal operation |  |  | 1775.0 |  | 13-03-2024 |
| Main LO pump no2 el. motor | During normal operation |  |  | 1775.0 |  | 07-01-2024 |
| Main LO pump no2 | During normal operation |  |  | 1775.0 |  | 26-02-2024 |
| **ME HPS pumps** | | | | | | |
| ME HPS pump no1 el. motor | During normal operation |  |  | 1772.0 |  | 12-08-2024 |
| ME HPS pump no2 el. motor | During normal operation |  |  | 1772.0 |  | 04-08-2024 |
| **AE LO priming pumps** | | | | | | |
| DG pre-lub pump no1 el. motor | During normal operation |  |  | 1710.0 |  | 20-06-2024 |
| DG pre-lub pump no2 el. motor | During normal operation |  |  | 1710.0 |  | 15-07-2024 |
| DG pre-lub pump no3 el. motor | During normal operation |  |  | 1710.0 |  | 22-01-2024 |
| **SW pumps** | | | | | | |
| Main cooling sea water pump no1 el. motor | During normal operation |  |  | 1775.0 |  | 26-02-2024 |
| Main cooling sea water pump no1 | During normal operation |  |  | 1775.0 |  | 26-02-2024 |
| Main cooling sea water pump no2 el. motor | During normal operation |  |  | 1775.0 |  | 12-08-2024 |
| Main cooling sea water pump no2 | During normal operation |  |  | 1775.0 |  | 12-08-2024 |
| **Fire pumps** | | | | | | |
| Fire bilge & GS pump no1 el. motor | During normal operation |  |  | 1785.0 |  | 10-12-2023 |
| Fire bilge & GS pump no1 | During normal operation |  |  | 1785.0 |  | 30-01-2024 |
| Fire bilge & GS pump no2 el. motor | During normal operation |  |  | 1785.0 |  | 12-08-2024 |
| Fire bilge & GS pump no2 | During normal operation |  |  | 1785.0 |  | 12-08-2024 |
| **IGG scrubber SW pump** | | | | | | |
| IGG scrubber cooling SW pump el. motor | During normal operation |  |  | 1775.0 |  | 17-01-2024 |
| IGG scrubber cooling SW pump | During normal operation |  |  | 1775.0 |  | 17-01-2024 |
| **Deck seal water pumps** | | | | | | |
| Deck seal water pump no1 el. motor | During normal operation |  |  | 3600.0 |  | 12-08-2024 |
| Deck seal water pump no1 | During normal operation |  |  | 3600.0 |  | 12-08-2024 |
| Deck seal water pump no2 el. motor | During normal operation |  |  | 3600.0 |  | 26-02-2024 |
| Deck seal water pump no2 | During normal operation |  |  | 3600.0 |  | 26-02-2024 |
| **LT CFW pumps** | | | | | | |
| LT CFW pump no1 el. motor | During normal operation |  |  | 1800.0 |  | 12-08-2024 |
| LT CFW pump no1 | During normal operation |  |  | 1800.0 |  | 12-08-2024 |
| LT CFW pump no2 el. motor | During normal operation |  |  | 1800.0 |  | 30-01-2024 |
| LT CFW pump no2 | During normal operation |  |  | 1800.0 |  | 30-01-2024 |
| **ME jacket cool pumps** | | | | | | |
| ME jacket cool pump no1 el. motor | During normal operation |  |  | 1800.0 |  | 04-08-2024 |
| ME jacket cool pump no1 | During normal operation |  |  | 1800.0 |  | 12-08-2024 |
| ME jacket cool pump no2 el. motor | During normal operation |  |  | 1800.0 |  | 30-03-2024 |
| ME jacket cool pump no2 | During normal operation |  |  | 1800.0 |  | 30-03-2024 |
| **Aux BLR feed water pumps** | | | | | | |
| Feed water pump for aux. boiler no1 el. motor | During normal operation |  |  | 3600.0 |  | 12-08-2024 |
| Feed water pump for aux. boiler no1 | During normal operation |  |  | 3600.0 |  | 12-08-2024 |
| Feed water pump for aux. boiler no2 el. motor | During normal operation |  |  | 3600.0 |  | 12-08-2024 |
| Feed water pump for aux. boiler no2 | During normal operation |  |  | 3600.0 |  | 12-08-2024 |
| **Composite BLR feed water pumps** | | | | | | |
| Feed water pump for comp. boiler no1 el. motor | During normal operation |  |  | 3600.0 |  | 27-03-2024 |
| Feed water pump for comp. boiler no1 | During normal operation |  |  | 3600.0 |  | 27-03-2024 |
| Feed water pump for comp. boiler no2 el. motor | During normal operation |  |  | 3600.0 |  | 13-09-2024 |
| Feed water pump for comp. boiler no2 | During normal operation |  |  | 3600.0 |  | 13-09-2024 |
| **FWG ejector pump** | | | | | | |
| FWG ejector pump el. motor | During normal operation |  |  | 1770.0 |  | 12-08-2024 |
| FWG ejector pump | During normal operation |  |  | 1770.0 |  | 12-08-2024 |
| **Aux BLR FO pumps** | | | | | | |
| FO unit pump for aux. boiler no1 el. motor | During normal operation |  |  | 3465.0 |  | 12-08-2024 |
| FO unit pump for aux. boiler no1 | During normal operation |  |  | 3465.0 |  | 12-08-2024 |
| FO unit pump for aux. boiler no2 el. motor | During normal operation |  |  | 3465.0 |  | 23-11-2023 |
| FO unit pump for aux. boiler no2 | During normal operation |  |  | 3465.0 |  | 23-11-2023 |
| **Composite BLR FO pumps** | | | | | | |
| FO unit pump for com. boiler no1 el. motor | During normal operation |  |  | 1620.0 |  | 12-08-2024 |
| FO unit pump for com. boiler no1 | During normal operation |  |  | 1360.0 |  | 12-08-2024 |
| FO unit pump for com. boiler no2 el. motor | During normal operation |  |  | 1620.0 |  | 13-09-2024 |
| FO unit pump for com. boiler no2 | During normal operation |  |  | 1360.0 |  | 13-09-2024 |
| **FO supply pumps** | | | | | | |
| FO supply pump no1 el. motor | During normal operation |  |  | 3520.0 |  | 13-06-2024 |
| FO supply pump no1 | During normal operation |  |  | 3520.0 |  | 13-06-2024 |
| FO supply pump no2 el. motor | During normal operation |  |  | 3520.0 |  | 26-01-2024 |
| FO supply pump no2 | During normal operation |  |  | 3520.0 |  | 26-01-2024 |
| **FO circulation pumps** | | | | | | |
| FO circulation pump no1 el. motor | During normal operation |  |  | 3530.0 |  | 13-06-2024 |
| FO circulation pump no1 | During normal operation |  |  | 3530.0 |  | 13-06-2024 |
| FO circulation pump no2 el. motor | During normal operation |  |  | 3530.0 |  | 26-01-2024 |
| FO circulation pump no2 | During normal operation |  |  | 3530.0 |  | 26-01-2024 |
| **Separators** | | | | | | |
| LO separator no1 el. motor | Under full load, 30min after starting and after flushing separator |  |  | 3510.0 |  | 19-08-2024 |
| LO separator no1 | Under full load, 30min after starting and after flushing separator |  |  | 12000.0 |  | 19-08-2024 |
| LO separator no2 el. motor | Under full load, 30min after starting and after flushing separator |  |  | 3510.0 |  | 23-10-2023 |
| LO separator no2 | Under full load, 30min after starting and after flushing separator |  |  | 12000.0 |  | 23-10-2023 |
| HFO separator no1 el. motor | Under full load, 30min after starting and after flushing separator |  |  | 3510.0 |  | 04-08-2024 |
| HFO separator no1 | Under full load, 30min after starting and after flushing separator |  |  | 12000.0 |  | 19-08-2024 |
| HFO separator no2 el. motor | Under full load, 30min after starting and after flushing separator |  |  | 3510.0 |  | 22-02-2024 |
| HFO separator no2 | Under full load, 30min after starting and after flushing separator |  |  | 12000.0 |  | 22-02-2024 |
| **Framo pumps** | | | | | | |
| Framo pump no1 el. motor | Normal operation.   Provide information about load and suction/discharge pressure |  |  | 1787.0 |  | 12-08-2024 |
| Framo pump no1 | Normal operation.   Provide information about load and suction/discharge pressure |  |  | 1787.0 |  | 12-08-2024 |
| Framo pump no2 el. motor | Normal operation.   Provide information about load and suction/discharge pressure |  |  | 1787.0 |  | 12-08-2024 |
| Framo pump no2 | Normal operation.   Provide information about load and suction/discharge pressure |  |  | 1787.0 |  | 12-08-2024 |
| Framo pump no3 diesel engine | Normal operation. Provide information about load and suction/discharge pressure |  |  | 1700.0 |  | 17-01-2024 |
| Framo pump no3 | Normal operation. Provide information about load and suction/discharge pressure |  |  | 1450.0 |  | 17-01-2024 |
| Framo pump no4 diesel engine | Normal operation. Provide information about load and suction/discharge pressure |  |  | 1700.0 |  | 17-01-2024 |
| Framo pump no4 | Normal operation. Provide information about load and suction/discharge pressure |  |  | 1450.0 |  | 17-01-2024 |
| **Framo feed pumps** | | | | | | |
| Framo feed pump no1 el. motor | During normal operation |  |  | 3495.0 |  | 19-08-2024 |
| Framo feed pump no2 el. motor | During normal operation |  |  | 3495.0 |  | 19-08-2024 |
| Framo feed pump no3 el. motor | During normal operation |  |  | 3495.0 |  | 22-02-2024 |
| **Main air compressors** | | | | | | |
| Main air compressor no1 el. motor | During normal operation |  |  | 1770.0 |  | 13-09-2024 |
| Main air compressor no1 | During normal operation |  |  | 1770.0 |  | 14-09-2024 |
| Main air compressor no2 el. motor | During normal operation |  |  | 1770.0 |  | 29-01-2024 |
| Main air compressor no2 | During normal operation |  |  | 1770.0 |  | 29-01-2024 |
| **Air Condition compressors** | | | | | | |
| Air cond. compressor no1 el. motor | During normal operation |  |  | 1775.0 |  | 13-09-2024 |
| Air cond. compressor no1 | During normal operation |  |  | 1800.0 |  | 13-09-2024 |
| Air cond. compressor no2 el. motor | During normal operation |  |  | 1775.0 |  | 25-01-2024 |
| Air cond. compressor no2 | During normal operation |  |  | 1800.0 |  | 25-01-2024 |
| **Deck Air Compressor** | | | | | | |
| Deck air compressor el. motor | During normal operation |  |  | 3530.0 |  | 30-01-2024 |
| **Provision compressor** | | | | | | |
| Provision ref. compressor no1 el. motor | During normal operation |  |  | 1720.0 |  | 10-12-2023 |
| Provision ref. compressor no1 | During normal operation |  |  | - |  | 26-01-2024 |
| Provision ref. compressor no2 el. motor | During normal operation |  |  | 1720.0 |  | 13-09-2024 |
| Provision ref. compressor no2 | During normal operation |  |  | - |  | 13-09-2024 |
| **Steering gear hydraulic unit pumps** | | | | | | |
| Steering gear hydraulic unit pump no1 el. motor | Idle (no load) |  |  | 3540.0 |  | 15-07-2024 |
| Steering gear hydraulic unit pump no2 el. motor | Idle (no load) |  |  | 3540.0 |  | 22-01-2024 |
| **Emergency fire pump** | | | | | | |
| Emergency fire pump el. motor | During normal operation |  |  | 1780.0 |  | 13-09-2024 |
| Emergency fire pump | During normal operation |  |  | 1780.0 |  | 13-09-2024 |
| **Composite boiler FD fan** | | | | | | |
| Comp boiler FD fan el. motor | During normal operation |  |  | - |  | 27-03-2024 |
| **Aux boiler FD fan** | | | | | | |
| Aux boiler FD fan el. motor | During normal operation |  |  | 1775.0 |  | 12-08-2024 |
| **IG fans** | | | | | | |
| IG blower no1 el. motor | During normal operation |  |  | 3560.0 |  | 12-08-2024 |
| IG blower no2 el. motor | During normal operation |  |  | 3560.0 |  | 17-01-2024 |
| **Purifier room exh fan** | | | | | | |
| Purifier room exhaust fan el. motor | During normal operation |  |  | 1720.0 |  | 13-09-2024 |
| **ER ventilation fans** | | | | | | |
| Engine room fan no1 el. motor | During normal operation |  |  | 1760.0 |  | 15-07-2024 |
| Engine room fan no2 el. motor | During normal operation |  |  | 1760.0 |  | 15-07-2024 |
| Engine room fan no3 el. motor | During normal operation |  |  | 1760.0 |  | 15-07-2024 |
| Engine room fan no4 el. motor | During normal operation |  |  | 1760.0 |  | 15-07-2024 |
| **Fans** | | | | | | |
| Sanitary exh fan el. motor | During normal operation |  |  | 1720.0 |  | 13-09-2024 |
| Incinerator draft fan el. motor | During normal operation |  |  | 3520.0 |  | 14-09-2024 |
| Galley exh fan el. motor | During normal operation |  |  | 1180.0 |  | 13-09-2024 |
| Steering gear room supply fan el. motor | During normal operation |  |  | 3540.0 |  | 13-09-2024 |
| **Sewage plant** | | | | | | |
| Sewage plant aeration blower el. motor | During normal operation |  |  | 2900.0 |  | 19-08-2024 |
| Sewage plant aeration blower | During normal operation |  |  | 2900.0 |  | 19-08-2024 |
| Sewage plant discharge pump el. motor | During normal operation |  |  | 3450.0 |  | 26-03-2024 |
| Sewage plant discharge pump | During normal operation |  |  | 3450.0 |  | 26-03-2024 |
| **FWG distillate pump** | | | | | | |
| FWG distillate pump el. motor | During normal operation |  |  | 3470.0 |  | 28-07-2024 |
| FWG distillate pump | During normal operation |  |  | 3470.0 |  | 12-08-2024 |