



BAGFAS PORT MAINTENANCE WORKS PROCEDURE

1. OBJECTIVE

To keep the company operation in business, to ensure that the machinery and equipment can work properly to prevent damage to property, life and environment caused by the deterioration of the used devices.

2. SCOPE AND VALIDITY

Loading and unloading (excluding trucks and work machines) included in the pier covers the maintenance work of machinery and equipment.

3. DEFINITIONS, ABBREVIATIONS

Maintenance: Work of control and repair for purpose of keeping all kinds of equipment used in business activities in continuous operation

Calibration: Work of setting the equipments used in the measurement operations based on the reference points at certain periods.

4. RESPONSIBLE

Maintenance and Repair Department

Construction Unit Responsible Engineering

Electrical Unit Responsible Engineering

Measurement Control Unit Responsible Engineering

Mechanical Unit Responsible Engineering

HSE Unit

5. APPLICATION

5.1. General Maintenance Activities

- 5.1.1. Listed, coded, and maintenance periods were established for all equipment requiring maintenance on the pier. How to care for the equipment is determined by the Maintenance Instructions and the inspection and maintenance tables. Maintenance intervals will be done with the maintenance file. The maintenance done by the Maintenance Engineer or Maintenance staff is checked every 15 days. Maintenance and Operations personnel make daily or weekly maintenance according to instructions and checklists, either by mail or by following orders of orally posted work orders. In order to close the work order in the program, it is necessary to write maintenance information.
- 5.1.2. Maintenance staff writes maintenance findings, notes on the actuals page and keeps the notifications received by mail in the relevant part of BAGFAS WEP.
- 5.1.3. Maintenance instructions have been made available from past experience and advice from the company providing the machinery and equipment.

DATE OF PREPARATION	APPROVED BY
	Factory Manager



- 5.1.4.** It is forbidden to smoke, fire, or generate sparks in coastal storage places of freight forwarders and points and dangerous cargoes in docked vessels carrying dangerous cargo.
- 5.1.5.** Flammable materials are kept away from spark-forming operations and tools and tools which generate sparks in dangerous cargo handling may not be operated.
- 5.1.6.** No maintenance and repair activities can be undertaken without obtaining a work permit from HSE Specialists. In case of any accident procedure 007-accident procedure to be followed. For the injuries form 002-accident and occupational disease notification form to be filled up.
- 5.1.7.** In addition to periodic maintenance, in the event of a malfunction, Unit supervisors request mail or additional verbal work for the maintenance of the defective device. This work is also processed as in periodic maintenance.
- 5.1.8.** Hot-cold working permit form and MSDS are provided for activities to be carried out with dangerous substances.
- 5.1.9.** Maintenance at the operation is carried out by the Maintenance Personnel or by the Maintenance Contractors if they are under the care of the Maintenance and Repair Manager. Also, the maintenance of the devices requiring service maintenance and the periods determined by their authorized service are also carried out by the Service Personnel.
- 5.1.10.** The pressurized vessels (compressor air tank), the forklift examinations are carried out periodically by the Chamber of Mechanical Engineers.
- 5.1.11.** Maintenances which require specialized maintenance such as pump maintenance, ground measurement, etc. must be performed by subcontractor.
- 5.1.12.** Information on the malfunctions and maintenance of each unit is also provided to the watchkeeper and written in the Daily Shift Book. In this way, communication is provided during shift changes.
- 5.1.13.** Work is carried out to prevent it frequently for malfunctions or for the first time or for repeated failures. The approved changes are made in accordance with the Purchase and Procurement procedure. Details of the fault and the work done to eliminate the fault are written here. The aim here is to solve easily once the same fault is encountered again.
- 5.1.14.** Spare parts, lifecycles, parts which will take a long time to be used for the machinery and equipment used in the operation shall be determined and the necessary approvals for the determination and keeping in stock will be provided. Spare parts stocks are kept by the current warehouse.
- 5.1.15.** The maintenance equipment are as follows:

DATE OF PREPARATION	APPROVED BY
	Factory Manager

**Pier – Loading and Discharge****Pier Number 1 (Vesfarte)**

scaffold winch

Pier number 1 ammonia transfer arm

Pier number 1 top belt n= 1448 d/d 15 kw 1000 mm 189 m

Pier number 1 outgoing band n= 1472 d/d 55 kw 1000 mm 483 m

Sulfur / Phosphate transfer belt 75 kw 1000 mm 300 m

Phosphate belt 55 kw 1000 mm 106 m

Phosphate belt 90 kw 1000 mm 177 m

S1 Phosphate belt 18,5 kw 1000 mm 30 m

S2 Phosphate belt 30 kw 1000 mm 42 m

S3 Phosphate belt 30 kw 1000 mm 64 m

Pier Number 2

ammonia transfer arm

F. Acid line

S. Acid line

Pier Number 3

scaffold winch

scaffold winch bunker

M1 transfer belt n=1500 rpm 22 kw 1200 mm 240 m

M4 transfer belt n= 1500 rpm 75 kw 1200 mm 550 m

M5 transfer belt n= 1500 rpm 45 kw 1200 mm 276,5 m

Yeni Ambar Bantları

M7 belt n= 1500 rpm 5 kw 1000 mm 225 m

R1 belt n= 1500 rpm 22 kw 1000 mm 227,5 m

R2 belt 22 kw 1000 mm 225 m

R3 car belt 30 kw 1000 mm 208 m

Control units of the system are on electrification and other equipment

DATE OF PREPARATION	APPROVED BY
	Factory Manager



5.2. Marine Systems Maintenance and Control

- 5.2.1. Maintenance and inspection of marine systems in operation are carried out according to the instructions established for each equipment and structure.
- 5.2.2. All isolated flanges in the platform and on the pier are tested every 12 months and the test certificate is issued. These insulated flanges should not be painted
- 5.2.3. Whether or not there is a shift in the positions of the buoys should be controlled by observing with continuous visual observation, as well as by the GPS device every year as latitude and longitude. This process should be done even if there is hesitation after strong storms
- 5.2.4. If there is a dent in the buoy after the impact, check if there is a hole. If there is a hole, there will be a constant heeling as water will get. In this case, land should be repaired.
- 5.2.5. The float locks, swivels and chains are visually inspected yearly as a submersible, checking that the locks on the rings are connected
- 5.2.6. The concrete parts of the marine structures in operation shall be made by an accredited organization taking the corners of water and under water as per the standards of the Minimum Standards of Operation as stated in the Operational Minimum Standards and shall be certificated to perform the tests of the connecting members such as shipbuilding parents. Maximum tensile loads are marked on them.

5.3. Maintenance and Control of Emergency Equipment

- 5.3.1. Emergency Equipments in operation have weekly test maintenance in addition to periodic maintenance for non-redundancies which must always be in working condition. For example, the Generator, Fire Pumps, Fire Doors, Emergency Buttons, etc. are tested once a week to confirm that they are working. If a faulty condition is detected, a new work order is created and the fault is corrected.
- 5.3.2. Maintenance of other Emergency Equipments in operation is carried out periodically.
- 5.3.3. Fire extinguishers are checked on site by the extinguisher supplier on a monthly basis for 6 months periods. There is a maintenance card on each extinguisher and these maintenance cards are checked by routine field control forms.
- 5.3.4. In addition, most of the Emergency equipments are used in the exercises performed by the HSE unit, and work orders are created and maintained for the faults detected at the end of the exercise.

5.4. Calibration

- 5.4.1. Calculation instructions and Periods have been created.
- 5.4.2. The product counters used for product sales during operation are calibrated at 6-month intervals and the Calibration Records are kept by the Operating Supervisor in the "Calibration" file. After the meters are calibrated, Measurement Control Unit is informed

DATE OF PREPARATION	APPROVED BY
	Factory Manager



about Measurement, calibration of the calibrated counters is made again and their calibration confirmations and the meters are sealed. If the seal is removed due to an automation malfunction and the system is interrupted, the meter is calibrated again by creating a new work order and sealed by the Measurement, Settings Directorate. Temporary sealings are carried out by the Supervisor, who has received training and authorization from the Directorate of Measure.

5.4.3. Other process meters used in operation are calibrated according to the instructions of the Operational Staff.

5.4.4. Calibration Documents are held by the Measurement Control Unit.

5.4.5. All other measuring instruments shall also be carried out in accordance with the instructions given above or in accordance with the instructions of the manufacturer company or its authorized company.

5.5. Training

5.5.1. For the topics needs specialists, Experts in or out of company are invited to give training in Facility.

5.5.2. Safety and health educations given by our safety and health specialist.

DATE OF PREPARATION	APPROVED BY
	Factory Manager