Mechanical Factory:
01 Nguyen Van Lich St., Linh Tay Ward.,
Thu Duc Dist., Ho Chi Minh City, Viet Nam.

STC ENGINEERING CONSTRUCTION
LIMITED LIABILITY COMPANY A MEMBER

N°: 0407-A/TD-N3-17 Date: April *07th, 2017*

CERTIFICATE OF INSPECTION

To: ABACO MACHINES

1. **Commodity Name :** Spreader Bar M1
2. **Brand and Model :** ABACO, model ASB056M1
3. **Quantity :** 01 sample.
4. **Inspection Request:** Periodic inspection.
5. **Client :** ABACO MACHINES.
6. **Place of inspection:** Mechanical Factory of STC Mechanical Engineering Construction Limited Liability Company A Member. 01 Nguyen Van Lich St., Linh Tay Ward., Thu Duc Dist., HCMC., Vietnam.
7. **Inspection Basis :**
   - QTTD 01:2006: Procedure for technological machinery issued by Quatest 3's Decision N° 034/QD-KT3 dated on March 3rd, 2006.
   - Direct observation of sample tested on-site under conditions specified by the client and based on the specification described in the Catalogue of Abaco Machines International Co. submitted by STC Engineering Construction Limited Liability Company A Member.
8. **Date of Inspection :** From 04th to 06th April 2017
9. **Inspection Result**

9.1. Name and quantity of inspected sample is as follow:

- Inspected sample is 01 Spreader Beam M1, brand ABACO, model ASB056M1, made by Mechanical Factory of STC Engineering Construction Limited Liability Company A Member -Vietnam (figure 1, figure 2, figure 3 & figure 4). According to manufacturer's design, the work load limit of inspected Spreader Bar M1 is as follows.

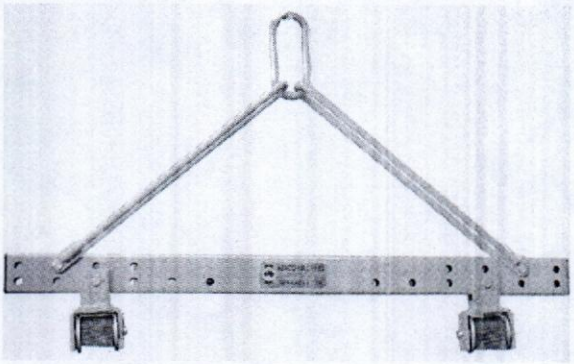

figure 1

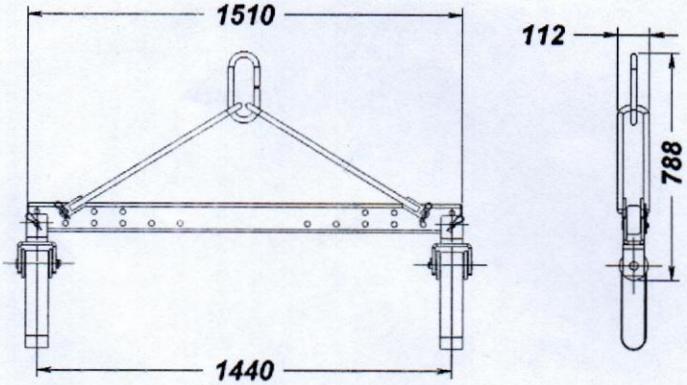

figure 2

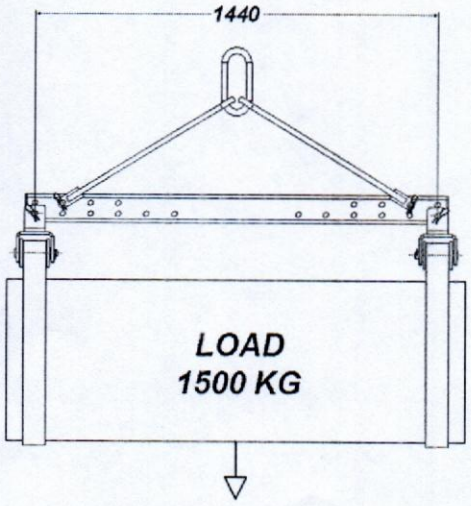

figure 3

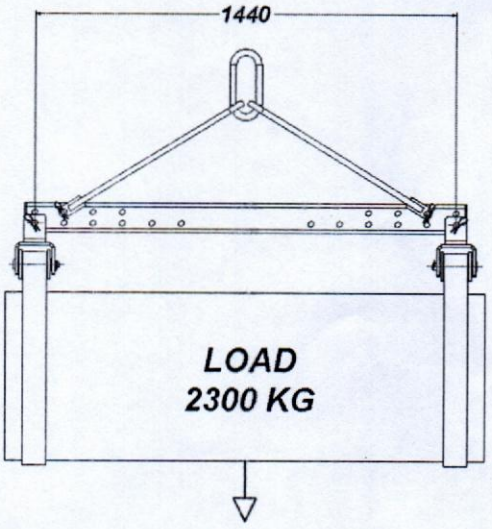

figure 4

9.2. Verification Result:

After verifying, the tested sample Spreader Beam M1 model ASB056M1 can bear the work load limit W_1 described in the catalogue of ABACO Machines International Co. and the test W_2 equals 1.5 value of work load limit W_1. After complete unloading, no deformations were found on the tested Spreader Beam M1 by visual test; no crack or teams found on bearing welds by Magnetic Particle Test (MT).

Chief of Technical Dept.

HO QUOC THAI

Issued to:

- Client as above (3 copies)
- VT, HS for archives.

Annex

CERTIFICATE OF INSPECTION

N°: 0407-A/TD-N3-17

PROCEDURE FOR STESTING SPREADER BEAM M1

1. Facilities and device for testing:

- Load indicator: Electronic Balance brand H46 model CS-7.5T, serial N°: NJJ20005, scale mark: 05 kg, calibration license N° 348DV6C dated 23th August 2016 due to 23th August 2017.
- Test load: Test loads are steel plates with thickness 22 mm and having length and width similar to stone slab (1600 mm x 1500 mm). Prior to load test, weight of the test load has been checked by electronic balance.
- Magnetic particle tool: AC contour probe B 310S.
- Lifting device: Forklift brand SMV, model SL12-1200A, permissible max. payload: 12000 kg.

2. Examination process:

Before and after testing bearing strength capacity, bearing welds of Spreader Beam M1 are tested by Magnetic Particle Test (MT) to detect crack and tears due to overload during load test.

Examination process for testing bearing strength capacity of Spreader Beam M1 has been carried-out in 1 stage:

❖ **Loading, lifting by forklift at each position:**

1st step: Load has been put up gradually to achieve the work load limit W_1 (W_1 = 1500 kg) described in the catalogue of ABACO Machines International Co. After having enough loads, the system has been lifted lighting by using forklift at eyelets on upper brace of beam. When the frame base has been at 0.5 m height with ground, the system has been maintained at stabilized condition for a specified time period 1 hour. During loading and lifting, check deformation on Beam, crack and tear on bearing welds by visual test during maintaining maximum load test.

2nd step: After finishing the 1st step, continue to put up load to test load W_2 equal 1.5 value of work load limit W_1 (W_2 = 2300 kg). After reaching W_2 value, the system has been lifted lighting by using forklift at eyelets on upper brace of beam. When the frame base has been at 0.5 m height with ground, the system has been maintained at stabilized condition as figure 4 for a specified time period 1 hour. During loading and lifting, check deformation on Beam,

crack and tear on bearing welds by visual test during loading and maintaining maximum load test.

When detect any deformation or defect, stop loading, recognize the status and value of test load at the time detecting defects/deformation.