# *BLASTRAC EBE Rigging System*
# *“ Floating Roof “*

**RIGGING SYSTEM FOR PROCESSING VERTICAL STEEL STORAGE TANK SURFACES**

The BLASTRAC EBE Floating Roof rigging systems are especially developed for the BLASTRAC EBE 350 Vertical machine. This machine is designed to suspend with a winch rigging system and works in an up or down pattern to clean and profile vertical steel external shell tank surfaces.

The rigging system is operated and controlled from a mobile control station.

## *TECHNOLOGY*

The Rigging Systems that USF EBE supplies are made with high grade components, all the necessary certification are include in this system and it is made out of several components, the benefit of this is that the building uptime is extremely short. This because the system is so developed that it consists of 5 major components,

**1.** The drive frame which arrange the movements during the blasting to the left and right,
**2.** Winch unit which is controlling the travel speed for blasting down and the movements going upwards,
**3.** Side support arm gives you a constant distance from tank shell and middle point of the machine,
**4.** Hoist arm and pulley frame that controls the winch cable,
**5.** Turnbuckle that is an extra safety point.

All the major components are build up together, the winch system which is a separate system is mounted on top of the Floating Roof rigging system.

The winch systems that USF EBE provide are exchangeable for use on all the other manufactured rigging systems.

# COMMON WARNINGS AND DIRECTIONS:

All certificates and tests are according to Dutch law and regulations.

Certified according to Dutch law:

- Load test at 125% of S.W.L. (Save Work Load)
- Hoisting points at 125% of death weight (approx. 650 Kg)
- See our certificates in this manual

Irrespective of the following information, the local safety regulations are valid in any case for the operation of the machine.

All safety and hazard notices at or on the machine must be kept complete and legible!

The machine may only be used for an EBE 350 VH. It's not allowed to use the winch for any other purposes!

Changes, add-ons or conversions to the machine which might impair safety must not be undertaken without the manufacturers permission!

Make sure that only authorized personnel operate or work on the machine.

Personnel being trained or made acquainted with the equipment may only be deployed on the machine under constant supervision of an experienced person!

Check the machine visually for any damage and defects at least once a day!

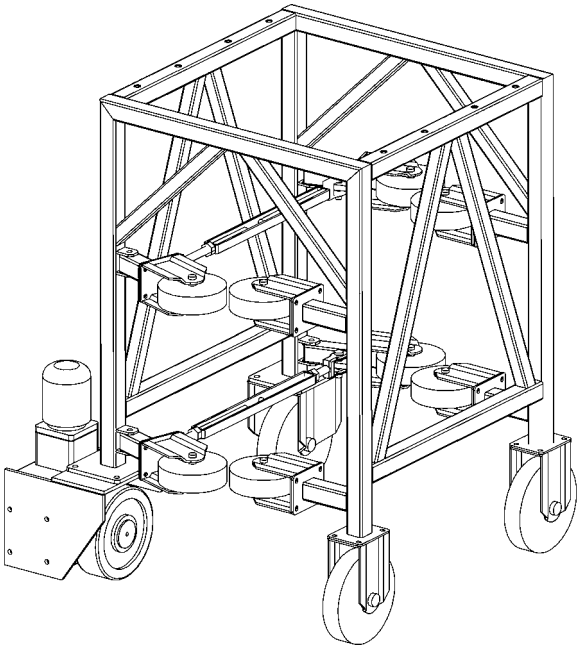
The electrical equipment for the plant must be inspected regularly. Please note in particular the specified recurring inspections according EN60204-1. Work on electrical equipment or operating materials may only be undertaken by a skilled electrician or by trained persons under the guidance and supervision of a skilled electrician as well as in accordance with the electrical engineering regulations.

Only operate the machine when all safety devices and related safety equipment, e.g. detachable safety devices, emergency stops are present and operational!

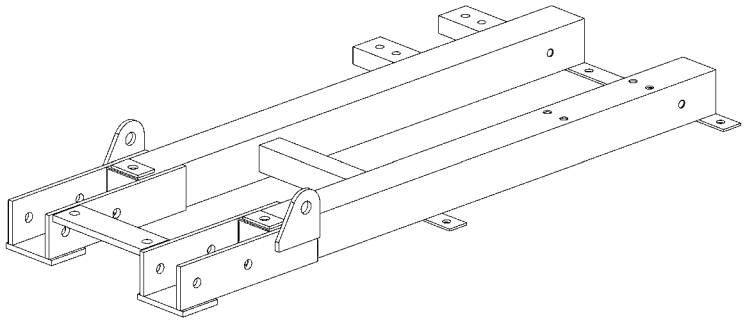
Secure the work area around the machine in public areas. Never walk under a load that is lifted!

# MAJOR COMPONENTS

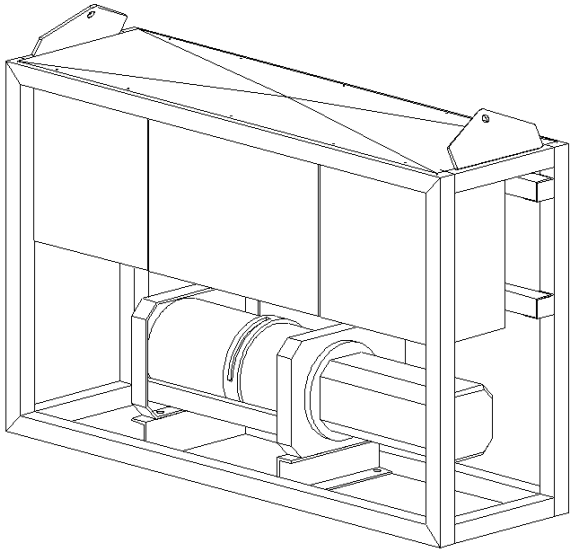
The Floating Roof Rigging System consists of the following 4 major components:



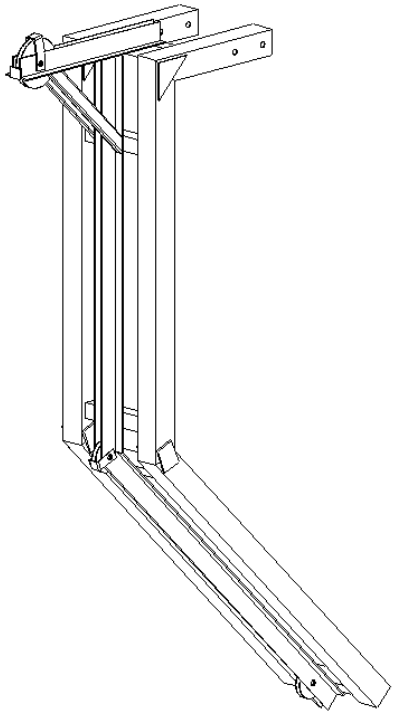
DRIVE FRAME



MOUNTFRAME
AND STIFFENINGPLATES



WINCH FRAME

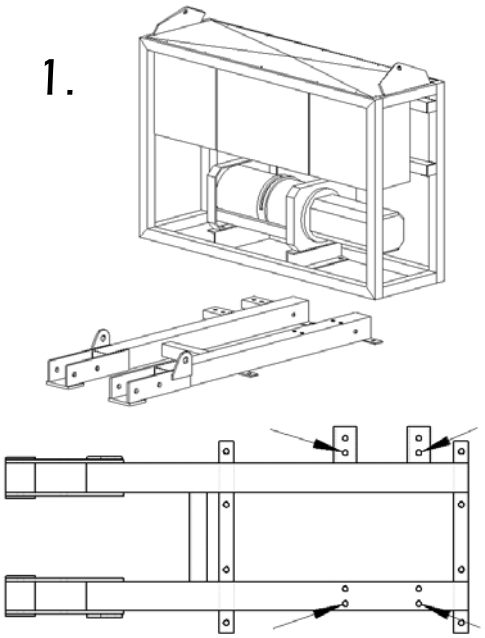


HOIST ARM

# PREPARATIONS

1. Attach WINCH FRAME to MOUNT FRAME;
2. Attach HOIST ARM to MOUNT FRAME;
3. Pull through WINCH CABLE and connect CABLE HOOK.

1.



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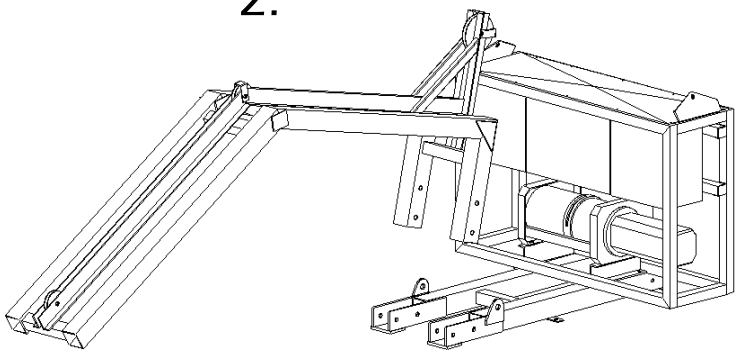

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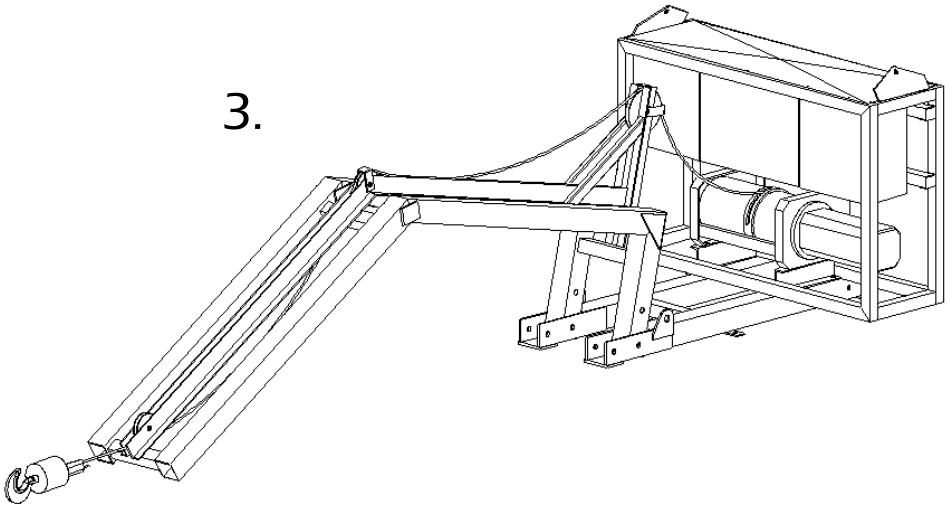
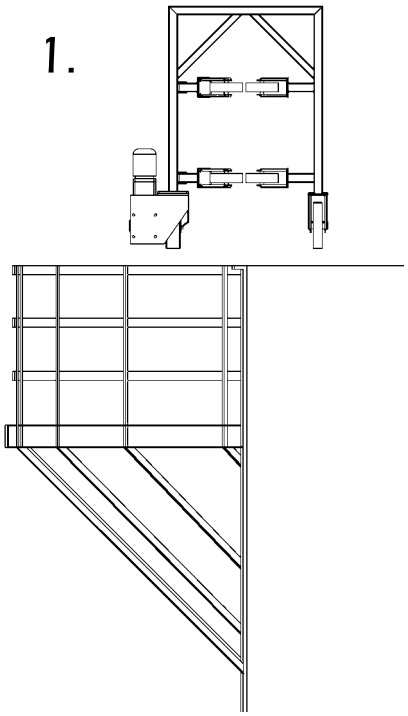


# HOISTING - DRIVE FRAME

1. Hoist the DRIVE FRAME above the wall of the floating roof tank;
2. Turn the Turnbuckle anti-clockwise, the wheels move outside;
3. Lower the DRIVE FRAME and fix the hinging wall wheels.

1.



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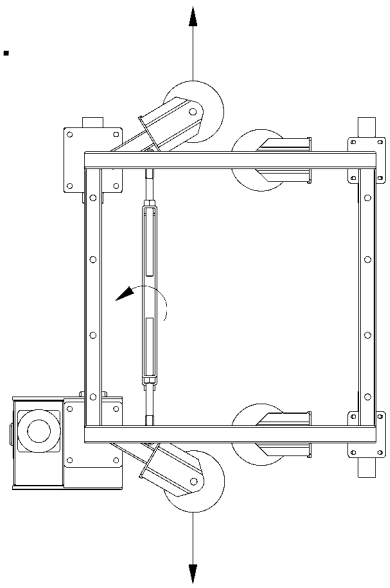

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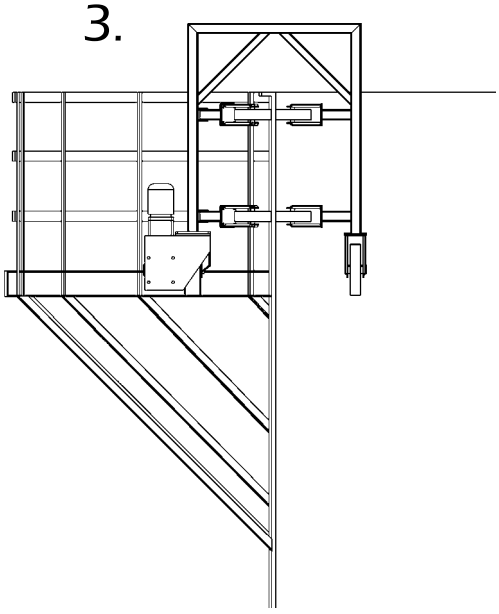
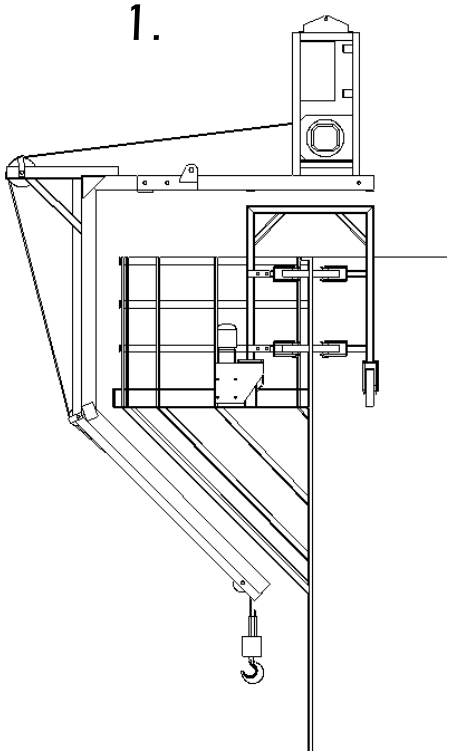


# HOISTING - WINCH ASSEMBLY

1. Hoist the WINCH ASSEMBLY a little bit above the DRIVE FRAME;
2. Lower the WINCH ASSEMBLY, fix the bolts and lock the HOIST ARM.

1.



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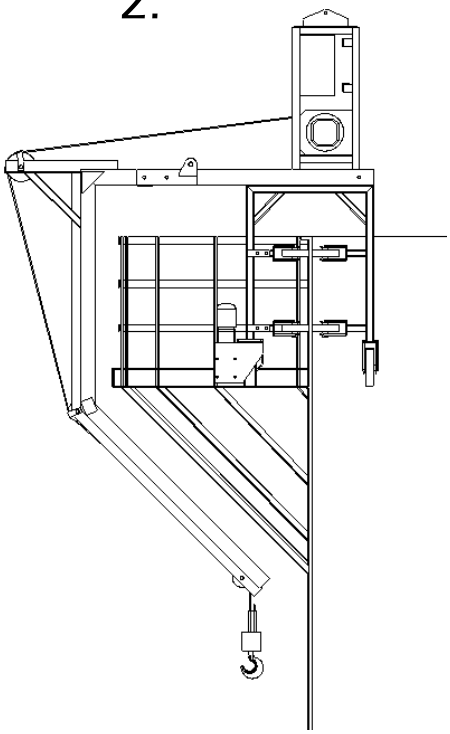
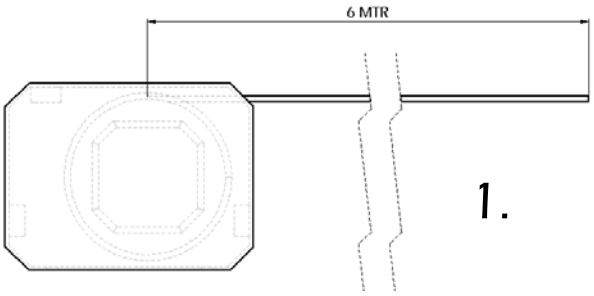


# Limit Switch Settings
# Floating Roof Rigging

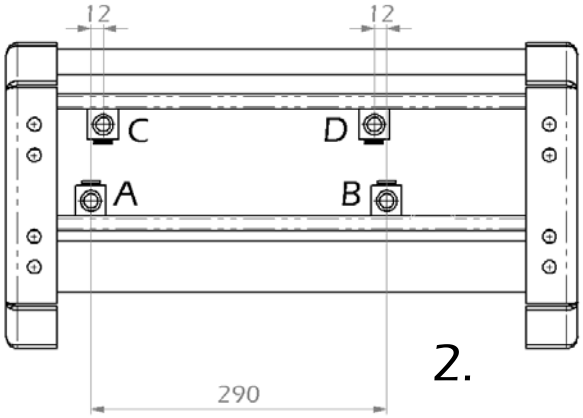
1. Switch on the power of the Winch Unit.

2. Release the cable until the distance from the centre of the winch drum to the lifting block is **6 mtr**.




3. Change the settings of limit switch A by loosening the two bolts and sliding the limit switch left or right to the position that will stop the winch from lifting (when cable length is 6 mtr).

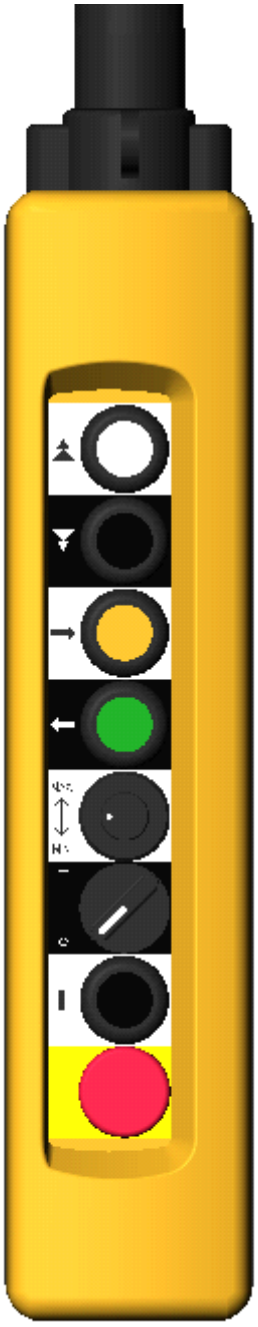
4. Change the other 3 limit switches According to Figure 2.




A. Start/Stop winch cable
B. End/Stop winch cable (± 20 mtr cable)
C. Slow/Start
D. Slow/End

# OPERATION

Remote Control Box of the FLOATING ROOF RIGGING SYSTEM.



- WINCH UP

- WINCH DOWN

- RIGGING DRIVE RIGHT

- RIGGING DRIVE LEFT

- BLASTING SPEED BLAST MACHINE

- 0 = FIXED BLASTING SPEED (0.5 or 16 mtr/min)
- 1 = ADJUSTABLE BLASTING SPEED (0.5 - 16 mtr/min)

- RESET ON

- EMERGENCY STOP