USER MANUAL
VERTICAL PLATE LIFTING CLAMP

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Description:

Lifting clamps are applied for lifting and transporting all kinds of steel plates and are made of top quality alloyed steel.

Vertical plate lifting clamps have specifically been designed for the vertical lifting and transporting of steel plates and constructions. The clamps consists of a locking device, a tension spring and a lever. Once the lever has been operated, the safety mechanism provides constant pre-tensioning of het cam on the steel plate, thereby ensuring that the clamp does not slip when lifting force is applied. When a load is being lifted the clamping force on the cam is increased by the weight of the load. The safety system also ensures that the clamp will not work itself loose from the plate as the load is being lowered.

Characteristic for a plate lifting clamp is that they function with a by the load generated clamping force. The friction between the load and the cams determine the safety. This is why the clamping jaws have tooth segments. For smooth surfaces which may not be damaged, like a stainless steel-plate, a plastic coating will be used on the cams.

Safety instructions:

Please carefully read the safety instructions of this owner's manual before using the safety lifting clamp. In case of any doubts, please refer to your dealer!

- A vertical plate lifting clamp must be inspected and tested every year by an authorized expert body.
- Never work with an untested or disapproved clamp.
- Keep your distance when lifting and never stand under the load.
- Do not use the clamp if (it has been) damaged.
- A damaged clamp must be repaired by a producer notified body or person.
- Never lift more than one plate at a time.
- Never lift plates heavier than the working load limit (WLL) or which have a weight less than 10% of the WLL, as indicated on the clamp and in the test certificate.
- Do not lift plates which are thicker or thinner than the jaw opening, as indicated on the clamp and in the test certificate.
- Take care when lifting from a non-vertical position. The WLL may be considerably reduced in these lifting situations.
- When using a number of lifting clamps at the same time, please provide lifting slings or chains of a sufficient length to ensure that the angle between the slings or chains never exceeds 60°.
- When simultaneously operating a number of lifting clamps time side by side, please use a lifting beam (equalizer) and lifting slings or chains of a sufficient length to ensure that the lifting shackles on the clamps are never subjected to lateral load.
- Do not place the clamp on tapered or conical sections of the plate or structure to be lifted.
- Remove all grease, oil, dirt, corrosion and mill scale from the plate at the point where the clamp is to be attached.
- The surface hardness of the plate must not exceed 37 HrC (345 Hb, 1166 N/mm²), unless otherwise stated.
- The clamp is only suitable for use in normal atmospheric conditions.

Warnings:

- As far as applicable, make sure that the lifting shackle or MP fork is never subjected to lateral load.
- A free fall or uncontrolled swaying at the crane hook resulting in objects being struck, may cause impact damage to the clamp. If this happens check whether the clamp is still in good working order before using it.
- Lifting clamps are not suitable for creating permanent joints.
- Do not modify the clamp (by welding, grinding, etc.), as this can adversely affect its operation and safety, thereby nullifying any forms of guarantee and product liability.

Lifting:

- Check whether the working load limit (WLL) of the clamp is sufficient for the load created in the lifting situation. Note: The WLL is shown on the lifting clamp.
- Attach the lifting clamp to the hoisting mechanism either by means of a:
  safety shackle directly to a crane hook.;
  coupling link or D-shackle;
  sling or chain, if necessary in conjunction with a coupling link or D-shackle.
- Ensure that all attachments have been tested and are of the correct tonnage. Make sure that coupling links and shackles are large enough to allow the clamp to move freely in the hook.
- Check whether the clamp has any visible damage.
- Operate the lever to check whether the cam opens and closes smoothly.

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- Check whether the teeth of the cam are free from dirt, and if necessary clean with a steel wire brush.
- Remove any grease , dirt and mill scale from the plate at the site of the lifting clamp.
- Use the lever to open the clamp.
- Place the jaws as far as they will go over the plate, making sure that the clamp is positioned so as to balance the load when it is being lifted.
- Close the clamp by turning the lever fully back.
- Lift gently so that the lifting force can be applied; check whether the clamp is slipping.
- Ensure that the load is in a stable position before loosening the clamp from the plate.