

Another

New Product

BH-313 Weld-On Hooks



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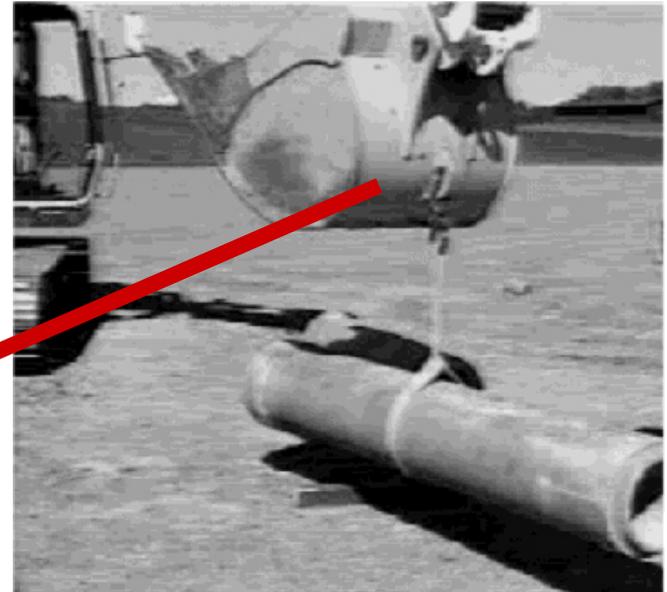
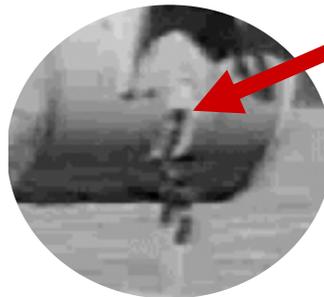
Crosby® BH-313 Weld-On Hooks

Purpose

Designed for attachment to mobile lifting equipment such as backhoes, excavator buckets or other pieces of machinery.

In order to...

Provide a pick point for easy sling attachment.



Crosby® BH-313 Weld-On Hooks

Product Information

- ☑ **Wide range of sizes available.**
 - **Working Load Limits of:
1, 2, 3, 4, 5, 8 & 10 Metric Tonnes**
- ☑ **Forged Alloy Steel**
- ☑ **Design Factor of 5 to 1**



Crosby® BH-313 Weld-On Hooks

Product Information

- Heavy duty latch interlocks with hook tip.



- Reduces potential for fouling
- Replacement latches available

Crosby® BH-313 Weld-On Hooks

Product Information

- Large Weld Pad
 - Provides more area for welding



Crosby® BH-313 Weld-On Hooks

Product Information

Detailed warning and application instructions included with each hook.

WARNING & APPLICATION INSTRUCTIONS
CROSBY® WELD-ON HOOK BH-313

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CROSBY® WELD-ON HOOKS
WARNING AND APPLICATION INSTRUCTIONS

WARNING

- Loads may disengage from hook if proper procedures are not followed.
- A falling load may cause serious injury or death.
- Hook must always support the load. The load must never be supported by the latch.
- Never apply more force than the hook's assigned Working Load Limit (WLL) rating.
- Do not use Crosby weld on hook for personnel hoisting. See OSHA Rule 19215.900(g).
- Read and understand these instructions before welding on, or using hook.

Important Safety Information - Read and Follow

- A visual periodic inspection for cracks, nicks, wear, gouges and deformation as part of a comprehensive documented inspection program, should be conducted by trained personnel.
- A visual periodic inspection of the weld should be performed. Check the weld visually, or use a suitable NDE method if required.
- As wear/tear increases are not specifically designed for constant use with excavator buckets, an excavator operator and very thorough inspection of the excavator bucket welding area to ensure no deterioration has been made to the work area.
- Never use a hook whose throat opening has been increased, or whose throat has been bent more than 10 degrees out of plane from the hook body, or is in any other way distorted or bent.
Note: A latch will not work properly on a hook with a bent or worn lip.
- Never use a hook that is worn beyond the limits shown in Figure 1.
- Remove from service any hook with a crack, nick, or gouge. Hooks with a crack, nick, or gouge shall be repaired by grinding smooth, following the contour of the hook, provided that the repaired dimension is within the limits shown in Figure 1.
- Never repair, alter, rework, or reshape a hook by welding, heating, burning, or bending.
- Always make sure the hook supports the load. The load is to be applied within the range shown in Figure 2. The latch must never support the load (See Figure 3).
- Never side load (See Figure 4), or top load (See Figure 5) a hook.
- The use of a latch may be prohibited by regulations of safety codes, e.g., OSHA, MSHA, ANSI/ASME B30, Insurance, etc. (Refer to your state and local codes, and instructions in "Understanding The Crosby Group Warnings" for further information.)
- Ensure latch functions properly. Use only genuine Crosby replacement parts.
- Never attach more than one sling directly in hook. For collecting two or more slings in the hook, use proper hardware.
- See ANSI/ASME B30.10 "Hooks" for additional information.

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Crosby[®] BH-313 Weld-On Hooks

Product Information

- Detailed Welding Instructions included with each hook.

Installation and Welding Instructions for the Crosby[®] Weld-on Hook

- The strength of the weld-on hook depends upon the method of attachment. Extreme care must be used in choice of support as well as during the attachment process.
- The support structure that the hook is attached to must be of suitable size, composition and quality to support the anticipated loads of all operating positions. The required support structure material thickness for a given application is dependent on variables such as unsupported length and material strength, and should be determined by a qualified individual. Minimum plate thickness required to support the welds are shown in Table 1.

Table 1

Working Load Limit (t)	Minimum Plate Thickness (in.)	Minimum Fillet Size All Around (in.)
1	3/16	3/16
2	1/4	1/4
3	5/16	5/16
4	5/16	5/16
5	3/8	3/8
8	1/2	1/2
10	1/2	1/2

- Position the hook to insure that the load is applied in the plane of the hook, and the load is supported by the hook in all operating positions. Insure that the hook does not interfere with the operation of other mechanisms or cause pinch points.
- Insure that the maximum gap between hook base and support does not exceed 1/8". Modify the support structure if required to reduce gap.

- When welding hook to carbon or low alloy steels (less than .40% carbon), the following welding recommendations are to be followed. For welding hook to other grades of steel, a qualified weld procedure must be developed. Crosby hook material is AISI 8622 modified.
- Welding is to be performed by a qualified welder using qualified procedure in accordance with American Welding Society (AWS), and/or American Society of Mechanical Engineers (ASME) requirements.
- Welding electrode to be in accordance with AWS A5.4 E-312-16. Observe the electrode manufacturers recommendations.
- Welding preheat range outlined below.
 - Minimum preheat temperature: 212F (100C)
 - Maximum temperature: 716F (380C)
- Before welding, the surface to be welded on, including the hook and support structure, must be clean and free from rust, grease and paint.
- Fillet weld leg size should be of minimum shown in Table 1. Weld profiles to be in accordance with AWS. Weld size is measured by length of leg.
- Welding should be carried out completely around base in a minimum of two passes to insure adequate root penetration at the base of the hook.
- Do not rapidly cool the weld.
- After welding, a visual inspection of the weld should be performed prior to painting.
- No cracks, pitting, inclusions, notches or undercuts are allowed. If doubt exists, use a suitable NDE method, such as Magnetic Particle or Liquid Penetrant to verify.
- If repair is required on weld, grind out defect and re-weld using original qualified procedure.
- After welding, the assembly should be proof tested before putting into service.



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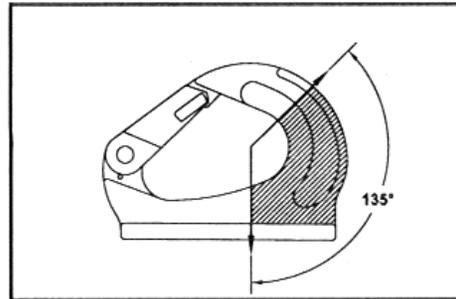
Crosby® BH-313 Weld-On Hooks

Product Application

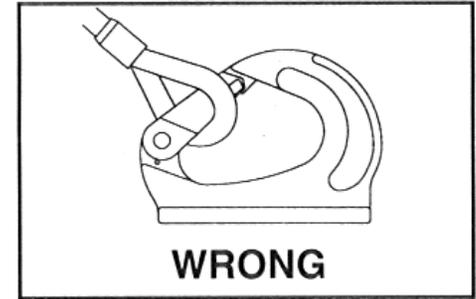
✓ Proper Lifting Techniques



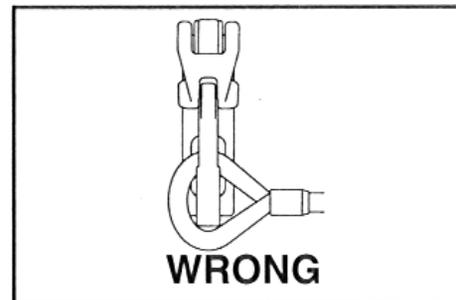
- The load must rest in the bowl of the hook (1).
- The latch should not support the load (2).
- The hook should not be Side loaded (3) or tip loaded (4).



(1)



(2)



(3)



(4)

Crosby® BH-313 Weld-On Hooks

Product Application



- Weld-On hooks are to only be welded to a structure, equipment or machinery in an area (load point) approved by the original equipment manufacturer.**
 - **Some manufacturers may not approve the modification of their product.**

- For hydraulic excavator lift capacity rating, refer to SAE standard J1097.**