

## Procedure: Checking

### 1. PURPOSE AND SCOPE

- 1.1. The purpose of this procedure is to define the checking procedure.
- 1.2. The scope is to confirm the drawings are complete in reference to the approved customer design, the sales order description, meets applicable design requirement standards, and meets manufacturing's needs to be able to produce the product at hand.
- 1.3. The Engineering Manager is responsible for implementation and management of this procedure.

### 2. REVISION AND APPROVAL

Rev.	Date	Nature of Changes	Approved By
N	06/05/2018	Original issue.	Eicher
001	3/6/2023	Added "buddy" check verbiage	Shenberger

### 3. DEFINITIONS

- 3.1. BOM: Bill of Material
- 3.2. BTH: Below-the-hook

### 4. PROCEDURE

Checking procedure is performed by a qualified designer.  
Checking procedure must meet the following requirements:

- 4.1. Meet all details of the description of the order.
  - 4.1.1. Notify sales to update the description as needed
- 4.2. Calculations

Beam size	Pin size	Hook size
Shackle size	Material size and type	Bail size
Hole tear-outs		
References, if matching or downsizing an existing BTH design, some or all of the above may be covered by the reference details.		
- 4.3. Nameplate is filled out.
- 4.4. BTH stamp and rating, if applicable
- 4.5. Coating or paint notes, standard block says "Caldwell Yellow."
- 4.6. Any specific stenciling notes. For example: "VERTICAL SYMETRICAL LOADING ONLY"

#### 4.7. BOM

- 4.7.1. BOM table is connected to the top of the drawing border.
- 4.7.2. Balloons connected to the proper components.
- 4.7.3. Sizes matching the component parts.
- 4.7.4. Stock# (M1#) matching the components.

#### 4.8. Critical dimensions

Overall L, W, H	Throat	Headroom
Clearances	Hook sizes	Min & Max on variables
Handle sizes	Attachment details	All options
Customer's device to be lifted, if provided, and confirm fit-up		

#### 4.9. Weld symbols

- 4.9.1. Accurate and precise detail of welds
- 4.9.2. Applicable notes in the weld tail. For example, TYP

#### 4.10. Minimal line crossing for BOM balloons, dimensions, weld symbols and any other supplementary information.

#### 4.11. Electrical requirements (if applicable)

- 4.11.1. Power input
- 4.11.2. Connection type
- 4.11.3. Controls, pendant, rigid buttons, crane controls and provider
- 4.11.4. Location of mounted electrical boxes