

# **BELOW-THE-HOOK EQUIPMENT**

# **C-HOOKS**

Avon Engineering C-hooks provide a simple, economical choice for coil handling. They are engineered with design flexibility to meet the specific requirements of the customer's operating environment. Design calculations and factory repairs are available.

Features of the Avon Engineering C-hook line include:

- Unitized construction so that only the bail, counterweight and coil support saddle are welded to the main, one-piece burnout.
- The tapered lower carrying arm facilitates entry into the coil ID.
- The beveled top edge of the carrying arm is standard on Hooks under 20,000 pound capacity.
- Coil support saddles are standard on hooks with 20,000 pounds or greater capacity.

Available options include:

- High temperature service
- Storage standsBail pins
- Mill duty service
   Protective pads
- Motorized rotation
- Digital weighing systems
- otorized rotation

All Avon Engineering C-hooks are designed and manufactured in accordance with the latest revisions of ASME Specifications B30.20 and BTH-1, Design of Below-the-Hook Lifting Devices.

#### **COUNTER BALANCED C-HOOKS**

This Model 624 C-hook has a lower member length that equals the maximum coil width. The full length support feature of this C-hook increases the amount of surface area in contact with the coil, minimizing the potential for damage to the inner wraps of lighter gauge coil stock. The tapered carrying arms facilitate entry into the coil ID. Model 624 C-hooks are counter balanced to hang level when loaded or unloaded. They are fabricated from high strength steel plate to minimize size and weight, making them an economical choice for coil handling. Available features include:

- Variety of lifting bails.
- Coil edge protection.
- Power rotation.
- Digital weigh system.
- Low headroom designs.
- Storage/maintenance stands are recommended.



# **Solving Material Handling Problems**

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#### MODEL 624-SL CLOSE STACKING C-HOOKS



These C-hooks are designed for close stacking. The distance from pick-up point (center of gravity) to the end of the hook is shortened. The shorter lifting arm permits handling all coil widths within operating range (widest to narrowest) without the lifting arm extending beyond the outer edge of the coil.

The reduced overall width of this style of C-hook decreases aisle space requirements and increases storage capacity.

#### **MOTORIZED ROTATING C-HOOKS**

Avon Engineering's Motorized Rotating C-hook comes equipped with a motorized rotator capable of continuous 360° rotation. This feature provides additional capability for safe and proper positioning of coils.



Motorized rotating C-hook sitting in its stand

#### MODEL 624 MILL DUTY RATED C-HOOKS





Mill duty C-hooks are built with larger sections and corner radii to keep stresses to a minimum, thereby providing maximum service life.

Our mill-duty C-hooks are designed for continuous, severe mill service. The design standard is ASME BTH-1, Category B, Service Class 4. This type of service requires a crane capable of handling loads approaching rated capacity throughout its life with 20 or more lifts per hour.

#### HIGH TEMPERATURE RATED C-HOOKS

This C-hook can handle high temperature coils in continuous-duty, hot mill applications. The C-hook has extra-large steel sections and corner radii. Bolt-on wear pads are standard.

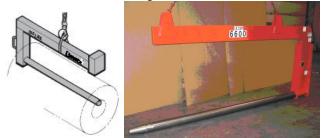


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#### **MODEL 600 PAPER ROLL C-HOOKS**

The paper roll C-hook lifts the paper roll by inserting the lower member through the roll core.

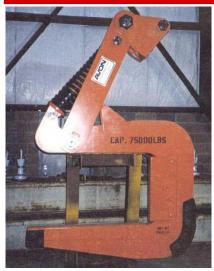


**C-HOOKS FOR HANDLING NARROW COILS** 



The Model 610 C-hook is similar in construction to the Model 624. The lifting bail is burned from the same piece of plate as the hook, making it an integral part of the C-hook.

#### **SPRING BALANCED C-HOOKS**



Spring balanced C-hooks are particularly useful for handling large coils. By eliminating the need for a counter weight, they minimize the weight of the hook. Coil edge protection is available.

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#### **C-HOOKS WITH LOAD WEIGHING SYSTEMS**



Avon Engineering C-hooks can also be equipped with integral load weighing systems. The accuracy of the load cells is from plus or minus 0.2% to 0.5% of full load. The calibration settings are saved in memory even during loss of power. All Avon Engineering Chooks are designed and manufactured in accordance with ASME Spec. B30.20 and BTH-1: Design of Below-the-Hook Lifting Devices.



### **EDGE PROTECTION & STORAGE STANDS**





Since C-hooks are large and heavy, they can cause personal injury or property damage if they fall over. Each C-hook should be stored in an upright position on a stand specifically designed for its size, shape and weight.





# **BELOW-THE-HOOK EQUIPMENT**

#### SPECIALTY C-HOOKS

#### Nickel clad C-hook



This C-hook was designed for submerging wire or rod coils in an acid pickling line. It is clad in 100% nickel to protect the steel used in the fabrication of the units.

#### **Stainless Steel C-hook**



**Coil tripper C-hook** 



The C-hook above was engineered to move small palletized slit coils (mults) from eyehorizontal to eye-vertical position. It is made of high strength steel with inside corners polished and NDT inspected and is available in capacities from 500 to 10,000 pounds.

Slit Mult Lifter

Faster and safer than a conventional C-hook, this specially designed lifter facilitates fast and safe placement of a slit coil onto an un-coiler mandrel. It adjusts automatically to varying coil diameters. The full length handle makes it easier to maneuver the lifter.

#### C-hook/Pallet lifter



This combination C-hook and pallet lifter is a versatile unit that can handle both coils and palletized materials. It can be designed with either motorized or manual fork adjustment.

#### **Three-legged C-hook**



Designed for lifting three hot forgings at once

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