

SPECIAL LIFTING EQUIPMENT

Bushman manufactures a wide variety of custom engineered lifting devices to meet the handling needs of all manufacturers. This equipment is custom designed to perform a wide variety of operations safely and efficiently while preserving the integrity of even the most fragile load.

Bushman lifting devices are designed and manufactured to meet or exceed the latest revision of ASME Spec. BTH-1: Design of Below the Hook Lifting Devices.



This 50-ton motorized lifter handles dies of varying length and width. It includes sensors for use on a semi-automated crane.



Operator uses an air impact wrench to rotate a mold held by a large rotating axis grab. The grab was designed to lift and provide 360 degree rotation for concentric steel rings.



This die lifter has power rotating forks that allow dies to be stacked close together. The forks are lowered along the sides of the die, and then rotated 90° until they are under the die to lift it.



This 40-ton device allows a forged ring manufacturer to quickly and safely load and unload rings from a series of vertical turret lathes. The device can lift the rings about the O.D. or the I.D. to accommodate a ring diameter range of six to 21 feet.

ROLL LIFTERS

Bushman designs and manufactures a wide range of specialized lifters for rolls or cylindrical shapes that combine safety, operating efficiency and load protection.



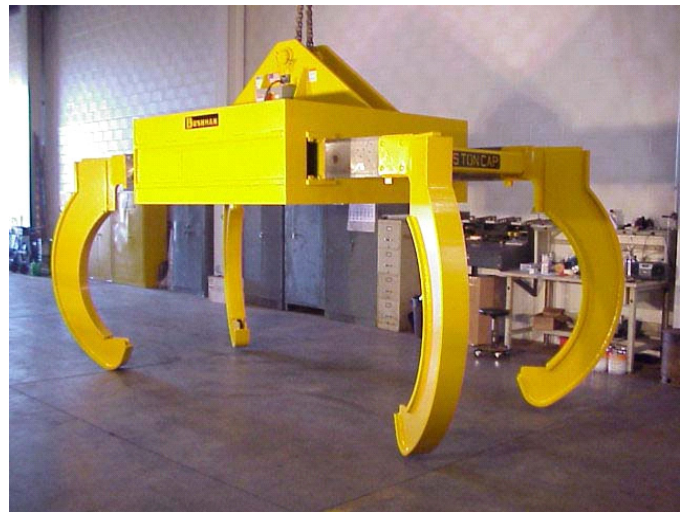
Model M2028 motor driven roll lifters have telescoping legs that engage the core of the roll. They handle rolls of varying widths and capacities from one to 20 tons, depending on the core size. A manual model, operated by a hand wheel or chain wheel, is also available.



This nine-metric ton capacity grab handles mill rolls in a fully automated roll grinding cell in a steel mill. This unit is specifically designed for lifting clean or dirty rolls in and out of roll grinders and storage racks. It features travel in and out to find the correct lifting position on the roll neck. The horseshoe is powered in a radial direction allowing this unit to be lowered directly on to the roll neck, if required, without having to travel in over the ends of the rolls. This can be used either manually or in fully automated systems.



Model 5609 roll lifters handle rolls of varying sizes by cradling them around the O.D. Manual and motorized units are available. The unit shown on the left also has motorized rotation capable of turning the roll about its vertical axis. Capacities up to 25 tons are available.



This custom lifter allows a steel manufacturer to remove spent electric arc furnace electrodes without having to wait for a full cool down period. This reduces the downtime for changing out electrodes.



This device moves telescopic legs to engage rolled steel sections and rotate them 90° to position them for welding into railroad tankers.

ROTATING AXIS GRABS



Model 2038 rotating axis grabs grip the load and rotate it about its horizontal axis. The unit can be operated manually or powered by electric or air motors.



Automatic



Manual

This 1,500 pound capacity rotating axis grab picks up shaft assemblies and rotates them about their horizontal axis to facilitate an assembly process.



This axis grab rotates refractory blocks about their horizontal axis. The design challenge was to have the grab securely grip this fragile load without crumbling it. Also complicating the design process was the fact that the sides were not flat or truly parallel with each other.



This custom designed unit grabs, rotates and flips 9,000 pound rolls of paper. It combines the unique features of a rotating axis grab, motorized coil grab and powered rotation into one lifter.

OTHER SPECIAL LIFTERS



This 75-ton lifter handles reels of steel tube used on offshore oil and gas platforms. It is an adaptation of our M5067 coil lifter.



This grab engages with a rack that holds and stacks bundles of steel bars. It uses our automatic latching system to allow full mechanical attachment and release of the rack.



This roll lifting beam can lift four 2,000 kg rolls at once, a total capacity of 8000 kg. The roll lifters are mounted on a single spreader beam with dual lifting bails.



This 55-ton capacity lifter attaches to refuse containers using hydraulic locking pins.

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