

FORESTRY BOOM FEATURES

GENERAL

- Pierce Forestry Booms maximize power for greater payload capacity, speed for increased cycle times, and length for longer reach and working range.
- Pierce experience: OEM supplier.
- 30 years and thousands of Pierce Forestry Booms in operation prove its superior design in extreme North American timber and conditions.

DESIGN

- All forestry booms are designed and analyzed utilizing FEA and 3D modeling.
- All boom sections are engineered, designed and built using the latest computer-aided design and manufacturing techniques.

STRUCTURE

- High strength, low alloy materials yield maximum strength-to-weight ratio, maximizing your payload.
- Cylinder and boom mount ears: T-1 steel.
- Precision machining.
- Assured fit and interchangeability of replacement service parts.
- Excellent cold weather properties.
- Wide joints distribute stress loads.
- Reinforced box section.
- Heavy duty joints for extended service life.
- OEM quality finish work: sandblast, primed, finish coat with top quality paints for a long lasting finish.

PINS AND BUSHINGS

- Oversized, induction hardened, heat treated and chromed pins, for longer service life.
- Aluminum bronze bushings for extended lubrication/greasing intervals.

CYLINDERS

- Matched to recommended machine operating pressure.
- High pressure piston seals.
- Bolt on heads.
- Designed to exacting standards following complete design analysis, inspecting every component for strength and application compatibility.

HYDRAULIC SYSTEM

- Parflanged tubing and centralized lubrication.
- Plumbing lines connected tight to boom profile minimizing potential damage from impact.

ADDITIONAL

- Our attachment division offers a complete line of forestry work tools.
- Our turnkey division features a full line of guarding, cab and undercarriage options.



Forestry Booms

Pierce Pacific Mfg.: Additional Forestry Products



PROCESSING/HARVESTER HEADS



PIERCE DELIMITERS



DENHARCO DELIMITERS



FORESTRY GUARDING



FELLING ATTACHMENTS



PARALIFT



FORESTRY GRAPPLES



BRUSH RAKES



ROAD BUILDER/HARVESTER CONVERSION



YARDING/WINCH PACKAGES

Pierce Pacific Manufacturing, Inc. Pierce Denharco, Inc.

4424 NE 158th
Portland, Oregon 97230 USA

Post Office Box 30509
Portland, Oregon 97294 USA

Telephone: 503.808.9110
Toll Free: 800.760.3270
Facsimile: 503.808.9111

Distribution Warehouses
Edmonton, Alberta Canada
Baton Rouge, Louisiana USA

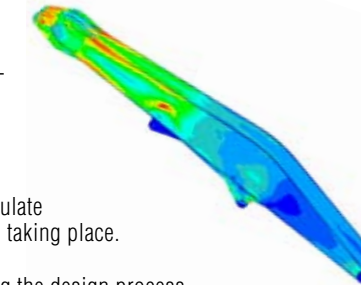
www.piercepacific.com
www.denharco.com



Denharco

GET A PERFECT FIT

Finite Element Analysis (FEA), combined with computer-aided motion analysis software, allows our design team to eliminate structural "hot spots" where structural strength is critical to the long-term integrity of the product. These tools, used by all the major excavator manufacturers, allow us to design, build, assemble, simulate and test our boom structures prior to any manufacturing taking place.



All high load concentrations have been eliminated during the design process, allowing us to provide structures and fabrications that will flourish in the rigors of North American timber and climate conditions.

In addition, fully associative drafting allows for a precision fit of every part and component we fabricate, allowing for a consistent/superior tolerance product to be manufactured each and every time.

And, as an Allied Equipment Manufacturer, our engineering team works directly with excavator manufacturers to assure complete and error-free integration of all OEM/ Pierce equipment.

THE PIERCE PROMISE

Like all Pierce products, once it's delivered we stand by it all the way. Our unparalleled product support and customer service includes on-site training and troubleshooting, stocked warehouses, after hours pickup and overnight delivery. Emergency orders are routinely shipped the same day, and our professional service technicians are available 7 days a week, after business hours and weekends, to make sure your jobs stay on track and on schedule. Quality from the drawing board to the bottom line. That's what "Pierce built, Pierce backed" is all about.



PIERCE
Denharco

Pierce Pacific Manufacturing, Inc.
Pierce Denharco, Inc.

Forestry Booms

Live Heel
Butt N Top
Millyard/Sortyard
Harvester
Specialty

**FORESTRY
BOOMS**

WE GO TO GREAT LENGTHS TO IMPROVE YOUR PRODUCTIVITY.

Pierce Forestry Booms offer optimum working range, strong lifting characteristics and are the most proven and reliable booms in the forest today. Each boom is designed and manufactured by our skilled team, allowing you to order a boom specifically engineered to accommodate your application, as well as machine make and model. Live heel or butt n top; straight or cambered main section; top mounted heel cylinder; 2-piece or 3-piece; long, short or standard lengths; and standard or through-the-snoot heel rack. . . you name it, Pierce can provide you the best possible tool for your specific job.

These configurations are all available from Pierce, however these are not typically available from machine manufacturers offering the "complete forestry package". These manufacturers offer one configuration to suit every application. In our experience, one size does not fit all. Pierce analyzes all of the factors associated with your needs, allowing us to recommending the configuration which maximizes your production – and profitability. *Need two more feet? More down angle? More lifting power?*

And, because our booms are Pierce built, you can count on getting a top quality product with full product support and fast delivery on all service parts. Three more reasons why Pierce forestry booms have set the standard in the woods for decades.



PIERCE LIVE HEEL FORESTRY BOOMS.

The efficient design of Pierce live heel forestry booms offer maximum working range and lifting capacity with optimum weight distribution and cylinder size. These hard-working booms can be engineered to accommodate special applications or length requirements; from shovel logging and loading to mill yard unloading and sorting. Pierce forestry booms also offer the ideal range for close-in log handling, long reach for stacking and loading, and superior above grade and down-over-the-bank characteristics. Solid design and construction makes them last longer to extend your productivity even more.

Pulpwood and knucklebooms are available where a live heel is not required.

For those that alternate between grapples and processing heads: the heel rack length is designed appropriately offering optimum geometry and leverage while heeling logs, and while fully retracted minimizing interference with the processor.



BUTT N TOP FORESTRY BOOM



Configurations available:

- Longer reach.
- Greater 'up' angle.
- Increased 'down' angle.
- Pierce cylinders.
- OEM cylinders.
- Cambered main section for improved 'under boom' visibility.
- Stick cylinder guard.
- Hoist cylinder guard.

MACHINE SIZE	20-21 M.T.	22-24 M.T.	25-29 M.T.	33-35 M.T.	37 M.T.
BOOM LENGTH	34'	36'	38'	40'	41'

Machine sizes not listed are available from Pierce as forestry machines upon request.



LIVE HEEL FORESTRY BOOM



Configurations available:

- Longer reach.
- Greater 'up' angle.
- Increased 'down' angle.
- Top mount heel cylinder.
- Standard heel rack.
- Through-the-snoot heel rack.
- Pierce cylinders.
- OEM cylinders.
- Stick cylinder guard.
- Hoist cylinder guard.



MACHINE SIZE	20-21 M.T.	22-24 M.T.	25-29 M.T.	33-35 M.T.	37 M.T.
BOOM LENGTH	36'	38'	40'	42'	44'

Machine sizes not listed are available from Pierce as forestry machines upon request.

MILLYARD/SORTYARD BOOM.



UNDERMOUNT HEEL CYLINDER



TOP MOUNT HEEL CYLINDER



3 PIECE BUTT N TOP



CAMBERED MAIN SECTION



CUSTOM DESIGN MEANS THE RIGHT BOOM FOR THE JOB.

At Pierce, we recognize that each mill/sortyard is unique to one another, thus each has different log decking requirements. In addition, these machines typically need to withstand an extended working life. For these reasons, we analyze the following factors before we propose a recommended boom/work tool configuration for your specific decking needs. The result is the optimum working range and decking characteristics for the extended work life of your machine.

FACTORS TO CONSIDER:

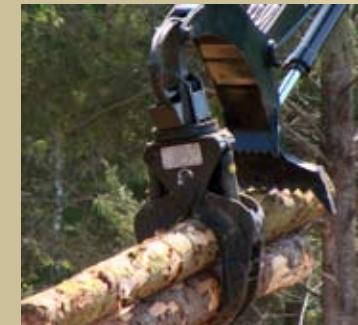
- The stem weight and density.
- Stem size and length.
- Cycle time and swing motion.
- Critical working range: reach, height, weight and capacity.
- Existing installations.
- Existing structures.
- Existing work tools.
- Safety regulations.

PIERCE HARVESTER / PROCESSOR BOOMS.

A Pierce Harvester/Processor Boom is a two piece configuration consisting of a medium length cambered main section and a long, straight stick, offering optimum harvester working range for felling and in the woods and roadside processing. Pierce Harvester/Processor Booms are engineered to optimize performance with any harvester/processor head. Each are designed to maximize your working range and capacity for thinning, clear cutting and processing. Selections range from a 16 metric ton thinning machine to a 37 metric ton big wood processor.

TWIN CYLINDER HYDRAULIC FORESTRY GRAPPLES.

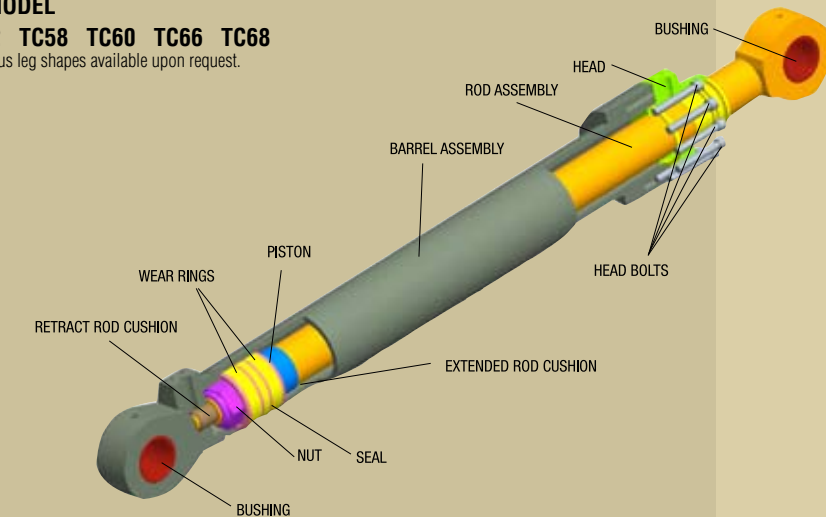
Pierce Twin Cylinder Forestry Grapples feature powerful 360° continuous rotation and are multi-purpose for excellent versatility. They feature optimum leg shape for big wood, tight grapple closure for superior small log control, load check valves to eliminate the risk of dropping your payload, and heavy duty legs that process the optimum shape for shovel logging, loading, unloading and sorting.



Complete your forestry package with a Pierce forestry grapple.

GRAPPLE MODEL TC46 TC52 TC58 TC60 TC66 TC68

Selection of various leg shapes available upon request.



TUFFY CYLINDER

The Tuffy Cylinder Program redefines cylinder performance for extreme logging applications through superior design, analysis, and manufacturing processes. Forestry operations demand performance that standard OEM cylinders may not offer. OEM cylinders used in below grade digging applications may not translate well into above grade logging and forestry work. Our cylinder design maximizes machine performance by increasing power, speed, payload capacity and range of motion in the woods where work is executed primarily at or above ground level. All Pierce cylinders are thoroughly inspected and tested for quality and assembly requirements prior to shipment and installation.

Look for Pierce Forestry Booms with Tuffy Cylinders to maximize your production.