BUILT TO WORK FOR YOUR BOTTOM LINE.

The stronger, more dependable H-Series feller bunchers are loaded with features to make you more productive while costing you less to operate.

**FULL TREE SYSTEM**

<table>
<thead>
<tr>
<th>HARVESTING</th>
<th>TRANSPORTING</th>
<th>LOADING</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="image1.png" alt="Image" /></td>
<td><img src="image2.png" alt="Image" /></td>
<td><img src="image3.png" alt="Image" /></td>
</tr>
</tbody>
</table>

Full Tree System—No one offers the extensive product line, dealer network and tough, purpose-built machines like John Deere.
The H-Series feller bunchers are built to be durable with a tapered-roller-bearing center joint and a streamlined hood constructed of dent-resistant steel. Heavy-gauge fuel and hydraulic tanks, as well as the wraparound rear bumper are forest-tough to stand up to the punishment of the woods. They’re also built to be more productive with big pins and bushings in the boom and head-tilt linkage to maximize lift capacity.

The 643H is compact and versatile with a short wheelbase and tight turn radius to work in crowded conditions. The 843H features the extra size and power for bigger wood and heavier bunches. Whatever one best fits your needs, you’ll get the high performance you demand to get the job done right.
FEATURE-RICH AND FOREST-TOUGH.

High-efficiency John Deere engines deliver full power on-demand at low rpms with economical fuel consumption.

Well-equipped operator’s cabin with excellent all-direction sight lines, proven cab HVAC system and the choice of wheel or joystick steering all ensure full-shift productivity.

Smooth hydrostatic drive with two-speed, electric-over-hydraulic gearbox avoids transmission wear when shifting on-the-go.

Strong center hinge with large tapered roller bearings gives long-life reliability to this critical area.

Load-sensing hydraulics with a closed-center hydraulic valve lets you run different functions at the same time.
Powerful cylinders and large pins and bushings provide the strength for high lifting capacity.

Felling head tilts back for maximum control of tall, heavy trees when felling, especially in slope conditions.
OPERATOR COMFORT IS THE KEY TO PRODUCTIVITY.

The remarkably roomy cab is well appointed for the ultimate in operator comfort. Plus, powerful load-sensing hydraulics will get the most out of every bunch and every shift.

Choose between traditional wheel steering or lever steering.
Parallel geometry of the arms and linkages keep trees vertical when the boom is raised.
Streamlined engine cover, with no limb risers, greatly improves visibility to the rear.

Long shifts fly by when you are inside a climate-controlled, isolation-mounted cab. Well-placed, low-effort controls are well within reach, and your view is unobstructed in all directions including up to the treetops through the large skylight, all to make your operator as productive as possible.

But when it comes to straight-out productivity, the H-Series feller bunchers feature John Deere diesel engines with a steep torque rise in the work range for easier load starting, better low-speed driveability and superior lugging power. The load-sensing hydraulics utilize a closed-center control valve, allowing multiple hydraulic functions to be powered simultaneously.
Spacious operator station features high-efficiency air-conditioning with ducts positioned for air flow to the operator's feet and chest, CB radio and new AM/FM/cassette radio with remote speakers.

The tilt/telescopic steering wheel allows the operator to find the perfect position for shift-long comfort.
TAKES THE PUNISHMENT AND KEEPS COMING BACK FOR MORE.

The H-Series feller bunchers are designed to perform day after day with reliable components and quick access to service areas.

Heavy-gauge fuel and hydraulic tanks and wraparound bumper stand up to the woods for unsurpassed reliability.

The parking brake is fully enclosed and oil-immersed for increased dependability.
Both the 643H and 843H feller bunchers feature smooth hydrostatic drive, with two-speed, electric-over-hydraulic gear box to avoid transmission wear when shifting on the go. Quick shifts between forward and reverse and on-the-fly differential lock-ups front and rear provide fast, no hesitation response and extended component life cycle. When service is necessary, all panels open quickly and easily, and the entire cab can be hydraulically tilted for efficient access to vital service areas and components. Pumps in the engine compartment are easy to get to, simplifying service and getting your John Deere H-Series Feller Buncher back to work quickly.

Strong center hinge with large tapered roller bearings give long-life reliability to this critical area.

The cab’s roof is built to be dent-resistant with thicker front and rear windows for operator protection.
**FELLING HEADS FACTORY MATCHED FOR YOUR EXACT NEEDS.**

Industry-leading disk saw felling heads and a high-speed shear are available to fit your specific application.

Forest-tough heads are built for shift-after-shift reliability, with either single-post and center-pocket design for handling big stems, or twin-post and side-pocket design to accumulate smaller stems.

Saw speed recovers quickly for increased productivity as the machine moves forward to the next tree. A shear head is available on the 643H.

<table>
<thead>
<tr>
<th>FELLING HEADS</th>
<th>FD22</th>
<th>FD45</th>
<th>FB20 SHEAR</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cutting Capacity</td>
<td>22-in 56 cm</td>
<td>20-in 51 cm</td>
<td>20-in 51 cm</td>
</tr>
<tr>
<td>Style</td>
<td>Single post center pocket</td>
<td>Twin post side pocket</td>
<td>Twin post center pocket</td>
</tr>
<tr>
<td>Accumulating Capacity</td>
<td>4.1 sq-ft 0.38 m²</td>
<td>6.9 sq-ft 0.64 m²</td>
<td>5.2 sq-ft 0.48 m²</td>
</tr>
<tr>
<td>Weight</td>
<td>5,800 lb 2,631 kg</td>
<td>4,900 lb 2,272 kg</td>
<td>6,000 lb 2,728 kg</td>
</tr>
</tbody>
</table>

**FD22 FELLING HEAD**
FD22—BEST IN BIG WOOD
- The FD22 has two non-folding harvesting and two folding accumulating clamp arms with high center posts and horn to control tall trees.
- Single-post design, with center storage pocket, holds large trees better with a wider opening.
- Low velocity front discharge directs spray chips forward, away from the machine.

FD45—BEST IN CLASS
- The FD45 disc saw felling head has best-in-class size and productivity with 990-sq.-in. (638.7 m²) accumulation and an offset pocket for gathering multiple small stems.
- Single-side accumulating and gathering arms provide fast, reliable and repetitive gathering and moving cut stems to the pocket.
- All lubrication points are accessible from the side of the head for easy servicing and less downtime.
- Twin-post design provides maximum visibility to the cutting zone.
- Can cut and hold single stems up to 20-in. (51 cm) in diameter with better use of horsepower and faster saw recovery.

FB20—SHEAR HEAD
- The FB20 shear head features one fixed and one moveable shear blade. High accumulation capacity and strength for high productivity in heavy going.
- Twin post, center pocket for secure handling of thick stems.
- Cutting capacity of 20 in. (51 cm).

FD45 FELLING HEAD
MAKE THE MOST OF EVERY DAILY OPERATING DOLLAR.

These highly maneuverable feller bunchers will keep your operating costs in line with high-output engines and load-sensing hydraulics.

Rest assured that your purpose-built John Deere Forestry equipment is supported by the most extensive dealer network in the industry and unsurpassed parts availability. That’s our promise.

John Deere engines are dependable with more net torque at lower rpms for instant power and economical fuel consumption. Load-sensing hydraulics run all functions at the same time, greatly improving fuel economy. When it comes time for daily maintenance chores, nearly all routine servicing can be done from ground level. Removing the left rear side shield allows quick and easy access to all daily engine service points, as well as fluid levels and visual check points.
TECHNICAL DATA 643H 843H WHEELED FELLER BUNCHER

OPERATOR’S STATION
Air conditioner (R134A refrigerant)
AM-FM stereo radio with two (2) remote-mounted speakers
CB radio
Cab tilt with onboard hydraulics
Cab with integral forestry guarding, FOPS, OPS, and ROPS protective structure
Coat hook
Cup holder
Defrost fan (right front of cab)
Fire extinguishers, dry chemical and pressurized water
Floor mat
Full-function monitor instrumentation with audible warning for: Engine air intake temperature (843 only) / Engine coolant temperature / Engine oil pressure
Monitor indicator lights for: Engine air filter restriction / Hydraulic filter restriction / Hydrostatic filter restriction / Low alternator voltage / Park brake
Gauges, illuminated: Engine coolant temperature / Hydrostatic transmission oil temperature
Hand throttle
Headliner
Heater, 40,000 Btu
Horn
Hourmeter, illuminated
Interior light
Lockable cab door (with start switch key)
Lunch cooler storage area
Pressurizer, dual-zone, three speed with fresh air inlet
Rearview mirror, interior mounted
Seal, fabric covered, adjustable suspension, knee action with: Height and weight adjustment / Seat armrest height adjustment / High back with headrest / Seat backrest angle adjustment
Seat belt, 2-in 51 mm wide with retractor (conforms to SAE J386)
Secondary exit (right side window)
Large treepop window
Sliding side windows (2)
Tinted polycarbonate windows
Storage in left-hand door
Windshield wiper/washer

STANDARD EQUIPMENT
Engine
John Deere 6068T, 414 cu-in 6.8 L
170 gross hp 127 kW (643 only)
John Deere 6068H, 414 cu-in 6.8 L
200 gross hp 149 kW (843 only)
Antifreeze to –34°F –37°C
Blower-type cooling fan, enclosed with guard
Coolant recovery tank
Electric fuel shutoff with start switch key
Fuel filters, dual stage, quick release
Fuel water separator
In-line injection pump
Isolation-mounted engine
Oil drain shutoff for spill-free oil changes
Oil-to-water engine oil cooler
Electrical
Battery disconnect in operator’s station
Dual, heavy-duty, low-maintenance batteries
Transmission
Infinitely variable hydrostatic transmission
Oil cooler, oil to air, heavy-duty in-line core, side-by-side with radiator
Oil filter, 10-micron spin-on type
Quick disconnect diagnostic ports
Protected electric/hydraulic range shift of two-speed gearbox
Axles
Front and rear axle differential lock, hydraulically operated, on-the-go
Standard-duty front axle, John Deere 1200 Series
Rear axle, John Deere 1200 Series
Brakes
Service: Disc type, mounted inboard of axle final drives, front axle / Sealed and lubricated / Self adjusting and self equalizing
Park: Spring-applied, hydraulically released, driveline mounted, completely enclosed in oil
Steering
Frame articulation, with 90 degrees total articulation, rubber frame stops
Wheel steering, telescopic and tilt column, steering wheel spinner knob
Hydraulic System
Low-effort pilot controls
Oil filter, return, 10 micron with bypass
Oil cooler, heavy-duty in-line core, side-by-side with radiator
Open-center hydraulics for shear machine (643 only)
Pressure-compensating load-sense hydraulics for saw machine (843 only)
Quick disconnect diagnostic ports
Continuous disc saws with axial piston pump (843 only)

Felling Head
None
Overall Vehicle
Articulation transport lock pin
Cable-type cab guards
Hand grips
Hose shields on lift and tilt cylinders
Lift arm lock
Lockable heavy-duty engine side shields
Lockable hinged access doors over fuel and hydraulic fill caps
Pressurized water reservoir with pressure gauge, hose, and spray nozzle
Tow hook

OPTIONAL EQUIPMENT
Transmission
Ground speed limiter control
Axles
Heavy-duty front axle, John Deere 1400 Series
Lever steering, left-hand armrest-mounted control
Hydraulic System
Pressure-compensating load-sense hydraulics for saw machine (643 only)
Shear (643 only)
Felling Head
Continuous disc saw
Shear (643 only)

Net engine power is with standard equipment including air cleaner, alternator, and cooling fan, at standard conditions per SAE J1349 and DIN 70 020, using No 2-D fuel at 35 API gravity. No derating is required up to 10,000 ft (3050 m) altitude. Gross power is without cooling fan. Specifications and design subject to change without notice. Wherever applicable, specifications are in accordance with SAE standards. Except where otherwise noted, these specifications are based on units with full fuel tank, 175-lb (79 kg) operators, and standard equipment.
**TECHNICAL DATA 643H 843H WHEELED FELLER BUNCHER**

<table>
<thead>
<tr>
<th>ENGINE</th>
<th>643H</th>
<th>843H</th>
</tr>
</thead>
<tbody>
<tr>
<td>Type</td>
<td>John Deere 6068T with altitude-compensating turbocharger</td>
<td>John Deere 6068H with altitude-compensating turbocharger</td>
</tr>
<tr>
<td>Gross Power @ 2,000 rpm</td>
<td>170 gross hp 127 kW</td>
<td>200 gross hp 149 kW</td>
</tr>
<tr>
<td>Cylinders</td>
<td>6</td>
<td>6</td>
</tr>
<tr>
<td>Displacement</td>
<td>414 cu-in 6.8 L</td>
<td>414 cu-in 6.8 L</td>
</tr>
<tr>
<td>Maximum Net Torque @ 1,400 rpm</td>
<td>494 lb-ft 670 Nm</td>
<td>575 lb-ft 780 Nm</td>
</tr>
<tr>
<td>Fuel Consumption, Typical</td>
<td>5.1–6.5 gal/hr 19.3–24.6 L/hr</td>
<td>6.5–7.5 gal/hr 19.3–28.4 L/hr</td>
</tr>
<tr>
<td>Fuel Filters</td>
<td>Two, with water separation</td>
<td>Two, with water separation</td>
</tr>
<tr>
<td>Air Cleaner</td>
<td>Dual stage with safety element and dust unloader valve</td>
<td>Dual stage with safety element and dust unloader valve</td>
</tr>
<tr>
<td>Cooling System</td>
<td>Heavy-duty radiator with coolant recovery reservoir</td>
<td>Heavy-duty radiator with coolant recovery reservoir, and side-by-side charged air cooler</td>
</tr>
<tr>
<td>Cooling Fan</td>
<td>Blower</td>
<td>Blower</td>
</tr>
<tr>
<td>Lubrication</td>
<td>Pressure system with oil cooler (oil to water)</td>
<td>Pressure system with oil cooler (oil to water)</td>
</tr>
<tr>
<td>Oil Filter</td>
<td>Vertically mounted spin-on oil</td>
<td>Vertically mounted spin-on oil</td>
</tr>
</tbody>
</table>

**ELECTRICAL**
- Alternator, 12 Volts: 95 amps
- Batteries (2), 12 Volt
  - Reserve Minutes: 180 minutes each
  - Cold Cranking Capacity: 925 cold cranking amps each

**TRANSMISSION**
- Type: Infinitely variable hydrostatic with two-speed gearbox
- Travel Speeds, With 28L-26 Tires: Forward and Reverse
  - Gear 1: 0–5 mph 0–8 kph
  - Gear 2: 0–12.5 mph 0–20 kph
- Filter: 10-micron, spin-on type, filters all oil to rotating groups

**AXLES**
- Final Drives: Heavy-duty planetary, mounted inboard
- Differentials: Hydraulic lock, operated on-the-go front and rear – standard

**BRAKES**
- Service Brakes: Inboard-mounted hydraulic wet-disc, bathed in cooling oil, long life, self adjusting, self equalizing, front axle
- Parking Brake: Automatically spring applied, hydraulically released, driveline mounted, completely enclosed in oil

**STEERING**
- Frame Articulation: 90 degrees total articulation, stop-to-stop
- Steering Wheel: Standard
- Lever Steering Option: For minimum-control motion

**HYDRAULIC SYSTEM**

<table>
<thead>
<tr>
<th>643H</th>
<th>843H</th>
</tr>
</thead>
<tbody>
<tr>
<td>Main Pumps</td>
<td>One variable-displacement axial piston main pump, closed-center with priority for steering; one variable-displacement axial piston pump for continuous saw</td>
</tr>
<tr>
<td>Saw Machine</td>
<td>One variable-displacement axial piston main pump, closed-center with priority for steering; one variable-displacement axial piston pump for continuous saw</td>
</tr>
<tr>
<td>Shear Machine</td>
<td>Two fixed-displacement gear pumps for shear; open-center system; axial piston pilot/brake pump</td>
</tr>
<tr>
<td>Ground Drive</td>
<td>Variable displacement axial piston pump and motor</td>
</tr>
<tr>
<td>Shear Close Flow @ 2,200 rpm</td>
<td>88 gpm 333 L/min</td>
</tr>
<tr>
<td>Shear Open Flow @ 2,200 rpm</td>
<td>44 gpm 166 L/min</td>
</tr>
<tr>
<td>Shear Pressure (Close)</td>
<td>3,500 psi 24 131 kPa</td>
</tr>
<tr>
<td>Lift and Tilt Flow @ 2,200 rpm</td>
<td>44 gpm 166 L/min (shear); 43 gpm 163 L/min (saw)</td>
</tr>
<tr>
<td>Lift Pressure</td>
<td>3,100 psi 21 374 kPa</td>
</tr>
<tr>
<td>Tilt Pressure</td>
<td>3,100 psi 21 374 kPa</td>
</tr>
<tr>
<td>Continuous Disc Saw Flow @ 2,200 rpm</td>
<td>30 gpm 113 L/min 41 gpm 155 L/min</td>
</tr>
<tr>
<td>Pressure</td>
<td>3,750 psi 25 856 kPa</td>
</tr>
<tr>
<td>Filter</td>
<td>Vertically mounted 10-micron spin-on return oil with bypass</td>
</tr>
</tbody>
</table>

Vertis QCA
1300 10th Street, Suite 200
East Moline, IL 61244
**CYLINDERS**

<table>
<thead>
<tr>
<th>Lift Arm (2)</th>
<th>Bore</th>
<th>Rod Diameter</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>3.92-in 100 mm</td>
<td>2.24-in 56 mm</td>
</tr>
<tr>
<td>Head Tilt (2)</td>
<td>3.92-in 100 mm</td>
<td>2.24-in 56 mm</td>
</tr>
</tbody>
</table>

**FELLING HEAD INFORMATION**

<table>
<thead>
<tr>
<th></th>
<th>643H</th>
<th>843H</th>
</tr>
</thead>
<tbody>
<tr>
<td>Shear</td>
<td>FB20</td>
<td></td>
</tr>
<tr>
<td>Continuous-Type Disc Saw</td>
<td>FD22 - Single post</td>
<td>FD22 - Single post</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**TIRES**

<table>
<thead>
<tr>
<th>Size Offered</th>
<th>28L-26 LS2 12 Ply / 28L-26 LS2 14 Ply</th>
<th>28L-26 LS2 12 Ply / 28L-26 LS2 14 Ply</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>28L-26 LS2 12 Ply</td>
<td>28L-26 LS2 12 Ply</td>
</tr>
<tr>
<td></td>
<td>8.6 psi 59 kPa</td>
<td>8.7 psi 60 kPa</td>
</tr>
</tbody>
</table>

*Data is for shear- or saw-equipped unit, tires inflated to recommended pressures, and 3-in 76 mm ground penetration.

**CAPACITIES**

<table>
<thead>
<tr>
<th>Fuel Tank</th>
<th>75 gal 284 L</th>
<th>75 gal 284 L</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cooling System</td>
<td>26 qt 24.6 L</td>
<td>32.5 qt 30.7 L</td>
</tr>
<tr>
<td>Engine Lubrication, Including Filter</td>
<td>20 qt 19 L</td>
<td>20 qt 19 L</td>
</tr>
<tr>
<td>Hydraulic Reservoir</td>
<td>67 gal 254 L</td>
<td>67 gal 254 L</td>
</tr>
<tr>
<td>Two-Speed Gearbox</td>
<td>5.2 qt 4.9 L</td>
<td>5.2 qt 4.9 L</td>
</tr>
<tr>
<td>Pump Drive Gearbox</td>
<td>5 qt 4.7 L</td>
<td>5 qt 4.7 L</td>
</tr>
<tr>
<td>Axles (Front and Rear), Each (1200 Series)</td>
<td>20 qt 19 L</td>
<td>20 qt 19 L</td>
</tr>
<tr>
<td>Axle (Front – 1400 Series)</td>
<td>30 qt 23.4 L</td>
<td>30 qt 23.4 L</td>
</tr>
</tbody>
</table>

**OPERATING WEIGHTS**

| Standard Equipment, Less Felling Head | 25,975 lb 11 782 kg | 26,275 lb 11 918 kg |
| With Shear (FB20) | 31,075 lb 14 504 kg |
| With Saw, Continuous (FD22) | 31,360 lb 14 482 kg | 32,390 lb 14 689 kg |

**DIMENSIONS**

<table>
<thead>
<tr>
<th></th>
<th>643H</th>
<th>843H</th>
</tr>
</thead>
<tbody>
<tr>
<td>A Maximum Height at Saw Head Attaching Pin</td>
<td>8-ft 0.3-in 2 446 mm</td>
<td>8-ft 0.3-in 2 446 mm</td>
</tr>
<tr>
<td>B Ground to Saw Head Attaching Pin</td>
<td>27.3-in 694 mm</td>
<td>27.3-in 694 mm</td>
</tr>
<tr>
<td>C Saw Head Tilt Back at Ground Level</td>
<td>17 degrees</td>
<td>17 degrees</td>
</tr>
<tr>
<td>D Saw Head Tilt Forward at Ground Level</td>
<td>58 degrees</td>
<td>58 degrees</td>
</tr>
<tr>
<td>E Front Axle to 20-in Tree Centerline</td>
<td>7-ft 3-in 2 141 mm</td>
<td>6-ft 3-in 1 988 mm</td>
</tr>
<tr>
<td>F Machine Articulation to Front Axle</td>
<td>3-ft 11-in 1 194 mm</td>
<td>4-ft 5-in 1 346 mm</td>
</tr>
<tr>
<td>G Wheelbase</td>
<td>8-ft 8-in 2 642 mm</td>
<td>9-ft 2-in 2 794 mm</td>
</tr>
<tr>
<td>Overall Width (With 28-in Wide Tires)</td>
<td>9-ft 6-in 2 900 mm</td>
<td>9-ft 10.2-in 3 002 mm</td>
</tr>
<tr>
<td>H Overall Length</td>
<td>24-ft 2-in 7 367 mm</td>
<td>24-ft 2-in 7 367 mm</td>
</tr>
<tr>
<td>I Overall Height</td>
<td>10-ft 8-in 3 251 mm</td>
<td>10-ft 8-in 3 251 mm</td>
</tr>
<tr>
<td>J Ground Clearance</td>
<td>20-in 508 mm</td>
<td>20-in 508 mm</td>
</tr>
<tr>
<td>K Saw Head Attaching Pin to Axle</td>
<td>3-ft 7.8-in 1 111 mm</td>
<td>3-ft 7.8-in 1 111 mm</td>
</tr>
<tr>
<td>L Ground to Axle</td>
<td>29.2-in 741,7 mm</td>
<td>29.2-in 741.7 mm</td>
</tr>
<tr>
<td>M Rear Axle to Rear of Unit</td>
<td>6-ft 9.8-in 2 078 mm</td>
<td>6-ft 9.8-in 2 078 mm</td>
</tr>
</tbody>
</table>

*With FD22 Continuous Saw and 28L-26 LS2 Tires*
NOTHING RUNS LIKE A DEERE.™

Maybe those words are the reason why almost every other professional logger is a John Deere customer.

They’re just five simple words. Yet they have profound impact on your company. Because at their heart they mean equipment that is built forest tough, with greater productivity, more uptime and lower daily operating costs. They mean a dealer network over 380 locations strong, with immediate access to parts and experts that understand your industry. They mean a dedicated lender in John Deere Credit, committed to helping loggers succeed with competitive financing to enhance cash flow. And they mean a global forestry equipment leader that invests more in R & D than any other manufacturer.

But most of all, these words represent the confidence that comes with over 168 years of heavy equipment experience.

Your world is logging. So is ours. John Deere Forestry. Leading the way, worldwide.