



Magnum Force Series Delimber/Debarker and Chipper

Flail Specifications

Overall	
Length	44' 11"
Width	11'
Height	13' 6"
Weight	Approx. 98,000 lb
Flail Drum	
Width	60"
Diameter	40"
Chain	Single or dual 8-link chains (50-96/roll)
Speed	300-800 rpm
Flail Drive	
	Rexroth Hydrostatic Pumps Rexroth motors, synchronous drives
Top Feed Roll	
Width	60"
Diameter	21"
Motor	Built-in high-torque Poclair
Bottom Feed Roll	
	High-torque Brevini planetary with Char-Lynn hydraulic motor
Throughput	
	Up to 175 tons/hour (completely depending upon wood type, species, and level of debarking)
Power	
Engine	CAT C15; 580 hp
Flexaire® Fan	Reversing pitch radiator fan that reverses airflow every 5-15 minutes automatically (adjustable)
Fuel Tank	
Capacity	275 gallons
Electrical	
	IQAN™ system with full radio remote control Remote wireless camera at discharge end
Loader/Cab	
	Tigercat T-215 Knuckle Boom with 4.4 L CAT engine and 27' reach



Disc Chipper Specifications

Overall	
Length	34' 8"
Width	11'
Height	13' 1"
Weight	Approx. 94,500 lb.
Chipper Disc	
	75" 4-knife babbitted or Key Knife Adjustable and easily replaceable anvils, upper and lower
Top Feed Roll	
Width	48"
Diameter	30"
Motor	Built-in high-torque Poclair
Bottom Feed Roll	
Width	48"
Diameter	13"
Motor	High-torque Brevini planetary with Char-Lynn hydraulic motor
Hydraulics	
Type	Hydrostatic
Throughput	
	Up to 200 tons/hour
Power	
Engine	CAT C27; 1050 hp
Drive	Arimid V-belt
Flexaire® Fan	Reversing pitch radiator fan that reverses airflow every 5-15 minutes automatically (adjustable)
Fuel Tank	
Capacity	375 gallons
Electrical	
	IQAN™ system with full radio remote control Optional wireless camera on chip chute for monitoring trailer loading
Tracks	
	Berco D-7 HD or optional D-5 (if unit is not going to tow flail)
Air Compressor	
	13 hp gas engine, 60' hose
Water Tank/Pump	
	165 gallon tank with 5 hp gas powered pump
High-intensity Light Package	

CBI's integrated high-capacity chipping system is designed specifically for logging contractors who want to increase production and lower operating costs.

Flail 604



Features

- Four flail roll design for optimum debarking action and production level while reducing fiber loss and chain wear. Specifically designed to work in unison with the CBI Disc Chipper 754
- Fully-enclosed design for debris containment to reduce maintenance and fire hazard
- Completely independent, fully-equipped Tigercat T-215 loader. Optional feed conveyor
- Allows B-train configuration with direct feed into CBI Disc Chipper
- Very large, long and deep chain curtain to prevent bark and branches from "surfing" and discharging with the debarked logs
- 13' wide x 12" high hydraulic debris conveying ram for complete residue removal
- Largest feed opening 60" x 24" for highest throughput
- Five large diameter, high torque feed rolls (2 upper, 3 lower)
- CAT C-15; 580 hp engine

Disc Chipper 754



Features

- Specifically designed to work in unison with the CBI Flail 604 either in wheel or track-mounted version. Heavy-duty track frame with fifth wheel plate hookup allows for B-train connection with Flail
- Trash separator discharges on opposite side of chip discharge allowing trailer and chip system to be parallel
- 75" diameter 4-knife chipper disc with babbitted or Key Knife system
- Large 26" feed opening designed to accept larger diameter trees
- Complete chipper hood opens hydraulically for ease of service
- All bolt-in wear liners
- CAT C-27; 1050 hp engine



The CBI difference: Fuel the Future™

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Built without a single compromise to be what other chipping systems are not –

- Productive
- Durable
- Dependable
- Powerful
- Flexible
- Service Friendly

– and a damn good investment!

Flail 604 – Description

CBI's Magnum Force Flail is engineered to be the industry's most rugged and productive delimeter/debarker, capable of processing logs up to 24" in diameter. The development of our flail was dictated by the needs of logging contractors, particularly those working with Eucalyptus and other species with "stringy" bark. When coupled with our Disc Chipper 754, the Magnum Force Flail is the ideal tool for the pulp and paper industry and others looking for high production and quality, uniform wood chips. One operator effectively controls the complete system, reducing manpower while drastically improving throughput.

CBI's four-roll flail design provides optimum contact with wood to deliver maximum debarking action. Consisting of four 60" long by 40" diameter drums, the flail is capable of running single or dual 8-link chains and speeds of 300-800 rpm. The top flail positions are determined by the top feed roll cylinder positioning sensors and the flail rpm is automatically adjusted based on log diameter. Flail drums are driven by high pressure hydraulic piston motors via synchronous belt drives. The motors are driven by high-efficiency hydrostatic hydraulic pumps.

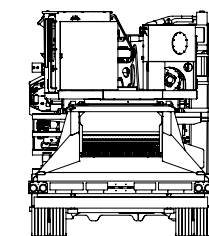
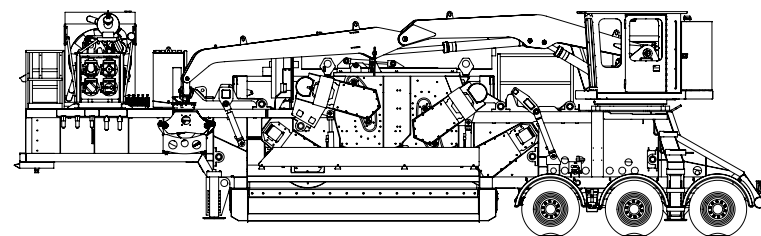
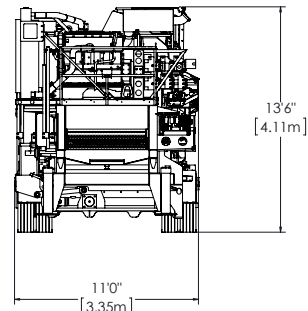
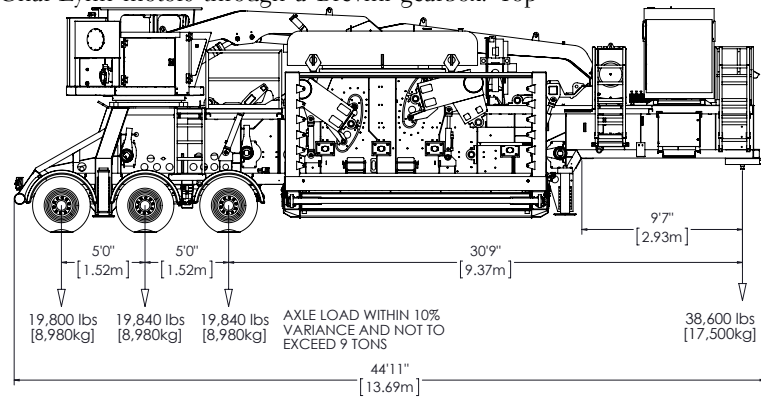
Material is fed into and out of the flail chamber by pivoting large diameter and high-torque top feed roll assemblies with position-sensing cylinders to achieve optimum debarking performance. All cylinders are specially designed with heavy-duty clevises and pins for long life and durability. Infeed rolls monitor the height of incoming material and automatically adjust height and speed of flail rolls, improving debarking by reducing chain wear, fiber loss, and fuel consumption. Bottom feed rolls are driven by direct-coupled Char-Lynn motors through a Brevini gearbox. Top

feed rolls are internally driven by Poclair high-torque wheel motors and are completely covered to eliminate spillage. The completely-enclosed system prevents debris from escaping the flail chamber, drastically reducing maintenance and fire hazards.

A heavy chain curtain wipes debris loose from logs before leaving the flail chamber. Residue is discharged from the flail chamber by a large hydraulically-actuated push ram that is 13' wide by 12" high with 72" stroke by 5" bore trunion-mounted cylinders to provide sufficient force to push debris far from the machine. The support frame ensures perfect alignment of ram and the frame hydraulically folds up for transport.

The inside of the flail chamber has replaceable wear liners for easy maintenance and overall longevity of the machine. The Magnum Force Flail also features a closed-loop hydraulic system, 580 hp CAT C-15 electronic diesel engine with a high ambient temperature radiator, hydraulically-actuated reversing Flexaire fan, and a Parker IQAN™ PLC with radio remote controls.

The Tigercat T-215 self-equipped knuckle boom loader comes with a 4.4 L CAT engine and has a 27' reach. The cab is equipped with AC/heater, high-intensity light package, adjustable comfort seat, joystick controls, and video camera display for the wood exit area and chipper discharge chute. This large capacity, field-proven Tigercat loader allows operators to load more wood per grapple and is the perfect complement to the flail. For short wood processing, the Flail 604 can be supplied with a feed conveyor instead of a loader.



Disc Chipper 754 – Description

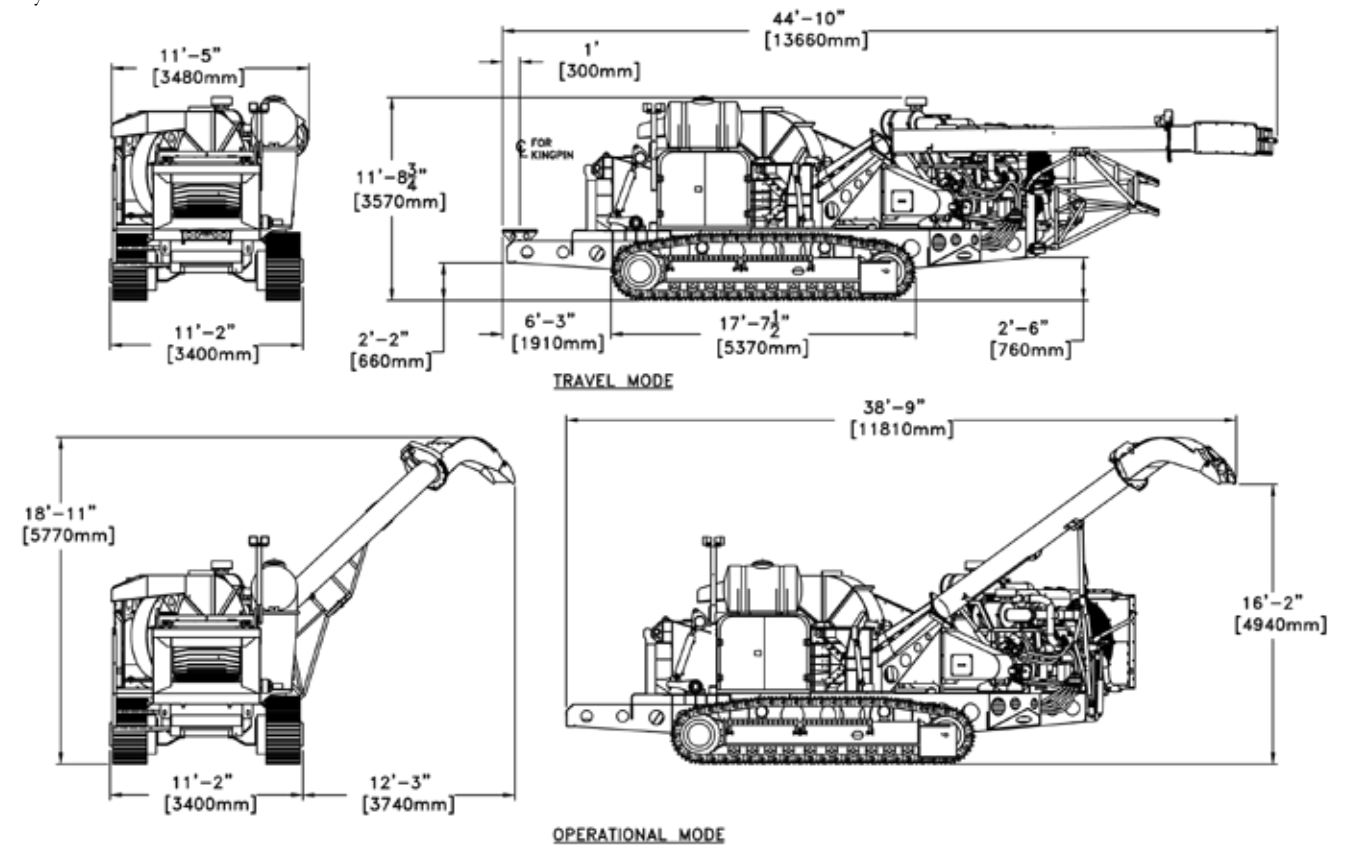
CBI's Magnum Force Disc Chipper 754 adds to our line of the most productive and reliable portable chippers in the world. It is capable of producing high-quality wood chips from 3/8" – 1" for the pulp and paper industry at up to 200 tons per hour. CBI's DC 754 is specifically designed to work in unison with the CBI Flail 604 either as a wheel-mounted or track-mounted unit. The track-mounted unit comes with a heavy-duty track frame and a fifth wheel plate hookup. This allows operators to conveniently connect the CBI Flail to the Disc Chipper and quickly move them down the logging road, saving set-up time and skidder distance. The 75" diameter 4-knife chipper disc is provided by Fulghum Industries, Inc., and delivers the most uniform chip thickness and chip length.

The trash separator on the DC 754 discharges on the opposite side of the chip discharge, which allows for convenient side-by-side processing especially while chipping on road sides. The discharge chute folds hydraulically for transport and multi-angular chute work provides for the most effective chip trailer loading. The complete chipper hood also opens hydraulically for easier servicing. The complete chipper housing is protected by bolt-in wear liners.

Providing a continuous positive feed, the top feed roll is equipped with a high-torque Poclair internal drive and the bottom feed roll is equipped with a high-torque Brevini planetary drive, both designed for extended life and reduced maintenance.

The DC 754 is equipped with a 1050 hp, CAT C-27 engine and comes with a PT Tech 15 PTO hydraulic clutch. Access to the engine from both sides simplifies maintenance. Additional features include an extra large AKG radiator for dusty and high ambient temperature operations, Flexaire auto-reversible fan, Donaldson air filtering system with Enginaire pre-cleaners, fire suppression (optional), emergency shutdown, and all-weather electrical control enclosures.

The hydraulic system incorporates hydrostatic pumps for the feed system and tracks. The control system by Parker IQAN™ provides increased monitoring and protection. Radio remote control with full mechanical backup runs all functions of the chipper.



Independent, fully-equipped Tigercat loader with remote control for complete system



Hydraulic debris-removal conveying ram with support frame to ensure perfect alignment



Bark discharges on opposite side of chip discharge. Designed to push bark/debris far from discharge chute



Direct feed from Flail to Disc Chipper. No extra loader required. Camera monitored so operator knows debarking efficiency level



Complete chipper hood opens hydraulically for easier service and exposes 180° of disc. Bolt-in liners throughout



Chip sizes from 3/8 inch to 1 inch. Camera monitored discharge