



#### A TEREX BRAND

#### **Features**

- Four roll flail 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.
- Very large, long and deep chain curtain to prevent bark and branches from "surfing" and discharging with the debarked logs
- Designed for "B-train" configuration with direct feed into CBI Disc Chipper. A complete in-woods pulp-quality chip processing solution
- 13' wide x 12" high hydraulic debris conveying ram for complete residue removal
- Largest feed opening 60" x 24" for highest throughput
- · Large diameter, high torque feed rolls (2 upper, 3 lower)

# 604 Flail



#### Description

CBI's Magnum Force Flail is engineered to be the industry's most rugged and productive delimber/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.

## Feed System

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 Poclain 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.

## Flail Chamber

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 closed loop hydrostatic hydraulic pumps. The flail chamber walls feature full coverage replaceable wear liners for easy maintenance and overall longevity of the machine. A full width, heavy duty 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.

#### Loader

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.

## **Specifications**

Overall	
Length	44' 11"
Width	11'
Height	13' 6"

Weight Approx. 98,000 lb

Flail Drum

60" Width 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 Poclain **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 C18; 600 hp

Flexxaire® Fan Reversing pitch radiator fan that reverses airflow every 5-15 minutes automatically (adjustable)

**Fuel Tank** Capacity

Loader/Cab (Optional)

330 gallons IQAN ™ system with full radio Electrical

remote control

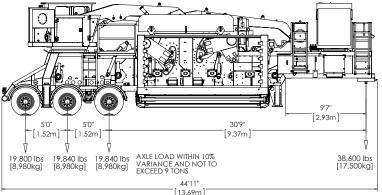
Remote wireless camera at

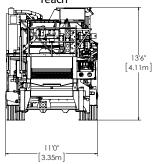
discharge end

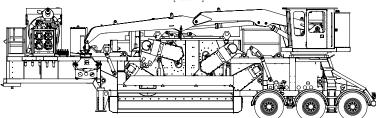
TigercatT-215 Knuckle Boom

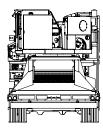
with 4.4 L CAT engine and 27'











Without Loader

**Rugged Work Light Packages** 

**Remote Observation Cameras** 

Fire Suppression System











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# The CBI difference: Fuel the Future.™

## **Continental Biomass Industries**

World's Best Stationary and Portable Material Recovery Systems

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