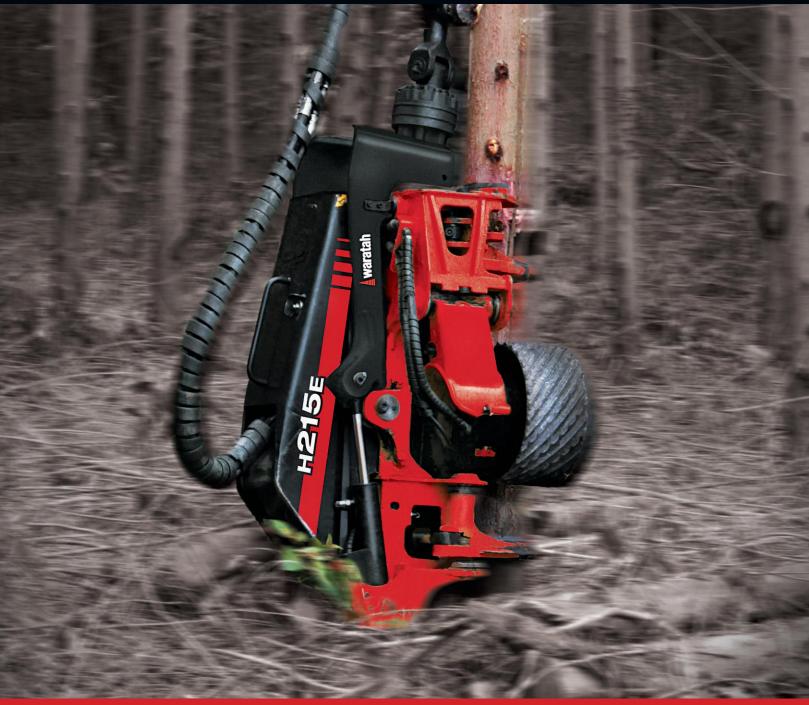
HARVESTING/PROCESSING HEADS

## 🛓 waratah

## **200 SERIES**



It's no coincidence that Waratah has been an industry-leader for over 40 years. Because we've always listened to you to design durable, more productive and efficient harvesting and processing heads proven for your application.

At our facilities in Finland and New Zealand, each head is made to order, so you get exactly what you need. Our heads are built to work with advanced technology providing precise control with accurate diameter and length measuring. With on-site facility testing, each product is proven on our time to be profitable on yours.

Our commitment to your success goes beyond product quality. When you put our heads to work, our global support network goes to work for you – from helping you choose the right head, to installation and startup, to being on site when you need us.

We offer the widest range of harvester/processor heads on the market. So whether you're harvesting at the stump, processing at the landing or somewhere in between, Waratah is built to work for you all over the world.



"I think Waratahs are the toughest out there. We put a lot of demand on them." Ben Reed, Wayne Stone Logging



# **200 SERIES**

Proven in hardwood, softwood and debarking applications, Waratah 200 Series harvesters balance productivity with accuracy.

> High tensile, steel frames engineered for maximum performance while providing excellent visibility to the tree

Stump treatment and color marking spray options

High performance saws with ample cutting capacity and automatic control for optimum performance in harvesting applications

Saw box designs to improve productivity and extend durability offering low stump heights

Superior tree holding, log handling, and processing of straight and crooked trees

Several junction box configurations available to suit many applications

H290

**Rotator options to suit many carriers** 

Multi-tree harvesting options for some models

Advanced on-board controller and diagnostics

Highly efficient, high performance valves provide responsiveness and speed

Optional top saw on some models increases productivity

Fixed and floating front knife options provide optimum delimbing coverage

Extreme measuring accuracy with the latest sensor technology and many wheel options

Specialized guarding packages for snow and harsh applications

Dual-diameter sensors for accurate log volumes, assortments and optimum head performance

High-torque high-performance feed motor options, some models with optional dual-speed feeding

Drive wheel options for optimum wood quality, debarking or maximum traction in crooked wood

Delimb knives provide the best possible delimbing for large- and small-diameter wood

Large knife and feed roller openings for fast stem catching and productive tree harvesting.



Whether you're in softwood, hardwood or debarking, the agile H270 Series-II is perfectly equipped to handle the task. Its simple design with excellent stem visibility and wide-opening rollers provides quick and easy tree harvesting.

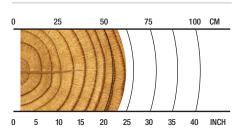
#### OVERVIEW

Harvesting in late thinnings or regeneration harvesting; productive in crooked or straight wood.

APPLICATIONS

Softwood harvesting Hardwood harvesting Multi-tree harvesting





**4-60cm / 1.5-23.6 in.** 





Optimized for performance, the recently updated H290 is a robust and powerful harvester head built for exceptional feeding and delimbing performance. The extra-efficient top saw option enables easy topping for increased stem utilization, boosting operational productivity.

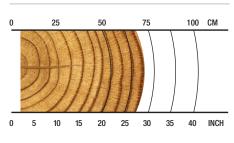
OVFRVIEW	

Harvesting in late thinnings or regeneration harvesting; productive in crooked or straight wood.

APPLICATIONS

Softwood harvesting Hardwood harvesting Debarking





5-70 cm / 2-27.6 in.





Eucalyptus is no match for the purpose-built H215E. Specifically designed for debarking, this powerful, high-capacity next-generation harvester head productively dominates in the harsh application.

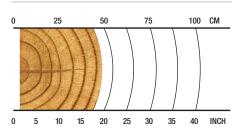
#### OVERVIEW

Eucalyptus debarking in late or final thinnings or regeneration harvesting.

APPLICATIONS

Debarking

RECOMMENDED RANGE



**3-45**cm / **1.2-17.7** in.



### **MEASURING AND CONTROL SYSTEMS**

We focus on providing you with accurate diameter and length measuring systems for profitable precision. Simplify operations and boost productivity with real-time statistics and measuring information, and wireless data transfer.



### TIMBERRITE<sup>™</sup> H-16

Imagine a fast, powerful control system that manages your workload and links your office to the forest.

The productive TimberRite measuring and control system uses a powerful Windows PC, providing accurate measuring technology and responsive head control for efficient operational productivity.

It records production information, tracks productivity, and packages all files in the latest StanForD 2010 format to ensure data interchanges with virtually any professional system in the forest industry.

Additionally, this user-friendly system has email capabilities, and can utilize our WaratahMate<sup>™</sup> smartphone app for the efficient and timely transfer of production information and other important files regardless of your location. Configurable as standard with Pre-Selection priority, or optionally with Value Optimization it can manage your output to keep step with market demands. TimberRite keeps you productive and informed to manage your workload for whatever your market requires.

#### KEY FEATURES

- **Pre-Selection Priority** (standard) sequential optimization by cutting list instruction, and alternate log assignments.
- Value Optimization (optional) value-based optimization, intuitive prognosis through intelligent assessment of advanced matrices.
- · Touch-screen display, or wireless keyboard and touch pad mouse.
- Windows™ 7 PC-based controller integrates the harvester head measuring and control system with the high processing power of a personal computer.
- StanForD 2010 file structure ensures data interchanges with other professional systems in the forest industry.
- Automatic file sending production reports, worksite instructions, repair follow-ups, calibration history, log tables, machine settings and harvesting instructions.
- WaratahMate<sup>™</sup> smartphone app Easily transfer data wirelessly regardless of location, or through email or USB stick.
- · Work & repair statistics Monitor uptime, productivity and operating costs.
- Species specific calibration and soft-clamping settings for delimb and drive arms.
- · Operator specific settings and configurable menus for quick navigation and adjustments.
- Extensive site documentation expanded site, contractor, and machine information.
- Simplified diagnostics input and output tests with built-in diagnostic troubleshooting assistance.

### **OPTIONS**

Waratah heads are congurable to your application. Consult your dealer for option availability.



#### Configurability

Waratah has a wide range of focused options for harvesting and processing applications including single- and multi-stem processing, multi-tree handling, and all models include options for softwood, crooked hardwood and debarking.



#### Main Saws, Saw Motors, Top Saws

The 200 series have high-cutting capacity main saws with saw boxes designed for quick, cross cutting. All saw units have auto tensioning 10 mm/0.404 pitch chain driven by efficient, high torque motors. Additionally, the H290 has an optional top saw for extra efficiency in crooked wood applications.



#### Delimb Arms

Delimb arms are engineered for fast stem catching and durability in the toughest applications. Knife profiles ensure quality delimbing throughout the recommended diameter range.



#### Feed Rollers

Many feed roller options are available for a variety of applications, offering improved traction and reducing fiber damage. Wheel options include eucalyptus debarking, rib, v-type, MTH, Moipu, MenSe, thumbnail, aggressive and many combination styles.



#### Front Knives

Waratah offers heavy-duty floating or fixed front knife options with specialized profiles and cutting edges for superior delimbing in any application.



#### Color Marking

Waratah offers nozzle-applied color marking systems to simplify log identification. Three colors provide many assortment combinations, improving sorting and yard safety.



#### Measuring Wheels

Application-specific measuring wheels are engineered for accurate and consistent measuring in all tree species with enhancements for log quality. Selections include wide and narrow models, coarse and fine teeth options, and multi-stem, debarking configurations.



#### Rotators

Waratah offers high torque and productive rotator motor and hose bulkhead options on all of the 200 series models.



#### Multi-tree Harvesting

Select models have multi-tree harvesting (MTH) capabilities, providing superior accumulating and precise bundle feeding with the option. MTH ability increases productivity and can easily be installed between the rotator and hanging bracket – even on existing heads.



Stump Treatment Waratah has nozzle or bar-applied stump treatment kits.

## TECHNICAL DATA 200 SERIES

	H270 Series-II	H290	H215E	
DIMENSIONS				
Width, head open [mm/in.]	1660 / 65.4	1900 / 74.8	1650 / 65.0	
Width, head closed	1075 / 42.3	1190 / 46.8	1200 / 47.2	
Height without rotator and link	1585 / 62.4	1970 / 77.6	1900 / 74.8	
WEIGHT				
Excluding rotator, link and some options [kg/lb.]	1350 / 2976	1970 / 4343	1690 / 3276	
DELIMBING [mm]				
Delimbing knives	4 moving, 1 floating, 1 fixed rear	4 moving, 2 fixed	4 moving, 1 fixed, 2 fixed debarking tools	
Delimbing diameter, tip to tip [mm/in.]	460 / 18.1	510 / 20.1	430 / 16.9	
Maximum opening, upper knives [mm/in.]	740 / 29.1	800 / 31.5	580 / 22.8	
Maximum opening, lower knives [mm/in.]	670 / 26.4	870 / 34.3	610 / 24.0	
DRIVE				
Quantity of drive rollers	2	2	2	
Motor cc - option 1	780-cc motors	1295 / 944-cc motors	702-cc motors	
Gross feed force [kN] (steel feed wheels)	28.1	37.7 / 28.1	25	
Motor cc - option 2	857-cc motors	1404 / 1050-cc motors		
Gross feed force [kN] (steel feed wheels)	31.1	41.6 / 31.2		
Motor cc - option 3	934-cc motors			
Gross feed force [kN] (steel feed wheels)	33.9			
Maximum feed speed [m/s]	4.5-6.0	4.5-6.0	5	
Maximum roller opening [mm/in.]	620 / 24.4	760 / 29.9	550 / 21.7	
Minimum diameter [mm/in.]	40 / 1.6	50 / 2.0	30 / 1.2	
OP SAW				
Maximum cut diameter [mm/in.]		400 / 15.7		
Length of saw bar [mm]		600		
Chain type [mm/in.]		10/0.404		
Top saw motor displacement [cc]		14cc		
BUTT / FELLING SAW				
Standard Saw	SuperCut 100 with auto chain tensioning	SuperCut 100 with auto chain tensioning	SuperCut 100 with auto chain tensioning	
Maximum cut diameter [mm/in.]	650 / 25.6	750 / 29.5	550 / 21.7	
Length of saw bar [mm]	825	900	670	
Chain type [mm/in.]	10/0.404	10/0.404	10/0.404	
Saw motor	19 or 20cc	19 or 20cc	20cc	
Bar oil tank capacity	4.81	7.2	10	
CARRIER RANGE				
Wheeled [metric ton]	18-25	20-30	18-22	
Tracked [metric ton]	16-25	25-30	20-25	
IYDRAULIC SYSTEM				
Maximum operating pressure [Mpa/PSI]	28 / 4061	28 / 4061	28 / 4061	
Recommended pump capacity [l/min.,gal/min.]	260-380	320-380	260-340	
CONTROL AND MEASURING SYSTEM	TimberRite H-16*	TimberRite H-16*	TimberRite H-16*	
OPTIONAL EQUIPMENT				
Color marking	Yes	Yes	No	
Stump treatment	Yes	Yes	No	
Multi-tree-harvesting (MTH)	Yes	No	No	
MenSe feed rollers	Yes	Yes	No	
Debarking feed rollers	No	Yes	Yes	
Steel thumbnail feed rollers	Yes	Yes	No	
Steel ribbed feed rollers	Yes	Yes	No	
Tireco chain	Yes	Yes	No	
Chain and saw-bar kits	Yes	Yes	Yes	
Hydraulic hose kit	No	Yes	No	
Top saw	No	Yes	No	

This brochure has been compiled with care for worldwide circulation. While general information, pictures and descriptions are provided, some illustrations and text may include options and accessories not available in all regions. Please contact your local dealer for details. Waratah reserves the right to change specications and design for products described in this brochure without notice. No liability for errors and omissions.

\*Other adaptations may be available. Please contact your local Waratah dealer.



FORESTRY EQUIPMENT

#### www.Waratah.com

