

HARVESTING/PROCESSING HEADS



200 SERIES





**It's no coincidence
that Waratah has been
an industry-leader
for more than 50
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.



**"In our industry, Waratah is the standard.
The heads have only gotten stronger, faster,
with more flow and better measuring."**

**Reid Lind
Owner, Lind Logging**

Several junction box configurations available to suit many applications

Rotator options to suit many carriers

Multi-tree harvesting options for some models

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

Stump treatment and color marking 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

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

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

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



200 SERIES

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



Advanced on-board controller and diagnostics

Highly efficient, high performance valves provide responsiveness and speed

Optional top saw on some models increases productivity

Specialized guarding packages for snow and harsh applications

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

Fixed and floating front knife options provide optimum delimbing coverage

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

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

Feed roller options for optimum wood quality, debarking or maximum traction in crooked wood



H212

Built for performance and speed, the compact and agile H212 delivers big productivity for harvesting, processing and debarking applications. With its robust and nimble design, this all-around capable head is a little giant in the forest.

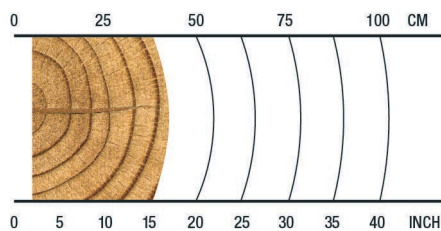
OVERVIEW

Harvesting in early thinnings; productive in crooked or straight wood.

APPLICATIONS

Hardwood harvesting
Softwood harvesting
Multi-tree harvesting
Debarking

RECOMMENDED RANGE



4-40 cm / 1.6-15.7 in.

SPECS



770 kg / 1,698 lb.
Weight (without rotator, link, or multi-tree handling)



28 MPa / 4,061 psi
Max Hydraulic Requirements



500 mm / 19.7 in.
Max Upper Delimb Opening



440 mm / 17.3 in.
Max Feed Roller Opening



520 mm / 20.5 in.
Maximum Cutting Capacity



11-18 metric ton
Carrier Size



8-16 metric ton
Carrier Size



H225E

Eucalyptus is no match for the purpose-built H225E. Specifically designed for debarking, this powerful, high-capacity next-generation harvester head productively dominates in the harsh application.

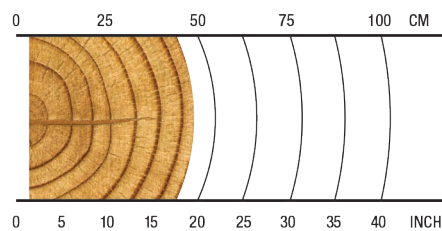
OVERVIEW

Eucalyptus debarking in late or final thinnings or regeneration harvesting.

APPLICATIONS

Debarking

RECOMMENDED RANGE



3-45 cm / 1.2-17.7 in.

SPECS



1690 kg / 3,726 lb.
Weight (Without Rotator & Link)



28 MPa / 4,061 psi
Maximum Hydraulic Requirements



580 mm / 22.8 in.
Max Upper Delimb Opening



550 mm / 21.7 in.
Max Feed Roller Opening



550 mm / 21.7 in.
Maximum Cutting Capacity



18-22 metric ton
Carrier Size



20-25 metric ton
Carrier Size

H216



Whether you're in hardwood, softwood or debarking, the agile H216 is perfectly equipped to handle the task. Its simple design with excellent feed power, delimbing, and large cut capacity provide productive tree harvesting.

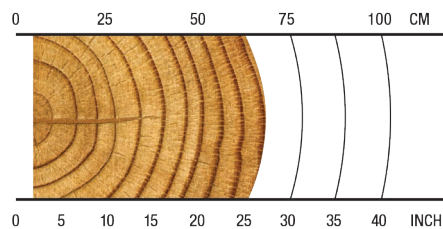
OVERVIEW

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

APPLICATIONS

Softwood harvesting
Hardwood harvesting
Multi-tree harvesting
Debarking

RECOMMENDED RANGE



5-65 cm / 1.9-25.6 in.

SPECS



1515 kg / 3,340 lb.
Weight (Without Rotator & Link)



28 MPa / 4,061 psi
35 MPa / 5,076 psi
Maximum Hydraulic Requirements



650 mm / 25.6 in.
Max Upper Delimb Opening



700 mm / 27.6 in.
Max Feed Roller Opening



750 mm / 29.5 in.
Maximum Cutting Capacity



18-25 metric ton
Carrier Size



16-25 metric ton
Carrier Size



H216X

Tackle hardwood with ease with the head that's built for tracked machines and harsh applications. The H216X features a robust design engineered for the brutal demands of hardwood, all while helping maximize accuracy and output.

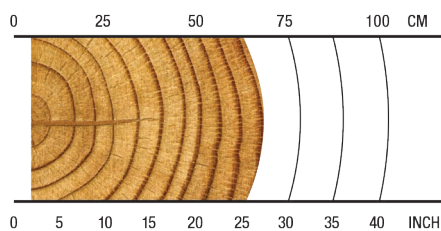
OVERVIEW

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

APPLICATIONS

Hardwood harvesting
Softwood harvesting
Multi-tree harvesting
Debarking

RECOMMENDED RANGE



5-65 cm / 1.9-25.6 in.

SPECS



1591 kg / 3,508 lb.
Weight (Without Rotator & Link)



28 MPa / 4,061 psi
35 MPa / 5,076 psi
Maximum Hydraulic Requirements



650 mm / 25.6 in.
Max Upper Delimb Opening



700 mm / 27.6 in.
Max Feed Roller Opening



750 mm / 29.5 in.
Maximum Cutting Capacity



18-25 metric ton
Carrier Size



16-25 metric ton
Carrier Size



H219

With a robust design, the H219 can handle the toughest woods. Durability is built-in with protected hoses, additional guarding and an aggressive measuring wheel. Plus, accessible servicing and a top saw option provide increased uptime and versatility.

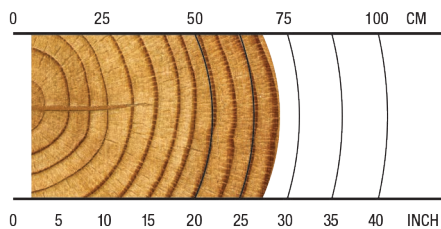
OVERVIEW

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

APPLICATIONS

Softwood harvesting
Hardwood harvesting
Debarking

RECOMMENDED RANGE



5-70 cm / 2-27.6 in.

SPECS

-  **1970 kg / 4,343 lb.**
Weight (Without Rotator & Link)
-  **28 MPa / 4,061 psi**
Maximum Hydraulic Requirements
-  **800 mm / 31.5 in.**
Max Upper Delimb Opening
-  **760 mm / 29.9 in.**
Max Feed Roller Opening
-  **750 mm / 29.5 in.**
Maximum Cutting Capacity
-  **20-30 metric ton**
Carrier Size
-  **25-35 metric ton**
Carrier Size



Primarily for tracked carrier applications, the H219X comes standard with a heavy-duty tilt frame for maximum productivity. With easy access to service points, laser find-end sensors and heavy-duty guarding for feed motors, this head is built for next-level performance.

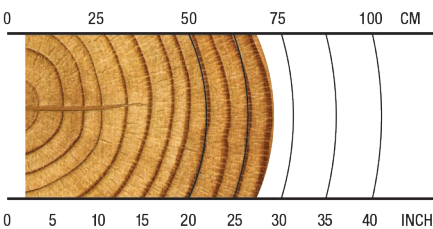
OVERVIEW

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

APPLICATIONS

Softwood harvesting
Hardwood harvesting
Debarking

RECOMMENDED RANGE



5-70 cm / 2-27.6 in.

SPECS

-  **2050 kg / 4,519 lb.**
Weight (Without Rotator & Link)
-  **28 MPa / 4,061 psi**
Maximum Hydraulic Requirements
-  **800 mm / 31.5 in.**
Max Upper Delimb Opening
-  **760 mm / 29.9 in.**
Max Feed Roller Opening
-  **750 mm / 29.5 in.**
Maximum Cutting Capacity
-  **20-30 metric ton**
Carrier Size
-  **25-35 metric ton**
Carrier Size

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™ 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™ 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

- **Onboard mapping** - (optional) - access your location and visualize your production data.
- **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™ 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™ smartphone app** - Easily transfer data wirelessly regardless of location, or through email via phone USB.
- **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 configurable 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.



Color Marking

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



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 H219 has an optional top saw for extra efficiency in crooked wood applications.



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.



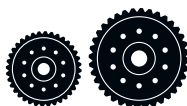
Delimb Arms

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



Rotators

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



Feed Rollers

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



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.



Front Knives

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



Stump Treatment

Waratah has nozzle or bar-applied stump treatment kits.

Talk to your Waratah dealer about more available options.

TECHNICAL DATA 200 SERIES

	H212	H225E	H216
DIMENSIONS			
Width, head open [mm/in.]	1150 / 45.3	1650 / 65.0	1695 / 66.7
Width, head closed	1025 / 40.4	1200 / 47.2	1335 / 52.6
Height without rotator and link	1360 / 53.5	1900 / 74.8	1845 / 72.6
WEIGHT			
Excluding rotator, link and some options [kg/lb.]	770 / 1698 (Std) 830 / 1830 (Incl. MTH)	1690 / 3718	1515 / 3340
DELIMBING			
Delimbing knives	3 moving, 2 fixed	4 moving, 1 fixed, 2 fixed debarking tools	4 moving, 1 fixed
Delimbing diameter, tip to tip [mm/in.]	360 / 14.2	430 / 16.9	450 / 17.7
Maximum opening, upper knives [mm/in.]	500 / 19.7	540 / 22.8	650 / 25.6
Maximum opening, lower knives [mm/in.]	550 / 21.7	610 / 24.0	760 / 29.9
FEEDING			
Quantity of feed rollers	2	2	2
Motor cc - option 1	398-cc motors	627-cc motors	702-cc motors
Gross feed force [kN] (steel feed rollers)	20	21.2 (@ 280 bar, 260 lpm) 27 @ 350 bar	33.6 (@ 350 bar, 320 lpm)
Motor cc - option 2		702-cc motors	780-cc motors
Gross feed force [kN] (steel feed rollers)		24 (@ 280 bar, 280 lpm)	29.8 (@ 280 bar, 318 lpm) 37.3 (@ 350 bar, 320 lpm)
Motor cc - option 3		780-cc motors	857-cc motors
Gross feed force [kN] (steel feed rollers)		26 (@ 280 bar, 310 lpm)	32.8 (@ 280 bar, 318 lpm) 41.0 (@ 350 bar, 320 lpm)
Motor cc - option 4			934-cc motors
Gross feed force [kN] (steel feed rollers)			35.7 (@ 280 bar, 318 lpm)
Motor cc - option 5			1043 / 624-cc motors
Gross feed force [kN] (steel feed rollers)			39.9 (@ 280 bar, 318 lpm)
Maximum feed speed [m/s]	6	5.5 / 18	4.5–5.6
Maximum roller opening [mm/in.]	440 / 17.3	550 / 21.7	700 / 27.6
Minimum diameter [mm/in.]		30 / 1.2	50 / 2.0
TOP SAW			
Maximum cut diameter [mm/in.]	-	-	400 / 15.7
Length of saw bar [mm/in.]	-	-	600 / 23.6
Chain type [mm/in.]	-	-	10 / 0.404
Top saw motor displacement [cc]	-	-	14cc
BUTT / FELLING SAW			
Standard Saw	SuperCut 100S with auto chain tensioning	SuperCut 100S with auto chain tensioning	SuperCut 100S with auto chain tensioning
Maximum cut diameter [mm/in.]	520 / 20.5	550 / 21.7	750 / 29.5
Length of saw bar [mm/in.]	640 / 25.2	670 / 26.4	900 / 35.4
Chain type [mm/in.]	10 / 0.404	10 / 0.404	10 / 0.404
Saw motor	20cc	20cc	32cc
Chain oil tank capacity		10 l	13 l
CARRIER RANGE			
Wheeled [metric ton]	11-18	18-22	18-25
Tracked [metric ton]	8-16	20-25	16-25
HYDRAULIC SYSTEM			
Maximum operating pressure [Mpa/PSI]	28 / 4061	28 / 4061, 35 / 5076	28 / 4061, 35 / 5076
Recommended pump capacity [l/min.,gal/min.]	180 @ 150 bar / 48 @ 2176 PSI	260–340 / 70–91	260-370 / 69–100
CONTROL AND MEASURING SYSTEM			
	TimberRite H-16*	TimberRite H-16*	TimberRite H-16*
OPTIONAL EQUIPMENT			
Color marking	Yes	No	Yes
Stump treatment	Yes	No	Yes
Multi-tree-harvesting (MTH)	Yes	No	Yes
HD tilt frame option	Yes	No	No
Debarking feed rollers	Yes	Yes	Yes
Steel thumbnail feed rollers	Yes	No	Yes
Steel ribbed feed rollers	Yes	No	Yes
Rubber feed roller option	No	No	No
Chain and saw bar kits	Yes	Yes	Yes
Hydraulic hose kit	Yes	No	Yes
Top saw	No	No	Yes
Processing upper delimbing knives	Yes	No	Yes
Saw chain grease lubrication	Yes	No	Yes
Find-end sensor	Yes	No	Yes

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

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 specifications and design for products described in this brochure without notice. No liability for errors and omissions.

	H216X	H219	H219X
DIMENSIONS			
Width, head open [mm/in.]	1695 / 66.7	1900 / 74.8	1900 / 74.8
Width, head closed	1335 / 52.6	1190 / 46.8	1190 / 46.8
Height without rotator and link	1845 / 72.6	1970 / 77.6	1970 / 77.6
WEIGHT			
Excluding rotator, link and some options [kg/lb.]	1591 / 3508 (Std) 1705 / 3759 (Incl. topsaw)	1970 / 4343	2050 / 4519
DELIMBING			
Delimbing knives	4 moving, 1 fixed	4 moving, 2 fixed	4 moving, 2 fixed
Delimbing diameter, tip to tip [mm/in.]	450 / 17.7	510 / 20.1	510 / 20.1
Maximum opening, upper knives [mm/in.]	650 / 25.6	800 / 31.5	800 / 31.5
Maximum opening, lower knives [mm/in.]	760 / 29.9	870 / 34.3	870 / 34.3
FEEDING			
Quantity of feed rollers	2	2	2
Motor cc - option 1	702-cc motors	1259 / 944-cc motors	1259 / 944-cc motors
Gross feed force [kN] (steel feed rollers)	33.6 (@ 350 bar, 320 lpm)	37.7 / 28.1	37.7 / 28.1
Motor cc - option 2	780-cc motors	1404 / 1050-cc motors	1404 / 1050-cc motors
Gross feed force [kN] (steel feed rollers)	29.8 (@ 280 bar, 318 lpm) 37.3 (@ 350 bar, 320 lpm)	41.6 / 31.2	41.6 / 31.2
Motor cc - option 3	857-cc motors		
Gross feed force [kN] (steel feed rollers)	32.8 (@ 280 bar, 318 lpm) 41.0 (@ 350 bar, 320 lpm)		
Motor cc - option 4	934-cc motors		
Gross feed force [kN] (steel feed rollers)	35.7 (@ 280 bar, 318 lpm)		
Motor cc - option 5	1043 / 624-cc motors		
Gross feed force [kN] (steel feed rollers)	39.9 (@ 280 bar, 318 lpm)		
Maximum feed speed [m/s]	4.2–5.6	4.5–6.0	4.5–6.0
Maximum roller opening [mm/in.]	700 / 27.6	760 / 29.9	760 / 29.9
Minimum diameter [mm/in.]	50 / 2.0	50 / 2.0	50 / 2.0
TOP SAW			
Maximum cut diameter [mm/in.]	400 / 15.7	400 / 15.7	400 / 15.7
Length of saw bar [mm/in.]	600 / 23.6	600 / 23.6	600 / 23.6
Chain type [mm/in.]	10 / 0.404	10 / 0.404	10 / 0.404
Top saw motor displacement [cc]	14 cc	14cc	14cc
BUTT / FELLING SAW			
Standard Saw	SuperCut 100S with auto chain tensioning	SuperCut 100S with auto chain tensioning	SuperCut 100S with auto chain tensioning
Maximum cut diameter [mm/in.]	750 / 29.5	750 / 29.5	750 / 29.5
Length of saw bar [mm/in.]	900 / 35.4	900 / 35.4	900 / 35.4
Chain type [mm/in.]	10 / 0.404	10 / 0.404	10 / 0.404
Saw motor	32cc	19 or 20cc	19 or 20cc
Chain oil tank capacity	13 l	7.2 l	7.2 l
CARRIER RANGE			
Wheeled [metric ton]	18-25	20-30	20-30
Tracked [metric ton]	16-25	25-30	25-30
HYDRAULIC SYSTEM			
Maximum operating pressure [Mpa/PSI]	28 / 4061, 35 / 5076	28 / 4061	28 / 4061
Recommended pump capacity [l/min.,gal/min.]	260-370 / 69–100	320–380 / 85–101	320–380 / 85–101
CONTROL AND MEASURING SYSTEM			
	TimberRite H-16*	TimberRite H-16*	TimberRite H-16*
OPTIONAL EQUIPMENT			
Color marking	Yes	Yes	Yes
Stump treatment	Yes	Yes	Yes
Multi-tree-harvesting (MTH)	Yes	No	No
HD tilt frame option	No	No	Yes
Debarking feed rollers	Yes	Yes	Yes
Steel thumbnail feed rollers	Yes	Yes	Yes
Steel ribbed feed rollers	Yes	Yes	Yes
Rubber feed roller option	No	No	No
Chain and saw bar kits	Yes	Yes	Yes
Hydraulic hose kit	Yes	Yes	Yes
Top saw	Yes	Yes	Yes
Processing upper delimbing knives	Yes	Yes	Yes
Saw chain grease lubrication	Yes	Yes	Yes
Find-end sensor	Yes	Yes	Yes



FORESTRY EQUIPMENT

For the latest model specifications and details, visit Waratah.com.

