

HARVESTING/PROCESSING HEADS



400 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.



**"Our production is great with Waratah.
The uptime is second to none"**

Drew Betts
Owner, Clay Hill Equipment

400 SERIES

Proven in mixed stand and multi-tree harvesting applications, Waratah 400 Series harvesters balance production with precision.

High-tensile steel frames engineered for maximum performance, while providing good 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

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

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



Rotator options to suit many carriers

Multi-tree harvesting options for some models

**Several junction box configurations
available to suit many applications**

Advanced on-board controller and diagnostics

**Highly efficient , high performance valves
providing responsiveness and speed**

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

**Optional top saw on some models
increases productivity**

**Fixed and floating front knife
options for many applications
providing optimum delimbing
coverage**

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

**Specialized guarding packages for snow
and harsh applications**

**High torque high performance
feed motor options**

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



H423

If you're looking for a top producer in a variety of wood sizes, the H423 is well-suited for the task. It has superb delimbing performance in all diameters, outstanding multi-tree harvesting qualities and an excellent power-to-weight ratio, taking productivity to a higher level.

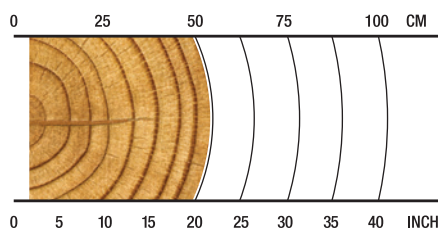
OVERVIEW

Harvesting in early-to-late thinnings

APPLICATIONS

Softwood harvesting
Multi-tree harvesting

RECOMMENDED RANGE



4-50 cm / 1.6-19.7 in.

SPECS



955 kg / 2,105 lb.
Weight (Without Rotator & Link)



28 MPa / 4,061 psi
Maximum Hydraulic Requirements



560 mm / 22.0 in.
Max Upper Delimb Opening



560 mm / 22.0 in.
Max Feed Roller Opening



580 mm / 22.8 in.
Maximum Cutting Capacity



14-20 metric ton
Carrier Size



13-21 metric ton
Carrier Size



H424

Characterized by its consistent performance and skill set in second thinnings and early regeneration cuttings, the versatile H424 is equally suited for processing or debarking applications. With a durable frame, well-protected hosing, feed power and ample cutting capacity, it's a very capable all-around head for mid-sized harvesters.

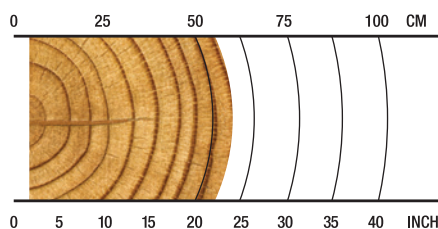
OVERVIEW

Harvesting in early and second thinnings; early regeneration harvesting.

APPLICATIONS

Softwood harvesting
Mixed stand (hardwood and softwood) harvesting
Multi-tree harvesting
Processing
Debarking

RECOMMENDED RANGE



4-57 cm / 1.6-22.4 in.

SPECS



1105 kg / 2,436 lb.
Weight (Without Rotator & Link)



28 MPa / 4,061 psi
Maximum Hydraulic Requirements



610 mm / 24.0 in.
Max Upper Delimb Opening



430 mm / 17.0 in.
Delimbing Diameter Tip-to-Tip



640 mm / 25.2 in.
Max Feed Roller Opening



620 mm / 24.4 in.
Maximum Cutting Capacity



17-22 metric ton
Carrier Size



16-21 metric ton
Carrier Size



H425

Optimizing performance, productivity and delimbing, the H425 excels in large diameter regeneration harvesting. With a powerful control valve and feed-roller arm geometry that ensures a solid grip, log control is only an afterthought.

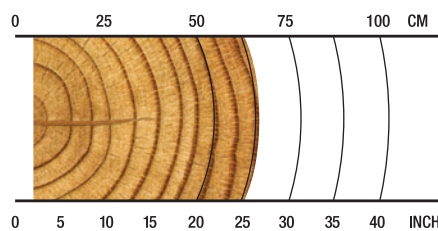
OVERVIEW

Harvesting in late thinnings; regeneration harvesting; tracked and wheeled machine applications.

APPLICATIONS

Softwood harvesting
Mixed stand (hardwood and softwood) harvesting
Multi-tree harvesting

RECOMMENDED RANGE



5-65 cm / 2-25.6 in.

SPECS



1360 kg / 2,998 lb.
Weight (Without Rotator & Link)



28 MPa / 4,061 psi
Maximum Hydraulic Requirements



680 mm / 26.8 in.
Max Upper Delimb Opening



680 mm / 26.8 in.
Max Feed Roller Opening



710 mm / 28.0 in.
Maximum Cutting Capacity



18-25 metric ton
Carrier Size



20-25 metric ton
Carrier Size



H425HD

The rugged H425HD is built to work on your toughest jobs. A heavy-duty tilt frame, feed motors and guarding provide even more durability. With a powerful control valve and a top saw option, this high-performance head will become your top choice for wheeled carrier applications.

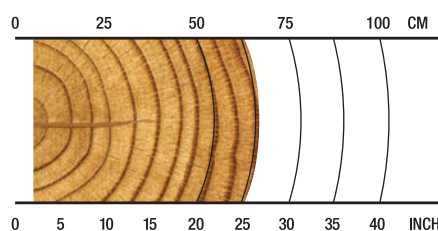
OVERVIEW

Harvesting in late thinnings; regeneration harvesting; tracked and wheeled machine applications.

APPLICATIONS

Softwood harvesting
Mixed stand (hardwood and softwood) harvesting
Multi-tree harvesting

RECOMMENDED RANGE



5-65 cm / 2-25.6 in.

SPECS



1390 kg / 3,064 lb.
Weight (Without Rotator & Link)



28 MPa / 4,061 psi
Maximum Hydraulic Requirements



680 mm / 26.8 in.
Max Upper Delimb Opening



680 mm / 26.8 in.
Max Feed Roller Opening



710 mm / 28.0 in.
Maximum Cutting Capacity



18-25 metric ton
Carrier Size



20-25 metric ton
Carrier Size



Equally comfortable on track machines, the H425X comes equipped with an extreme duty main saw box and excels in mixed stand harvesting. With a powerful control valve, high-performance drive motors, precision delimbing and optional top saw, “backing up” will not be in your vocabulary.

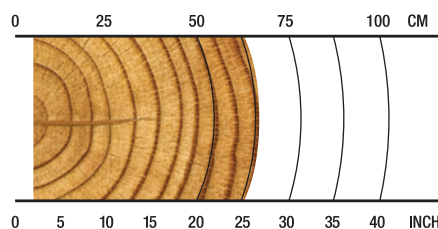
OVERVIEW

Harvesting in late thinnings;
regeneration harvesting; tracked
and wheeled machine applications.

APPLICATIONS

Softwood harvesting
Mixed stand (hardwood
and softwood) harvesting
Multi-tree harvesting

RECOMMENDED RANGE



5-65 cm / 2-25.6 in.

SPECS



1426 kg / 3,143 lb.
Weight (Without Rotator & Link)



28 MPa / 4,061 psi
Maximum Hydraulic Requirements



680 mm / 26.8 in.
Max Upper Delimb Opening



680 mm / 26.8 in.
Max Feed Roller Opening



710 mm / 28.0 in.
Maximum Cutting Capacity



18-25 metric ton
Carrier Size



20-25 metric ton
Carrier Size



H427

The rugged H427 delivers performance, durability and precision for big timber. With heavy-duty features and a large capacity, this powerhouse head is made for late thinnings to the final cut.

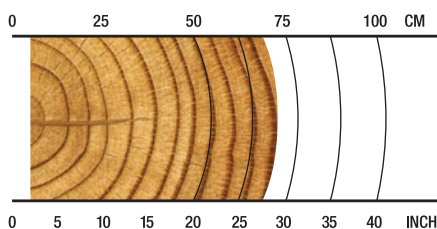
OVERVIEW

Harvesting in late thinnings; regeneration harvesting; tracked and wheeled machine applications.

APPLICATIONS

Softwood harvesting
Mixed stand (hardwood and softwood) harvesting
Multi-tree harvesting

RECOMMENDED RANGE



5-70 cm / 2-27.6 in.

SPECS



1655 kg / 3,649 lb.
Weight (Without Rotator & Link)



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



720 mm / 28.3 in.
Max Upper Delimb Opening



720 mm / 28.3 in.
Max Feed Roller Opening



760 mm / 29.9 in.
Maximum Cutting Capacity



18-25 metric ton
Carrier Size



20-30 metric ton
Carrier Size



H427X

The tough H427X is purpose-built for tracked machine applications. With a standard, heavy-duty tilt frame and heavy-duty feed motor covers, this powerful head delivers durability for extreme harvesting.

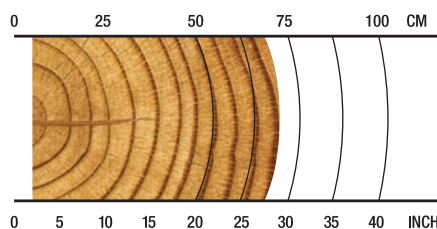
OVERVIEW

Harvesting in late thinnings; regeneration harvesting; tracked and wheeled machine applications.

APPLICATIONS

Softwood harvesting
Mixed stand (hardwood and softwood) harvesting
Multi-tree harvesting

RECOMMENDED RANGE



5-70 cm / 2-27.6 in.

SPECS



1853 kg / 4,085 lb.

Weight (With topsaw, HD tilt and feed motor covers)



28 MPa / 4,061 psi

35 MPa / 5,076 psi

Maximum Hydraulic Requirements



720 mm / 28.3 in.

Max Upper Delimb Opening



720 mm / 28.3 in.

Max Feed Roller Opening



760 mm / 29.9 in.

Maximum Cutting Capacity



18-25 metric ton

Carrier Size



20-30 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

TimberRite H-16 elevates control while providing connectivity to keep you in the know. Using CAN-bus carrier communication, this easy-to-use system provides configurable and precise head control to increase efficiency and productivity.

If access to information is your game, connectivity options are available – supporting real-time information for online mapping/site monitoring, analytics, automated wireless data transfer or emails, or work and repair statistics for productivity monitoring.

On-screen production information and reports can be configured, with the latest StanForD file structures supported ensuring data can interchange with virtually any professional system in the forest industry. Additionally, the system has advanced diagnostic capabilities including remote access.

Configurable as either a pre-selection assortment prioritization system or the optional value-based bucking optimization system, TimberRite H-16 can offer solutions to meet any market needs.

KEY FEATURES

- **Onboard online 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 2007 or 2010** file structure compatibility ensures data interchanges with other professional systems in the forest industry.
- **Email and automatic file sending** - production reports, worksite instructions, repair follow-ups, calibration history, log tables, machine settings and harvesting instructions.
- **Telematics options using optional onboard solutions or 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 400 series have high-cutting capacity, main saws with saw boxes designed for quick cross cutting. All saw units have auto tensioning 0.404 pitch chain driven by efficient, high torque motors. Additionally, the H425HD, H425X, H427 and H427X models have 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.



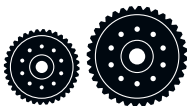
Delimb Arms

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 400 series models.



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.



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

400 SERIES

	H423	H424	H425
DIMENSIONS			
Width, head open [mm/in.]	1450 / 57.1	1520 / 60.0	1720 / 67.7
Width, head closed	1140 / 44.9	1300 / 51.2	1220 / 48.0
Height without rotator and link	1330 / 52.4	1345 / 53.0	1510 / 59.4
WEIGHT			
Excluding rotator, link and some options [kg/lb.]	955 / 2105	1105 / 2436	1360 / 2998
DELIMBING [mm]			
Delimbing knives	4 moving, 2 fixed	4 moving, 2 fixed	4 moving, 2 fixed
Delimbing diameter, tip to tip [mm/in.]	420 / 16.5	430 / 16.9	460 / 18.1
Maximum opening, upper knives [mm/in.]	560 / 22.0	610 / 24.0	680 / 26.8
Maximum opening, lower knives [mm/in.]	570 / 22.4	670 / 26.4	710 / 28.0
DRIVE			
Quantity of drive rollers	4	4	4
Motor cc - option 1	500 / 315-cc motors	620 / 400-cc motors	400 / 630-cc motors
Gross feed force [kN] (steel feed wheels)	23	27	27
Motor cc - option 2		503 / 315-cc motors	500 / 780-cc motors
Gross feed force [kN] (steel feed wheels)		21.5	30
Motor cc - option 3			1014 / 315-cc motors
Gross feed force [kN] (steel feed wheels)			25–42
Maximum feed speed [m/s]	4.8–5.6	4.3–5.3	2.9–7.0
Maximum roller opening [mm/in.]	560 / 22.0	640 / 25.2	680 / 26.8
Minimum diameter [mm/in.]	40 / 1.6	40 / 1.6	50 / 2.0
TOP SAW			
Maximum cut diameter [mm/in.]			
Length of saw bar [mm]			
Chain type [mm/in.]			
Top saw motor displacement [cc]			
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.]	580 / 22.8	620 / 24.4	750 / 29.5
Length of saw bar [mm]	640 / 750	750	825/900
Chain type [mm/in.]	0.404	0.404	0.404
Saw motor	19 or 20cc	19, 20 or 25 cc	19, 20 or 32cc
Oil tank capacity	8.9 l	7.5 l	9.0 l
CARRIER RANGE			
Wheeled [metric ton]	14-20	17-22	18-25
Tracked [metric ton]	13-21	16-21	20-25
HYDRAULIC SYSTEM			
Maximum operating pressure [Mpa/PSI]	28	28	28
Recommended pump capacity [l/min., gal/min.]	240–280	260–320	260–340
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	Yes	Yes
Debarking feed rollers	No	Yes	Yes
Steel thumbnail feed rollers	Yes	Yes	Yes
Steel V-profile feed rollers	Yes	Yes	Yes
Steel ribbed feed rollers	Yes	Yes	Yes
Moipu feed rollers	Yes	Yes	Yes
Mense V-tec feed rollers	Yes	Yes	Yes
Chain and saw-bar kits	Yes	Yes	Yes
Hydraulic hose kit	Yes	Yes	Yes
Top Saw	No	No	No
Processing knives	No	Yes	Yes
Heavy-duty tilt frame	No	Yes	No
Rotator options	Yes	Yes	Yes
Saw bar and chain grease lubrication	Yes	Yes	Yes

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.

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

H425HD	H425X	H427	H427X
1720 / 67.7	1720 / 67.7	1777 / 70	1777 / 70
1220 / 48.0	1220 / 48.0	1447 / 57	1447 / 57
1510 / 59.4	1510 / 59.4	1779 / 70, 1870 / 74 with top saw	1779 / 70, 1870 / 74 with top saw
1390 / 3064	1426 / 3144	1655 / 3649	1853 / 4085
4 moving, 2 fixed	4 moving, 2 fixed	4 moving, 2 fixed	4 moving, 2 fixed
460 / 18.1	460 / 18.1	490 / 19.2	490 / 19.2
680 / 26.8	680 / 26.8	720 / 28.3	720 / 28.3
710 / 28.0	710 / 28.0	800 / 31.5	800 / 31.5
4	4	4	4
400 / 630-cc motors	400 / 630-cc motors	500 / 780cc (single speed) (@ 350 bar)	500 / 780cc (single speed) (@ 350 bar)
27	27	40	40
500 / 780-cc motors	500 / 780-cc motors	1014 / 507 / 315cc (multi-speed)	1014 / 507 / 315cc (multi-speed)
30	30	42	42
1014 / 315-cc motors	1014 / 315-cc motors	1043 / 630cc (single speed)	1043 / 630cc (single speed)
25-42	25-42	43	43
2.9-7.0	2.9-7.0	4.8, 3.6, 5.9	4.8, 3.6, 5.9
680 / 26.8	680 / 26.8	720 / 28.3	720 / 28.3
50 / 2.0	50 / 2.0	50 / 2.0	50 / 2.0
400 / 15.7	400 / 15.7	450 / 17.7	450 / 17.7
600	600	670 / 26.4	670 / 26.4
10 / 0.404	10 / 0.404	10 / 0.404	10 / 0.404
14cc	14cc	14cc	14cc
SuperCut 100S with auto chain tensioning	SuperCut 100S with auto chain tensioning	SuperCut 100S with auto chain tensioning	SuperCut 100S with auto chain tensioning
750 / 29.5	710 / 28.0	760 / 29.9	760 / 29.9
900	900	900	900
0.404	0.404	10 / 0.404	10 / 0.404
19, 20 or 32cc	19, 20 or 32cc	32cc	32cc
9.0	9.0	14.3	14.3
18-25	18-25	18-25	18-25
20-25	20-25	20-30	20-30
28	28	35 / 5076	35 / 5076
260-340	260-340	260-370, 69-98	260-370, 69-98
TimberRite H-16*	TimberRite H-16*	TimberRite H-16*	TimberRite H-16*
Yes	Yes	Yes	Yes
Yes	Yes	Yes	Yes
Yes	Yes	Yes	Yes
Yes	Yes	Yes	Yes
Yes	Yes	Yes	Yes
Yes	Yes	Yes	Yes
Yes	Yes	Yes	Yes
Yes	Yes	Yes	Yes
Yes	Yes	Yes	Yes
Yes	Yes	Yes	Yes
Yes	Yes	Yes	Yes
Yes	Yes	Yes	Yes
Yes	Yes	Yes	No
Yes	Yes	Yes	Yes
Yes	Yes	Yes	Yes



FORESTRY EQUIPMENT

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

