Forestry ATTACHMENTS

The right choice

Bell Equipment's comprehensive range of specially developed forestry attachments are renowned worldwide for their efficient operation and unparalleled longevity in a variety of timber harvesting and wood yard applications.

Experience unmatched performance with our durable timber grapples that range in capacity from 0,36m² to 2,25m². The Bell range of grapples includes stem grapples for whole length tree applications.

Designed and manufactured to handle demanding timber applications, our diverse selection of harvesting heads, shear heads, and felling heads deliver exceptional productivity.

Timber Grapples

With longevity built into the robust structure, Bell Grapples are designed to be efficient loading tools for timber and general material handling applications. They are suitable for a variety of purpose-built and hybrid carriers weighing 7,5t to 40t and cross-cut saw options are available in certain sizes.

Our timber grapples have a nose cone option, either with an internally routed link or standard link. The internal link limits damage caused by impact with logs, or debris to hydraulic lines during loading by allowing hoses to be routed from the carrier to the grapple with minimal external exposure for higher component life.

Optional feature:

Nose cone – the nose cone allows for an extended reach for the grapple (generally 1 000mm) combined with the ability to route hoses internally.

Stem Grapples

Bell Stem Grapples are the ultimate choice for a variety of applications, including timber yards, roadside depots, and even logging operations due to their suitability to handling large diameter logs, both processed and full tree-lengths. The grapple's unique design allows it to grip even the largest logs securely, with the rotator ensuring a full 360° range of tree placement options while maintaining excellent reliability.

Our stem grapples have the options of a live heel and a nose cone, both of which have an internally routed link to limit damage caused by impact with logs or debris to hydraulic lines during loading. This combined with the unique stem grapple design allows hoses to be routed from the carrier to the grapple with minimal external exposure for high component life.

Optional features:

Live heel – the live heel allows loading of timber while maintaining a given angle with the ground. The angle can be adjusted by the operator using the heel. This is mostly suited to loading trucks where extra control is required for full tree lengths.

Nose cone – the nose cone provides extended reach for the grapple (generally 1 000mm) combined with the ability to route hoses internally.

Pickaroons

The Bell Pickaroon is available for fitment from a backhoe loader to a 21t excavator and is the ideal tool to uproot and push over trees. The pickaroon's replaceable ripper tip and blade guard easily rips through roots while the nudge guard is designed to force a controlled drop of the tree.

Cross-cut grapples

The Bell Cross-cut Grapple is based off the proven Bell Timber Grapple range with the attachment of the cross-cut saw box. The grapple design ensures a firm grip of the poles while the cross-cut saw cuts a consistent square cut through the timber. This grapple is ideally suited for cutting, sorting, and loading.

Harvesting Heads

Suitable for 21t to 40t hybrid or purpose-built carriers, the Bell Harvesting Head has been designed for Eucalyptus timber harvesting and processing with the aim of single pass processing.

The two roller head with four wrap-around high tensile knives ensure maximum bark and small limb removal while the high strength structure and two-piece valve bank provide great durability and ease of maintenance.

Felling Heads

Bell Felling Heads are recommended for carriers ranging from 13t to 21t making them suitable for fitment on Bell FastFells and Skoggers. Well suited to small to medium sized timber in either thinnings or clearfell applications, Bell Felling Heads have a simple yet robust design. Customers have the choice of a dangle joint with rotator or with a fixed excavator mounting for more controlled positioning when felling.

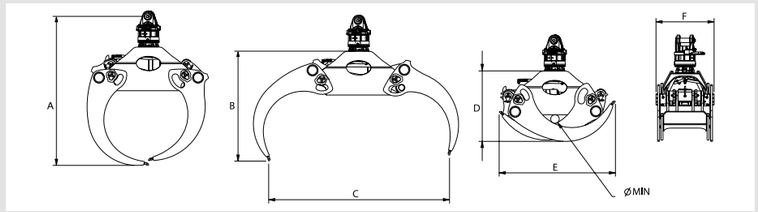
Shear Heads

The Bell Shear Head has a fixed mounting and features a high tensile steel blade that is ideally positioned to ensure low to ground level cutting. Suitable for excavator carriers ranging from 13t to 21t, this is the perfect head for a variety of soft and hard wood applications with small to medium sized timber.

Timber Grapples LX & MT range

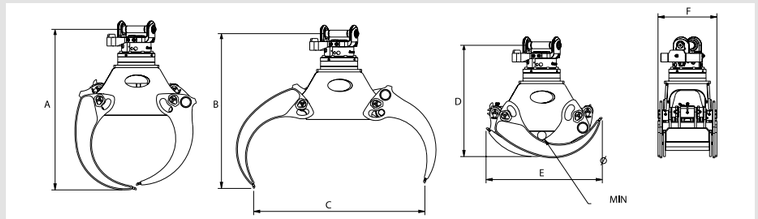
Technical Data

LX GRAPPLES: Loggers and Cranes



Model	Area	A	B	C	D	E	F	øMin	Max. operating pressure	Weight	Indexator model
	m²	mm	mm	mm	mm	mm	mm	mm	BAR	kg	
LX36	0,36	1316	823	1630	625	948	448	106	160	222	GV12S
LX42	0,42	1399	893	1783	669	1040	448	111	160	247	GV12S

MT GRAPPLES: Excavators and large Knuckleboom Cranes



Model	Area	A	B	C	D	E	F	øMin	Max. operating pressure	Weight	Indexator model	Typical carrier size (but not limited to)
	m²	mm	mm	mm	mm	mm	mm	mm	BAR	kg		ton
MT500 LB	0,5	1549	1453	1843	1051	1196	560	90	250	430	GV12/17	7-14
MT600 LB	0,6	1620	1460	2139	1100	1302	660	113	250	531	GV12/17	14-20
MT800 LB	0,8	1812	1587	2472	1170	1467	560	114	250	561	GV12/17	20-26
MT501	0.5	1637	1578	1843	1151	1184	600	90	250	800	XR350	7-14
MT601	0.6	1754	1593	2139	1237	1300	600	110	250	915	XR350	14-20
MT801	0.8	1896	1700	2472	1292	1496	600	120	250	998	XR350	20-26
MT1000	1,0	1717	1468	2851	1054	1673	815	135	250	1125	XR400	26-30
MT1200	1,2	1832	1637	2936	1078	1825	815	116	250	1310	XR400	26-30
MT1800	1,8	2217	1952	3490	1546	2197	829	147	250	1489	IR22	30-38
MT2250	2,25	2517	2065	4493	1456	2522	875	176	250	2426	XR500	38-52

Line Drawings

Features

Rotator
To ensure efficient operation, the rotator is supplied by an industry leading supplier and is matched to the grapple.

Cylinders
Manufactured in the Bell factory using the highest quality chrome shafts and other components.

Body
High strength steel structure designed for maximum uptime, including line bored bushes for continuous smooth operation.

Tines
Grapple tines are designed to provide optimised geometry for gripping timber.

Pins
Chrome-plated pins ensure maximum life and minimal wear on the bushes. Furthermore, non-swivel pins ensure that the serviceable bushes wear as little as possible.

Stem Grapples

Technical Data

DIMENSIONS

Height [mm]	2 033
Width [mm]	927

WEIGHT

Gross [kg]	945

GRAPPLE

Area [sqm]	0,5
Maximum jaw open [mm]	1 852

HYDRAULICS

Maximum operating pressure [bar]	250

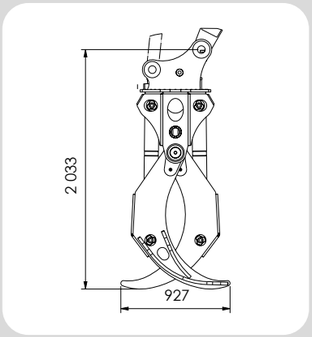
ROTATOR MODEL

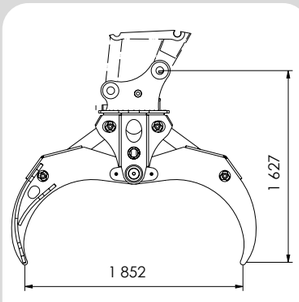
Indexator XR500	
Rotation [degrees]	360
Weight [kg]	216

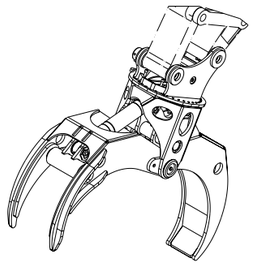
BASE MACHINE (CARRIER SIZE)

Excavator minimum weight [t]	21
Excavator maximum weight [t]	30

Line Drawings







Features

Live Heel (optional)
The heel design is made of structural steel and is interfaced to the excavator mountings.

Pins
Chrome-plated pins ensure maximum life and minimal bush wear. Furthermore, non-swivel pins ensure that the serviceable bushes wear as little as possible.

Rotator
Provided by an industry-leading supplier, the rotator is ideally matched to the grapple for efficient operation.

Body
High strength steel structure designed to provide absolute control when subjected torsional loading.

Cylinders
Cylinders are manufactured in the Bell factory using the highest quality chrome shafts and other components.

Tines
Grapple tines provide a firm grip while increasing bite size.

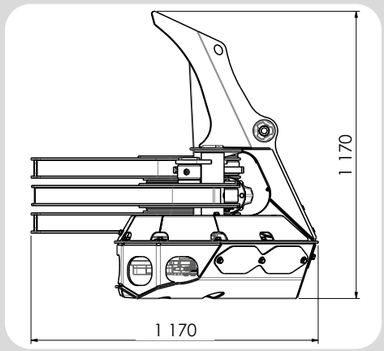
Felling Heads

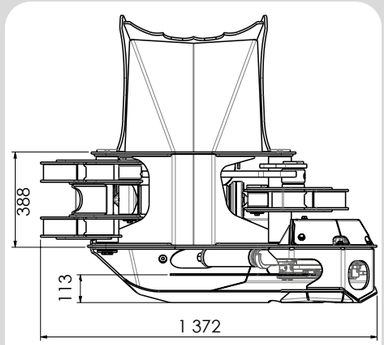
Technical Data

DIMENSIONS	MT50FH	MT50FHF
Height [mm]	1 170	1 816
Width [mm]	1 372	1 162
Depth [mm]	1 170	1 359
WEIGHT		
Gross [kg]	535	955
GRAPPLE		
Area [sqm]	0,25	0,25
Maximum jaw open [mm]	890	890
Minimum jaw closed [mm]	50	50
Lateral tilt		30°
SAW		
Hultdins SuperCut		
Saw chain type	0,404	404
Saw bar [mm]	750	750
Saw motor [cm³/rev]	19	19
Maximum cut diameter [mm]	530	530
HYDRAULICS		
Pressure rating [bar]	200-280	200-280
Oil flow minimum [Lpm]	65	65
Oil flow maximum [Lpm]	1 05	1 05
ROTATOR MODEL		
Indexator GV124S - Grapple		
Saw rotator		
Rotation [degrees]	360	
Weight [kg]	59	
BASE MACHINE (CARRIER SIZE)		
Excavator minimum weight [t]	13	13
Excavator maximum weight [t]	21	21

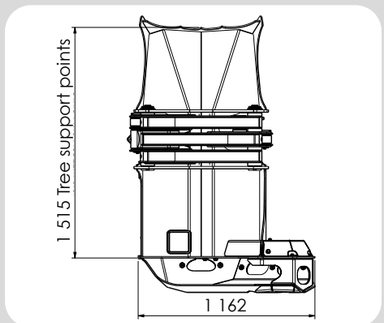
Line Drawings

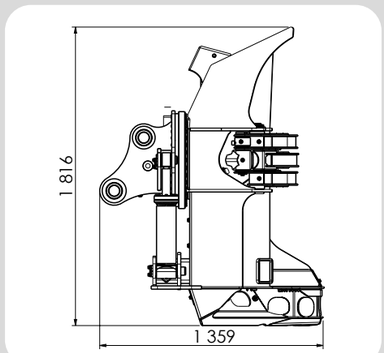
MT50FH





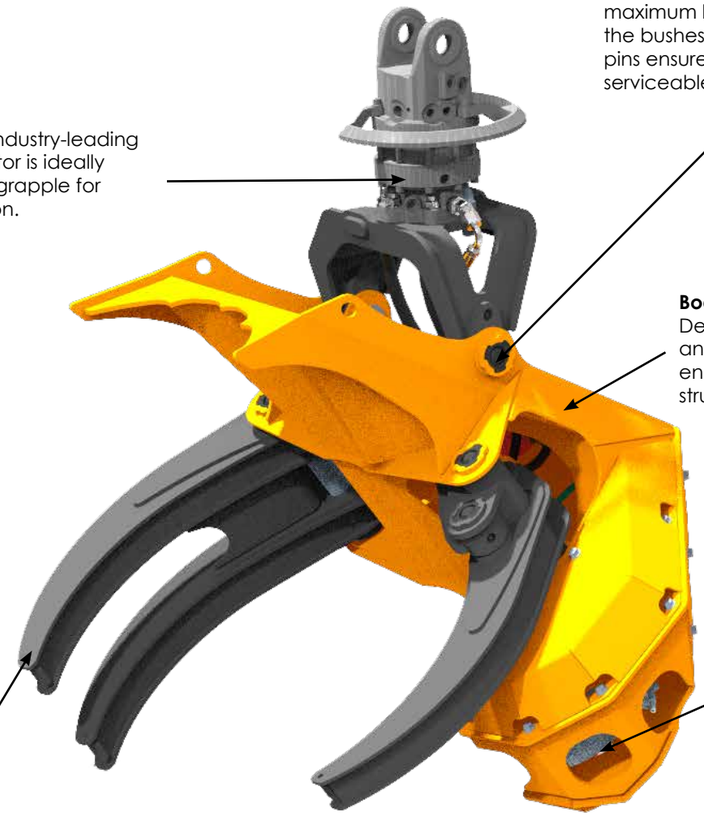
MT50FHF





Features

MT50FH



Pins
Chrome plated pins provide maximum life and limited wear to the bushes. In addition, non-swivel pins ensure minimal wear to the serviceable bushes.

Rotator
Provided by an industry-leading supplier, the rotator is ideally matched to the grapple for efficient operation.

Body
Designed to be low in weight and high in strength, the body ensures a long-lasting head structure.

Saw
The saw is the proven Hultdins SuperCut with a 750mm saw bar.

Tines
Wear resistant grapple tines ensure a solid stem grip.

MT50FHF

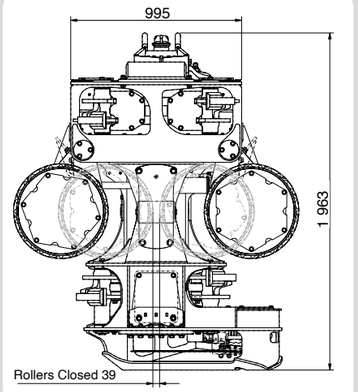
30°Lateral tilt adapter
Turns 30° in both directions.

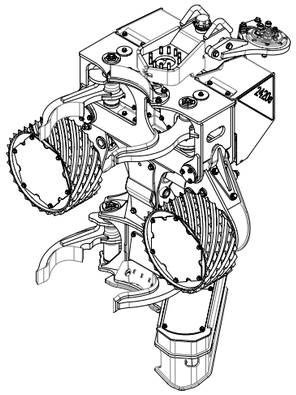
Harvesting Head 2420E

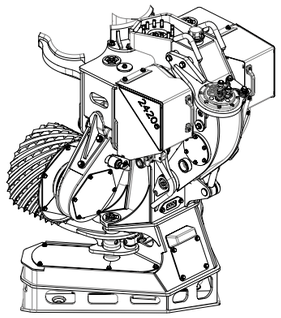
Technical Data

DIMENSIONS	
Width, head open [mm]	1 659
Width, head closed [mm]	1 317
Height with rotator and link [mm]	1 787
WEIGHT	
Without rotator and link, from	1 680
FELLING/CUTTING	
SuperCut 150 saw unit, automatic chain tensioning	
Maximum cut diameter [mm]	559
Length of saw bar [mm]	750
Chain type	404
Saw motor [cm³/rev]	19
FEEDING, TWO-WHEEL DRIVE (CC)	467
with steel feed rollers	
Gross feed force [kN]	22
Maximum feed speed [m/s] (feede rate)	5
Maximum roller opening [mm]	559
Roller opening minimum [mm]	39
Roller diameter (to roller tips) [mm]	550
Feed roller motor	467
Number of feed rollers	2
Feed wheel type	Steel Roller
DELIMBING	
Delimbing knives	4 moving, 1 fixed
Delimbing diameter, tip to tip [mm]	583
Maximum opening, upper knives [mm]	583
Maximum delimbing full coverage [mm]	350
HYDRAULIC SYSTEM	
Maximum operating pressure [bar]	300
Recommended pump capacity [l/min]	300
ROTATOR MODEL	
Indexator HX30LS	
BASE MACHINE (CARRIER SIZE)	
Excavator minimum weight [t]	20
Excavator maximum weight [t]	25

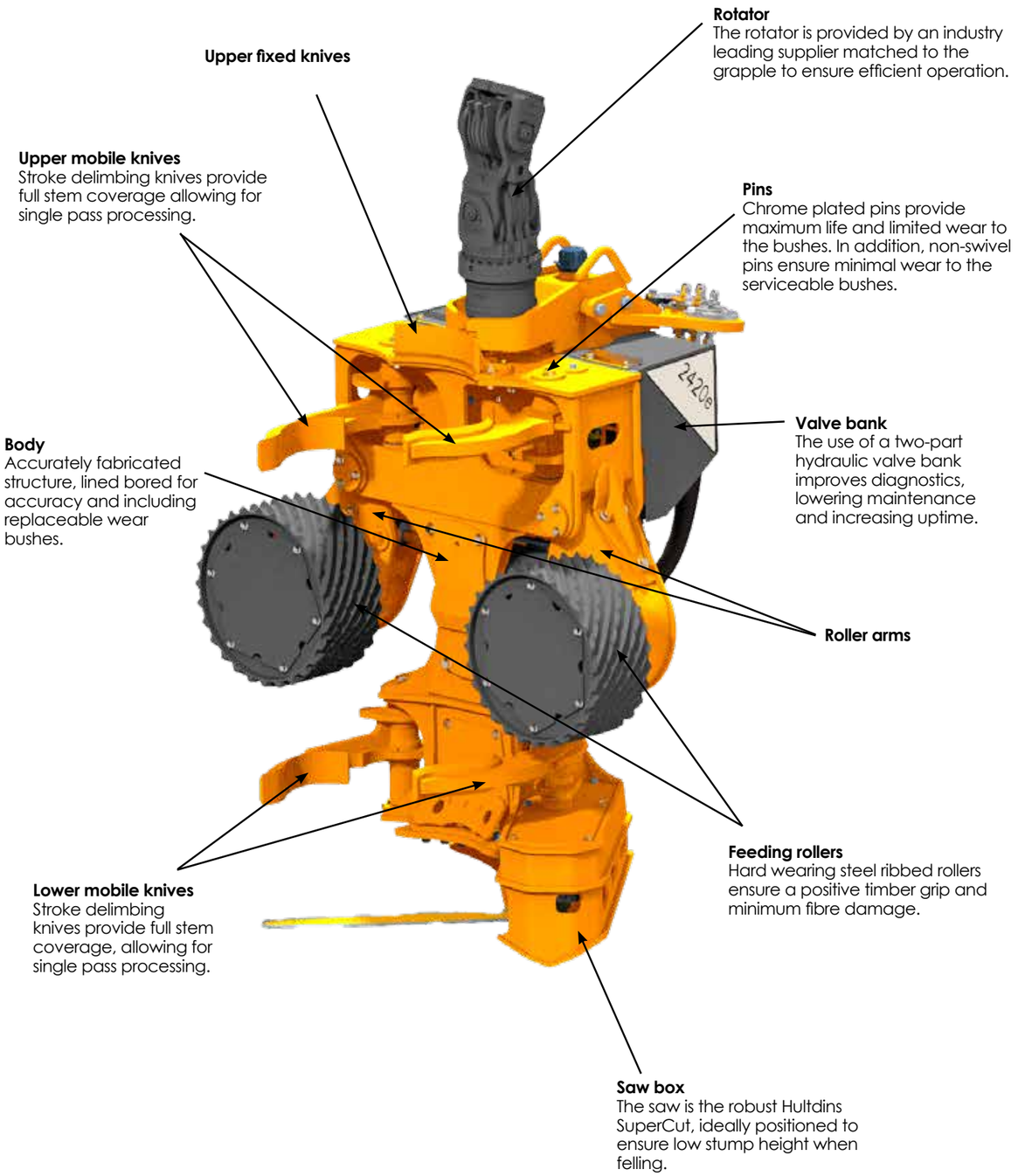
Line Drawings







Features



Shear Head

Technical Data

DIMENSIONS

Width, head open [mm]	993
Length [mm]	1 258
Height [mm]	993

WEIGHT

Gross [kg]	650

FELLING/CUTTING

Maximum cut diameter [mm]	400
Blade thickness [mm]	16
Maximum opening [mm]	650

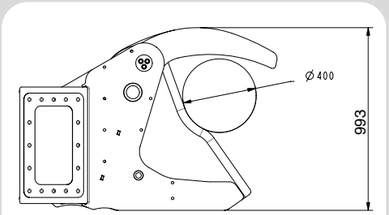
HYDRAULIC SYSTEM

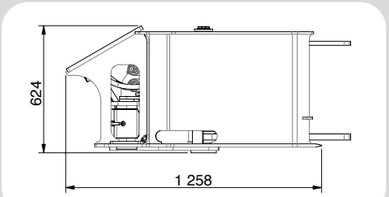
Maximum operating pressure [bar]	250
Recommended pump capacity [l/min]	80-140

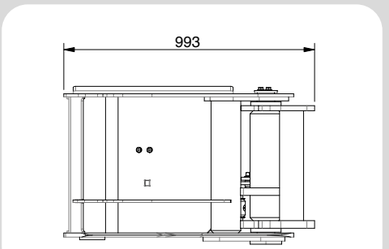
BASE MACHINE (CARRIER SIZE)

Excavator minimum weight [t]	8
Excavator maximum weight [t]	20

Line Drawings



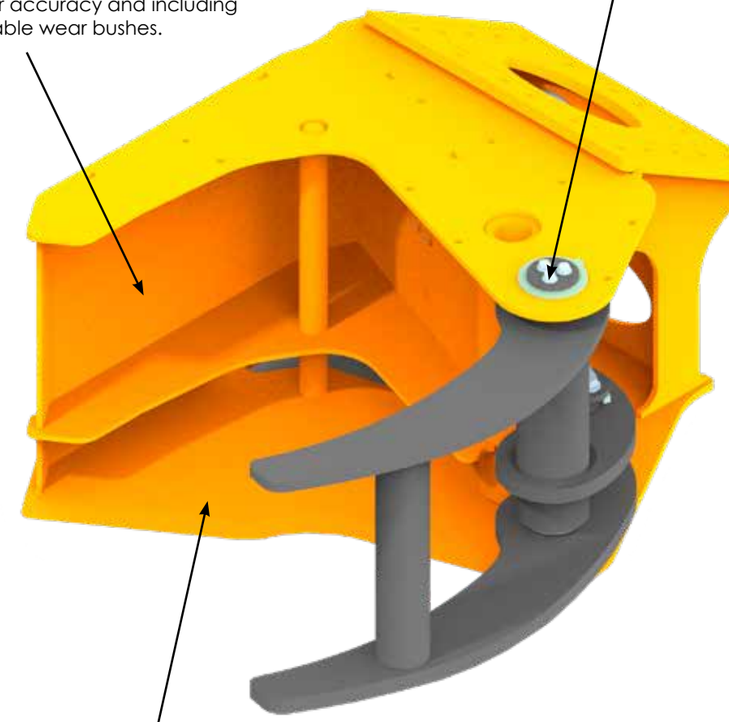




Features

Pins
Chrome plated pins promote maximum life and limited wear to the bushes. In addition, non-swivel pins ensure minimal wear to the serviceable bushes.

Body
Accurately fabricated structure, lined bored for accuracy and including replaceable wear bushes.



Blade
Hardened high tensile steel blade, geometrically positioned to ensure stump cut height close to ground level.

Pickaroons

Technical Data

DIMENSIONS

Width [mm]	1 022
Height [mm]	1 502

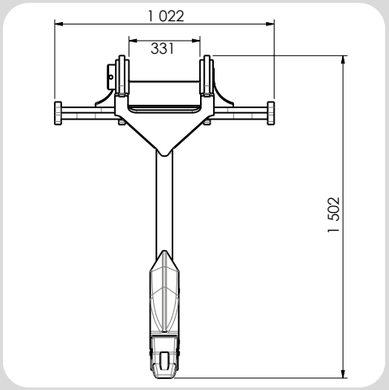
SHANK

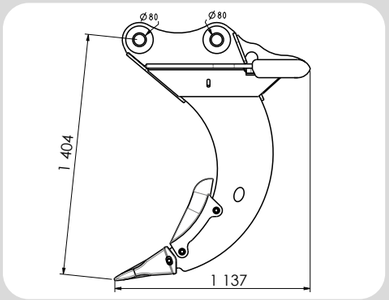
Gross [mm]	80

BASE MACHINE (CARRIER SIZE)

Excavator maximum weight [t]	21

Line Drawings





Features

Pusher yoke

Body
Manufactured from structural steel for reduced wear and increased life.

Replaceable tooth & cutter adaptor

Cross-Cut Grapples

Technical Data

DIMENSIONS

Length 'A' [mm]	1 095
Width 'B' [mm]	162
Height 'C' [mm]	400
Width 'D' [mm]	120
Saw bar [cm]	90

WEIGHT

Gross [kg]	102

HYDRAULIC SYSTEM

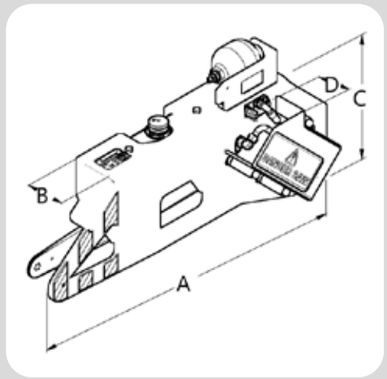
Saw motor displacement [cm³]	10
Minimum hydraulic pressure, saw motor [bar*]	160
Minimum hydraulic flow, saw motor [lpm *]	65
Hydraulic pressure, saw bar feed out [bar]	50 - 55
Hydraulic pressure, chain tensioning [bar]	30
Gas pressure, accumulator [bar]	1
Air pressure, saw bar retraction [bar]	12 - 14

** Maximum saw chain speed and Maximum power input to the saw chain may NEVER exceed recommendations from each saw chain manufacturer.*

CHAIN LUBRICATION

Type of lubrication	Proportional
Lube oil tank capacity [L]	3,0

Line Drawings



Features

Body
High strength steel structure designed off the existing timber grapple.

Cross-cut saw
Heavy duty Hultdins SuperSaw 10cc grapple saw for durability.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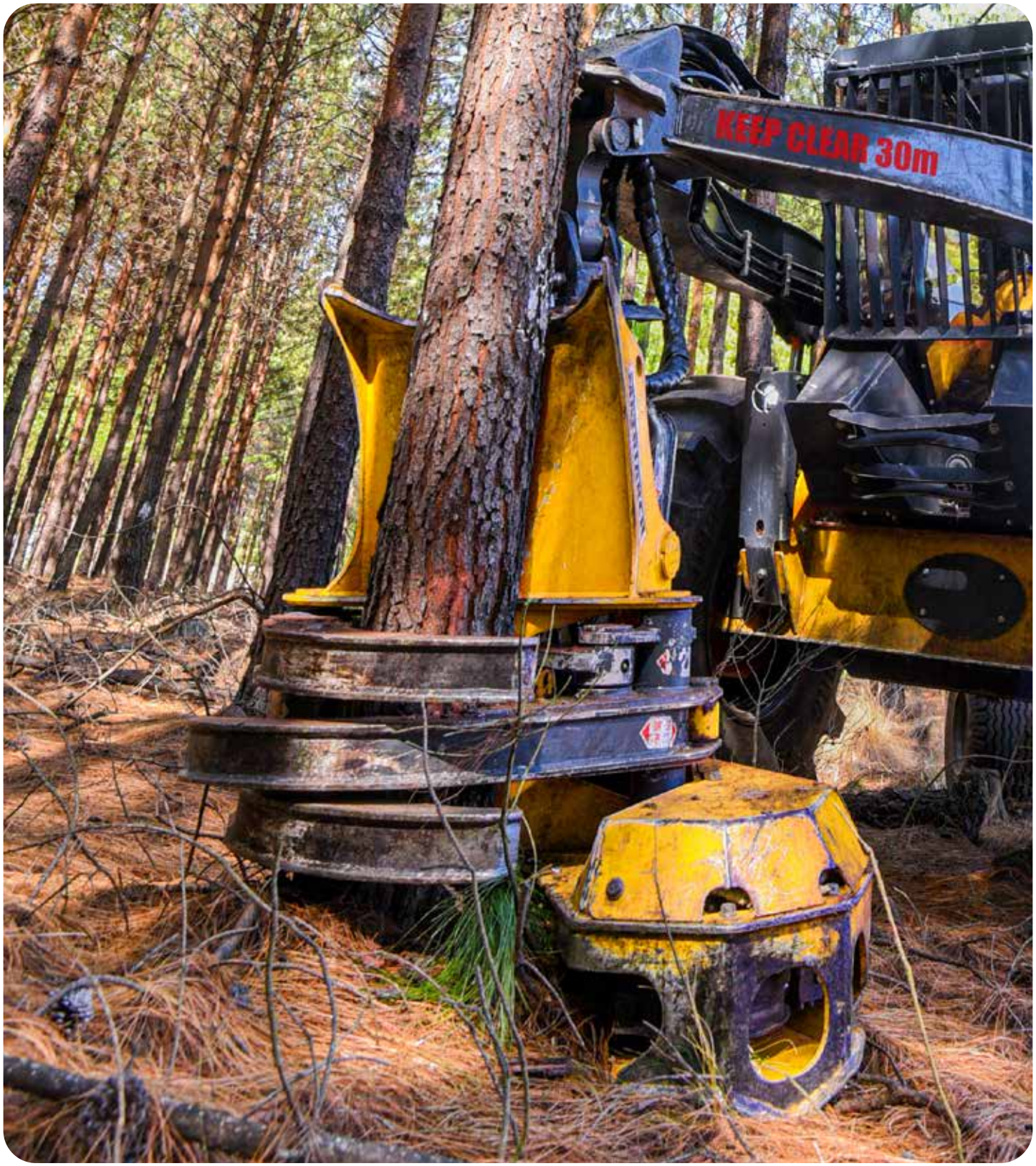
KEEP CLEAR 30m
BELL
FASTfell



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Strong Reliable Machines
Strong Reliable Support

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