

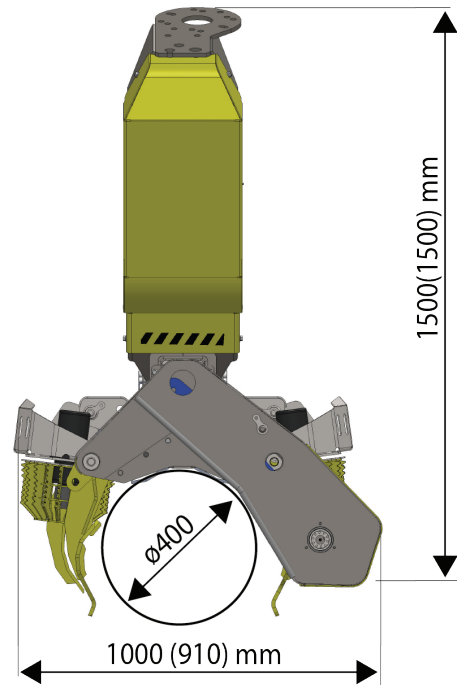
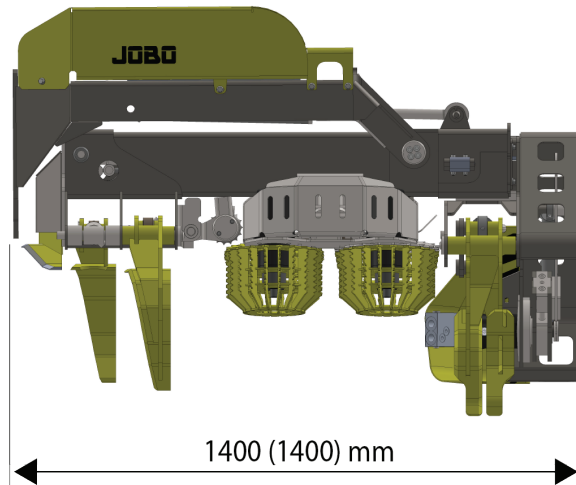


# **SYKETEC**

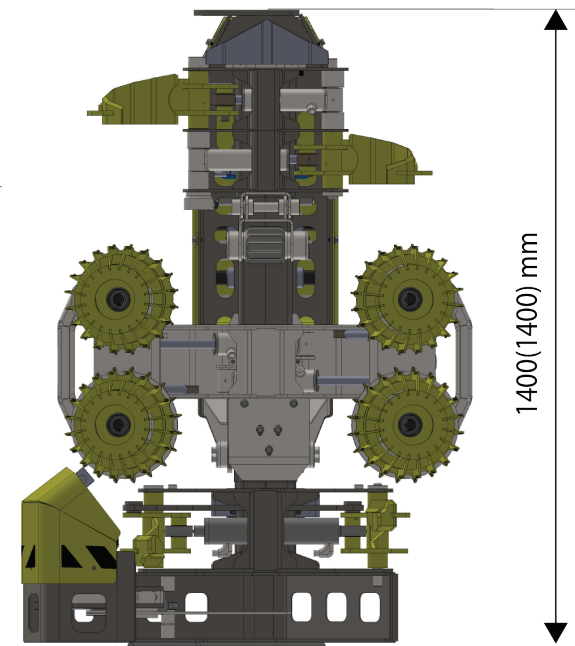
## **JOBO SR75**

### **Product program**





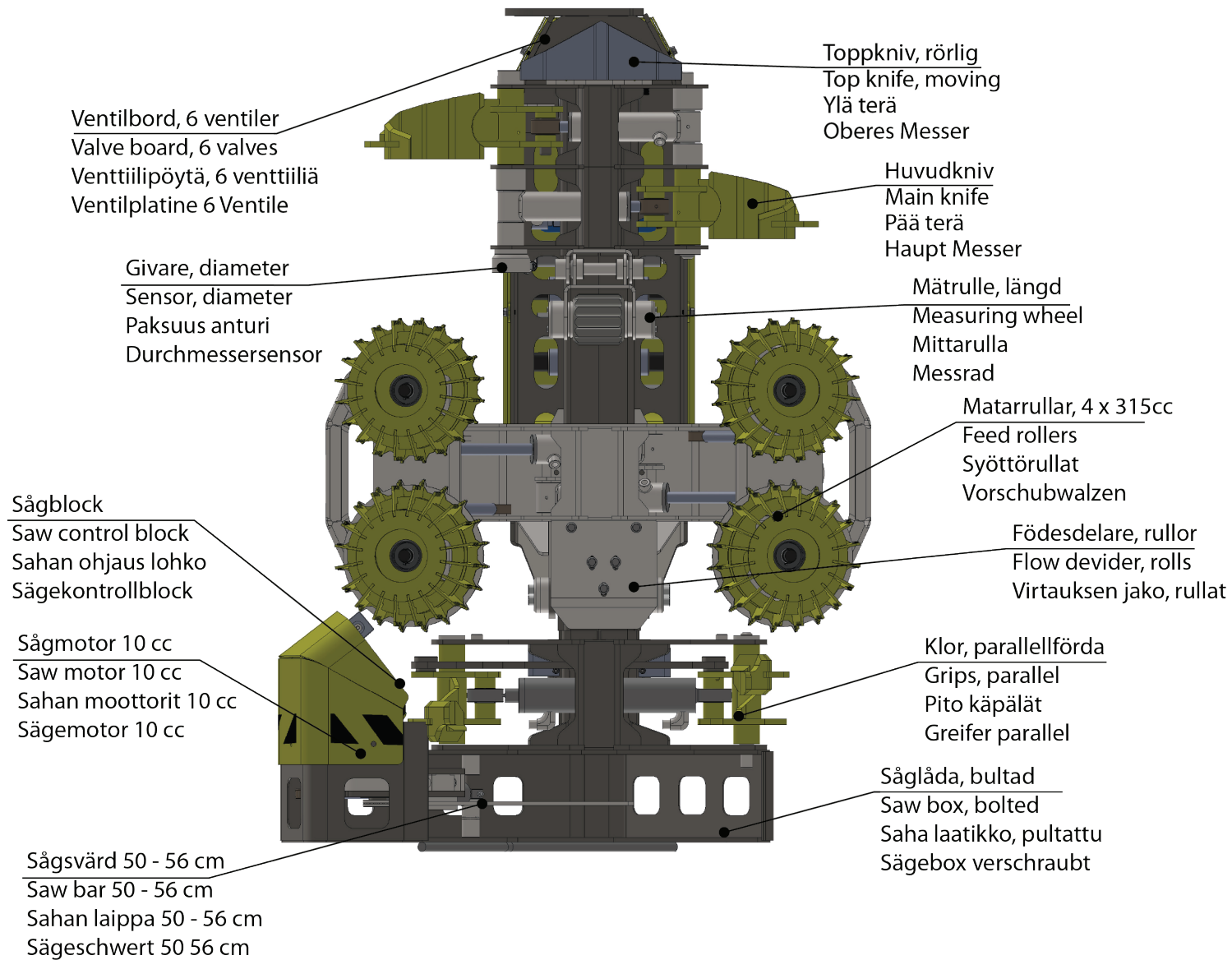
**JOBO ST75  
Combi / Jumbo**



- Måtten inom parentes är för ST75 Jumbo
- Suluisa olevat mitat ovat ST75 Jumbon mitat
- Measures within parenthesis are for ST75 Jumbo
- Die Angaben in Klammern beziehen sich auf die Jumbo-Version

## Specification

Specification	JOBO SR75 Jumbo	JOBO SR75 Combi
Weight, base machine	330 kg	430 kg
Fell diameter	40 cm	40 cm
Delimiting diameter	45-3 cm	45-3 cm
Saw bar/chain	50/54 cm, 2mm, .404	50/54 cm, 2mm, .404
Oil requirement	60-100 l/min	80-120 l/min
Hydraulic pressure	190 bar	200 bar
Stroke length	75 cm	75 cm
Feed force, $\varnothing$ 40/32 mm	35/23 kN	35/23 kN
Speed of stroke	0,75 m/sec	0,75 m/sec
Roll feed	-	2-3,5 m/sec



## Harvester JOBO ST50-scope selection

Specification	JOBO SR75 Jumbo	JOBO SR75 Combi
Saw limiter	Electronic	Electronic
Stump treatment	Option	Option
Moving knives	3 pcs	3 pcs
Feed rolls	-	Option
Length measure, stroke	Standard	Standard
Length measure by roller	Standard	Standard
Diameter measure	Standard	Standard
Volume calc. (top/middle)	CAN-MID	CAN-MID



## Measurement system CAN-CCD

JOBO CAN CCD is the controller for all functions of the harvester head. The operator can fine tune functions all depending on actual oil flow and temperature. The selection of species and length preselection are simple by means of menu's and buttons.


### Technical features:

- Operating voltage 9 - 32 VDC
- Operating temperature -20 - +60°C
- LCD display 3,7in QVGA
- Frame, aluminium IP67
- Interface CAN 2.0B
- Real time clock

This system can be built in two separate units (as in picture) or in single unit panel. Installation space shall determine which unit type to choose.

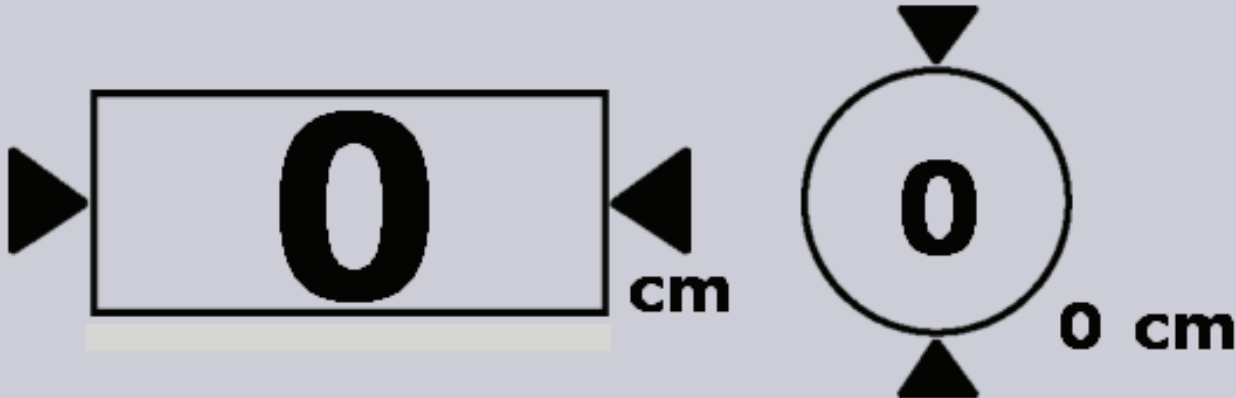
## Control system features

Specification	JOBO SR75 Jumbo	JOBO SR75 Combi
Select operation mode	F1 - stroke	F1 - F4, COMBI
Feed to preselection	Automatic	Automatic
Select species	Six (6) preselections	Six (6) preselections
Length selection	Six (6) lengths	Six (6) lengths
Multi stem/ Multi grip selection	-	With rolls
Volume calculation	CAN-MID	CAN-MID
Crane controls	CAN-CCD/MID	CAN-CCD/MID
Internal diagnostic	CAN-CCD/MID	CAN-CCD/MID
Production recording	CAN-CCD/MID	CAN-CCD/MID



**SYKETEC**  
JOB0 ST V. 0 . 0

RUNTIME 0 h 0 : 00  
0 . 0 . 0




**SET**

**0**


**SPECIES**

**0**


**CHOOSE TREE SPECIES**




**COMBI**




**ROLL FEED**




**MULTI-STEM**




**MULTI-GRIP**




**LGTH**




**CLBR**




**PROD**



**DIAG**



**STICK**



**ADMIN**





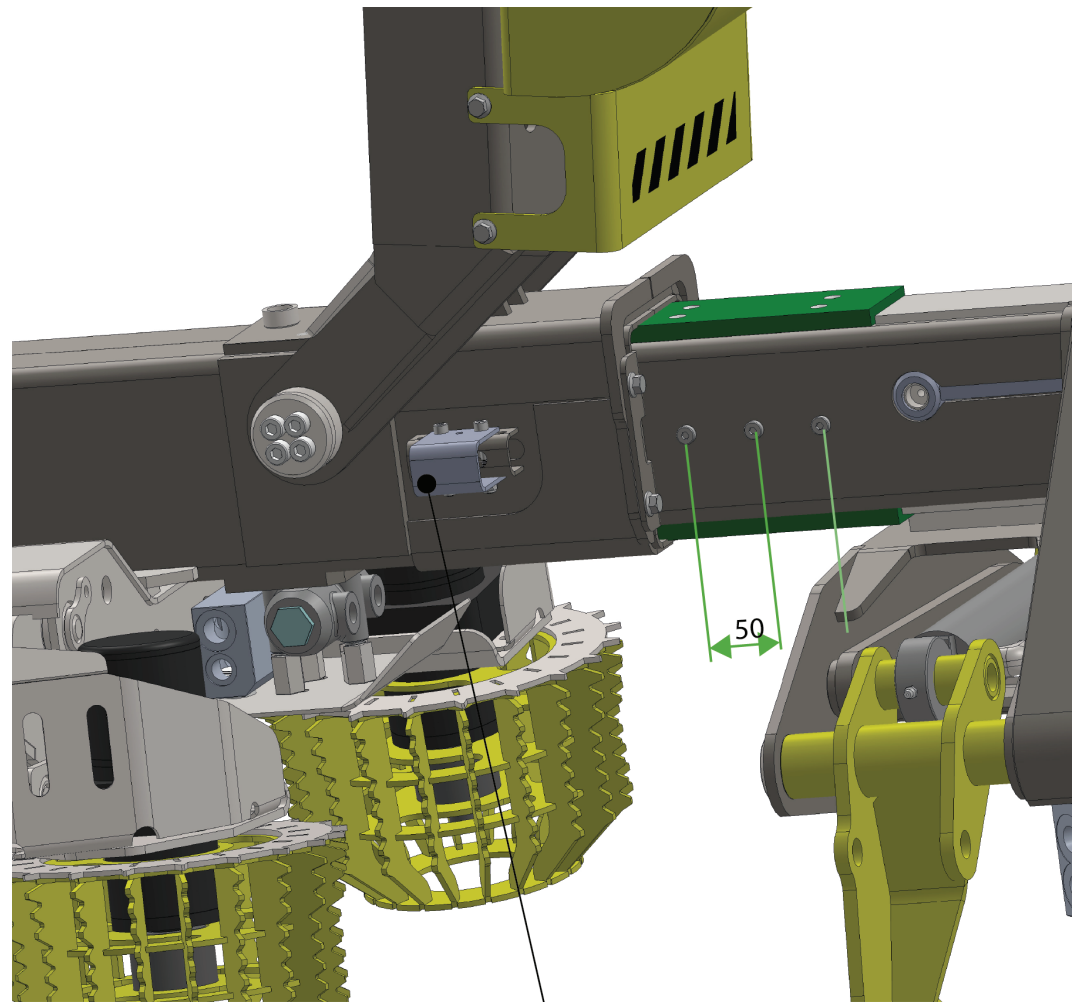
## Measurement system CAN-MID

JOBO CAN MID is the more advanced measuring and control system built on high quality hardware with sophisticated features. The operating system Linux provides calculation power and easy to use menus to adjust all functions and even follow-up of produced volumes.

### Technical features:

- Operating voltage 9 - 32 VDC
- Operating temperature -20 - +60°C
- LCD display 7in QVGA
- Frame, aluminium IP67
- Interface CAN 2.0B
- Connector 44 pin AMP
- Real time clock, 4 - video inputs

This system can be built in two separate units or in single unit panel (as in picture) . Installation space shall determine which unit type to choose.



Längdgivare  
Pituusanturi  
Length sensor  
Längen-Sensor



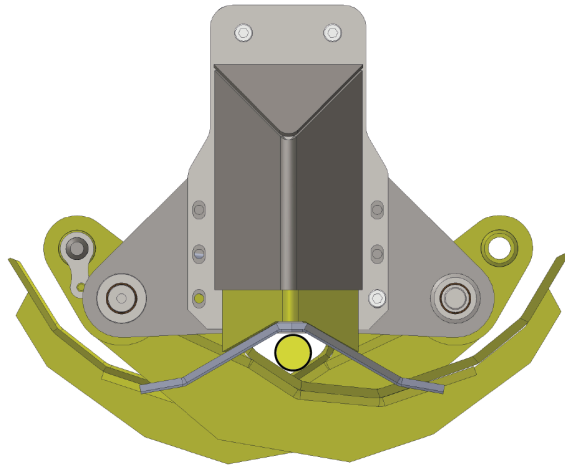
## Measurement methods

All JOBO harvester heads include length measure taken from the stroke. Length sensor is calculating length with 5 cm intervalls. More accurate measurement is achieved with the standard measuring wheel.

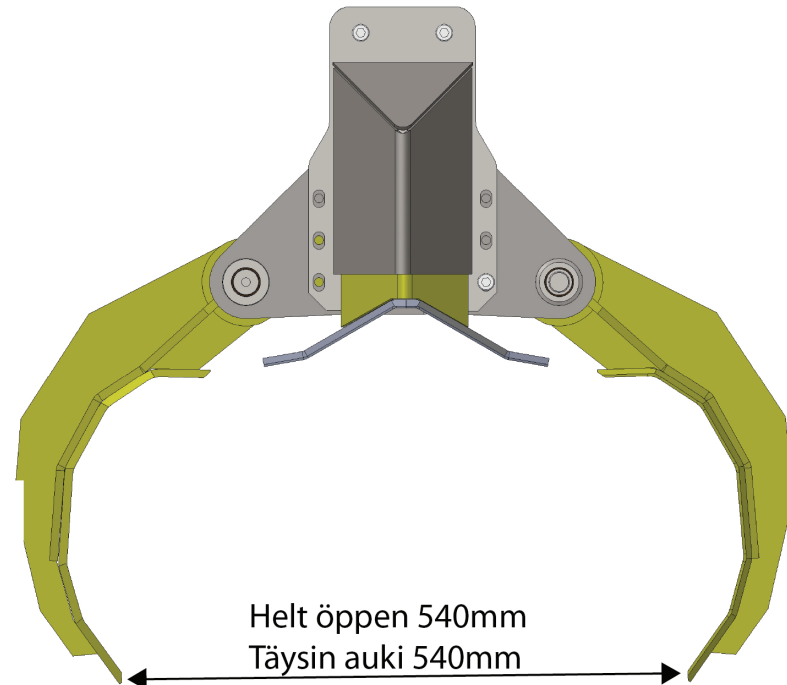
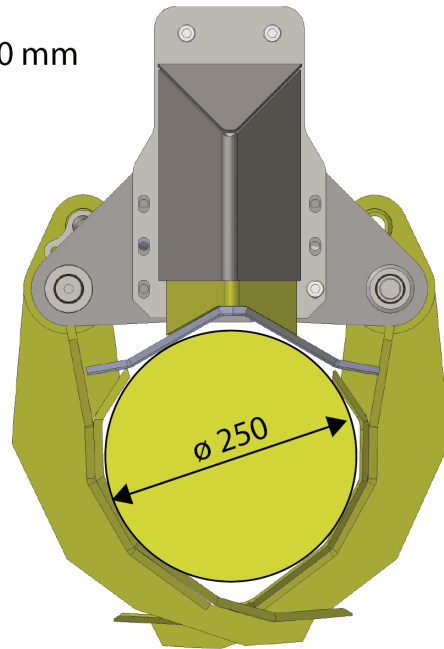
### Technical features:

- Measuring wheel diam. 80mm (L=26cm)
- Spring loaded
- Magnetic (HALL) sensor, 32 pulses/turn
- Theoretical accuracy 0,7 cm

The measuring wheel is counting forward and backward as it follows the tree stem. Measuring wheel can be retrofitted.



Min diam. 20 - 30 mm  
Mindestdurchmesser 20 bis 30 mm



Helt öppen 540mm  
Täysin auki 540mm  
Fully open 540mm



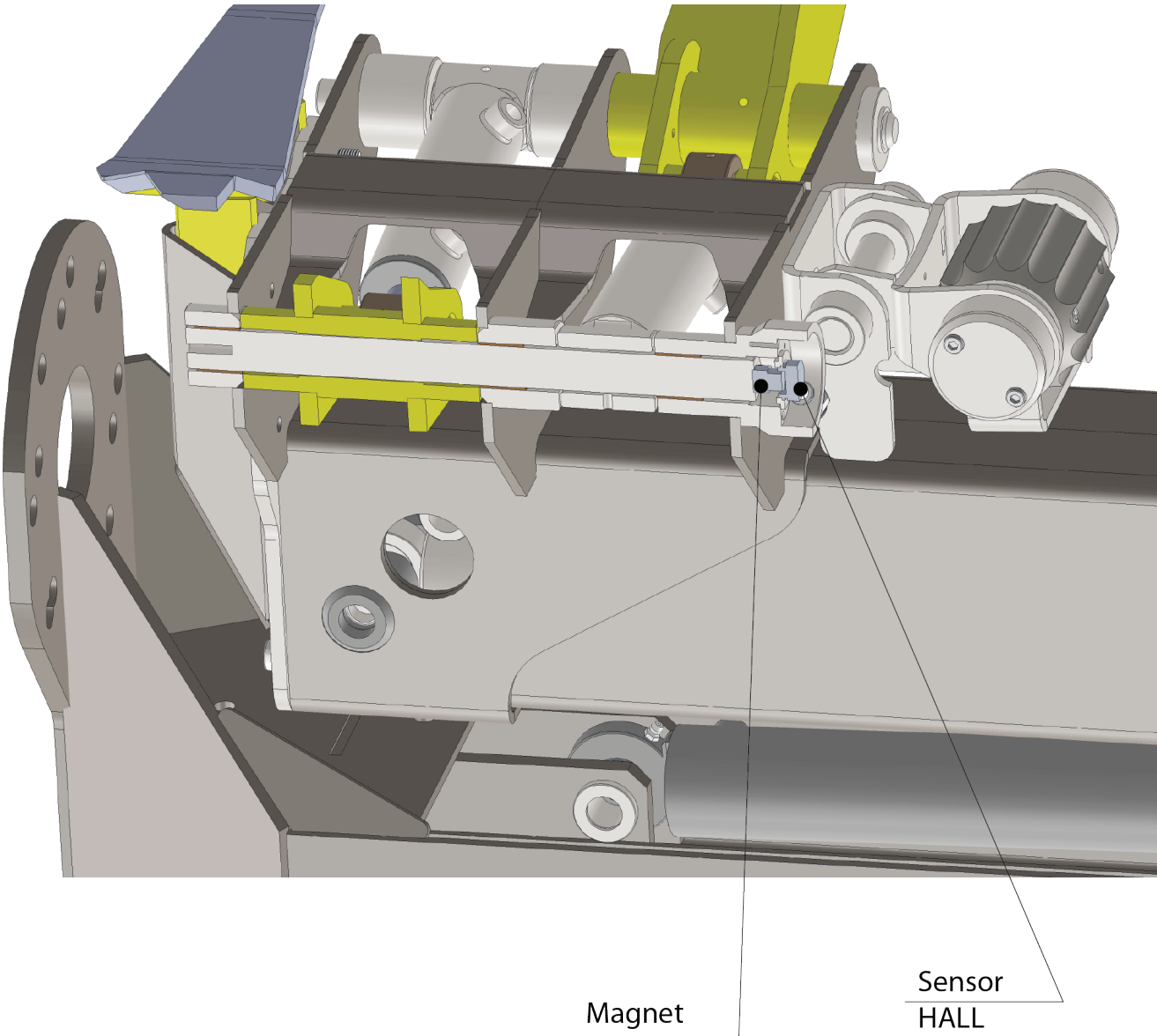
## Delimiting knives

The knife profile is fitted to the optimal performance on stems of  $\varnothing 15 - 25$  cm, but is still performing delimiting well from 35 cm down to abt. 3 cm.

All knives are movable. The top knife is spring loaded in order to follow small bends on the stems.

All knives are made from wear resistant (Hardox) steel. Main knives are pressure controlled with own propo pressure reducing valve at abt. 120-150 bar. Pressure is varied depending on the operating mode and it is adjustable from the display.

The main knife cylinders (2pcs) are mounted in a fixed position which ensures minimum movement of hoses.





## Diameter measurement

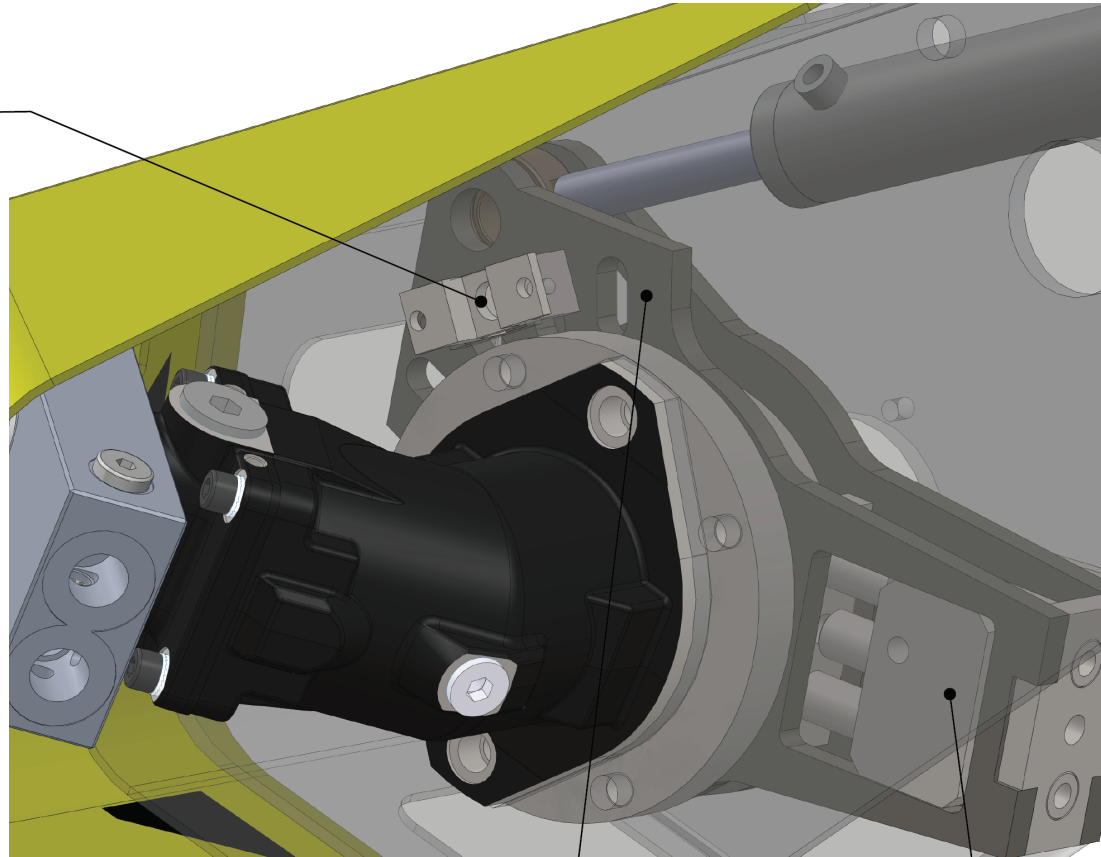
All SR75 harvester heads are prepared for diameter measuring. The measuring transducer is placed in the shaft end of left main knife. As its signal is magnetically transferred there are no moving parts making the system really reliable.

### Technical features:

- Absolute sensor (HALL type)
- Magnet  $\varnothing 20$  mm, sensing 2-4 mm
- resolution 12 bit, 180°
- Output 0,5 - 4,5V
- Operating voltage 5-30 VDC
- Operating temperature -40 - +85°C
- Protection class IP67

Thanks to the sensor type (absolute) knife always knows in which position it is (angle). The measurement result can be calibrated in the control program (CCD/MID). This solution has a design protection.

Såg "hem" givare  
Saha "kotona" anturi  
Saw "home" sensor



Genomsågnings stopp  
Ohisahauksen estä  
Saw limiter  
Sägebegrenzer

Hydraulisk kedjespännare  
Hydraulinen ketjun kiristin  
Hydraulic chain tensioner  
Hydraulic Kettenspanner



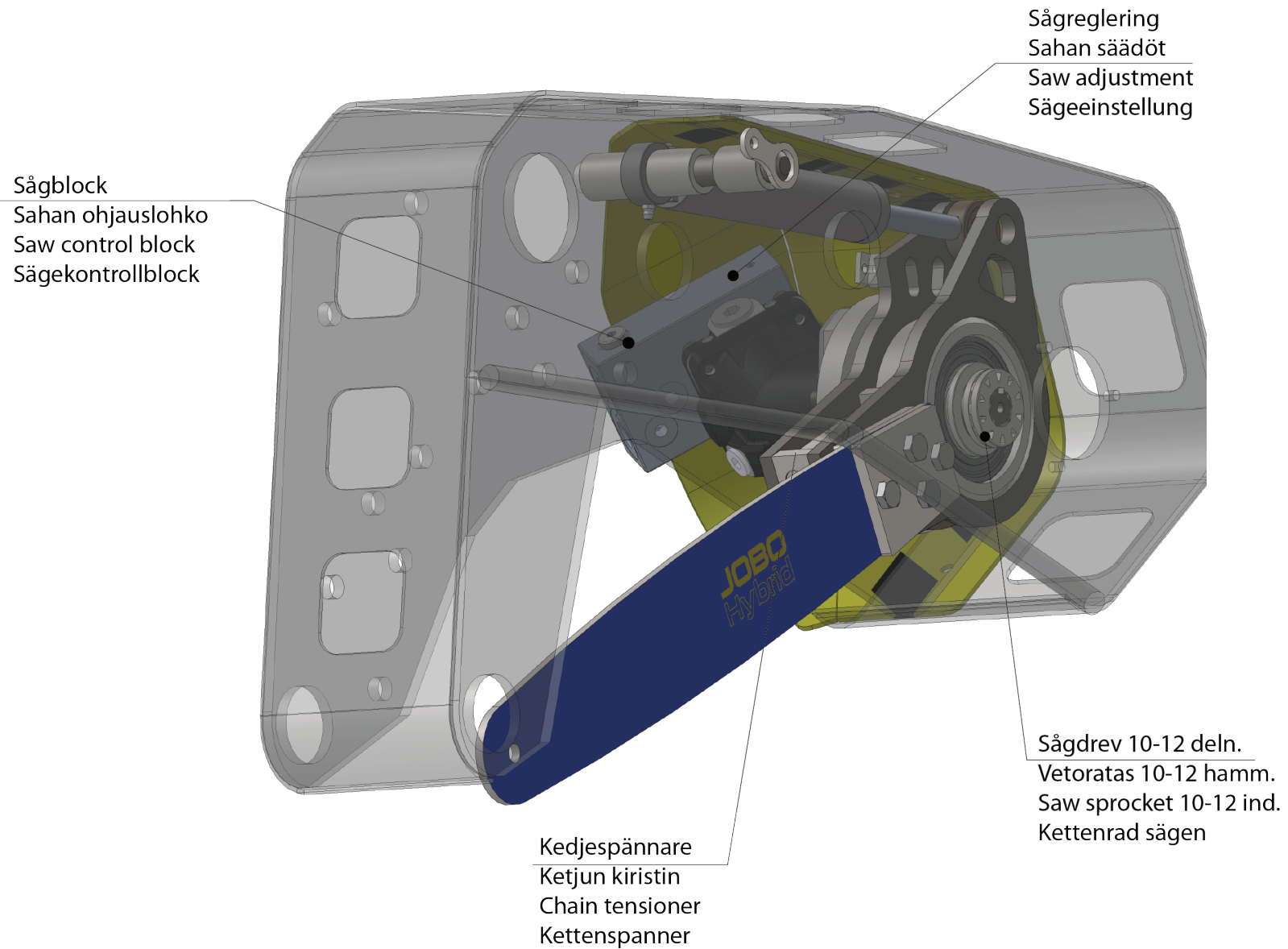


## Saw limiter

A electronic saw limiter is standard on all SR75-harvesters. The limiter is connected to the diameter measurement and it is adjusted so that saw will stop at a position of abt. 1/3 of width of the saw bar.

This is a valuable function if the saw bar is not visible when felling (it is often hard to see what is behind the tree stem).

This function also minimizes the risk of saw bar getting beyond the saw cut of the stem and getting stuck or accidentally hitting a stone or nearby standing tree.





## **Saw control**

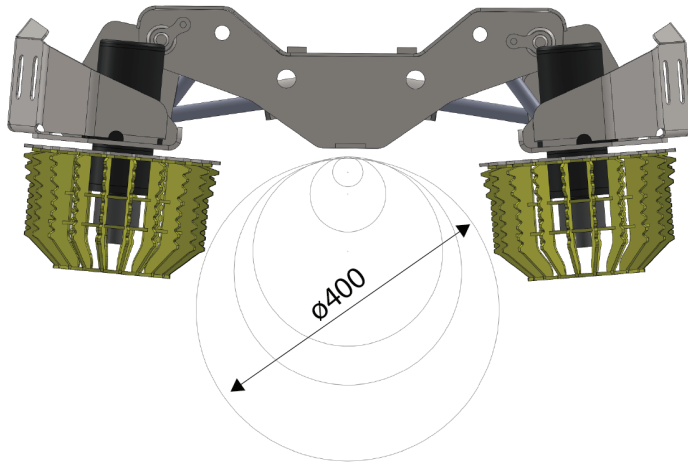
An essential function of a harvester is how the saw is controlled. The saw motor must reach full speed before it hits the stem and during sawing feed pressure should be held at optimum saw effect.

It is also very important that the return pressure is not too high as that may tension the chain or put extra strain on the saw mechanism.

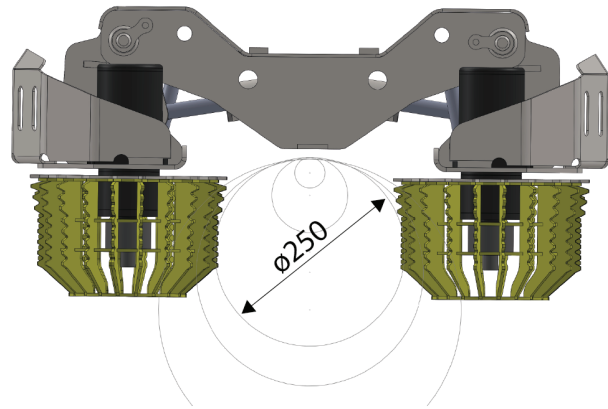
### **Technical features:**

- Saw motor speed 6000 - 10000 rpm
- Chain speed max. abt 25 m/sec
- Power requirement 45 kW
- Feed pressure regulation
- Return pressure regulation

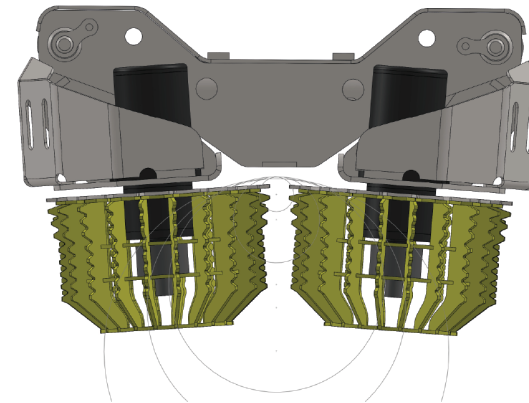
All functions are taken care of in the control block including valves and restrictors (see picture).

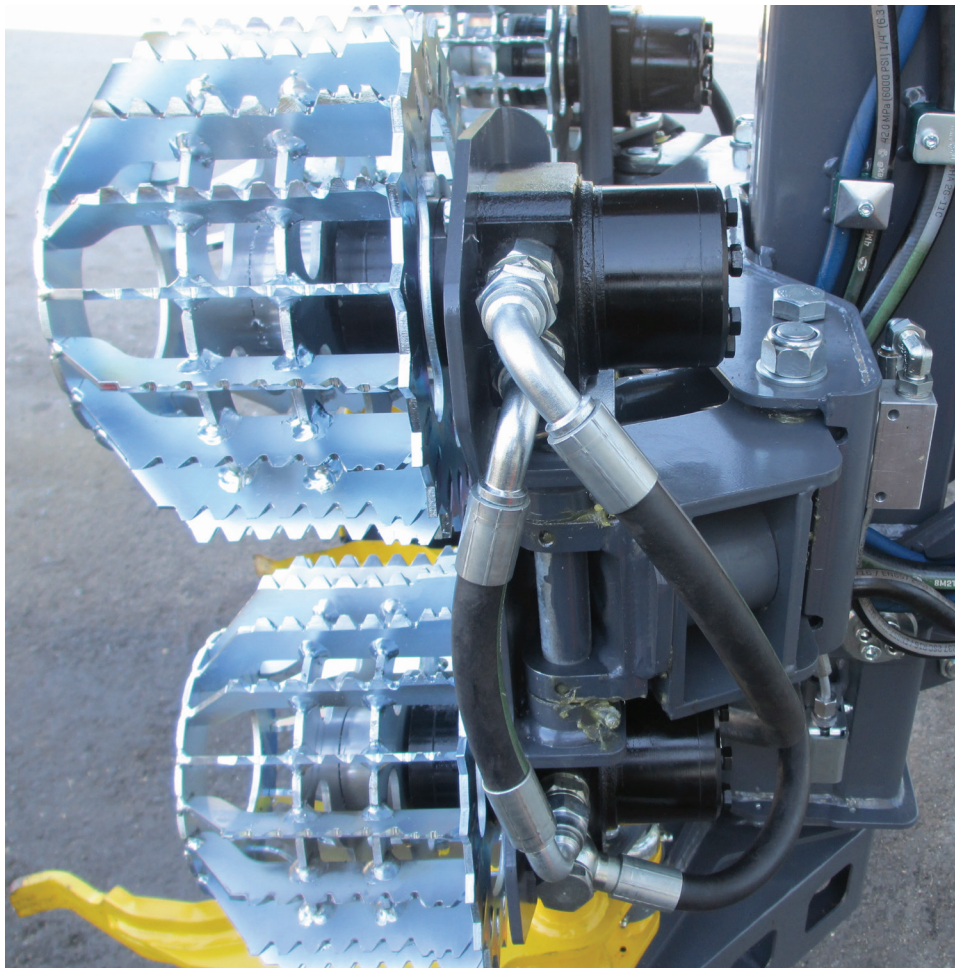


Fullt öppen  $\varnothing 400$  mm  
Täysin auki  $\varnothing 400$  mm  
Fully open  $\varnothing 400$  mm  
Voll geöffnet bei 400 mm Durchmesser



Min. diam. 30-40mm  
Minstdurchmesser 30-40mm





## Feed rolls

In its COMBI version the SR75 is provided with welded feed rolls made in high strength steel. The light weight and open construction improves its self cleaning. Designed to be used on trees with few branches or only light branching. A secondary function of the Feed rolls is it provides support for a heavy tree in the MultiGrip position

### Technical features:

- Roll diameter - 4 x  $\varnothing 220$  mm
- Roll hydraulic motors - 4 x 315 cc
- Roll feed speed > 3 m/sec

SR75 Jumbo is prepared for subsequent retrofit of the roll system if required. All programs are available as standard.

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