



N5

N5 THINNING HARVESTER

NIS

THE FUTURE OF EFFICIENT THINNING

IMPROVED PRODUCTIVITY

- Nimble and balanced
 - moves fast in the felling area
- Parallel crane in line with the operator
 - head fast to take to the tree
- Less driving, more harvesting
 - 9, 10 and 10.5 m crane alternatives
- Harvester heads with efficient power/weight ratio
 - fast and accurate handling of trees

LOWER COSTS

- Low purchase price
 - less capital needed
- Low fuel consumption (6.5-8 l/h)
 - no money wasted
- Reliable with no unnecessary frills
 - less downtime
- Regular maintenance costs
 - less than €2/h

HEAD ALTERNATIVES

NISULA 425H



Reach of the crane
10.5 m

NISULA 425C



Reach of the crane
10.5 m

NISULA 500H



Reach of the crane
9/10 m

NISULA 285E+



Head change facility and
accumulating energy wood head
as accessories



NISULA 500H

– EVERYTHING YOU COULD
WANT IN A HARVESTER HEAD ?

Nisula 500H is a true harvester head that serves you from first thinning to the last improvement felling. Both the physical dimensions and the weight of the head are ideal for thinning. Thanks to high-quality materials, the head only weighs 640 kg without the rotator. The head is easy and fast to take to the tree, and thanks to the efficient drive motors, even challenging stems go easily through the grapple. 500H's single cut diameter is 50 cm.

DETAILS THAT IMPROVE DURABILITY, USABILITY AND RELIABILITY

- All the structures of the heads are made of high strength steel. (Hardox 400).
- The structures are welded by using special filler metals designed for high strength steel.
- The shaft sleeves are made of tempered steel and the axles of surface hardened tempered steel.
- The cylinders of the heads do not move length-ways, which minimises the movement of the hoses and thereby the risk of damage.
- The design of the saw casing helps the operator find the correct cut-off point and reduces the risk of the saw hitting the ground.
- The accurately measured position of the saw maximises the utilisation of the saw bar: comparatively larger cut-through diameter and minimised movement of the saw bar. These features bring savings in chain and saw bar costs.
- The whole head can be greased in one position (tilt up and grapple closed)

DETAILED TECHNICAL SPECIFICATION:
WWW.NISULAFORREST.COM

NEW GENERATION EASY-TO-USE CONTROL SYSTEMS

NISULA NCU3i WITH PRIORITY SCALING FUNCTION



NCU3i is equipped with a larger 7" colour monitor. The operator can easily program the required wood grades and measurements without a complicated price matrix. NCU3i is a good control system for both a new and an older machine. It meets the latest measurement standard requirements.

NISULA NCU3X WITH VALUE AND QUALITY SCALING



NCU3X is equipped with a larger 12.1" touch screen. The X Model has value and quality scaling and data transfer facilities. Thanks to the new electronics generation and improved computing capacity, the value and quality scaling is extremely accurate. The new advanced algorithm maximises the production.

As the PC used for reading map software and for data transfer is a separate system, the embedded solution guarantees reliability. Possible Windows/PC problems do not stop the felling operations. The felling operations do not depend on the PC's computing capacity, either. Therefore forestry companies' software may contain extensive maps and other heavy-duty features.

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N5 TECHNICAL DATA

STANDARD EQUIPMENT AND ACCESSORIES

An extensive range of accessories and versatile head and crane alternatives allow you to customise N5 to meet your special needs. It is always sensible to avoid unnecessary investments. N5 with standard equipment is a full-fledged thinning harvester.

N5, STANDARD EQUIPMENT:

- 600/65R34 Nokia Forest Rider tyres
- Nisula P90 parallel crane, reach 9 m
- Nisula 425H harvester head
- Nisula NCU3i measuring device
- Mini levers
- Webasto, air conditioning system
- Stereo equipment, handsfree facility for the mobile phone
- Air suspension seat
- LED lights, 16 pcs for the standard harvester

N5 ACCESSORIES:

- 710/55R34 Nokia Forest Rider tyres + chains
- Nisula P99 parallel crane, reach 10.0 m
- Nisula P99T parallel crane with hydraulic extension, reach 10,0 m
- Nisula P99.5T parallel crane with hydraulic extension, reach 10,5 m
- Epsilon M80F101 crane
- Nisula 425C multi-purpose head
- Nisula 500H harvester head
- Colour marking, stump treatment facility, saw control, automatic chain adjuster
- Head change facility for the accumulating Nisula 285E+ energy wood head
- Nisula NCU3X control system with value and quality scaling and data transfer facility
- Tablet PC for data transfer and map software management
- Calliper
- LED lights for the crane
- Automatic ventilation
- GSM control system for the additional heater
- Cool box
- Sun shades

ENGINE

N5 is equipped with the reliable Agco Power 4.9 AWF engine. The output torque of this long-stroke, four-cylinder engine is optimal for harvesting. A sufficient hydraulics capacity is reached at 1300-1500 r/min, depending on the felling area and the harvester head. This guarantees extremely low fuel consumption – according to our measurements, about 6.5-8 l/h, depending on the felling area.

Benefits to the customer:

- Reliable Finnish engine
- Low fuel consumption
- Long maintenance intervals

Engine:	Agco Power 4.9 AWF, supercharged and intercooled, Stage 4
Power	127 kW / 1900 r/min (ISO14396)
Maximum torque	750 Nm / 1500 r/min
Starter motor	4.5 kW
Batteries	2 x 170 Ah

WORK HYDRAULICS

Pump:	Rexroth
Output:	220-280 l/min depending on the head (2000r/min)
Operating pressure:	210-230 bar depending on the head
Oil tank capacity:	210 litres

Benefits to the customer:

- The operating hydraulics can be optimised for each head – lower consumption

DIMENSIONS

Length	1030 cm (transport position)
Width	274 cm (600 tyres), 287 (710 tyres)
Transport height	335 cm (370 cm during on-road transportation)
Weight	12500-14400 kg

POWER TRANSMISSION

The hydrostatic-mechanical power transmission with differential axle locks ensures smooth and safe driving even in the most demanding terrains. Driving is accurate and controlled. Moving from one felling area to another is fast. The maximum transport speed is 40 km/h.

Benefits to the customer:

- Reliable power transmission, simple structure
- Nimble movement in the forest, fast and accurate harvesting operations
- Excellent pulling force, fast and economic transport from one site to another

Power transmission:

- Hydrostatic-mechanical power transmission
- Variable displacement swash plate pump, Sauer 115 cm3/r
- Variable displacement axial piston motor, Sauer 160 cm3/r
- 3 operating modes, HSD driving mode (operation/transport)
- CSD control system
- Drive speed regulator, crawling
- Front and back drive pedal can be used for driving

Gearbox:

- Two-speed gearbox ZF (2HL290)
- Electro-hydraulic control of the gearbox (Power-Shift)
- Speeds, forward/reverse, Gear1, 0...10. 7 km/h, Gear 2, 0...40 km/h

Axles :

- Drive axles in front and rear / ZF 3075
- Axles with differential locks

CRANE ALTERNATIVES



NISULA PARALLEL CRANES

The Nisula parallel cranes are designed for thinning. Fast and accurate manoeuvring, optimal location of the crane for the operator and sufficient lifting and swing torques all contribute to fast and productive work.

The crane can easily be adjusted for the operator through the terminal device. Standard accessory: 9-metre P90 without extended boom. A 10-metre P99 without hydraulic extension and P99T with hydraulic extension are available with both 425 and 500 harvester head series. The reach of P99.5T is 10.5 metres, and it is available with 425H or 425C.

Benefits to the customer:

- Optimal motion paths for harvesting
- Strong and accurate motorised turning
- Accurate adjustment of the crane for the operator
- Dual swing damper adds to accuracy
- Strong crane base with tilting facility
- The crane is made of ultra strong steel
- Three LED lights available as accessory

Technical Specification NISULA P90/P99

Total weight	1510/1580 kg
Reach	9/10 m
Swing torque, gross	31 kNm
Lifting torque, gross	130 kNm
Lifting capacity with full reach	800/700 kg

Technical Specification NISULA P99T / P99.5T

Total weight	1580/1610 kg
Reach	10.0/10.5m
Swing torque, gross	31 kNm
Lifting torque, gross	115 kNm
Lifting capacity with full reach	700/660 kg

EPSILON M80F101

The EPSILON M80F101 crane provides N5 Harvester with completely new functionalities. The harvester head can be changed to a 285E+ energy head or a regular timber grapple.

Benefits to the customer:

- Added functionality
- Nisula Syncro function, which allows the parallel facility when the crane is pulled inwards, as standard equipment
- Four LED lights as standard equipment

Epsilon M80F101 crane	
Lifting torque, gross, kNm	114
Lifting torque, net, kNm	75
Maximum reach	10.3m
Swing torque, kNm	35
Swing angle, °	385
Dry weight, kg	1760



HARVESTER HEAD ALTERNATIVES



NISULA 500H

Weight, kg	640
Clean delimiting Ø, mm	430
Single cut Ø, mm (1 stem)	500
Number of delimiting knives	5+1
Opening of front knives, mm	500
Opening of additional knives, mm	720
Width in delimiting position, mm (open/closed)	1200/980
Height in delimiting position, mm (open/closed)	1250/1050
Height in felling position, mm	1120
Operating pressure, bar	210-230
Oil consumption, l/m	140-180

Accessories: Stump treatment facility, colour marking, saw control, automatic chain adjustment

NISULA 425H/C

	425H	425C
Weight, kg	410	425
Clean delimiting Ø, mm	320	300
Single cut Ø, mm (1 stem)	425	425
Number of delimiting knives	4+1	2+1
Opening of front knives, mm	430	430
Grapple opening, mm	580	920
Width in delimiting position, mm (open/closed)	1100/940	1100/940
Height in delimiting position, mm	880	880
Height in felling position, mm	880	880
Operating pressure, bar	210	210
Oil consumption, l/m	120-150	120-150

Accessories: Stump treatment facility, colour marking, saw control, automatic chain adjustment

NISULA 285E+

Weight, kg	330
Grapple opening, mm	930
Cut diameter Ø, mm	280
Single cut Ø, mm (1 stem)	180-240
Operating pressure, bar	180-210
Oil consumption, l/m	80-150