

ENERGY WOOD HEADS

NISULA





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E-SERIES ENERGY WOOD HEADS

"Why didn't I buy this head earlier?" is a frequent comment from our customers after the replacement of a normal grapple to a Nisula energy wood head.

Nisula brought its first 150E Energy Wood Head onto the market in 2005. This energy wood head model has raised great interest among our customers and even among other manufactures.

The series covers four different size categories for different customer needs. The E-Series energy wood heads are easy to install in the place of a normal timber grapple. They do not require electricity or additional hydraulics.

DETAILS THAT IMPROVE DURABILITY, USABILITY AND RELIABILITY

All the structures of the heads are made of high strength steel. 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.

USES

- Energy wood harvesting
- Clearing bushes and trees from the edges of fields and forest truck roads
- Clearing thinning sites
- Clearing the edges of power lines
- Maintaining forest parks, felling trees in gardens

E-SERIES ENERGY WOOD HEADS: OPERATING PRINCIPLE

- With the cutting blade attached, small trees can be felled and bundled on the ground or felled and loaded directly on the trailer.
- With the cutting blade detached and the tilt mechanically locked, the head can be used like a normal timber grapple to load energy wood or other timber grades.



NISULA 105E

ENERGY WOOD HEAD FOR SMALL CRANES

Simple structure and a new kind of mechanical tilt (pat.pend.) together with high quality materials ensure a lightweight but durable structure. This allows machines with even small cranes to be used for energy wood harvesting.



NISULA 150E

LIGHT ENERGY WOOD HEAD

The original Nisula 150E energy wood head is a cost-efficient choice for energy wood harvesting. The spike-shaped grapple arms ensure that all the grabbed trees get cut by the blade and are not pulled out of the ground. When loading, the head lifts the wood bunches without grabbing dirt or stones, and small branches do not get stuck in the head. Thus, the 150E is an excellent choice for feeding a chipper.



SUITABLE BASE MACHINES

- Agricultural tractor with suitable crane
- ATV
- Mini excavator

TECHNICAL INFORMATION

| | |
|--------------------------------|---------|
| Weight, kg | 52 |
| Grapple opening, mm | 500 |
| Width, mm (open/closed) | 640/460 |
| Height, mm (open/closed) | 690/480 |
| Height in felling position, mm | 270 |
| Single cut Ø, mm (1 tree) | 90-120 |
| Required oil pressure, bar | 150-210 |
| Required oil flow, l/min | 8+ |

SUITABLE BASE MACHINES

- Agricultural tractor
- Excavator 3-5 t

TECHNICAL INFORMATION

| | |
|--------------------------------|---------|
| Weight, kg | 110 |
| Grapple opening, mm | 650 |
| Width, mm (open/closed) | 840/600 |
| Height, mm (open/closed) | 900/580 |
| Height in felling position, mm | 380 |
| Single cut Ø, mm (1 tree) | 120-150 |
| Required oil pressure, bar | 175-210 |
| Required oil flow, l/min | 25+ |



NISULA 175E

ENERGY WOOD HEAD WITH TRADITIONAL STYLE GRAPPLE

175E is equipped with a traditional style grapple to improve the head's loading capabilities. The tip-plated grapple arms direct all the grabbed trees to the blade, which cuts tree groups and bushes fast and efficiently. The tilting action is easily adjustable to different pressure levels by means of an adjustment valve.



SUITABLE BASE MACHINES

- Agricultural tractor
- Excavator 4-7 t

TECHNICAL INFORMATION

| | |
|--------------------------------|----------|
| Weight, kg | 183 |
| Grapple opening, mm | 765 |
| Width, mm (open/closed) | 980/680 |
| Height, mm (open/closed) | 1100/760 |
| Height in felling position, mm | 520 |
| Single cut Ø, mm (1 tree) | 150-180 |
| Required oil pressure, bar | 175-210 |
| Required oil flow, l/min | 25+ |



NISULA 200E

HEAVY ENERGY WOOD HEAD

With 200E, you can equip e.g. a forwarder for energy wood harvesting easily without major installations or modifications. Just attach the head in the place of the normal grapple, and the machine is ready to harvest energy wood. The spike-shaped grapple arms ensure that all the grabbed trees get cut by the blade and are not pulled out of the ground. When loading, the head efficiently grabs the wood bunches, and the high pressing power ensures effortless handling of even big bunches. Thanks to the grapple design, the head does not easily grab dirt or stones, nor do branches get stuck in the grapple.

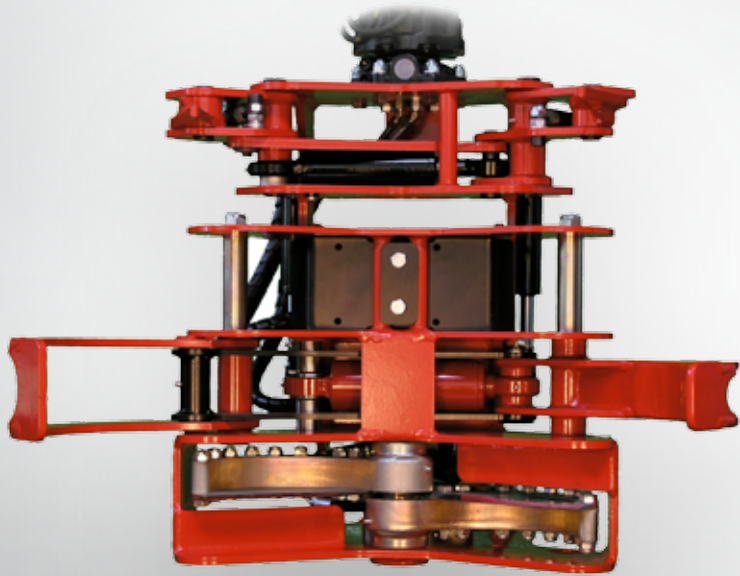


SUITABLE BASE MACHINES

- Forwarder
- Heavy agricultural tractor
- Excavator 6-12 t

TECHNICAL INFORMATION

| | |
|--------------------------------|----------|
| Weight, kg | 295 |
| Grapple opening, mm | 860 |
| Width, mm (open/closed) | 1120/770 |
| Height, mm (open/closed) | 1220/820 |
| Height in felling position, mm | 500 |
| Single cut Ø, mm (1 tree) | 200+ |
| Required oil pressure, bar | 180-250 |
| Required oil flow, l/min | 45+ |



NISULA 280E JA 280E+

ACCUMULATING ENERGY WOOD HEADS

Nisula 280E is an efficient and compact head for professional small wood harvesting: easy felling, bunching and loading. Depending on the base machine, the whole small wood harvesting process (standing tree to roadside) can be performed without changing the head.

Thanks to its structure, the head grabs trees and bushes efficiently. The grapple arms, which are located near the scissor blades, ensure that the stems and even twigs are cut by the blades.

280E+ is equipped with accumulating tilt system that improves the head's collecting capacity and the handling of bunches.

All 280E's are upgradeable with the + accumulating tilt system.



USES

- Energy wood harvesting
- Clearing bushes and trees from the edges of fields and forest truck roads
- Clearing the edges of power lines
- Maintaining forest parks, felling trees in gardens

SUITABLE BASE MACHINES

- Forwarders
- Timber loaders mounted with sleeve adapters on an agricultural tractor
- Light harvesters
- Excavators from 7 t up to 12 t

TECHNICAL INFORMATION

| | 280E | 280E+ |
|----------------------------|---------|---------|
| Weight, kg | 290 | 330 |
| Grapple opening, mm | 930 | 930 |
| Cut area Ø mm | 280 | 280 |
| Single cut Ø, mm (1 tree) | 180-240 | 180-240 |
| Required oil pressure, bar | 180-210 | 180-240 |
| Required oil flow, l/min | 80-150 | 80-150 |

NISULA ACCESSORIES

SWING DAMPERS

This significantly improves work efficiency and the handling of the head, and thereby the end result. The swing dampers make it easier to move the head between trees, which makes the work less stressful.

BENEFITS FOR THE CUSTOMER

- Excellent, long-lasting braking power even in heavy use
- Low operating costs
- Easily adjustable braking power
- Made of special steel
- Lubricated bronze alloy bushings
- Hardened pins



JRPP7 | JRPP10 | JRPP15

2-directional Swing damper-boom head package for Finn-Rotor rotators. It can be welded in the place of the old boom head and is therefore installable on nearly all cranes

| | 7 | 10* | 15* |
|--------------------------------|-----|------|------|
| Fits to the following rotators | FR7 | FR10 | FR15 |
| Rotator's upper pin Ø, mm | 24 | 25 | 30 |
| Weight, kg | 20 | 20 | 20 |

* HD version also available for heavy use

ADAPTERS

| Multipurpose Head | Rotator | Rotator axle Ø | Adapter | Swing damper |
|-------------------|-----------------|----------------|---------------------|---------------------|
| 105E | FR7 | 49,5 mm | AD495 | JRPP7 |
| 150E | FR10 | 59 mm | ADFR10 | JRPP10 / JRPP10HD |
| 175E | FR10 | 59 mm | ADFR10 | JRPP10HD |
| 200E | FR15 or GR603DB | 69 mm | ADFR15 / GR without | JRPP15HD / JRKPP35S |



QUALITY AND RELIABILITY – WITHOUT COMPROMISE

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