

## Nova Combi



### *Nova Combi*

- **The ideal seed and fertilizer drill for all sowing conditions.**
- **Unparalleled seeding accuracy.**
- **The best seeding economy on the market.**



1948–2008

# TUME-AGRI OY

*High productivity*



# *from your farm operations!*



## ***Cost savings***

- With low pulling resistance and no non-rotating parts, the machine is pulled easily even with tractors of less than 90 hp.
- Achieve significant fuel savings.
- Save still more by means of the fertilizer-side tram-lining device.
- Switching to Nova does not necessarily mean a tractor upgrade.

## ***Precise seeding depth***

- Field surface variations do not affect the seeding depth:
  - Surface variations in the driving direction have no effect.
  - Surface variations in the sideways direction, such as grooves and furrows, have no effect.
- Whether the hopper is full or empty does not affect the seeding depth.
- The sowing speed does not affect the seeding depth.

## ***Non-blocking heavy-duty coulters***

- Heavy-duty coultter arms.
- Shape-profiled coultter discs.
- Runtime seeding coultter pressure adjustment, up to 200 kg per coultter.

## ***Ease of adjustment and use***

- Easy adjustment of working depth from the front side of each pair of coultters.
- The easiest and quickest calibration test on the market:
  - You only need to turn one crank for side-pull troughs.
  - Only one hydraulic block of the tractor required for seeding.

## *Nova Combi* – Save up to 5 L of fuel per hectare!



The Nova Combi's ELMIA-award-winning double-disc coulters.

The Nova Combi is a universal seed and fertilizer drill for all soil cultivation methods. The machine can be used without limitations for direct seeding and for minimally tilled and traditionally ploughed / harrowed soil preparation. The Nova Combi feeds the seed and fertilizer into the same coulters, but the unique double-disc solution developed by Tume keeps them apart. Since separate fertilizer coulters are not used, the tractor power requirement is up to 30% lower!

The Nova Combi's robust disc coulters are attached in groups of two, guaranteeing optimum adaptation to uneven and rough field surfaces. Carefully designed coulters placement, size, and structure keep the seed separate from the fertilizer. In addition, the double-disc coulters decrease the tractor power required by approximately one third when compared to similar drills that have e.g. scraping or non-rotating – and therefore braking – parts. The Nova's maximum coulters weight is approximately 200 kg.

### ***Precise seeding depth in all sowing conditions***

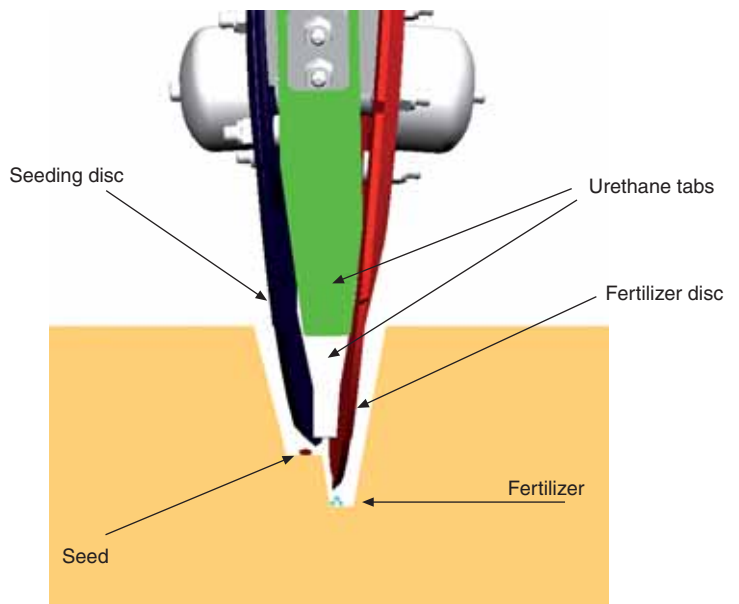
Each coulters unit has a large front wheel used for adjusting the seeding and fertilizing depth. Since the steering takes place ahead of the coulters, there is enough time to adjust the working depth to match the soil level variation. Neither the seed furrow of the coulters nor the driving speed have an effect on the seeding depth. The front wheel compacts the soil ahead of the coulters, ensuring smooth, non-blocking operation and

seeding on intact soil. The wheel also compresses straw and other surface matter against the ground, ensuring that the coulters opens the seed furrow without fail. This also prevents straw and other undesired material from entering the furrow. Whether the hopper is full or empty has no effect on seeding depth with the Nova. Just compare it with other manufacturers' seeding drills!

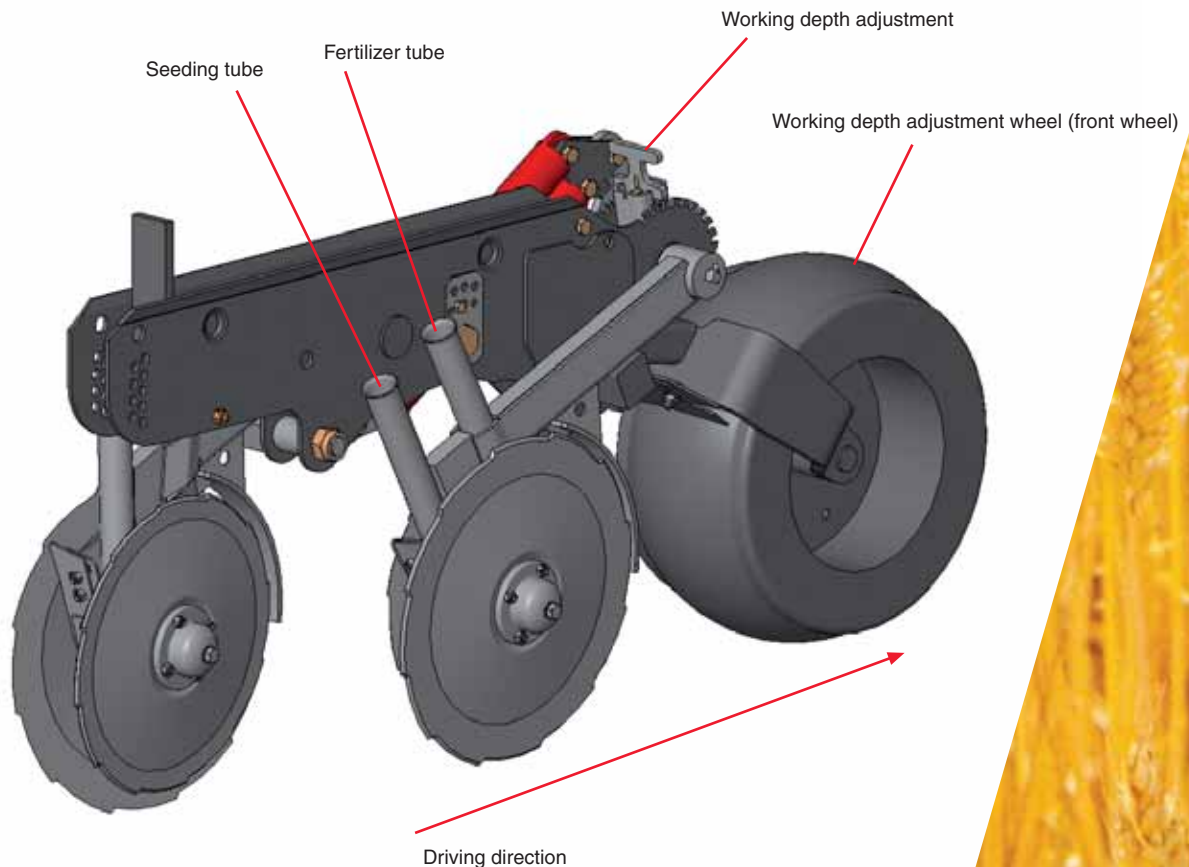


## Durable and robust coultter structure

The seed furrow is not wider than needed due to the convex outside profile of the discs: the soil is not moved to the sides, as would happen with straight discs. This means the seeding furrow is more reliably covered with Tume seeding drills. The convex-profiled discs and the stone-rejection system on each coultter ensures that the discs can withstand even the hardest conditions and remain operational. The outside perimeter of the discs is notched and the discs have slightly different diameters, ensuring excellent rotation, self-cleaning, and soil penetration properties. No separate scrapers are needed for cleaning the coultters. Urethane plates between the discs maintain fertilizer and seed separation and prevent depth variations. One should also note that the Nova Combi retains the proven, standard row width of 125 mm! This makes tasks such as selecting the tramlining device for spraying work easier.



## The Nova Combi's coultter assembly





*The drawbar can be mounted in the upper position for applications such as CultiPack combination.*

## **Superior technology**

The Nova Combi's proven technology makes seeding possible in all conditions. The machine has become a trusted workhorse in Norway and Sweden as well as in Hungary, Romania, and Bulgaria, where the conditions are often very demanding and the farms large.

The support wheel set employs Tume's patented hydraulic flattening distribution system, which not only guarantees stability in relation to ground level even on sloped fields but also yields improved adaptation to uneven surface.

Moreover, the Nova Combi uses the well-known Tume fluted roller feeding system for both fertilizer and seed hoppers, known for their high accuracy and long life. The feeder drive employs a large ground wheel

mounted on the side of the machine, ensuring uniform traction power. Whether the hopper is full or empty does not affect the seeding depth. The Nova Combi is fully equipped with fertilizer and seed calibration test equipment, and the testing is the easiest and fastest on the market.

The Nova Combi also has a drawbar that can be shifted into two positions as a standard accessory. The top position is useful with front tillage equipment (such as the Tume CultiPack) or a similar device is used. Naturally, the standard down mount with no additional harrows is possible as well. If you change the sowing method later on, there is no need for any additional parts, as the standard drawbar can always be fitted.



*The Nova Combi features a robust wheel set and a highly adaptive set of coulters.*

The large wheels make driving easier and reduce harmful compaction in soft or damp conditions. The large-diameter tractor-pattern wheels allow extra space between each tyre so that the soil will not start to collect in front of the tyres.

## Large hoppers, small transport width

The Nova Combi's hopper volume is over 1,000 L / m working width. The hopper is divided into two compartments with an adjustable divider wall in between. Large filling doors (also in the driving direction) make filling the hopper easy. The tarpaulin covers can be rolled open if necessary. Sieves for both the seed and the fertilizer hopper are standard accessories with the Nova.



The transport width of the Nova Combi 3000 is only 3 m.



Using the Nova Combi is easy.

The Nova Combi's overall width is the same as the drilling width, just 3 m or 4 m, enabling easy and trouble-free transport between fields.

## Modern, easy-to-use control units

The Tume Nova Combi can be equipped with an Agrocont or AgrocontPlus computer controller. The Agrocont controller features tramlining functions, axle/level controls, marker operation, area counters, and (if desired) the so-called half-lift. Its new features include an easy-to-use coulter pressure adjustment for the Nova Combi. The AgrocontPlus controller has the same features, plus electronic remote fertilizer control.



One view, all functions.

## Fertilizer tramlining – standard with Tume machines for over a decade

Tume seed and fertilizer drills have featured fertilizer tramlining devices for more than 10 years now. The method, patented by Tume, is based on creation of the lines for the fertilizer simultaneously with the seeding ones. This results in significant savings: using a Tume Nova Combi with a working width of 3 m in combination with a 15 m sprayer results in (at minimum) a 3.3% reduction in the amount of fertilizer required. If your fertilizer requirement is, for example, 450 kg per hectare and your total field area is 100 hectares, the Tume fertilizer tram-lining device is guaranteed to save you

more than 1,500 kilograms of fertilizer each year.

Calculated using the average fertilizer cost for autumn 2008, the amount saved is approximately 1,000 euros per year! Can you really afford not to save that kind of money? Fertilizing empty tramlines is completely unnecessary and creates an unnecessary burden on the environment.

**More than 10 euros in savings per hectare!**

**TECHNICAL DETAILS Nova Combi 3000**

**4000**

• Hopper capacity	3250 L	4500 L
• Working width	3000 mm	4000 mm
<b>Weight</b> (unloaded with standard accessories)	3750 kg	5475 kg
<b>Traction power required</b>	90/66 hp/kWh	120/88 hp/kWh
<b>Double-disc coulters</b> - Pressure range - Runtime weight adjustment	24 discs, Ø 360/400 mm 40–200 kg standard feature with Agrocont	32 discs, Ø 360/400 mm 40–200 kg standard feature with Agrocont
<b>Working depth adjustment wheels</b> - Tire size	12 wheels 18.5 x 8.50–8 AW	16 wheels 18.5 x 8.50–8 AW
Fertilizer/seed feeder - Bottom valves - Feeder usage	Fluted rollers, 100 positions adjustable, with springs metering wheel at the side	Fluted rollers, 100 positions adjustable, with springs metering wheel at the side
<b>Packer wheels</b> - Tire size	12 wheels, in groups of two, adjustable structure 7.50–16 AS	16 wheels, in groups of two, adjustable structure 7.50–16 AS

**Standard equipment:** Steps in the front and back • Fine seed option • Hydraulic Nova Combi combination drawbar • Fertilizer and seed sieves • Tarpaulin cover • Adjustable divider wall between the hoppers • Fertilizer/seeder calibration test equipment • Lighting

**Optional accessories:** Agrocont or AgrocontPlus controller • Hydraulic markers • CultiPack cultivator • Middle packer Seed dressing device • Grass seeder • Covering discs behind the coulters • Agitators for fertilizer / seed • Rear harrow • Low-lift feature • Rear handrail to hopper

The information given here is subject to change. Some machines presented in the brochure are fitted with optional extra accessories.

**Versatile accessories**

An extensive range of optional accessories is available for the Nova Combi.



CultiPack disc cultivator

Covering discs

Hydraulic tramline markers



Producer:

**TUME-AGRI Oy**

TUME-AGRI Oy  
Sudenkorventie 1

P.O. Box 77, FI-14201 Turenki  
Telephone +358 20 7433 060  
Fax +358 3 688 2305

Sales: