

CUTTING ROLLERS

BEDNAR

TILLCUT TE

Multi-purpose cutting roller



JOY OF FARMING



Why TILLCUT TE?



„The TILLCUT TE is a specially designed trailed roller based on the requirements of customers looking for a fast, low-cost and efficient solution for processing post-harvest residues. It is a roller that offers interesting applications for farmers practicing new farming methods such as regenerative farming. The TILLCUT TE greatly improves the efficiency of handling plant material and crop residues. It is a versatile machine that can be used also with a smooth roller for a wide range of operations for consolidation of top soil after seeding.“

Jan Bednář



BEDNAR TILLCUT TE are cutting rollers with a diameter of 890/914/940 mm designed for shallow cultivation of the top soil layer, typical for vertical tillage technology. This technology minimises disturbance to the soil structure, especially in the horizontal direction. Only the very top layer of soil is loosened, while soil capillarity is preserved. The result is reliable water retention in the soil, reduced erosion and very good conditions for seed emergence. The positioning of the knives creates a gradual soil-shearing effect, which ensures good crumbling of the soil and prevents the formation of larger clods. The machine is intended primarily for processing the most resilient crop residues (for example after grain maize, winter oilseed rape or sunflower), for initiating the growth of volunteers and weeds, or for the mechanical control of pests. TILLCUT TE is available in working widths of 7.5 and 12.5 metres.

It is an attractive technological solution for conventional farmers who wish to replace certain intensive operations with a more soil-friendly approach. It is also well suited to no-tillage systems, where it can effectively break surface crusting and process larger amounts of accumulated biomass without impairing soil structure.

Thanks to the large roller diameter and specially shaped knives made of high-strength HARDOX steel, TILLCUT TE cuts, chops and incorporates crop residues shallowly into the soil, creating ideal conditions for biomass decomposition and the release of nutrients back into the soil.

The option to replace the cutting rollers with smooth rollers further increases the potential uses of the TILLCUT TE throughout the year.



Why TILLCUT TE?

TECHNICAL ADVANTAGES

- The robust centre frame in combination with the side frames increases the rigidity and strength of the entire machine and allows working at a maximum working speed of 20 km/h.
- The aggressive positioning of the blades on the roller in a spiral (V-shape) significantly increases the cutting effect.
- The replaceable blades are made of high-strength HARDOX steel, which guarantees maximum durability and minimum wear.
- Possibility to fill the rollers with water to increase the pressure and the cutting effect (pressure up to 1240 kg/m, TILLCUT TE 7500/12400 with replaceable blades).
- Independent suspension of the individual rollers to the support frame for excellent terrain contouring.
- High stability during transport thanks to the 600/40-22.5 or 700/40-22.5 wide-profile tyres.
- Compact transport dimensions — max. width 3 m, max. height 4 m.



AGRONOMIC ADVANTAGES

- Efficient disposal and quality cutting of post-harvest residues, especially after harvesting corn, sunflower, winter oilseed rape, sorghum or cotton.
- Quality cutting of manure and row crop lines leads to improved nitrogen fixation in the soil.
- Shallow tillage to incorporate post-harvest residues and start germination of the seed in one pass contributes significantly to fuel saving and eliminates the cost of chemical treatments on the land.
- Mechanical elimination of pests such as the corn earworm, reduction of overwintering conditions, reduction of yield losses.
- Significant reduction in the risk of machine clogging during subsequent working operations such as tillage or seeding.
- Rolling the land after seeding leads to better seed to soil contact and reduced soil moisture evaporation.
- Maintaining permanent grassland after winter and levelling the ground reduces the risk of damage to forage and hay harvesting machinery.

FLEXABILITY OF USE AND NEW AGRONOMIC POSSIBILITIES



DEMONSTRATION ON THE GRAIN MAIZE STUBBLE

Working speed: 20 km/h
Fuel consumption: 2.8 l/ha
Average output: 22 ha/h



DEMONSTRATION ON THE OIL SEED RAPE STUBBLE

Working speed: 16 km/h
Fuel consumption: 2.8 l/ha
Average output: 20 ha/h



DEMONSTRATION ON THE SUNFLOWER STUBBLE

Working speed: 20 km/h
Fuel consumption: 2.4 l/ha
Average output: 20 ha/h



DEMONSTRATION ON THE CATCH CROP

Working speed: 18 km/h
Fuel consumption: 3.4 l/ha
Average output: 19 ha/h



Key working features



THE SMOOTH ROLLER

The TILLCUT TE is equipped with smooth rollers with a diameter of 914 mm. The rollers are made of highly resistant material to damage and abrasion. These rollers can be filled with water to increase soil consolidation.



CUTTING ROLLER – REPLACEABLE BLADES

The cutting roller with interchangeable blades is the solution for the most demanding conditions. The individual blades are screwed onto the roller. In case of damage, the individual blades can be easily replaced.

The replaceable blades are made of boron steel or high-strength HARDOX steel. When filling these type of rollers with water, their maximum weight is 1 240 kg/m.



V-RING ROLLER

This is a roller with a diameter of 890 mm, suitable for intensive clod crumbling and soil consolidation.

The rollers can be filled with water to increase the consolidation effect. The roller is equipped with scrapers.



The individual rollers are reinforced for maximum durability with the inside walls of the rollers fitted with breakwaters to reduce the torsional force pressing on the walls when filled with water.



ABILITY TO FILL THE ROLLERS WITH WATER

On the sides there is a hole through which the individual rollers can be filled with water. The interesting technical design helps to significantly increase the working effect of the rollers when working in heavy soils, in dry conditions or when processing tough post-harvest residues.

FOLDING AND UNFOLDING SYSTEM

The TILLCUT TE uses the proven concept of folding and unfolding the machine into an “E” (centre frame and two side folding frames). This concept offers quick and easy folding of the machine from/to the transport position, which can be done without leaving the tractor cab. In addition, the 700/40-22.5 wide profile tyres ensure good stability of the machine during transport. The high ground clearance allows safe machine movement, for example on dirt roads.

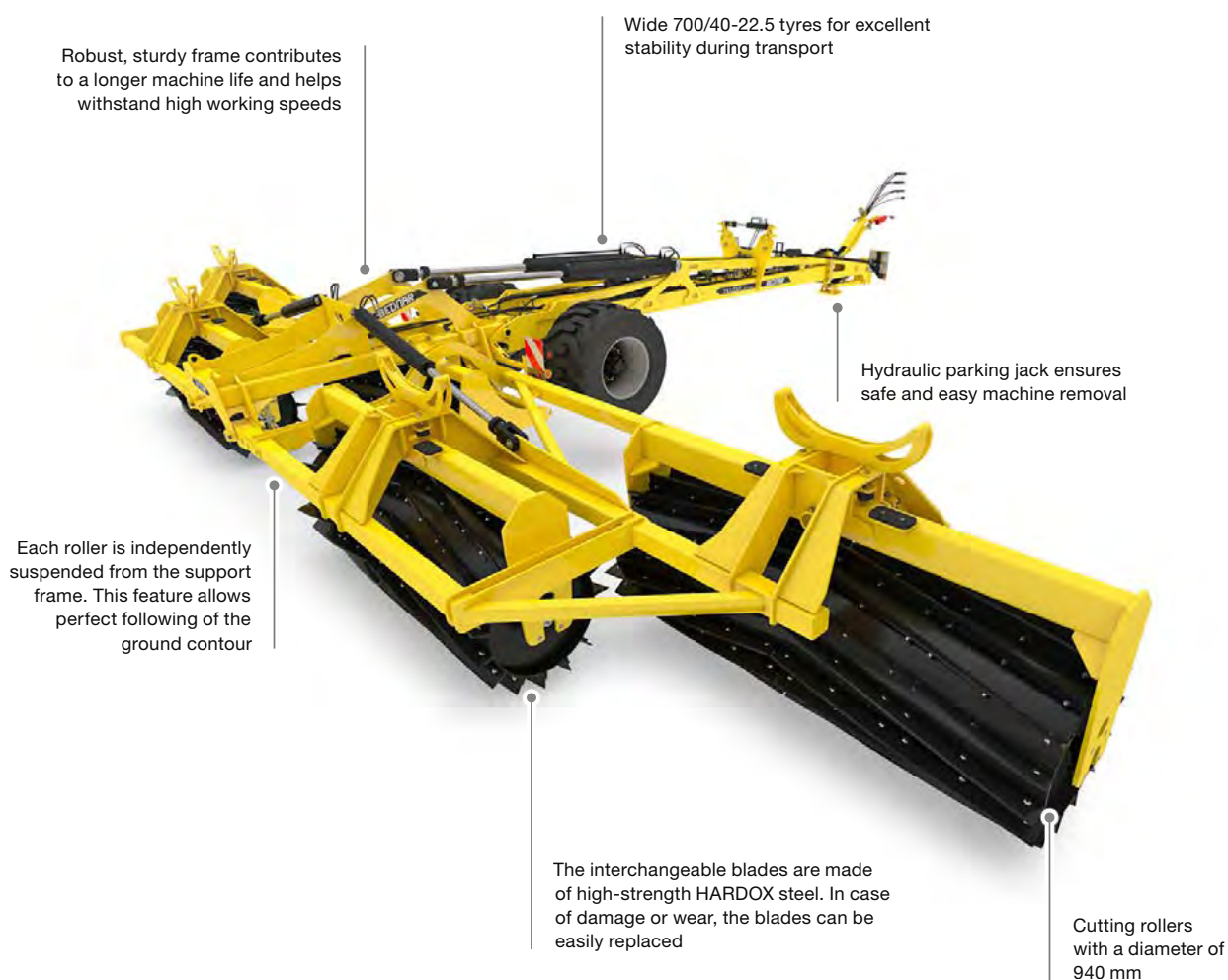


EXCELLENT TERRAIN CONTOURING

Each roller is independently suspended from the support frame. This function ensures ideal terrain contouring, even when working on uneven surfaces. In addition, the individual rollers are positioned so that they overlap by only a few centimetres. This ensures a quality finish throughout the whole operation.



Key working features



TILLCUT TE is a trailed roller manufactured in working widths of 7.5 (three roller sections) and 12.5 m (five roller sections). The basis of the machine is a robust frame designed to withstand heavy loadings and operate at high working speeds. Two side folding frames contribute to the reduction in the number of hydraulic cylinders and lubrication points. During operation, the entire weight of the machine and the water in the rollers acts on the cutting blades or the roller itself to guarantee maximum working effectiveness.

Depending on the design, the TILLCUT TE is equipped with a roller with a diameter of 914 mm (smooth), 940 mm (cutting) or 890 mm (V-RING). The rollers work on a 60 mm diameter shaft and include highly durable, single row, maintenance-free ball bearings with oil filling from FKL.



TILLCUT TE

		TE 7500	TE 12400
Working width	m	7.5	12.5
Transport length	m	5.1	8.4
Transport height	m	3	3.6
Number of rollers	pcs	3	5
Roller diameter — cutting	mm	940	940
Roller diameter — smooth	mm	914	914
Power demand*	HP	150–250	250–360
Dimension of transport tyres		600/40-22.5	700/40-22.5
Max. total weight — without water / with water (replaceable blades)	kg	7,400 / 9,300	12,100 / 15,500
Max. total weight — without water / with water (smooth rollers)	kg	6,500 / 9,130	11,070 / 15,470

* according to machine equipment

I did my best for maximum yield this year

Tillage



SWIFTERDISC
Compact Disc Harrows



ATLAS
Compact Disc Harrows



FENIX
Tine Cultivators



VERSATILL
Tine Cultivators



SWIFTER
Seedbed Cultivators



KATOR
Power Harrows



TERRALAND
Subsoilers



ACTROS
Combination Cultivators



GALAXY
Rollers

Seeding and Fertilising



OMEGA
Seed Drills



MATADOR
Strip-till Seed Drills



DIRECTO
No-till Seed Drills



FERTI-BOX
Hoppers for Fertiliser

Row Crop Cultivation / Strip Tillage Mulching



ROW-MASTER
Row Crop Cultivators



STRIP-MASTER
Strip-Till Cultivators



STRIEGEL-PRO
Straw Harrows



MULCHER
Rotary Mowers

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