



CULTIRAPID EVO



ma/ag
MACCHINE AGRICOLE S.r.l.



COMBINED "CULTIRAPID EVO" PATENT CR2005A000002

The combined "CULTIRAPID EVO" is a combination machine for working the soil and the preparation of the seedbed, under a vision of a conservation agriculture for the use as primary tool, under the techniques of the minimum tillage.

This machine presents another interesting change of the "CULTIRAPID" machine, already well known from the customers from several years for its innovative characteristics and for its versatility.

The advantages that derive from the use of this tool

is substantially to follow the approach of the minimum tillage with all the characteristics of the method.

The high working speed (7/15 Km/h) permits to attend more quickly and to reduce the working costs, ensuring hourly output of 4/7 hectares. The working depth of the anchors is 15/30 cm (max), while that of the discs and of the refiner star group is of 5/15 cm.

The machine is available in the version with half-brought or trailed frame, hydraulically foldable at 2,55 m for the transport on road, customizable in different configurations depending on the application and of chosen tools.



CTRI 50 EVO SP

STARTING SITUATION

FINAL SITUATION

CTRI 40 EVO SP

THE COMBINED “CULTIRAPID EVO” PERMITS:

- **High productivity of the work** with a working speed adjustable from 7 to 15 Km/h and a yield average hourly varying from 4 to 7 hectares per hour, according to the models and consequently a **reduction in manpower**;
- **Double working layer** obtained thanks to the use of the front subsoiler-decompactor Cultilam: up to 30 cm with the anchors and up to 15 cm with the intermediate discs;
- **low environmental impact** less carbon released into the environment and a **very significant reduction** in fuel consumption per worked hectare, containment of erosion phenomena;
- **ideal for biologic agriculture** thanks to the sequence of the working elements that permit the weed control;
- **reduction of the number of passages** obtained thanks to the sequence of the working elements, in general 1 or 2 passes are sufficient for obtaining the desired work.
- **Up to 50% saving costs compared with “traditional” processing system involving the plough and rotary harrow** taking into account the cost of equipment, maintenance costs (minimal), depreciation (long equipment life) and labor costs (higher productivity);
- **production yields comparable, if not superior, to those obtainable with the “traditional” processing system**;
- **high presence of crop residues mixed up to 70%** obtained thanks to non-inversion of the soil layer;
- **improvement in soil formation and activity** in fact, already after a couple of years of this method, the presence of animal organisms, such as earthworms or other in the top soil layers is significantly increased;
- **versatility of the equipment**, the passage from the configuration without plowing to the traditional with springs, by simply replacing the intermediate DISCS with the spring group with adjusting working depth.



Use of the **CULTIRAPID 40 EVO CP** on cut corn stalk (spring processing)

COMBINED “CULTIRAPID EVO” CONFIGURATION FOR THE DIRECT WORK ON UNPLOUGHED SOIL

BASIC VERSION WITH DOUBLE DISCS

MODEL MACHINE	WORKING WIDTH (m)	TRANSPORT WIDTH (m)	VERSION	HP	WEIGHT (Kg)
CTRI 40 EVO	4,00	2,55	Base – double discs	180-200	5500
CTRI 50 EVO	5,00	2,55	Base – double discs	200-240	5800
CTRI 60 EVO	6,00	2,55	Base – double discs	240-260	6000

VERSION “CP” WITH DECOMPACTOR WITH ANCHORS

MODEL MACHINE	WORKING WIDTH (m)	TRANSPORT WIDTH (m)	VERSION	HP	WEIGHT (Kg)
CTRI 40 EVO CP	4,00	2,55	Base – double discs - decompactor	220-260	6800
CTRI 50 EVO CP	5,00	2,55	Base – double discs - decompactor	260-300	7400
CTRI 60 EVO CP	6,00	2,55	Base – double discs - decompactor	300-350	7900

VERSION “SP” WITH DECOMPACTOR WITH ANCHORS AND FRONT FLAT DISCS

MODEL MACHINE	WORKING WIDTH (m)	TRANSPORT WIDTH (m)	VERSION	HP	WEIGHT (Kg)
CTRI 40 EVO SP	4,00	2,55	Base – double discs – de decompactor - discs	220-260	7600
CTRI 50 EVO SP	5,00	2,55	Base – double discs – de decompactor - discs	260-300	8400
CTRI 60 EVO SP	6,00	2,55	Base – double discs – de decompactor - discs	300-350	9100



CTRI 50 EVO SP

The weights can change according to the type of rollers used and of particulars type of tools.

PARTICULARS



Particular of the group composed by a toothed flat discs and by the subsoiler group with "Michel" H 600 mm.

The hydraulic regulation, independent on these two KITS, permits the right use in any conditions both to cut the starting residues or to prefer the double layer working with a deep decompactation up to 30 cm.



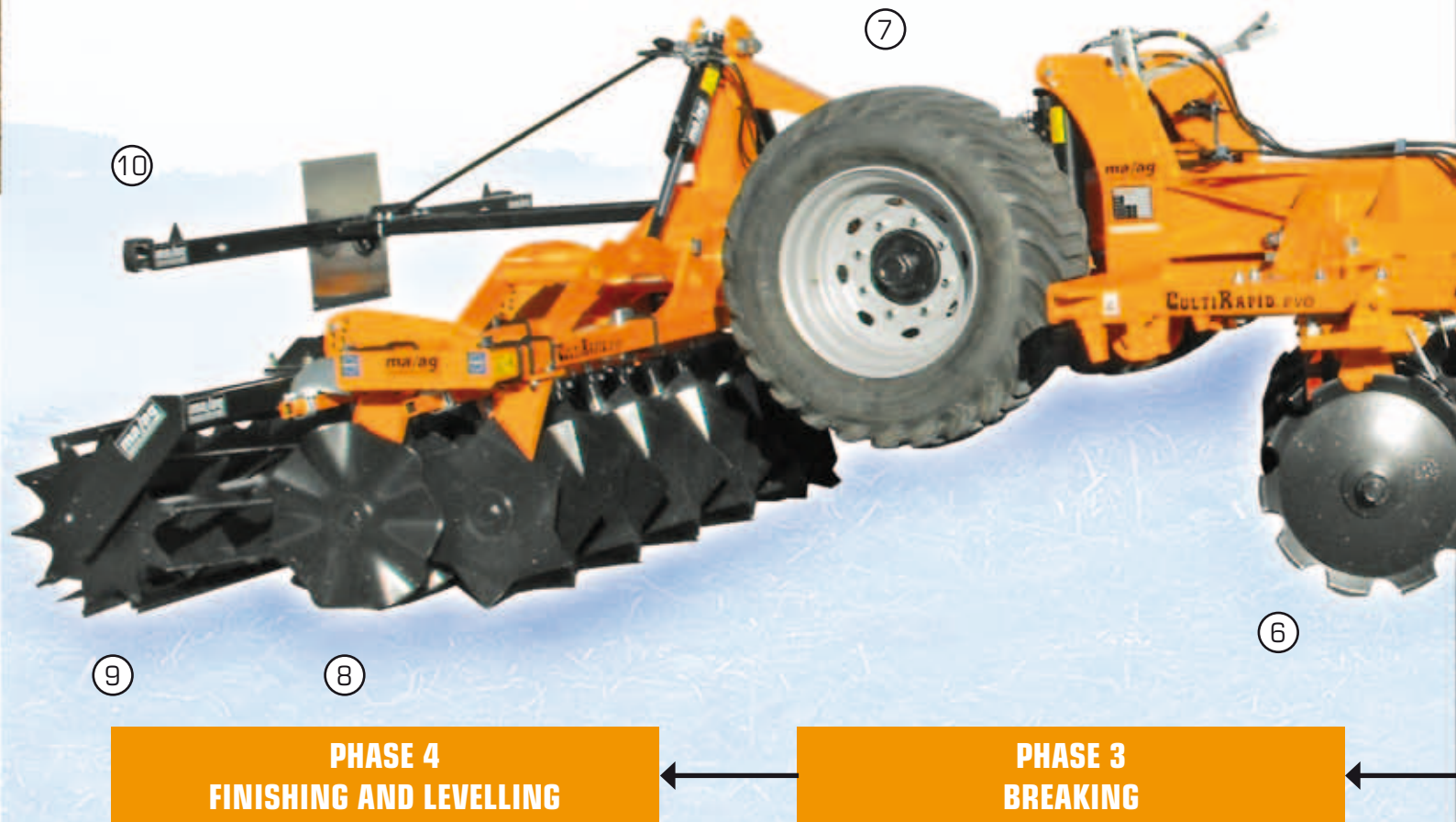
Hydraulic folding KIT for the exclusion of the toothed flat disc and for the subsoiler with anchors group. This KIT is particularly useful on soils with high presence of crop residues. The exclusion of the anchors group prevents clogging and allows a first cut of the stalks by the middle discs group and refiner rear group.



Particular of middle discs. The two disc gangs are willing "to rumble" according to the patented system ma / ag (CR2005A000002). The bigger space distance between the discs permits an optimum discharge of the soil and, at the same time, a better management of the working, even at high speeds (7/15 Km/h).

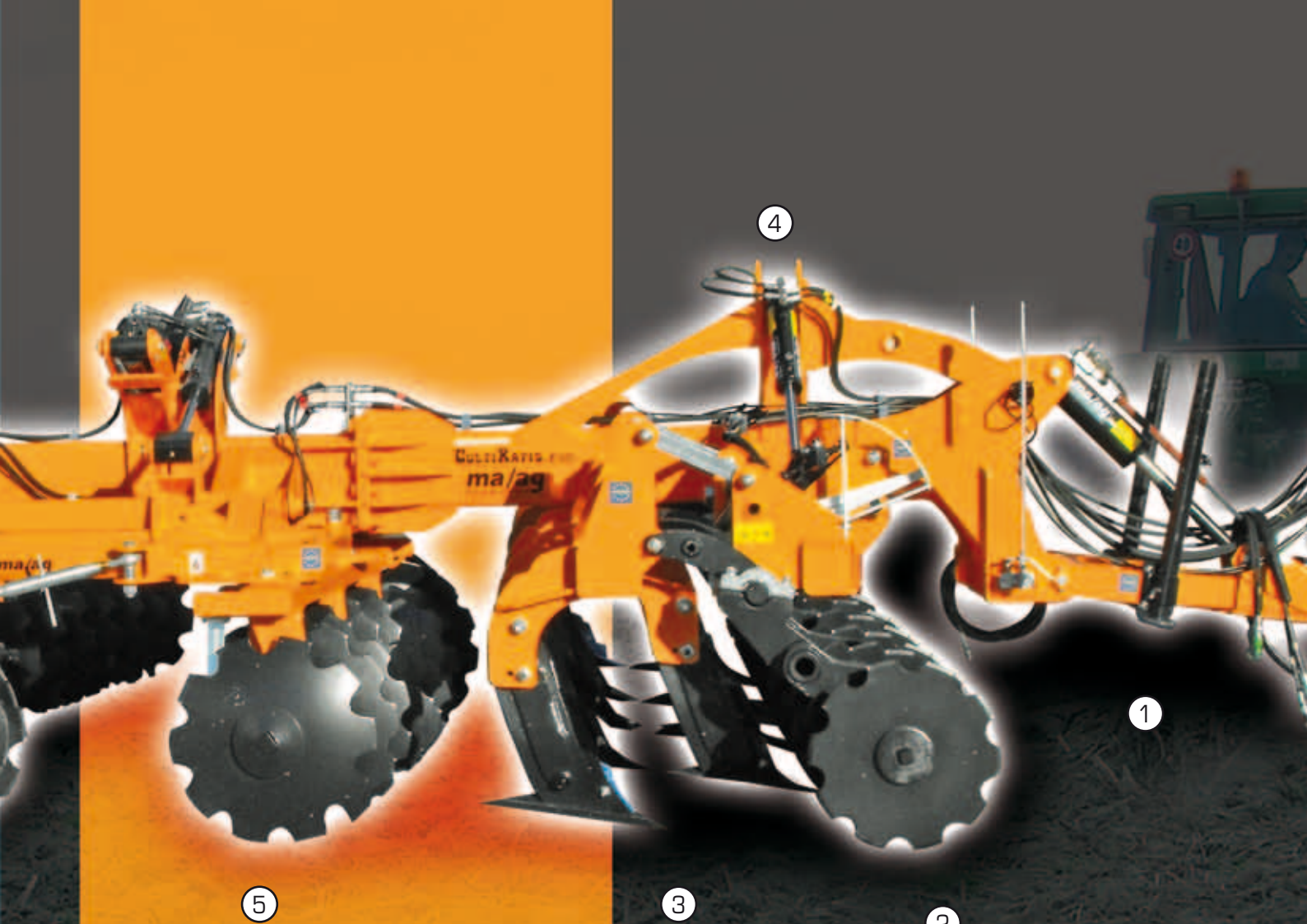
Double breaking self cleaning roller and rear finishing roller. Characteristic and innovative element of the "CULTIRAPID" from its first edition, these self-cleaning working tools permit the breaking of the crop residues and the leveling of the soil for a later perfect seeding. Mechanical regulation by a perforated plate of the rear roller.

COMBINED “CULTIRAPID EVO” VERSIONS “CP” AND “SP”



SPECIFIC ELEMENTS

- ⑧ Double self-cleaning breaking roller (on series with star and wavy discs). It permits the mixing of the soil and the further breaking of the crop residues, permitting, in this way, the fast decomposition of the same and the subsequent transformation into natural organic fertilizer.
Realized with boron steel discs, mounted on a steel shaft and swivelling supports with double conical bearings with interchangeable carter – system ma/ag.
- ⑨ Single rear levelling cage roller.
It is available in the plates or pipes cage version, packer roller, spikes roller.
- ⑩ Lighting bar for the transport on road
- ⑥ Middle toothed rounded discs. Realized with boron steel discs, mounted on a steel shaft and swivelling supports with double conical bearings – system ma/ag. Mechanical adjustable regulation in different positions.
- ⑦ Transport trailer with oversize wheels, half-shaft 8 holes.



PHASE 2 DE-COMPACTION AND BREAKING

PHASE 1 CUTTING RESIDUES

- ③ Soil loosening group with anchors with bending profile type "Michel" H 600 mm. The anchors are arranged on 2 working rows, permitting the soil loosening without the reverse of the layers. Safety device by a shear bolt. Interchangeable anti wears shares and protections. Hydraulic depth regulation of the soil loosening group.
- ④ Hydraulic folding KIT for the exclusion of the toothed plane disc and of the anchors group.
- ⑤ Front toothed rounded discs. Realized with boron steel discs, mounted on a steel shaft and swivelling supports with double conical bearings – system ma/ag. Mechanical adjustable regulation in different positions.

- ① Drawbar (on series lift arms KIT to the tractor is expected, on request it can be fitted the eye swivel hitch KIT).
- ② Toothed flat discs. Ideal for managing large quantities of crop residues. Realized with boron steel discs, mounted on a steel shaft and swivelling supports with double conical bearings – system ma/ag. Hydraulic adjustment of the impact on the ground.



Used of the **CULTIRAPID EVO MQ** on ploughed soil

COMBINED “CULTIRAPID EVO” CONFIGURATION FOR FINISHING PREPARATION ON HALF PLOUGHED SOILS

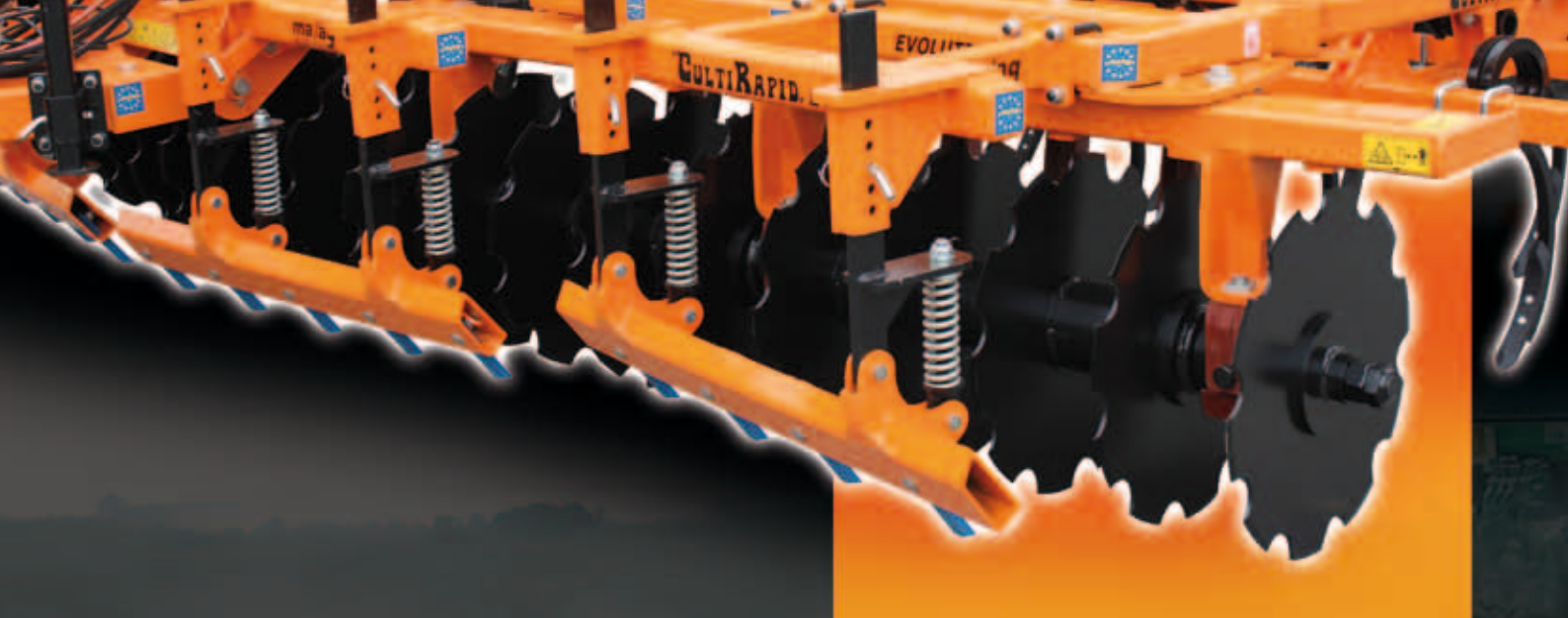
VERSION WITH “MQ” WITH LEVELLING BAR AND GRUBBER 25X25

MODEL MACHINE	WORKING WIDTH (m)	TRANSPORT WIDTH (m)	VERSION	HP	WEIGHT (Kg)
CTRI 40 EVO MQ	4,00	2,55	Base – levelling bar – flat disc – square springs	200-240	5800
CTRI 50 EVO MQ	5,00	2,55	Base – levelling bar – flat disc – square springs	240-280	6550
CTRI 60 EVO MQ	6,00	2,55	Base – levelling bar – flat disc – square springs	280-320	7100

The weights can change according to the type of rollers used and of particulars type of tools.
Customizable for working width 8,00 – 9,00 – 10,00 and different equipment



CTRI 60 EVO MQ



PARTICULARS



Particular of the damped levelling bar and of the front discs. These two elements have the task of reducing the size of the ground plate. The violent impact (caused by the high speed (7/15 Km/h) with the levelling bar generates the first breaking. The steel spikes have a disruptive effect and damped springs limit the stress to the main structure. The toothed flat discs of large diameter operate the "cut" of the clod, reducing the size.

Particular of the central grubber group with hydraulic regulation with parallelogram of the working depth. The square springs with double thread 25x25 mm make the disintegration of the clods. The hydraulic regulation of the working depth (from 10 to 25 cm), managed directly by the tractor, allows timely intervention on equipment in function of the desired job and local conditions of the soil.



Double breaking self-cleaning roller and rear finishing roller. Characteristic and innovative element of the "CULTIRAPID" from its first edition, these self-cleaning working tools permit the breaking of the crop residues and the levelling of the soil for a later perfect seeding. Mechanical regulation by a perforated plate of the rear roller.

COMBINED “CULTIRAPID EVO” VERSION “MQ”

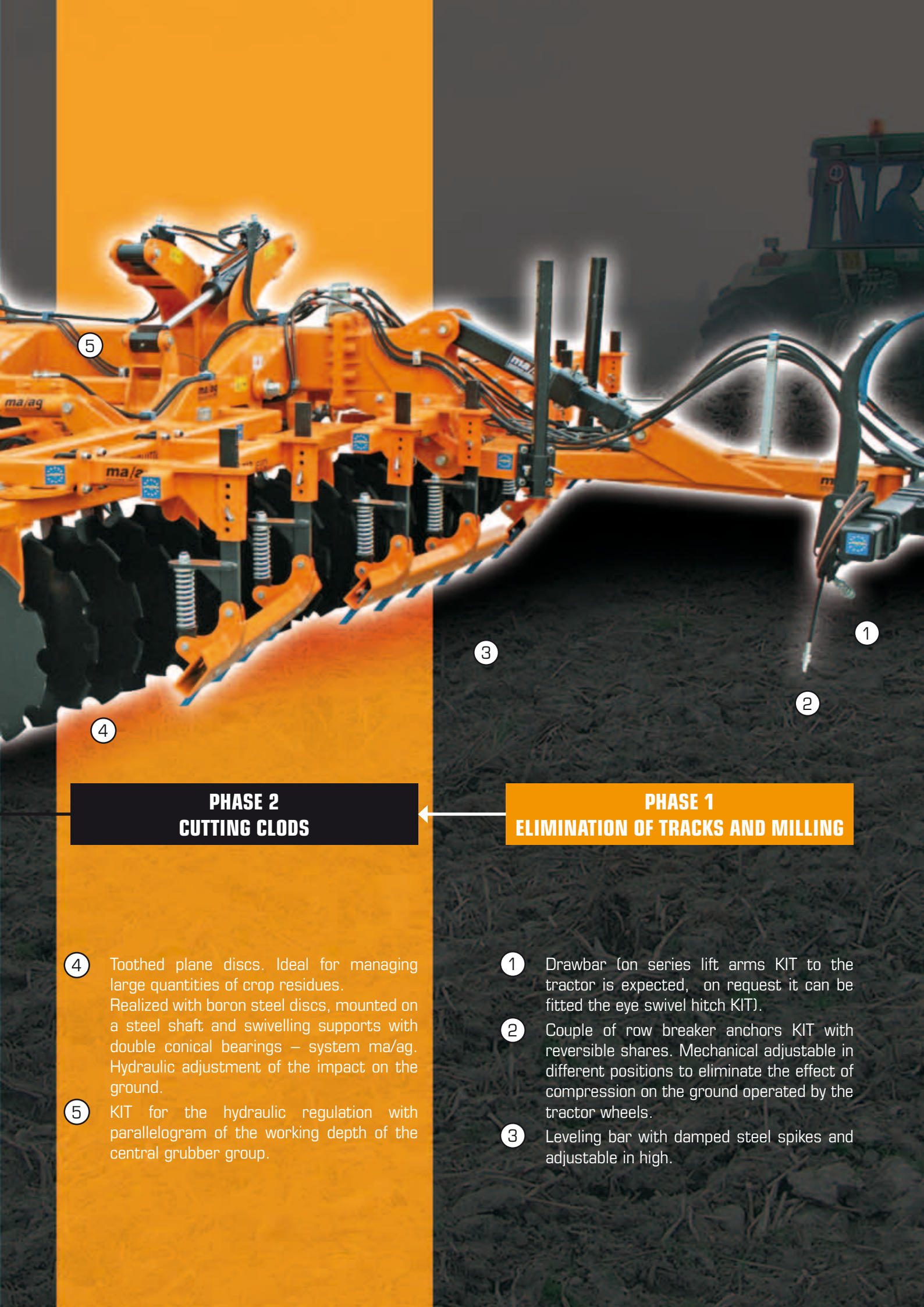


**PHASE 4
FINISHING AND LEVELLING**

**PHASE 3
CULTIVATION**

SPECIFIC ELEMENTS

- 8 Double self-cleaning breaking roller (on series with double star discs). It permits the mixing of the soil already worked and the further breaking of the crop residues. Realized with boron steel discs, mounted on a steel shaft and swivelling supports with double conical bearings with interchangeable carter – system ma/ag.
- 9 Single rear leveling cage roller. It is available in the plates or pipes cage version, packer roller, spikes roller and smooth roller.
- 10 Lighting bar for the transport on road.
- 6 Cultivator with square springs 25x25 mm arranged on 2 rows. Independent frame.
- 7 Transport trailer with oversize wheels, half-shaft 8 holes



PHASE 2 CUTTING CLODS

- ④ Toothed plane discs. Ideal for managing large quantities of crop residues. Realized with boron steel discs, mounted on a steel shaft and swivelling supports with double conical bearings – system ma/ag. Hydraulic adjustment of the impact on the ground.
- ⑤ KIT for the hydraulic regulation with parallelogram of the working depth of the central grubber group.

PHASE 1 ELIMINATION OF TRACKS AND MILLING

- ① Drawbar (on series lift arms KIT to the tractor is expected, on request it can be fitted the eye swivel hitch KIT).
- ② Couple of row breaker anchors KIT with reversible shares. Mechanical adjustable in different positions to eliminate the effect of compression on the ground operated by the tractor wheels.
- ③ Leveling bar with damped steel spikes and adjustable in high.



CTRI 50 EVO SP



MADE IN ITALY- CEE



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