Kharma X Zephyr X

Cultivator & drill together, or with a implement







eSOW Drills

The concept was born due to the necessity of cost-efficient solutions for preparation and seeding tasks, in one machine.

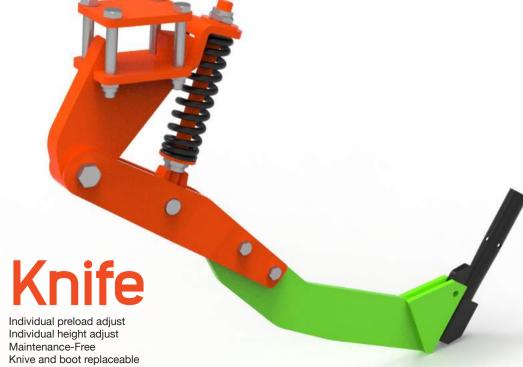
That is why a really original system for the rear roller has been designed. In this way the disc preparator can be loaded without interference on the seeding line. The design of the seeding line, makes it so that this has no problems with superficial residues, allows the opening of the progressive of furrows at the required depth to offer a high-speed performance. The seed is placed between the two areas compacted by the roller, which ensures the ideal location for a perfect growth and as well as the best reserve for humidity.

"Whether it is conventional seeding or minimum labor the seed drills by Vomer will be the most precise and high-quality tool"

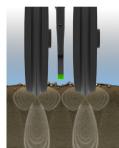
Vanguard Technology

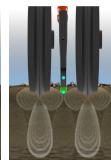
The heart of the vomer Seed drills is our metering "merlin.4" of great precision and softness, with electrical activation and 4 seeding sectors (2 in mounted models), valid for all kind of terrains, whitout needing to change the seeding rollers.

The control system is easy to manipulate, from a wireless touch-screen device. The sensors of the machine allow the connection with all kinds of tractors, automatically feeding the data for a correct seed dispenser



Compact Disc Harrow or Seed Drill, You Choose...



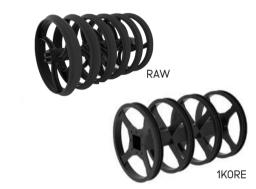


Compact Disc Harrow Seed Drill

CHOOSE YOUR WORK

When it works as "preparation" the seed placement line is in a HIGH POSITION and makes a longitudinal cut and avoid residue from getting stuck between the discs. The compaction in "strips" and the effect "ground against ground" leave an "open" harvested surface and longitudinally consolidated, which significantly increases the rate of absorption and conservation of humidity.

When it works as "seed drill" the seed placement line is in a LOW POSITION and disposes the seed between the two consolidated strips. The compaction in "strips" and the effect "ground against ground" leave an "open" harvested surface and longitudinally consolidated, with the seed carefully disposed in the optimal location for its growth.



COMPACTION & RECONSOLIDATION

The compaction line of the Vomer seed drills uses compactor discs in Ø600 separated 140 or 170mm, making a strip compaction. Consolidates "ground against ground" in stripes, leaving an "open" harvested surface.

These discs have a great rolling power, which translates in a substantial decrease in dragging effect and fuel consumption. The roller is mounted on high capacity bearings.

You can choose between two packers, the RAW type (T ring) or de KORE type (U ring)



RUBBER SUSPENDED DISCs CULTIVATOR

Individual floating discs built on high performance elastomers. Each disc adapts individuallu to the terrain which translates in a greater performance when compare to other sustems. Waterproof hub without maintenance, located on the rear, which facilitates soil movement on the disc surface. This way bottlenecks are avoided and the mixing effect is improved. Cutting angles and inclination optimized for each position and tupe of disc. This characteristic offers a better cutting effect and swinging. At the same time, it allows the machine to work completely centered, an important characteristic when working at high speeds. Smoothness even when working at high System reliability and free maintenance



Zephyr X MOUNTED

3,00-5,20m Working Width

400-600lts
Hopper Volume



Kharma X TRAILED

4,20-6,20m Working Width

3000-4000lts
Hopper Volume



14-17_{cm}
Between Lines

8-16Km/h
Working Speed



Location
Seed Placement Line



The area where we deposit the seed is known as "seed placement line" and if the seeding wants to be as good as possible it needs to be homogeneous. This could be a problem as we face areas with different levels of compaction, mainly due to the areas where the tractor has stepped and the sides of the machine. To counteract this effect, we have designed the Knives with individual pressure and depth adjustment, achieving that desired homogeneity.

The Depth control is made by two spindles of micrometric adjustment, one for each part. The design incorporates as well height adjustments and knive inclination adjustment, to increase the life of the equipment as it suffers the wear of normal work usage. All of this without maintenance, as the movement is made on plastic bearings

Precission: Metering system merlin.4 / merlin.2



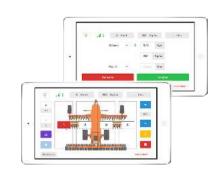
The succes of a good harvest is in the number and location of the seeds, and for that, the heart of the Kharma X seeder is our user-friendly and easily accessible system metering merlin.4.

Developed exclusively by Vomer, the merlin.4 metering allows for a very precise dispense of the seeds, even in small doses. The distribution in 4 sectors, electronically ruled, allows us to cut each and every one of the sectors without influencing the assets, this gives a great precision in the number of seeds deposited, preventing re-seeding and the accumulation of seeds in non-cut sectors.

Merlin.4 adapts to the working speed in a fast and progressive manner, thanks to the standard radar sensor and electronic control in each sector. merlin.4 allows for the easiest regulation and adjust system of the market.

Smart Control

Software eMerlin



The brain of our seeders is the eMerlin software developed by Vomer. With a simple interface, eMerlin lets you make the sowing adjustments in merely seconds. Once the previous adjustments have been made, we have a control screen for the sowing process, with a very intuitive design, where the main controllers are accessible, not to lose much time. All communications are via WIFI and the tablet type device is interchangeable, which allows it to act as the main ECU.

Different tractors can use it in a simple screen, simply using a main power socket for each tractor. The software updates are made via WEB, and it doesn't depend on any element or hardware.



Savings Sectors machine Shut-Off



The electronic metering system allows shutoff in 4 sectors the seed placement line, which translate in a decrease on the number of seeds employed and an increase of productivity to avoid re-seeding, and make the most of the headers

4 Sectors for Kharma X 2 Sectors for Zephyr X



Rear Articulation (Option)

Integrated system in the chassis that avoids the dragging on the terrain and seeds in the turns, reducing as much as possible the overlaps in the line of sowing, specially in the headings or in fields with irregular perimeters.

Leveling

After the intensive work of the disc cultivator the soil can become uneven, mainly derived from the turning and mixing performed by the discs. For this purpose, the Vomer trailed seeddrills can optionally incorporate a leveling bar with leaf springs, with front or intermediate arrangement. The fully hydraulic adjustment ensures dynamic regulation in the field, without having to get off the tractor to make adjustments.



FRONT Leaft Spring bar

Front bar with interchangeable Leaf-Spring suspended Flat Blades designed for a previus levelling works with hydraulic drive. This type of levellers improves the effect of

levelling thanks to the individual vibration, and decreases the catching of rocks and other residues by the blades.

Two position of the blades and its possible incorporate a longitudinal stabilizing bar.

*Only Kharma X



Leaft Spring bar

Intermediate bar with interchangeable Leaf-Spring suspended Flat Blades designed for a levelling works with hydraulic drive. This type of levellers improves the effect of levelling thanks to the individual vibration, and decreases the catching of rocks and other residues by the blades.

*Only Kharma X



TRACK ERADICATOR

Front track eradicator system that reduces the effect of the tractor tyre marks before to the work of the Disc cultivator. Ideal for seedbed preparation work. It allows the placement totally elevated so that if it is necessary to cancel your work

*Only Kharma X



Technical Features



Kharma X

- Pneumatic drill
- Drill line integrated in packer
- Tines with rubber NON-STOP security and free maintenance
- 57cm (22") Disc and maintenance-free hubs
- Hydraulic depth control
- Elevated front Fan
- Radar Speed Sensor
- Drawbar or lower link connection
- Can works like a Compact Disc Harrow or like a Drill

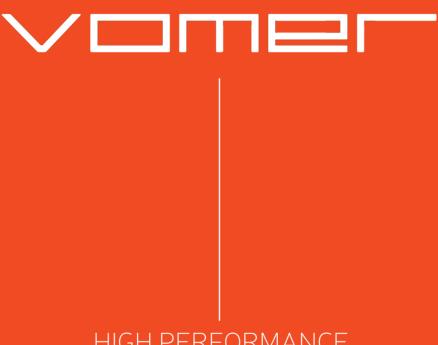
Kharma X	KHX3020	KHX4030	KHX5030	KHX6040
Working Width (m)	3,00	4,30	5,30	6,30
Transport Width (m)	3,00	3,00	3,00	3,00
Number of Disc	22	32	40	48
Disc spacing (mm)	125	125	125	125
Disc Diameter (mm)	22" (560)	22" (560)	22" (560)	22" (560)
Connection Lower link 2-Points	Cat. II/III	Cat. II/III	Cat. II/III - III	Cat. II/III - III
Seed hopper capacity (Its) (option)	2200	3000	3000 (4000)	4000
Feed opening hopper (m)	1,00 x 2,00	1,00 x 2,00	1,00 x 2,00	1,00 x 2,00
Tire Size	400/60 R15.5	445/50 R19.5	550/45 R22.5	550/45 R22.5
Front Support Wheels	1000	11.5/80 R15.3	11.5/80 R15.3	400/60 R15.5
RAW Packer N° Seed Coulter (140mm)	21	30	36	44
1KORE Packer N° Seed Coulter (170mm)	17	24	30	36
Doble-Acting control devices	2 + (1 simple)	3 + (1 simple)	3 + (1 simple)	3 + (1 simple)
Despressurized return flow (max 5 bar)	1	1	1	1
Road lighting equipment	Standard	Standard	Standard	Standard
Working Speed (km/h)	8-18	8-18	8-18	8-18
Power Demand (HP)	120-160	150-210	190-240	220-300



Zephyr X

- •Pneumatic drill
- Drill line integrated in packer / or Boleo Frogs
 Tines with rubber NON-STOP security and free maintenance
- 57cm (22") Disc and Free maintenance hubs
- Integrated front FanRadar Speed Sensor
- Mounted
- Hopper 400lts / 600lts
- Can works like a Compact Disc Harrow or like a Drill

ephyr X	ZHX3020	ZHX4030	ZHX5030
/orking Width (m)	3,00	4,30	5,30
ransport Width (m)	3,00	3,00	3,00
umber of Disc	22	32	40
isc spacing (mm)	125	125	125
isc Diameter (mm)	22" (560)	22" (560)	22" (560)
onnection Lower link 3-Points	Cat. II/III	Cat. II/III	Cat. II/III - III
eed hopper capacity (Its) (option)	400	400	600
AW Packer Nº Seed Coulter (140mm)	21	30	36
KORE Packer Nº Seed Coulter (170mm)	17	24	30
oleo (Even distribution)	8	12	16
oble-Acting control devices	1 (simple)	1 + (1 simple)	1 + (1 simple
espressurized return flow (max 5 bar)	1	1	1
oad lighting equipment	Standard	Standard	Standard
orking Speed (km/h)	8-18	8-18	8-18
ower Demand (HP)	140-200	180-250	200-270



HIGH PERFORMANCE FARMING IMPLEMENTS



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