LYVARNYI ZAVOD SE

GOLTA

FIELD ROLLERS

CATALOGUE
2022

Lyvarnyi zavod SE, a subsidiary enterprise of SLC Pervomaiskdiselmash, is a leader of Ukrainian agricultural engineering industry engaged in production of field rollers.

Lyvarnyi zavod SE has been incorporated in 1999 on the base of cast iron foundry workshop in SLC Pervomaiskdiselmash. Its principal activities include manufacture of cast iron products obtained from various cast iron grades and manufacture of agricultural machinery.

Lyvarnyi zavod SE has set up commercial production and now produces commercially more than 40 models of field rollers; this makes it a leader in this sector of national agricultural engineering industry.

Our enterprise was many-time awarded with golden medals and diplomas of international agricultural exhibitions in various nominations:

- Field rollers of KZK-9,2H; KKSh-9,2H; KN-9,2H model series were awarded on AGRO 2013 in The Best Agricultural Machinery nomination;
- 5KKSh-20H field roller was awarded on AGRO 2014 in The Best Agricultural Machinery nomination;
- 5KKSh-20H field roller was awarded on AGRO TESTY DRIVE 2014 for successful demonstration in the field;
- Golta-6 field roller was awarded on AGRO 2015 in Innovative Technologies and Machinery in Agriculture nomination;
- Golta-6 field roller was awarded on AGRO 2016 in The Best Agricultural Machinery innovation;
- KR-6P (KR-6P-01) was awarded on AGRO 2017 in Innovative Technology of Soil Treatment nomination;
- The enterprise was also awarded for participation in AGROEXPO in 2014, 2015, 2016, 2017.

Our field rollers are known on European market under Golta trademark. The field rollers manufactured by SE Lyvarnyi zavod are notable for their high quality, accessible prices and easy adaptability to various needs of today's manufacturers of agricultural goods.

Machinery produced during the above-mentioned years is successfully operated as in Ukraine, so on fields in Lithuania, Latvia, Estonia, Moldavia, Kazakhstan, Romania, RF.

Procurement of high-quality materials, stock materials and component items are performed directly from Ukrainian and foreign manufacturers or their official representatives thus allowing us to fix the prices accessible to any consumers and to provide reliability of manufactured machinery.

Achievements of our enterprise team are confirmed with our awards:

- GOLD OF RATING IN EXPORTER 2016;
- INDUSTRY LEADER 2007;
- INDUSTRY LEADER 2010;
- INDUSTRY LEADER 2012;
- INDUSTRY LEADER 2014.

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FIELD ROLLERS. Soils are compacted with field rollers prior to and after seed sowing. Soil compaction prior to the seed sowing will level the field surface, destruct soil clods, compact any unsettled and late-tilled soil. Compaction of the top soil layer after sowing will improve contact of the seeds with soil and improve moisture inflow from the lower horizons resulting in quicker seed sprouting. Soil compaction in arid regions will reduce the moisture loss owing to reduced evaporation intensity of which is higher from loose soils and lower from the compacted soils.

If soils in a field are compacted, this improves smoothness of machinery movement; therefore, their working speed can be increased.

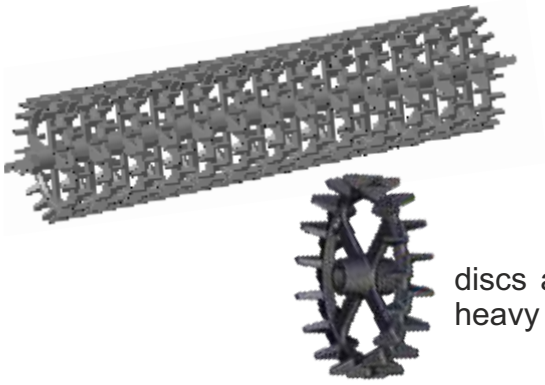
Design of field rollers manufactured by our enterprise allows us to follow the soil relief accurately thus providing optimal contact with soil across the working width even within complicated reliefs.

CAMBRIDGE FIELD ROLLER. Its working tools with diameters of 360/370 mm, 460/470 mm, 520/530 mm are made of cast iron, are completed with wedged rings of smaller diameter and toothed rings of bigger diameter. Such rollers are used prior to the seed sowing and are also used to level surface, to destruct soil clods and to restore the soil structure. Their usage after sowing is also advisable, since it is conducive to more even sprouting and to acceleration of vegetation.

It is suitable for any soil types.

Advantages of its usage:

- soil surface levelling and destruction of soil clods;
- improved contact between seeds and soil;
- moisture retention;
- reduced soil erosion with simultaneous soil structure improvement.

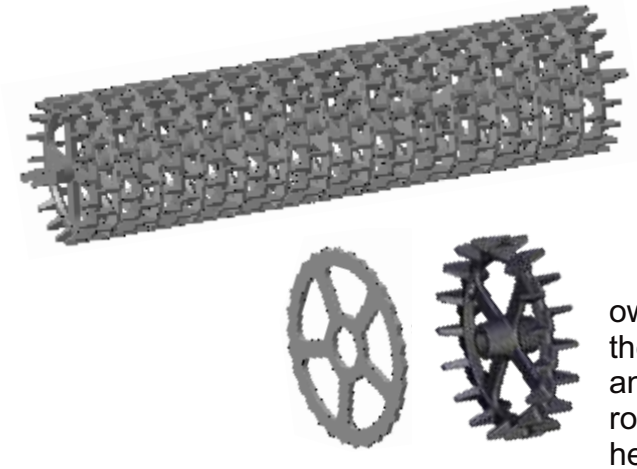


CROSSKILL FIELD ROLLER. Disc with diameter of 460 mm (cast iron) or 520 mm (cast iron or steel).

After pass of the roller, soil will be characterised with powdery structure and formation of the superficial crust will be prevented. The discs destruct soil clods efficiently without disc clogging caused by soil adhesion. After the roller pass, soil becomes well fragmented. Owing to narrow distance between discs and their special profiles, such roller is especially suitable for heavy soils and medium-heavy soil types.

Working tools of Crosskill rollers have diameters of 470 and 530 mm made of cast iron. The roller has an aggressive profile leaving loose and resistant against crust formation soil surface. It has proven itself to be good at heavy dry soils. The roller crushes big fractions with simultaneous strip compaction and preserves optimal air circulation within upper soil layers. It is stable on fragmental soils.

Field roller selection depending on the soil type



CROSSKILL FIELD ROLLERS (TOOTHED-CROWFOOT ROLLER). Combination of two working tools such as the crowfoot disc with diameter of 520 mm (cast iron) and toothed ring with diameter of 550 mm (cast iron) has allowed us to make the roller versatile and high-efficient machine owing to more finely crushed soil clods. The toothed ring is installed between the crowfoot disc to provide self-cleaning of working tools owing to oscillating rotation of the toothed ring. After pass of the roller, soil will be characterised with powdered structure and formation of the superficial crust will be prevented. Such roller is especially suitable for heavy soils and medium-heavy soil types.

SMOOTH WATER-FILLED FIELD ROLLER is intended to compact the surficial soil layer prior to or after the sowing, to pack green manure before turning it into soil. Cylinders are filled with water. By changing amount of water therein, specific pressure of the roller onto soil will be adjusted.

CRUSHING WATER-FILLED FIELD ROLLER. It is intended to chop crop residues after sunflower, maize; to level the field surface with partial mulching.

Chopping crop residues and partial soil mulching decelerate moisture evaporation, control the superficial layer temperature, retard growth of weeds, protect against weathering, enrich the soil with organics.

COMPACTING FIELD ROLLER. Disc with diameter of 700 mm made of cast iron.

When land is ploughed, the ploughs make soil loose and crumble it intensely thus causing multiple increase of pore volume in the ploughed layer. Natural compaction of the top soil layer is upset, and internal capillaries are destructed; as a result, the ploughed layer is saturated with air and becomes warm quicker. As a rule, intense crop rotation has no sufficient time for the soil to settle and its natural compaction. Due to this fact, the ploughed layer drying must be prevented. It is offered to use soil compactors in the course of land ploughing. Concurrent usage of ploughs with rollers allows soil packing just in the time when the soil is moistened still and can be compacted to the entire ploughing depth. With that, good fragmentation of the soil layer with formation of finely powdered structures is provided thus allowing to restore the capillaries and provide water ingress to the seed bed and to exclude ploughed soil drying.

Such rollers are especially efficient when the soil is prepared for rape where retention of moisture is of crucial importance when no precipitation is available.

Certain structural alterations were implemented during the roller production; they were aimed at improvement of its reliability and durability:

- adjustment of axial play of working tools without the bearing unity disassembly;
- reinforcement of the frame at heavily loaded nodes;
- improvement of the roller structure rigidity owing to struts;
- usage of quick-release connections;
- usage of improved design of the frame hinged joint;
- usage of the roller in combination with a disc harrow, sowing machine or cultivator has good prospects.

Basis technical specifications *	KZK-6P	KZK-6P-01	KZK-6P-02
Rated working width, m	6.0		
Productivity during a hour of basic time, ha	7.2 at most		
Working speed, km/h	12 at most		
Towing speed, km/h	20 at most		
Diameter of wedged disc, mm	460	360	520
Diameter of toothed ring, mm	470	370	530
Aggregation method	Tractor mounted		
Required tractor power, hp	80 at least		
Overall dimensions in working position (length, width, height)	3580x6100x1010	3580x6100x1010	3580x6100x1010
Overall dimensions in towing position (length, width, height)	4700x2280x1500	4700x2280x1500	4700x2280x1500
Weight of basic configuration, kg	2800	2300	3000

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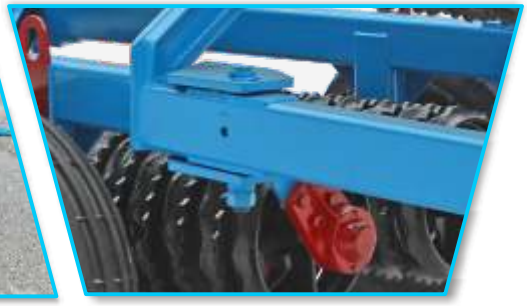

Basis technical specifications *	KZK-9.2P	KZK-9.2P-01
Rated working width, m	9.2	
Productivity during a hour of basic time, ha	11 at most	
Working speed, km/h	12 at most	
Towing speed, km/h	20 at most	
Diameter of wedged disc, mm	460	360
Diameter of toothed ring, mm	470	370
Aggregation method	Tractor mounted	
Required tractor power, hp	100 at least	
Overall dimensions in working position (length, width, height)	3580x9380x1025	3580x9380x1025
Overall dimensions in towing position (length, width, height)	6500x2280x1600	6500x2280x1600
Weight of basic configuration, kg	4350	3500

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The roller is completed with a central section (the tail part of the roller when transported) consisting of three smaller-sized rollers.

Basis technical specifications *	KZK-10P	KZK-10P-01	KZK-10P-02
Rated working width, m	10.0		
Productivity during a hour of basic time, ha	12 at most		
Working speed, km/h	12 at most		
Towing speed, km/h	20 at most		
Diameter of wedged disc, mm	460	360	520
Diameter of toothed ring, mm	470	370	530
Aggregation method	Tractor mounted		
Required tractor power, hp	120 at least		
Overall dimensions in working position (length, width, height)	7000x10300x1000	7000x10300x1000	7000x10300x1000
Overall dimensions in towing position (length, width, height)	6900x2290x1400	6900x2290x1400	6900x2290x1400
Weight of basic configuration, kg	5350	4300	5900

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Installation of a central section, consisting of three smaller-sized rollers, is a distinctive feature of this roller.

Basis technical specifications *	KZK-12.5P	KZK-12.5P-02
Rated working width, m	12.5	
Productivity during a hour of basic time, ha	15 at most	
Working speed, km/h	12 at most	
Towing speed, km/h	20 at most	
Diameter of wedged disc, mm	460	520
Diameter of toothed ring, mm	470	530
Aggregation method	Tractor mounted	
Required tractor power, hp	220-300	
Overall dimensions in working position (length, width, height)	8300x12900x1100	8300x12900x1100
Overall dimensions in towing position (length, width, height)	8100x2300x1500	8100x23000x1500
Weight of basic configuration, kg	6700	7400

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KZK Golta-6

Usage of the crossboard to crush the clods, to backfill furrows and to level surface.

The crossboard consists of S-shaped pillars made of special high-elastic spring steel with dimensions of 80x10 and replaceable wearable components made of abrasion-resistant boron-bearing steel.

Control of the crossboard (switching it over to working and towing positions, setting the depth of soil work by changing the action angle to the superficial field layer) shall be exercised by the tractor operator by virtue of a hydraulic drive from the tractor cab.

The roller design is provided with an original tracking mechanism guaranteeing ideal relief following of the field surface.

By using boxes installed on the roller frame, you can load a large number of stones, i.e. to remove the stones from the field in the course of field preparation to the sowing in order to avoid further troubles related to damaging machines with such stones.

The roller is connected to the tractor by virtue of a safety sling-and-pin shackle made by forging and rotating around its axle.

Basis technical specifications *	KZK GOLTA-6	KZK GOLTA-4.5
Rated working width, m	6.0	4.5
Productivity during a hour of basic time, ha	7.2 at most	5.4 at most
Working speed, km/h	12 at most	
Towing speed, km/h	20 at most	
Diameter of wedged disc, mm	520	
Diameter of toothed ring, mm	530	
Aggregation method	Tractor mounted	
Required tractor power, hp	80 at least	
Overall dimensions in working position (length, width, height)	3400x6200x850	3700x4700x850
Overall dimensions in towing position (length, width, height)	5720x2300x2200	4780x2360x2100
Weight of basic configuration, kg	3820	3100

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KZK Golta-4.5

KZK Golta-6

Basis technical specifications *	KZK OLVIA-6A	KZK OLVIA-6
Rated working width, m	6	
Crossboard consists of S-shaped pillars 80x10	+	-
Productivity during a hour of basic time, ha	7.2	
Working speed, km/h	10	
Towing speed, km/h	20	
Diameter of wedged disc, mm	520	
Diameter of toothed ring, mm	530	
Aggregation method	Tractor mounted	
Required tractor power, hp	120 at least	
Overall dimensions in working position (length, width, height)	4100x6300x1300	
Overall dimensions in towing position (length, width, height)	3900x2400x2630	3890x2400x1435
Weight of basic configuration, kg	4000	3450

** Всі дані, розміри і вагові характеристики знаходяться в процесі постійного технічного вдосконалення, в зв'язку з чим вони можуть змінюватися. Маса відноситься до базового варіанту. Підприємство залишає за собою право на технічні зміни.*
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Basis technical specifications *	KZK ORLIK -6	KZK ORLIK-6-02	KZK ORLIK-6A	KZK ORLIK-6A-02
Rated working width, m	6			
Crossboard consists of S-shaped pillars 80x10	-	-	+	+
Productivity during a hour of basic time, ha	7,2			
Working speed, km/h	12 at most			
Towing speed, km/h	20 at most			
Diameter of wedged disc, mm	460 (cast iron)	520 (cast iron)	460 (cast iron)	520 (cast iron)
Diameter of toothed ring, mm	470 (cast iron)	53 (cast iron)	470 (cast iron)	530 (cast iron)
Aggregation method	Tractor mounted			
Required tractor power, hp	120			
Overall dimensions in working position (length, width, height)	3580x6100x1010		3580x6100x1500	
Overall dimensions in towing position (length, width, height)	4700x2280x1500		4700x2280x1500	
Weight of basic configuration, kg	3100	3500	3800	4200

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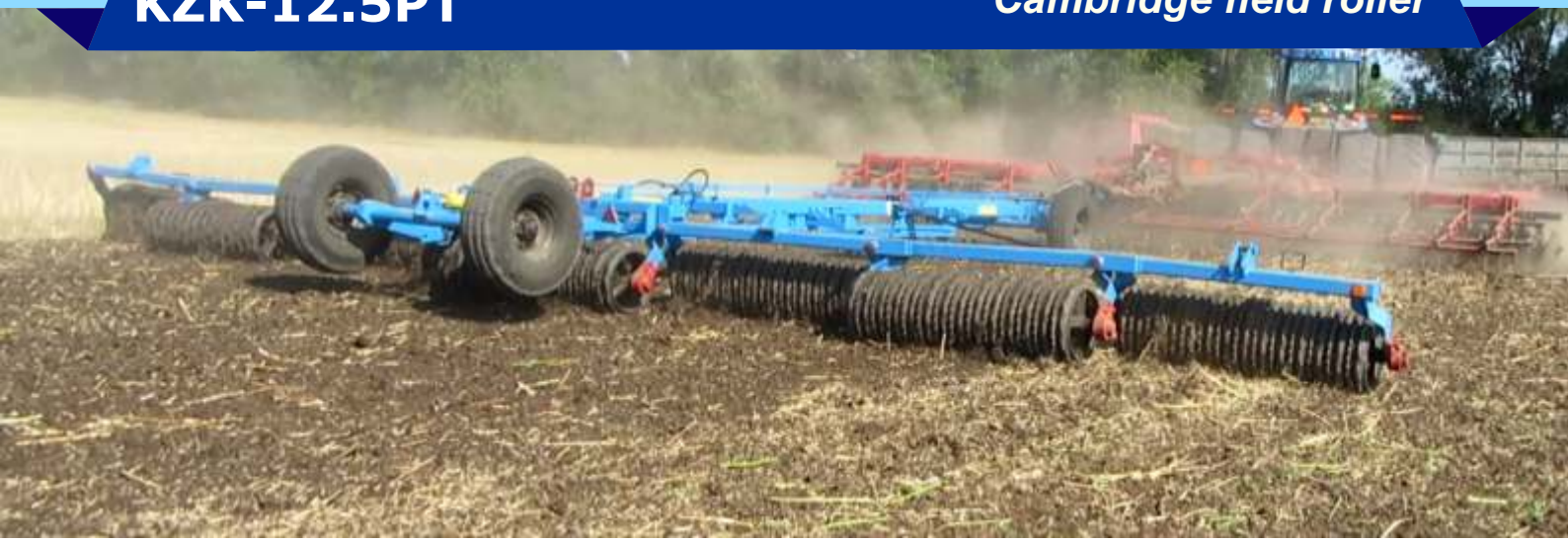
KZK-12.5PT

Cambridge field roller



Installation of the frontal wheel pair for convenient towing and a central section consisting of three smaller-size rollers is one among distinctive features of this roller.

Installation of the frontal wheel pair with two hydraulic cylinders practically releases the load from the linkage system of tractor thus allowing us to aggregate the roller in a hitch with other agricultural machines.

Basis technical specifications *	KZK-12.5PT
Rated working width, m	12.5
Productivity during a hour of basic time, ha	15 at most
Working speed, km/h	12 at most
Towing speed, km/h	20 at most
Diameter of wedged disc, mm	520
Diameter of toothed ring, mm	530
Aggregation method	Tractor mounted
Required tractor power, hp	220 at least
Overall dimensions in working position (length, width, height)	11800x12740x1100
Overall dimensions in towing position (length, width, height)	11600x2300x1500
Weight of basic configuration, kg	8000

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Basis technical specifications*	KKSh-6H	KKSh-6H-01	KKSh-6H-02
Rated working width, m	6.0		
Productivity during a hour of basic time, ha	7.2 at most		
Working speed, km/h	12 at most		
Towing speed, km/h	20 at most		
Diameter of star-wheeled, mm	520 (steel)	460 (cast iron)	520 (cast iron)
Aggregation method	Tractor mounted		
Required tractor power, hp	80 at least		
Overall dimensions in working position (length, width, height)	3580x6110x1010	3580x6110x1010	3580x6110x1010
Overall dimensions in towing position (length, width, height)	4700x2280x1500	4700x2280x1500	4700x2280x1500
Weight of basic configuration, kg	1950	2060	2250

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Basis technical specifications*	KKSh ORLIK-6	KKSh ORLIK-6-02
Rated working width, m	6,0	
Productivity during a hour of basic time, ha	7.2 at most	
Working speed, km/h	12 at most	
Towing speed, km/h	20 at most	
Diameter of star-wheeled, mm	520 (steel)	520 (cast iron)
Aggregation method	Tractor mounted	
Required tractor power, hp	80 at least	
Overall dimensions in working position (length, width, height)	3580x6240x1025	
Overall dimensions in towing position (length, width, height)	4930x2290x1670	
Weight of basic configuration, kg	2300	2600

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Basis technical specifications*	KKSh-9.2H	KKSh-9.2H-01	KKSh-9.2H-02
Rated working width, m	9.2		
Productivity during a hour of basic time, ha	11 at most		
Working speed, km/h	12 at most		
Towing speed, km/h	20 at most		
Diameter of star-wheeled, mm	520 (steel)	460 (cast iron)	520 (cast iron)
Aggregation method	Tractor mounted		
Required tractor power, hp	80 at least		
Overall dimensions in working position (length, width, height)	3580x9380x1025	3580x9380x1025	3580x9380x1025
Overall dimensions in towing position (length, width, height)	6500x2280x1670	6500x2280x1670	6500x2280x1670
Weight of basic configuration, kg	2900	3150	3660

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Basis technical specifications*	KKSh-10H	2KKSh-10H	KKSh-12.5H	2KKSh-12.5H
Rated working width, m	10		12,5	
Productivity during a hour of basic time, ha	15 at most		16 at most	
Working speed, km/h	12 at most			
Towing speed, km/h	20 at most			
Diameter of star-wheeled, mm	520 (steel)			
Aggregation method	Tractor mounted			
Aggregation by class tractors 14-20 кN				
Overall dimensions in working position (length, width, height)	8300x10000x1000		8300x12500x1000	
Weight of basic configuration, kg	5100		6000	

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A versatile five-section tractor-mounted roller also is successfully used in a hitch with disc harrows or cultivators. Manufacture of customised rollers with working width of 11; 12.5; 13.5 m.

Usage of two shafts in a section of star wheeled discs with Ø520 mm arranged in the checkboard order allowed us to convert the roller into a versatile and high-efficient machine owing to

- a pivot connection and tracking mechanism allowing perfect soil relief following;
- self-cleaning of working tools because of their arrangement in the checkboard order.

Basis technical specifications*	5KKSh-10H
Rated working width, m	9.7 at most
Productivity during a hour of basic time, ha	11.5 at most
Working speed, km/h	12 at most
Towing speed, km/h	20 at most
Soil compaction depth, cm	4-7
Aggregation method	Tractor mounted
Required tractor power, hp	80 at least
Overall dimensions in working position (length, width, height)	3500x10000x1200
Overall dimensions in towing position (length, width, height)	4400x3350x1800
Weight of basic configuration, kg	3350

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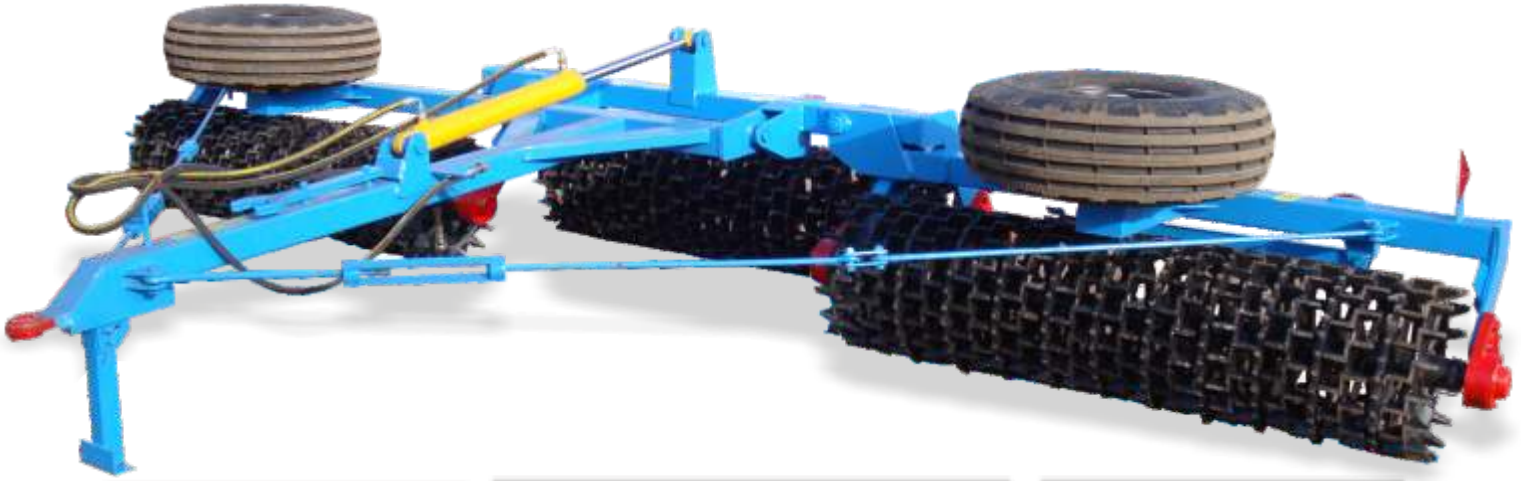






Usage of a combination of two working tools – star-wheeled disc with diameter of 520 mm made of steel and K3K toothed ring with diameter of 550 mm made of cast iron – allowed us to convert the roller into a versatile and high-efficient machine owing to:

- more fine disintegration of soil clods;
- self-cleaning of working tools owing to axial and radial plays of the toothed ring.

Usage of the roller in combination with a disc harrow, sowing machine or cultivator has good prospects.

Basis technical specifications*	KZSh-6H
Rated working width, m	6.0
Productivity during a hour of basic time, ha	7.2 at most
Working speed, km/h	12 at most
Towing speed, km/h	20 at most
Diameter of star-wheel disc, mm	520 (steel)
Diameter of toothed ring, mm	550 (cast iron)
Aggregation method	Tractor mounted
Required tractor power, hp	80 at least
Overall dimensions in working position (length, width, height)	3580x6240x1025
Overall dimensions in towing position (length, width, height)	4930x2290x1670
Weight of basic configuration, kg	2300

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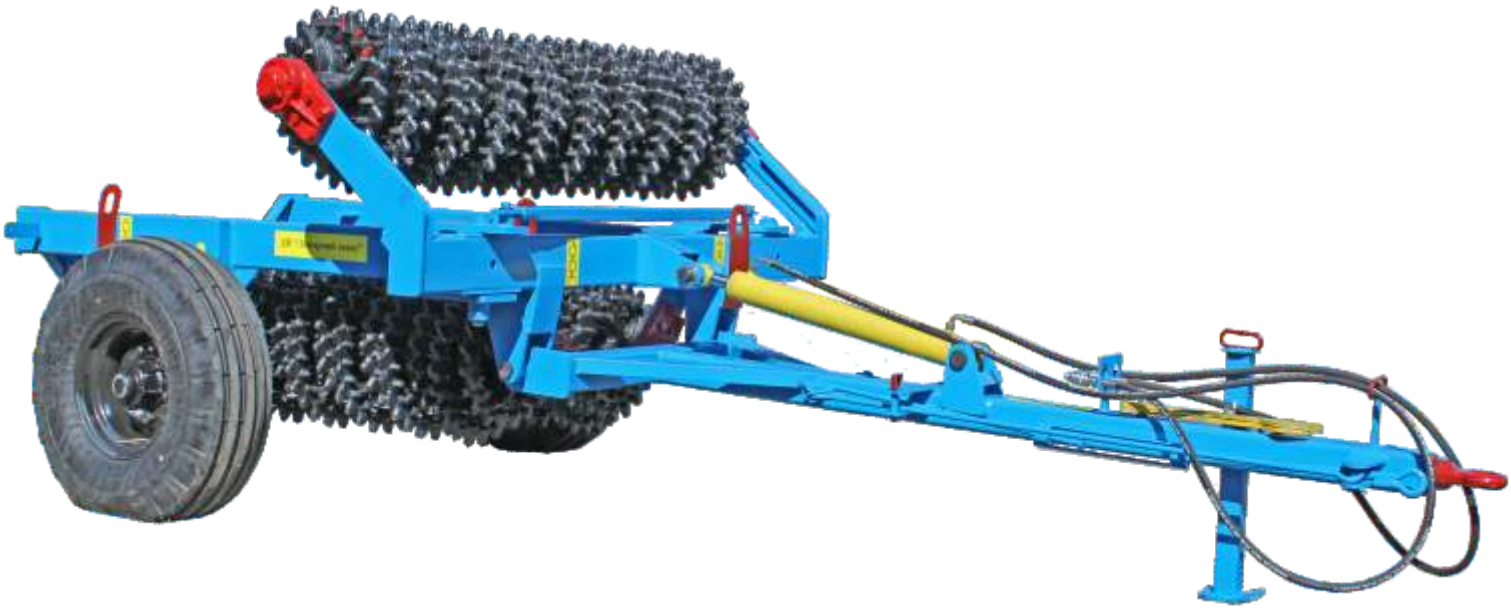

KZSh-6H-01 Crosskill field roller is characterised with usage of a combination of two Crosskill star-wheeled discs Ø470 mm and Ø530 mm with aggressive profile. Disc Ø530 mm is freely rotated on a sleeve thus providing self-cleaning of the roller and more fine soil clod disintegration. After the roller pass, the soil will be characterised with well-compacted lower layer and loose top layer.

Such roller may also be used in early spring to destroy hard surfaces and ice crust. The roller is characterised with the unique feature of self-cleaning even at relatively moistened soil. Big difference between ring diameters not only gives the ring self-cleaning effects but also provides the advantage of offset arrangement of seed spots thus allowing us to treat larger soils areas under usual conditions.

Basis technical specifications*	KZSh-6H-01
Rated working width, m	6.0
Productivity during a hour of basic time, ha	7.2 at most
Working speed, km/h	до 12
Towing speed, km/h	до 20
Diameter of crosskill disc KO-001, mm	470 (cast iron)
Diameter of crosskill disc KO-002, mm	530 (cast iron)
Aggregation method	Tractor mounted
Required tractor power, hp	100 at least
Overall dimensions in working position (length, width, height)	3580x6240x1025
Overall dimensions in towing position (length, width, height)	4930x2290x1670
Weight of basic configuration, kg	2600

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Usage of a combination of two working tools – star-wheeled disc with diameter of 520 mm made of steel and KZK toothed ring with diameter of 550 mm made of cast iron – allowed us to convert the roller into a versatile and high-efficient machine owing to:

- more fine disintegration of soil clods;
- self-cleaning of working tools owing to axial and radial plays of the toothed ring.

Usage of the roller in combination with a disc harrow, sowing machine or cultivator has good prospects.

Basis technical specifications*	KZSh-9.2H	KZSh-9.2H-01
Rated working width, m	9.2	
Productivity during a hour of basic time, ha	13 at most	
Working speed, km/h	15 at most	
Towing speed, km/h	20 at most	
Diameter of star-wheel disc, mm	520 (steel)	520 (cast iron)
Diameter of toothed ring, mm	550 (cast iron)	550 (cast iron)
Aggregation method	Tractor mounted	
Required tractor power, hp	80 at least	
Overall dimensions in working position (length, width, height)	3580x9200x970	3580x9200x970
Overall dimensions in towing position (length, width, height)	6480x2280x1500	6480x2280x1500
Weight of basic configuration, kg	3400	3900

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Basis technical specifications*	KR-3.2M	KR-3.2M-01
Rated working width, m	3,2	
Productivity during a hour of basic time, ha	4.5 at most	
Working speed, km/h	18 at most	
Towing speed, km/h	20 at most	
Wheel diameter with knives, mm	219 / 470	
Aggregation method	Tractor mounted	
Required tractor power, hp	40 at least	
Overall dimensions in working position (length, width, height)	1550x3200x1200	
Overall dimensions in towing position (length, width, height)	1950x3200x1200	
Weight of basic configuration, kg	900	

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Basis technical specifications*	KRT-6M
Rated working width, m	6.0
Productivity during a hour of basic time, ha	7.2 at most
Working speed, km/h	12 at most
Towing speed, km/h	20 at most
Wheel diameter with knives, mm	550 / 780
Aggregation method	Tractor mounted
Required tractor power, hp	80 at least
Overall dimensions in working position (length, width, height)	2270x6200x1500
Overall dimensions in towing position (length, width, height)	4930x2290x1500
Weight of basic configuration, kg	4300

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Basis technical specifications*	KRT-6P
Rated working width, m	60
Productivity during a hour of basic time, ha	7.2 at most
Working speed, km/h	12 at most
Towing speed, km/h	20 at most
Wheel diameter with knives, mm	426 / 680
Aggregation method	Tractor mounted
Required tractor power, hp	80 at least
Overall dimensions in working position (length, width, height)	3580x6240x1145
Overall dimensions in towing position (length, width, height)	4930x2290x1810
Weight of basic configuration, kg	2300

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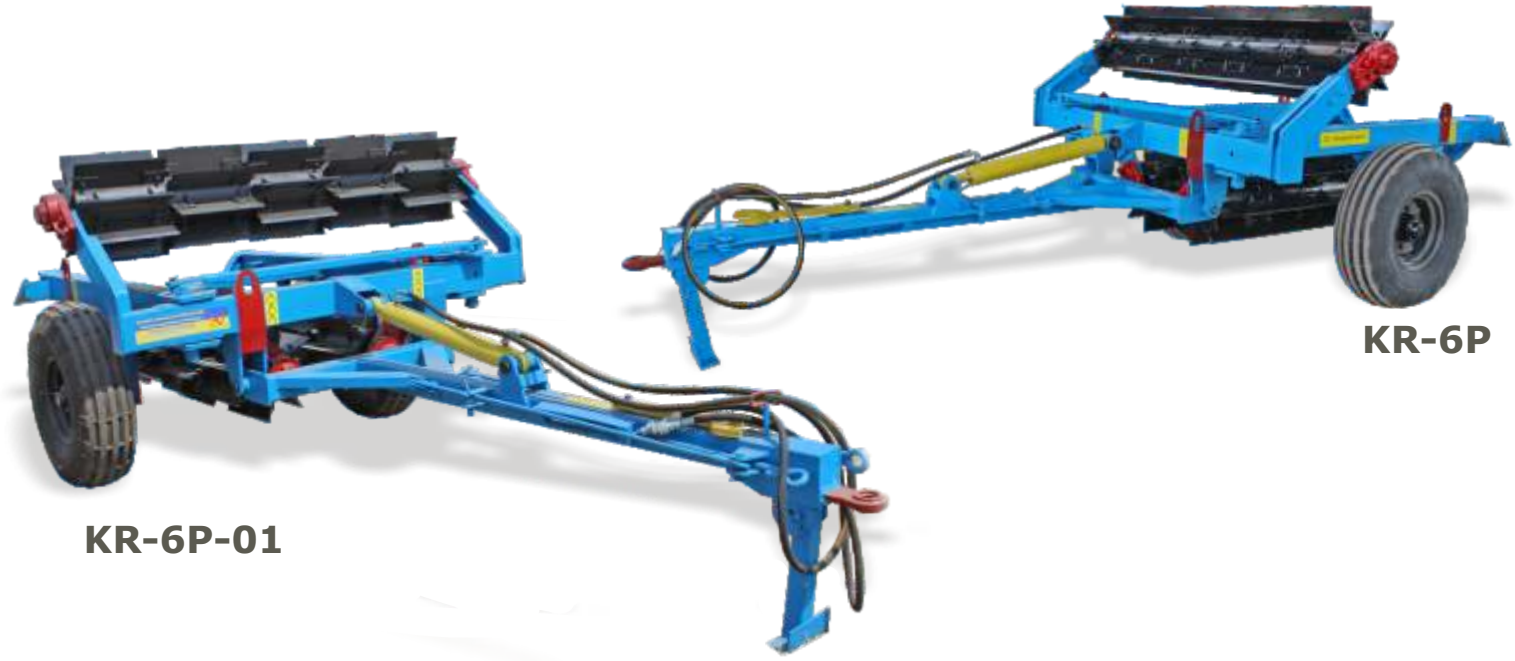

KR-6P

KR-6P-01

Basis technical specifications*	KR-6P	KR-6P-01
Rated working width, m	6.0	
Productivity during a hour of basic time, ha	7.2 at most	
Working speed, km/h	12 at most	
Towing speed, km/h	20 at most	
Wheel diameter with knives, mm	219 / 470	
Aggregation method	Tractor mounted	
Required tractor power, hp	80 at least	
Overall dimensions in working position (length, width, height)	3580x6240x1025	
Overall dimensions in towing position (length, width, height)	4930x2290x1690	
Weight of basic configuration, kg	1690	

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Basis technical specifications*	KR-9.2P; KR-9.2P-01
Rated working width, m	9.2
Productivity during a hour of basic time, ha	13.8 at most
Working speed, km/h	12 at most
Towing speed, km/h	20 at most
Wheel diameter with knives, mm	219 / 470
Aggregation method	Tractor mounted
Required tractor power, hp	80 at least
Overall dimensions in working position (length, width, height)	3580x9380x1025
Overall dimensions in towing position (length, width, height)	6500x2280x1600
Weight of basic configuration, kg	2550

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Basis technical specifications*	KR-10P	KR-10P-01	KR-12.5P	KR-12.5P-01
Rated working width, m	10.0		12.5	
Productivity during a hour of basic time, ha	20 at most		30 at most	
Working speed, km/h	12 at most			
Towing speed, km/h	20 at most			
Wheel diameter with knives, mm	219 / 470			
Aggregation method	Tractor mounted			
Required tractor power, hp	150 at least			
Overall dimensions in working position (length, width, height)	7000x10300x1000		8300x12900x1100	
Overall dimensions in towing position (length, width, height)	6900x2290x1400		8100x2300x1500	
Weight of basic configuration, kg	3425		4250	

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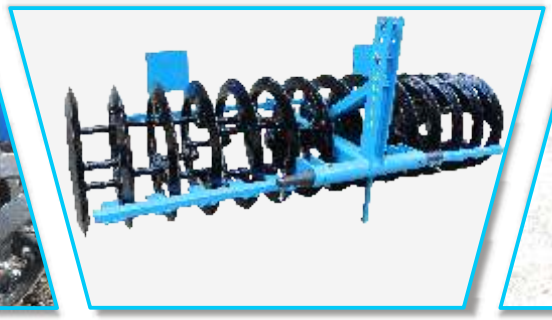

When K1U is on the frontal hitch, it compacts the soil. Owing to this, tractor wheels do not sink into the soil and no ridges are formed between the wheels. Therefore, it provides the best conditions for obtaining accurately and evenly prepared seeding bed. Usage of K1U field roller (frontal hitch) and a seeding machine (rear hitch) on the same tractor give excellent results; these halves the energy consumption in the course of crop sowing. K1U may be used in the course of ploughing and sowing.

Basis technical specifications*	K1U
Rated working width, m	2.6
Number of discs, pcs.	14
Number of rows	One
Diameter of packing ring, mm	700
Track spacing, mm	200
Aggregation method	Tractor mounted
Required tractor power, hp	80 at least
Overall dimensions in working position, mm	1100x2600x1135
Design weight, kg	930

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K2U

Double-row compacting field roller

After pass of the compacting field roller, capillary channels are restored in the root habitable layer thus resulting in prevention of soil drying and agitation of activity of soil microorganisms. In addition, large soil clods are disintegrated.

A feature in the compacting field roller design allows us to adjust the working width by means of simple screwing discs on and off thus allowing usage of such field roller with a plough with any working width.

Big thickness of discs in the main wear and tear zone provides longer service life of the compacting field roller.

Disc shape and its profile provide for the unique method for their connection thus guaranteeing the highest strength and reliability of the tool; slight wear and tear even when operated at fragmented soils. Since the compacting field roller design does not contain the central axle, this excludes clogging the soil in the space between rings. Moreover, additional installation of rigid wear-resistant disc scrapers made as a band of rubber-covered canvas provides operation of the field roller without clogging. Disc spacing in a row is 200 m, while the spacing between field roller traces is 100 mm.

The field roller will be delivered for operation in a hitch with a swing plough or on the frontal hitch of tractor with disc diameter of 700 mm and 45-degree profile.

Hitch bar of the field roller may be adjusted in length and height. Height of the connection point of the bar to the field roller catcher is adjustable and may be set for various ploughing depths.

Double-row compacting field roller K2U

К2У Double-row compacting field roller adapted for working with plows: Optikon Master A8, Lemken Diamant 11, Kverneland.

Basis technical specifications*	**K2U**					
Rated working width, m	1.6	2.0	2.4	2.8	3.2	3.6
Number of discs, pcs.	16	20	24	28	32	36
Design weight, kg	1530	1730	1930	2130	2330	2530
Number of rows	Two					
Diameter of packing ring, mm	700					
Track spacing, mm	100					
Aggregation method	Tractor driven					
Required tractor power, hp	80 at least					
Overall dimensions in working position						
Length, mm	5890					
Width, mm	1600	2000	2400	2800	3200	3600
Height, mm	1135					

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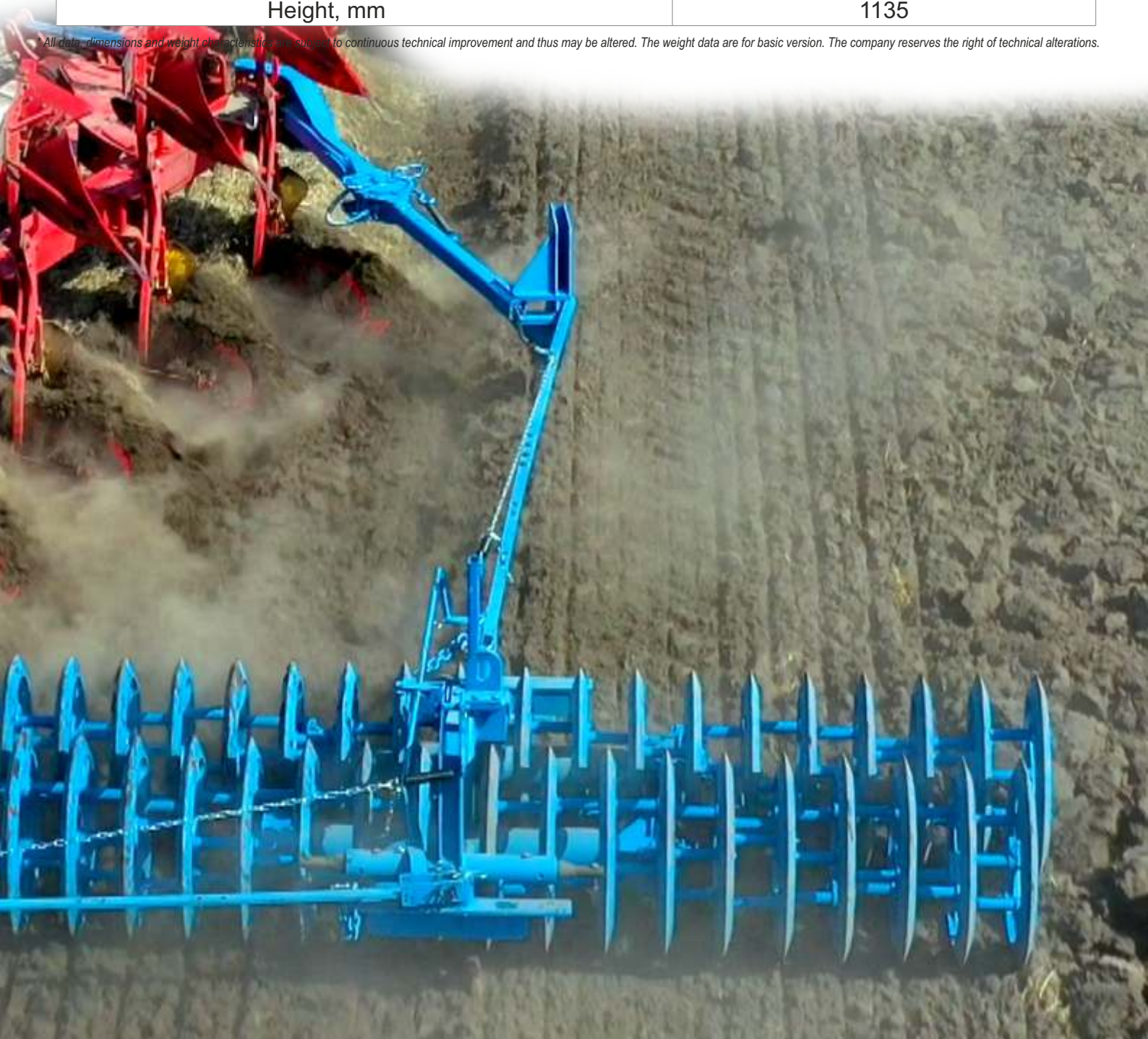

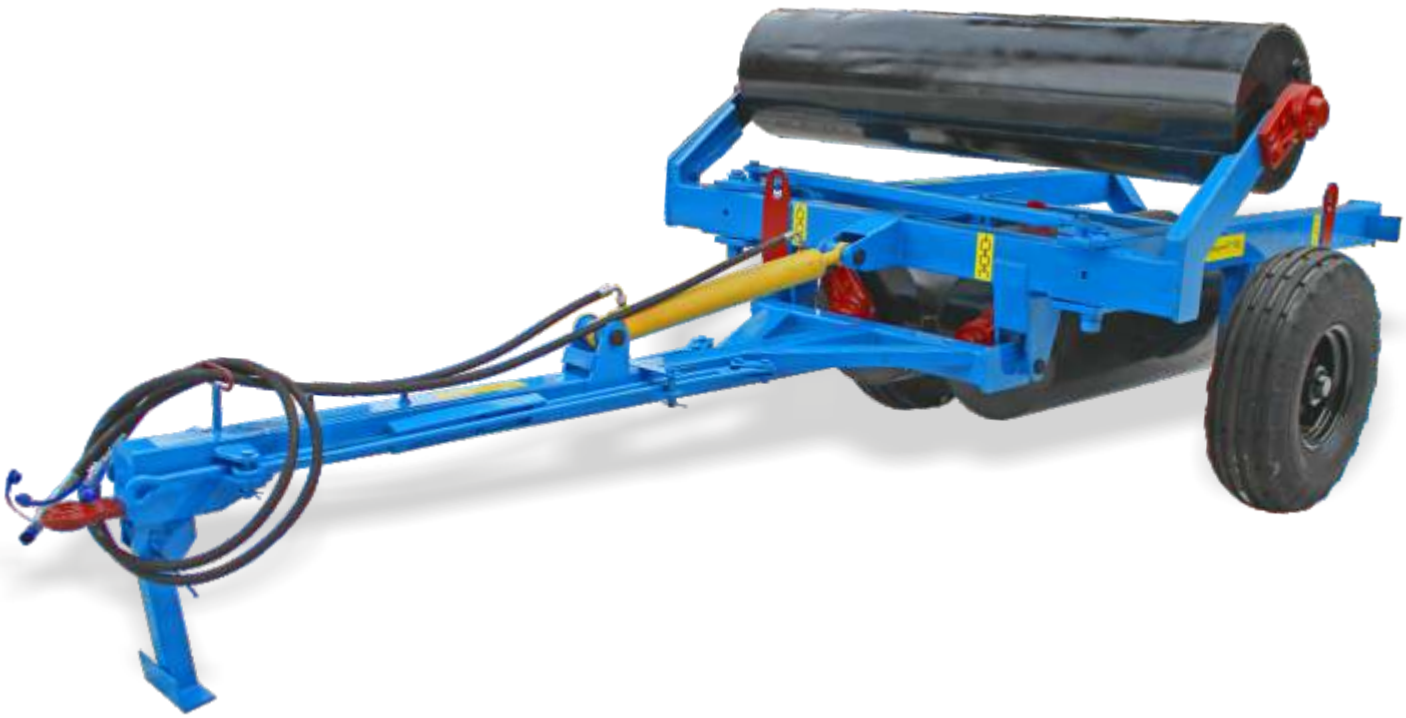

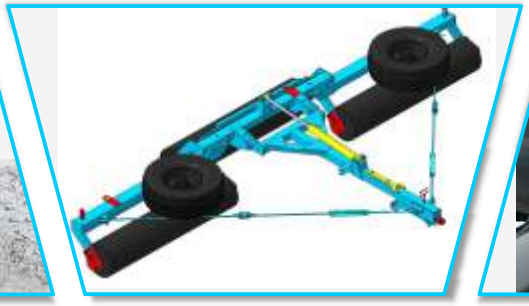

Smooth water-filled field roller is intended to compact the surficial soil layer prior to or after the sowing, to pack green manure before turning it into soil. The field roller consists of three sections. Each section contains a smooth hollow cylinder. Cylinders are filled with water. By changing amount of water therein, specific pressure of the roller onto soil will be adjusted.

Basis technical specifications*	KN-6H
Rated working width, m	6.0
Productivity during a hour of basic time, ha	7.2 at most
Working speed, km/h	12 at most
Towing speed, km/h	20 at most
Diameter of the cylinder, mm	470
Aggregation method	Tractor mounted
Required tractor power, hp	80 at least
Overall dimensions in working position (length, width, height)	3580x6240x1025
Overall dimensions in towing position (length, width, height)	4930x2290x1670
Weight of basic configuration, kg	1460

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KN-9.2H Smooth water-filled field roller is intended to compact the surficial soil layer prior to or after the sowing, to pack green manure before turning it into soil. The field roller consists of five sections. Each section contains a smooth hollow cylinder. Cylinders are filled with water. By changing amount of water therein, specific pressure of the roller onto soil will be adjusted.

Basis technical specifications*	KN-9.2H
Rated working width, m	9.2
Productivity during a hour of basic time, ha	11 at most
Working speed, km/h	12 at most
Towing speed, km/h	20 at most
Diameter of the cylinder, mm	470
Aggregation method	Tractor mounted
Required tractor power, hp	80 at least
Overall dimensions in working position (length, width, height)	3580x9380x980
Overall dimensions in towing position (length, width, height)	6500x2280x1500
Weight of basic configuration, kg	1890

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It is intended for transportation and distribution (with the possibility of self-filling) of technical water within the boundaries of the farm, water storage and watering of animals on farms. It can be used for washing agricultural machines and transporting water for extinguishing fires.

Basis technical specifications*	VR-4	VR-6
Aggregation method	trailing	
Capacity, m3	4	6
Towing speed, km/h	5	
Pump, brand	SCL-00A (centrifugal-vortex)	
pump supply, l/sec	6	
push, m	30	
power, kV	5	
Overall dimensions (length, width, height), m	4,0x1,8x2,3	6,0x1,8x2,3
Massa (without water), kg	1200	1600

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Wedged disc
Ø460 mm, Ø520 mm

Wedged disc
Ø350 mm

Toothed ring
Ø470 mm, Ø530 mm,
Ø550 mm

Toothed ring
Ø360 mm

Star-weeled
Ø410 mm (cast iron)

Wedged disc
Ø350 mm

Star-weeled
Ø400 mm (cast iron)

Star-weeled disc
Ø460 мм,
Ø520 mm (cast iron)

Star-weeled disc
Ø520 mm (steel)

Crosskill Ø470 mm
(cast iron)

Crosskill Ø530 mm
(cast iron)

KR knife of the crushing
field roller
(steel of 45H grade)

3KKSh bearing casing
assembled

UD hub

KKSh bearing casing
assembled

KZK bearing casing
assembled

1 - KZK-6.02.004 bearing casing assembled
2 - KZK-6.20.009 sleeve
3 - Bushing collar 2.2-65x90 GOST 8752-89
4 - Bearing 3609 GOST 5721-75
5 - Washer KZK-6.02.006
6 - Washer KZK-6.02.007
7 - Nut M36-6H.019 GOST 5915-70
8 - Grease packing gland 1.2.Ц6(M10x1) GOST 19853-74
9 - Bearing body lid KZK-6.02.005
10 - Bolt M8-6gx20.58.019 GOST 7798-70

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