

FERTILIZER SPREADERS



AGRICULTURAL ENGINEERING COMPANY



HF AGRO– EFFICIENT AGRICULTURAL MACHINERY.

The company develops and manufactures many units, functional and reliable machinery for all types of tillage, plant protection and nutrition, machinery for packaging and storage of products, and much more. The range of the brand is wide, and is designed for the productive operations of a modern agricultural enterprise

WIDE RANGE

The HF Agro range includes reversible ploughs for ploughing on various soils, disc, tine, rotary and trail harrows, subsoilers and milling chisel ploughs, field cultivators and seedbed preparation units. The product range also includes a large selection of spreaders, applicators for liquid fertilizers and ammonia, grain packers and unloaders, field rollers for soil compacting before and after sowing.

EXCLUSIVE SOLUTIONS

HF Agro offers exclusive solutions to each farmer: machinery adapted to work in local conditions, taking into account specific soil and climatic characteristics, and to the exact needs of each farm. The implements that provide high productivity, low operating costs and excellent tillage.

A separate area of the company's activity is active bacterial complexes for plant nutrition and protection.

The company's operations are not limited to the agricultural sector only: the HF Agro model range also includes multi-purpose units for road construction and utilities industries, machinery for winter road maintenance

OUR PRIORITIES

The priority area of HF Agro is the pursuit of innovations and the creation of new unique products considering the individual needs of farmers. In the face of ever-changing requirements for farming, the company is ready to provide farmers with the best machinery and become a reliable partner for their customers

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VIBRATING FERTILIZER SPREADERS



up to 36 m



up to 3000 l

VIBRATING FERTILIZER SPREADERS



HF-52lv series spreaders are characterized by a wide variety of models and the precision of the substances to be spread, whether it is fertilizer or salt, seeds or granules. Nonetheless, the spreading uniformity is maintained regardless of the driving speed and the type of used fertilizer.

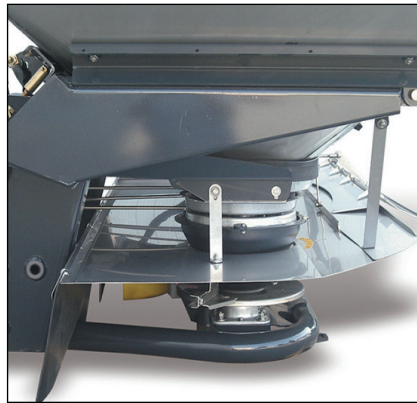
Manufacturability, maximum utilization of stainless steels, proven design and modularity (with a wide choice of capacities and working widths) are the key parameters for the success of the HF-52lv series spreaders.



INNOVATIVE VIBRO SYSTEM

The absence of internal agitators optimizes the spreading range and prevents the formation of dust.

This system allows introducing mineral fertilizers and seeds with increased accuracy.



ROBUST FRAME

Payload up to 3600 kg.

Robust structure and flexible coupling due to three different hitch positions.

Special profiles for fast, efficient cleaning.



OPTIMUM SPREADING

Forged blades of special profiles and a stainless steel barrier above the spreading discs for optimum lateral spreading.

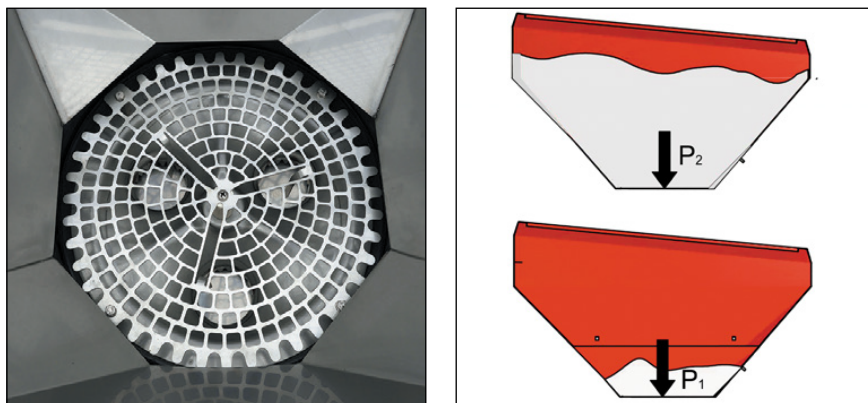


In conventional fertilizer and seed spreaders, the spreading system is fed by gravity (along the tilted surfaces of the hopper) and moving mechanical agitators immersed in the contents of the hopper.

This system has many disadvantages: metal mixers hit the fertilizers, causing friction and abrasion of the granules, often destroying them (decreasing their properties). The agitators also generate heat when moving, thus causing agglomerates to form, which can clog the passages of the spreading system. Where the agitators are used to spread the seeds, when they rotate, they can damage the seeds, which can affect their germination.

VIBRO SYSTEM is an innovative system completely made of stainless steel, which is free from all such disadvantages! There is no friction, which means that fertilizer granules are not destroyed, and the seeds are not damaged (and their germination does not decrease).

Thanks to VIBRO SYSTEM, it is possible to introduce substances such as powdered lime, sulphates or granular organic fertilizers, which usually cannot be introduced with conventional systems. Furthermore, the spreaders are recommended for broadcasting various seeds and moistened rice.



An important component of the system is a vibrating disc mounted on the bottom of the hopper before the feeding system. When the power take-off is switched on, the hopper bottom vibrates constantly during the entire feeding time.

A stainless steel sieve grid is securely mounted above the swinging bottom, designed for: trapping excess fertilizer:

- which could disturb the uniformity of the feed to the spreading system
- reducing and maintaining a constant fertilizer pressure on the feed system, in order to provide a continuous dose of fertilizer for any volume of product in the hopper

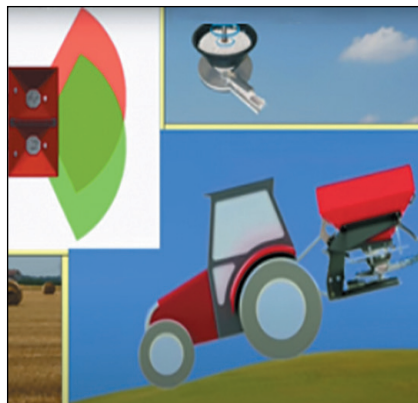
VIBRATING FERTILIZER SPREADERS



DISTRIBUTION CONTROL

Such a technical solution allows for optimal positioning of the introduced fertilizer output based on the fed quantity. The more fertilizer there is on the disc when moving from one blade to the other, the greater the output, which is automatically controlled.

Moreover, you can manually set the advance or delay of the fertilizer to the disc to compensate for local introduction of fertilizer at the edges or in the centre of the run.

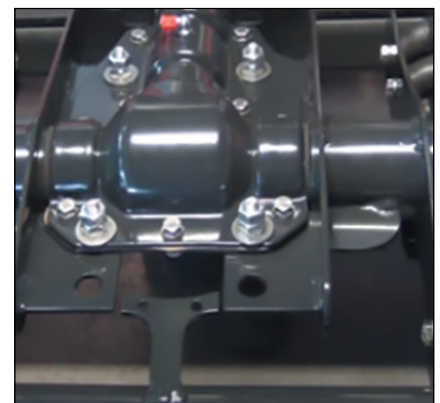


LATERAL FEED

The HF-52lv series spreaders (in contrast to conventional systems with fertilizer falling from the top) use lateral feeding of fertilizer to the blades.

Such a solution ensures optimum spreading range even on uneven ground: the blades are always fed from the side at the same angle, even when the unit is swinging or working on a slope.

Another advantage is that the fertilizer granules (or seeds) remain intact and do not collapse, as is the case in conventional top-feed systems, when fertilizer falling onto the disc is repeatedly broken by continuous movement of the blades.



TPS - TRANSMISSION PROTECTION SYSTEM

The HF-52lv series spreaders are equipped with an innovative and efficient propulsion system using an angular counter drive with swinging motion.

This system makes it easy and efficient to check the exact length of the universal-joint shaft. When installing the wrong length, the bend of the universal joint is absorbed by the rubber couplings, which, under the action of this load, deform and collapse, but at the same time they protect the transmission unit.

The required length of the universal joint can be easily determined by the two marks on the frame and on the transmission unit. Thus, the TPS allows for working safely in all operating conditions.

VIBRATING FERTILIZER SPREADERS WITH ELECTRONIC CONTROL



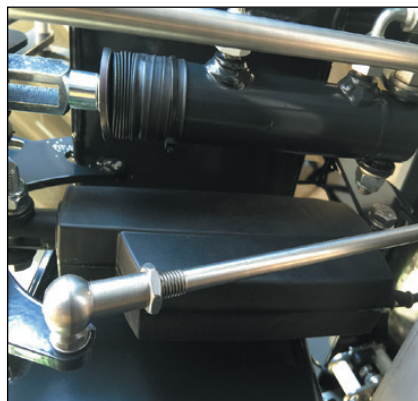
The HF-52lv series spreaders can be equipped with an electronic control and weighing system for even more precise uniformity of the spreading material, regardless of the driving speed and the characteristics of the fertilizer being introduced.



FEED CONTROL WITH ELECTRONIC CONTROL

The 7" colour monitor has a built-in GPS receiver that detects and transmits the actual speed of movement to the system without the need to install sensors on the tractor wheel.

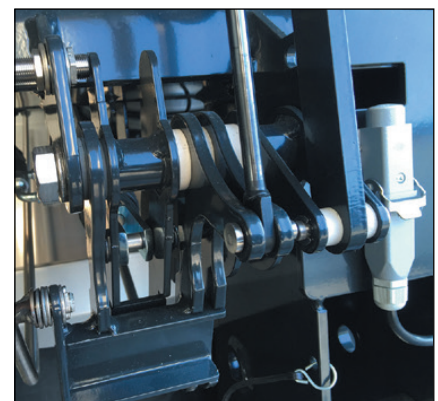
Numerous spreading tables allow you to create personalized fertilization programs and transfer them via Bluetooth.



DOUBLE HYDRAULIC AND ELECTRONIC CONTROL

The control serves to open and close the feed and its subsequent adjustment.

Instant opening and closing at the beginning and at the end of the field is ensured by two hydraulic cylinders, and the continuous adjustment of the holes is controlled by two servomotors.

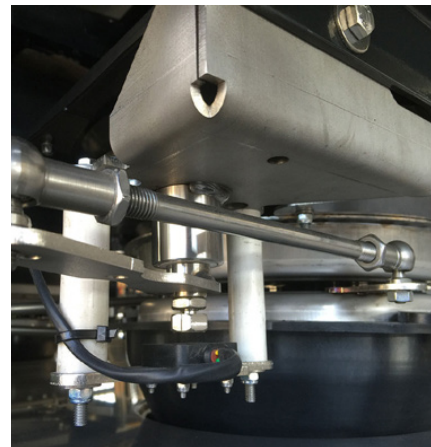


ALARM SENSORS

Two sensors detect the on/off state of the hydraulic system and control the feed.

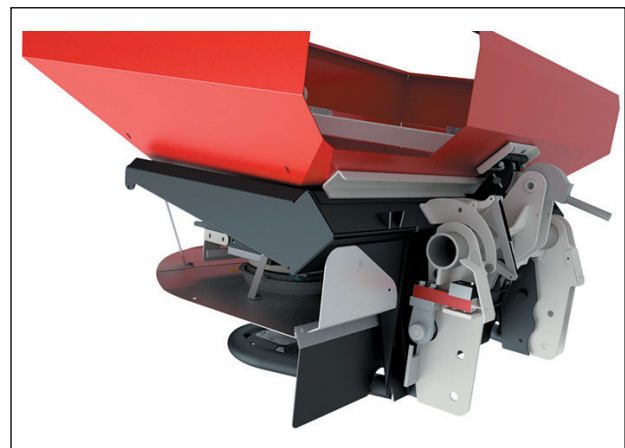
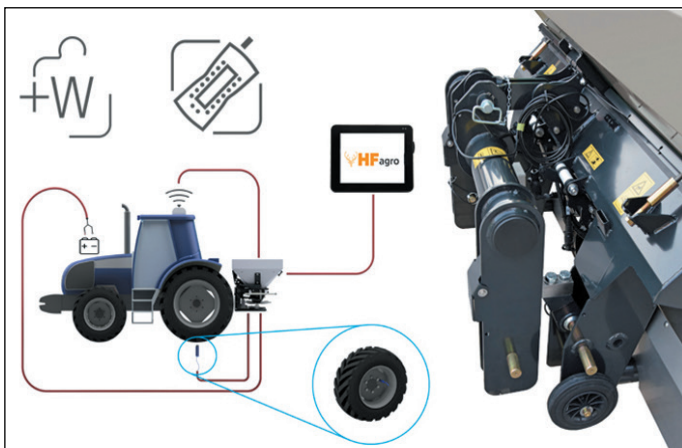
To prevent fertilizer spreading outside the field, the GPS gives a signal to turn on the feed after the tractor has travelled from the beginning of the field a distance equal to the spreading range of the fertilizer spreader.

VIBRATING FERTILIZER SPREADERS WITH ELECTRONIC CONTROL



ELECTRONIC CONTROL OPTION

Such an option offers to adjust the required dose automatically depending on the feed speed of the two servomotors. The system allows you to instantly change the applied dose, turn off spreading on one side, check the introduced amount and the area of cultivated land, while sitting comfortably in the tractor cab.



ELECTRONICS AND WEIGHING FOR MAXIMUM PERFORMANCE

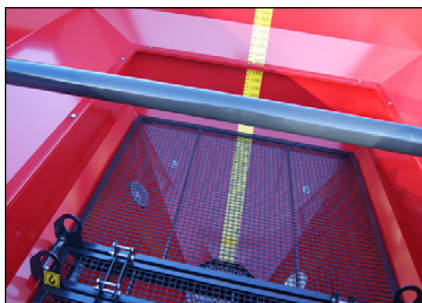
Two 5t load cells are installed on the double frame, continuously measuring the actual weight loaded into the hopper, driving every fertilizer and every physical change to the spreading curve to deliver exactly the right amount per hectare.

This system provides accurate values even with field slopes of up to 12% in all directions.

VIBRATING FERTILIZER SPREADERS WITH ELECTRONIC CONTROL



STAINLESS STEEL HOPPERS, SIDES AND PARTS



GRADUATED SCALES ON HOPPERS AND SIDES



ROBUST THREE-POINT HITCH



OCTOGONAL BOTTOM HOPPER



LADDER FOR CONTROL AND CONVENIENCE



UNIVERSAL-JOINT SHAFT WITH TORQUE LIMITER



HYDRAULIC UNIT FOR FERTILIZATION ON THE BORDERS OF THE FIELD

SPECIFICATIONS

	HF-52118v			HF-52124v			HF-52128v			HF-52136v		
Capacity, l	850	1450	1800	1400	2000	3000	1400	2000	3000	1400	2000	3000
Working width, m	up to 18			up to 24			up to 28			up to 36		
Electronic control	optional											
Weighing system	optional											
Weight, kg	350	390	405	480	520	600	480	520	600	480	520	600
Overall dimensions (length, width, height), mm	1233x 2350x1072	1233x 2350x1361	1233x 2350x1439	1789x 2399x1218	1789x 2399x1443	1789x 2399x1663	1789x 2399x1218	1789x 2399x1443	1789x 2399x1663	1789x 2399x1218	1789x 2399x1443	1789x 2399x1663



FERTILIZER SPREADERS



10-36 m



900-3500 l

FERTILIZER SPREADERS



Double disc fertilizer spreaders are available in many configurations with tank volumes from 900 to 3500 litres. All fertilizer spreaders are equipped with a protective tarpaulin and technological transport wheels.

Fertilizer spreading widths from 10 to 36 m.



SMART HYDRAULICS

The control is carried out from the tractor cab and provides for quick opening and closing of the spreader valve, which allows for introducing fertilizer directly from the beginning of the field without gaps and instantly turn off spreading at the end of the field without over-consuming fertilizer.

Thanks to the hydraulic valve, fertilizer can be spread separately on the right and left side of the unit.

TRAILED VERSION

Models with a tank volume of 2000 L or more are also trailed to reduce the load on the tractor hitch and the possibility of being coupled with a tractor of lower power.

MULTI-PURPOSE LOADER

The multi-purpose loader can be added to any mounted fertilizer spreader, which allows one tractor operator to independently load the spreader from the big bags without any problems.

Available in 1000 and 1200 kg models.

FERTILIZER SPREADERS



Supports with wheels as standard for the convenience of manual movement of the fertilizer spreader uncoupled from the tractor by one person.



Road lighting for safe transportation of fertilizer spreaders on public roads.



To protect the tractor cab from technological materials, additional protective screens are installed on the HF-521/522 series spreaders.



All hoppers are equipped with a protective cover to protect the introduced substances from moisture and dust.

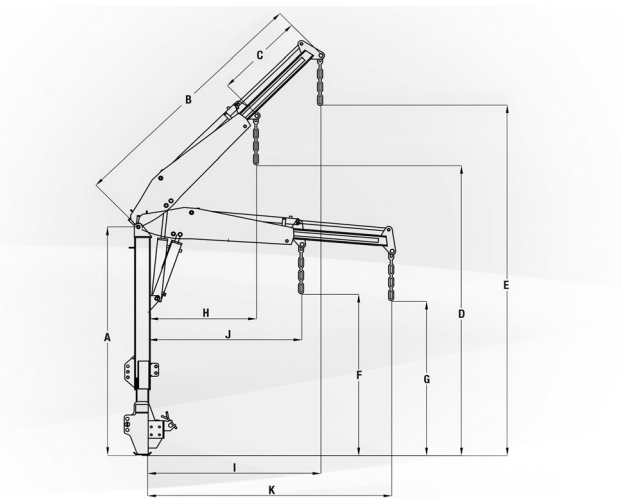


Bottom safety net to prevent coarse clods of fertilizer from entering the feed system.

MULTI-PURPOSE LOADER



The HF Agro Multi-Purpose Loader will become the ultimate helper when lifting heavy loads on your farm. Thanks to the hydraulic system connected to the tractor's three-point suspension system, you can independently lift loads without additional assistance, safely and easily. The multifunctional load lift is also needed to organize machinery in the garage. The unit is manufactured as efficiently as possible, therefore it can be used both together with a fertilizer spreader, and separately. It helps you to easily pour large packs of fertilizer into the spreader. By purchasing a loader, you save your money and time.



SPECIFICATIONS			
		MOUNTED CRANE "SPECIAL"	MOUNTED CRANE "PLUS"
Chassis height in closed position	A (mm)	2270	2520
Rod length	B (mm)	2459	2959
RETRACTABLE ROD LENGTH	C (mm)	850	900
Height of the rod extension in the closed position of the retractable rod	D (mm)	3005	3505
Height of the rod extension in the open position of the retractable rod	E (mm)	3711	4211
Height of the retracted rod in the closed position of the retractable rod	F (mm)	1337	1587
Height of the retracted rod in the open position of the retractable rod	G (mm)	1173	1423
Distance between the end of the rod and the main chassis in the closed and open position of the retractable rod	H (mm)	801	1051
Distance between the end of the rod and the main chassis in the retractable rod and the rod in the open position	I (mm)	1272	1772
Distance between the end of the rod and the main chassis in the retractable rod and the rod in the closed position	J (mm)	1449	1699
Distance between the end of the rod and the main chassis in the retractable rod and the rod in the open position	K (mm)	2281	2781

SPECIFICATIONS			
	Lifting capacity (retractable rod closed)	Lifting capacity (retractable rod open)	Unit weight
MOUNTED CRANE "SPECIAL"	1000 kg	600 kg	306 kg
MOUNTED CRANE "PLUS"	1200 kg	850 kg	410 kg

SPECIFICATIONS								
	HF-5219	HF-52112	HF-52115	HF-52118	HF-52120	HF-52125	HF-52130	HF-52135
Tank volume, L	900	1200	1500	1800	2000	2500	3000	3500
Working width	10-36	10-36	10-36	10-36	10-36	10-36	10-36	10-36
COUPLING TYPE	hinged	hinged	hinged	hinged	hinged	hinged	hinged	hinged
Required PTO speed	540	540	540	540	540	540	540	540
Working speed, km/h	8-12	8-12	8-12	8-12	8-12	8-12	8-12	8-12
Number of wheels, pcs	-	-	-	-	-	-	-	-
Overall dimensions (length, width, height), mm	1000x2050x1320	1130x2050x1320	1260x2050x1320	1390x2050x1320	1520x2050x1320	1650x2050x1320	1780x2050x1320	1920x2050x1680
Weight, kg	406	440	474	508	542	576	610	700

SPECIFICATIONS						
	HF-52220M	HF-52225M	HF-52230M	HF-52225T	HF-52230T	HF-52235T
Tank volume, L	2000	2500	3000	2500	3000	3500
Working width	10-36	10-36	10-36	10-36	10-36	10-36
Coupling type	trailed	trailed	trailed	trailed	trailed	trailed
Required PTO speed	540	540	540	540	540	540
Working speed, km/h	8-12	8-12	8-12	8-12	8-12	8-12
Number of wheels, pcs	2	2	2	4	4	4
Overall dimensions (length, width, height), mm	2550x2050x2600	2550x2050x2600	2550x2050x2600	2550x2050x3300	2550x2050x3300	2550x2050x3300
Weight, kg	780	850	920	950	1020	1090





TRAILED BELT FERTILIZER SPREADERS



24 m



from 80 h.p.



10,4 m³

TRAILED FERTILIZER SPREADERS



Powerful, easy-to-use units that provide even, wide distribution. A simple mechanical drive ensures that the amount of fertilizer spread is proportional to the feed, allowing a constant amount of fertilizer to be maintained over the entire surface. The structure and design of the unit allows working with large volumes, as well as to use wet fertilizers, compost and other materials (lime, sand, salt, etc.).



SINGLE DISTRIBUTION WINDOW



Ø700 MM BLADE



SLOPE RANGE FINDER

TRAILED FERTILIZER SPREADERS



**REMOVABLE TARPAULINS WITH
ATTACHING HOOKS**

All hoppers are equipped with protective tarpaulins to protect the introduced substances from moisture and dust.



GALVANIZED COATING MESH

Special mesh with a protective galvanized coating to exclude large caked fertilizer lumps from entering the feed system.



COMPLETE ELECTRICAL KIT

Road lighting for safe transportation of fertilizer spreaders on public roads.



**SPREADING DISCS, DISC GUARDS AND
PULLEY BOX
MADE OF STAINLESS STEEL**

Use of stainless steel for the main elements in contact with the fertilizer to maximize the life of the fertilizer spreaders.



PVC ROLLERS

Corrosion-resistant non-metallic PVC support rollers.



HYDRAULIC CUTTER

TRAILED FERTILIZER SPREADERS



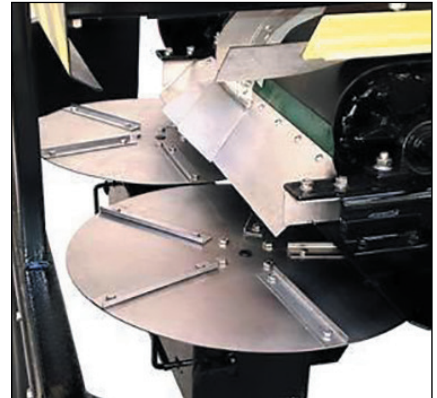
SPECIAL DEVICE FOR DISTRIBUTING BULK FERTILIZERS

Optional special device for uniform distribution of fine bulk solids.



WORKING AREA LIMITER BUMPER

Optional protective bumper for the working area.



SPECIAL DISCS FOR SPREADING FREE RUNNING FERTILIZERS



FINAL FILLING ARRANGEMENT

Optional trowels for embedding the introduced technological material.



LATERAL FILLING ATTACHMENT

Optional conveyor for lateral fertilization.



ATTACHMENT FOR DOUBLE-FURROW FERTILIZATION

Optional dual-furrow subsoil fertilization system.



ATTACHMENT FOR LATERAL DISTRIBUTION

Optional deflectors for lateral fertilization.



ATTACHMENT FOR SIDE DISTRIBUTION

Optional housing for lateral spreading of fertilizers.



SWIVEL HITCHING ATTACHMENT

Optional swivel hitch to increase the maneuverability of the tractor coupled with a fertilizer spreader.

TRAILED FERTILIZER SPREADERS



STAINLESS STEEL BEARING

Increase the durability and corrosion resistance of the spreader by installing optional stainless steel bearings and rollers.



STAINLESS STEEL ROLLERS



SPECIAL WIDE UNLOADING WINDOW FOR COMPOST

Special optional wide discharge port for composting.



HYDRAULIC PARKING BRAKE

Optional hydraulic parking brake for safe parking of the spreader.



UNIVERSAL JOINT DRIVE



DOUBLE HYDRAULIC CUTTER

SPECIFICATIONS								
	HF-52320	HF-52330	HF-52336	HF-52345	HF-52355	HF-52365	HF-52372	HF-52385
Tank volume, L	2100	2500	3600	4500	5500	6500	7200	8500
Carrying capacity, kg	2450	30000	4300	5400	6600	7800	8640	10000
Spreading width, m	18	18	18/24	18/24	18/24	18/24	18/24	18/24
Track, mm	1600	1600	1750	1750	1900	1950	1950	1950
Overall dimensions (length x width x height), mm	3780x2005 x1875	3780x2005 x1955	4582x2250 x2060	4582x2250 x2180	4980x2290 x2100	4980x2500 x2180	6090x2500 x2370	6090x2500 x2370
Weight, kg	1049	1146	1522	1558	1850	1942	2377	2370



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