

PRODUCTS 2021

MULTIVA





GOOD CROPS ARE NOT COINCIDENCE

Multiva manufactures high-quality, easy-to-use agricultural equipment in the northernmost farming country in the world.

Our focus is on resolving the challenges of our farming customers by developing modern agricultural machinery, all the while respecting and protecting the environment.

MULTIVA
CULTIVATING THE FUTURE



NEVER STOP IMPROVING

Just like farmers, Multiva will always continue to look for better results and more efficient technologies.

Reliability and high quality in our machines have always been a key factor, but we also seek to support future-proof and sustainable farming methods.

Multiva's endeavor is to serve today's modern farmer with state-of-the-art agricultural machinery that improves farming efficiency. Our uniqueness is the result of everything that we do. We offer reliability, durability, as well as recognized and proven quality for work in the fields with the best resale value.

Our focus is on the customer, the farmer, the agricultural entrepreneur who wants to run a successful business now and in the future. Our mission is to develop the best agricultural machinery for today's

and tomorrow's market so that you as a farmer can look forward to the future with confidence. Multiva machines aim to provide the best crops, profitable cultivation and fertile soil for present and future generations.

Multiva's motto **Cultivating the Future** emphasizes the fact that the whole purpose of Multiva's existence is related to both ensuring the future of agriculture and its continuous development.

MULTIVA



MULTIVA S-TINE HARROWS

The working principles of S-tine harrows

- TRUE KNOWLEDGE OF THE SOIL

A good S-tine harrow creates a smooth seed bottom and field surface with the fewest possible runs, making the conditions for sprouting most favorable.

An S-tine harrow should also produce a good crumb structure and the right kind of distribution of soil particles. This is particularly important for heavier soil types that require finer soil near seed to ensure proper moisture for germination, along with more coarse soil on the surface of the field to avoid siltation.

The operation and technological innovations of Multiva harrows are based on meeting these requirements. The optimum tine geometry ensures a smooth seed bottom and efficient crumbling. Advanced levelling board and cage roller technologies enhance the formation of the right soil structure.



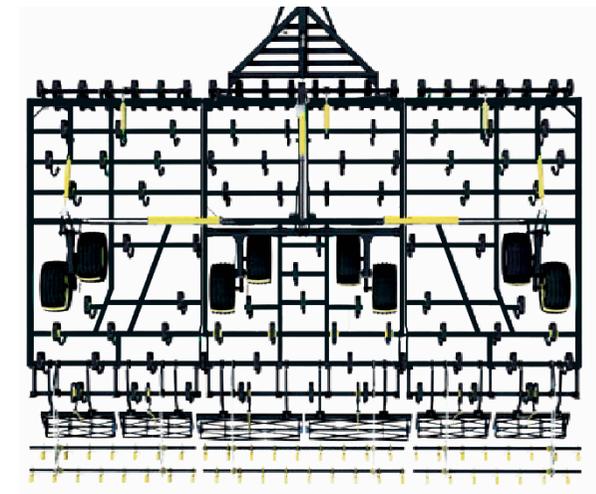
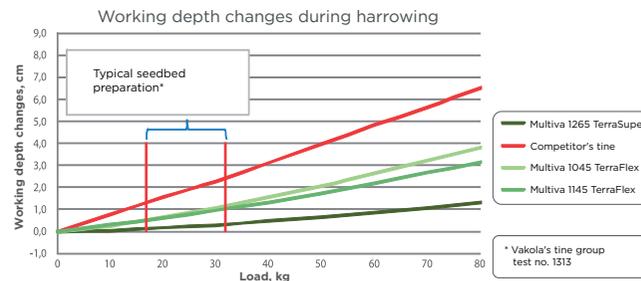
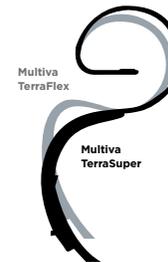
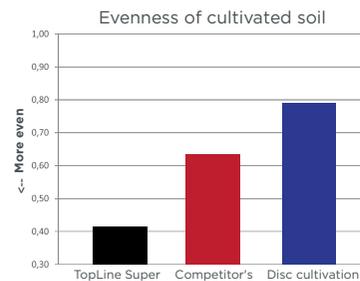
MULTIVA S-TINE

- THE MOST EVEN CULTIVATION RESULTS BY RESEARCH

The Department of Agricultural Sciences of the University of Helsinki has studied factors contributing to the evenness of the seedbed produced by s-tines. The study examined the flexibility of s-tines under a workload as well as the evenness of the seedbed in practical tests. The study found that Multiva tines produced the most even working depth under a workload along with the most even seedbed.

The evenness of cultivated soil that Multiva TerraFlex and TerraSuper tines achieve is based on their unique tine geometry. Multiva s-tines maintain their working depth better than the competition. For example, when moving from soft to hard soil.

The impact of S-tine size, distribution and blade width on cultivation characteristics, Pro Gradu Thesis, University of Helsinki, 2012



Excellent clog-proofness

Particular attention has been paid to the clog-proofness of Multiva harrows. It is a very important factor in minimum tillage, with lots of straw and plant residue on the field. Multiva harrows have tines divided on seven, eight, or even nine axles.



Safe on the road

Multiva TopLine 600-700 models have a narrow transport width of three meters. They are safe to transport, and fit even the narrowest roads. Brakes, lights and additional reflectors are also available as accessories.

Efficient crumbling and levelling

A new addition to the accessory selection together with rear levelling board is a rear cage roller. The combination helps to create very uniform and fine seedbed and field surface even in the heaviest of soils.

Multiva's multi-board technology is providing excellent levelling and crumbling capabilities. TopLine Cross models are equipped with two levelling boards that cover the width of the harrow. The hydraulically controlled boards can be adjusted mechanically and in relation to each other. TopLine Cross models can be equipped with an optional rear levelling board.



TOPLINE CROSS

- SUPERIOR CULTIVATION

TopLine Cross is at its best when cultivating heavy clay soils. The harrow is equipped with eight tine rows. The spacious and clog-proof harrow is perfect for reduced tillage machinery chain.

Cross is a superior harrow for seedbed cultivation of precultivated soil. The harrow is suitable for special applications, such as cultivation before sugar beet seeding. The harrow is capable of reaching cultivation speeds of up to 15 km/h.



MULTIVA
STORY

The fields of Jussi and Satu Taruma's farm in Jokela, Tuusula, consists mainly of heavy and medium clay soils. The cultivation window for heavy clay soils, in particular, is very short, requiring powerful cultivation equipment. All spring cultivation fields are disc cultivated in the autumn and prepared for seeding with a harrow. Some areas have also required an additional shallow disc cultivation run in the spring. Last spring the farm switched to TopLine Cross 800.

"We were looking for an aggressive harrow that would be able to maintain the cultivation depth under varying conditions. The multiple levelling boards, heavy weight, sturdy tines and the large tyre surface area were definitely promising. We could also modify the harrow for stubble cultivation by removing the middle levelling board and some tines," Jussi Taruma says.

Satu Taruma, who has been mostly driving the harrow, has been pleased with the consistency and adjustability of the machine. "I have not had to make many adjustments between soil variations. The harrow ran smoothly, performing on an excellent level in terms of both the cultivation and the seedbed. We were able to finish all fields with two passes. The double levelling boards in the front levelled and crumbled the ground, and the dual blade of the front levelling board ran smoothly without clogging. The cage roller and the rear harrow worked well together."

"The quality objectives were achieved with less passes than previously, so we are very happy with the purchase", Jussi and Satu conclude.

**STRONG AND
TORSIONALLY RIGID FRAME**

The chassis of Multiva harrows have two or three strong transverse frame beams and 60 mm tine axles. The twin or triple beam structure and heavy tine axles, combined with Double Grade special steel, add considerably to the torsional rigidity of the frame and the lifespan of the harrow.

In TopLine Cross and TopLine Super XL, the height of the frame beams is 120 mm. In practice, that means 54% stronger frame structure than when using 100 mm frame beams.



TECHNICAL DATA: TOPLINE CROSS

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TopLine Cross	600	700	800	900	1000
Number of tines	73	83	93	105	123
Tine spacing, mm	80	80	80	80	80
Number of tine axles	8	8	8	8	8
Working width, cm	600	680	780	880	1000
Frame length, cm	410	410	410	410	410
Transportation width, cm	300	300	360	360	440
Transportation height, cm	315	355	385	430	440
Power requirement, hp	120	150	180	210	240
Tyre size	340/55-16	340/55-16	340/55-16	340/55-16	340/55-16
Weight, kg	5020	5620	6440	7110	8390

* Traction power requirement is indicative and is defined for a working depth of 5 cm



Front support wheels

Front support wheels for side sections are available as accessories for TopLine Super XL and TopLine Cross harrows. Front support wheels smoothen machine travel with larger working widths. This becomes especially important when using higher cultivation speeds

Big flotation tyres

Multiva harrows have big flotation tyres and sturdy wheel hubs. The largest tire size, 340 / 55-16, is standard on TopLine Cross and Super XL models.



TOPLINE SUPER XL

- MULTI-PURPOSE METHOD

The TopLine Super XL represents the latest generation of S-tine harrows, suitable for cultivating large areas. The easy to use and versatile machine makes cultivation run smoothly even in harsh conditions.

The cage roller and the rear harrow are easy to adjust with a handle that is delivered with the unit. The TerraSuper 12x65 tine makes it possible to make seedbed cultivation directly in stubble. The TopLine Super is a high-performance harrow, reaching a cultivation speed of up to 15 km/h.



MULTIVA

STORY

Veikko Kuusinen The Metsola farm in Pertteli, Finland, mainly produces cereals, such as wheat, barley and oats but also rapeseed and hayseed. The Metsola farm features soil types ranging from silt to loam clay. In the spring, Kuusinen cultivates the stubble directly with the TopLine Super.

Kuusinen utilises the Multiva DiscMaster disc cultivator as well as the TopLine Super XL harrow. He is pleased with his harrow. "TopLine Super XL provides excellent flowing through of plant residue, and it is heavy enough for reaching the optimal harrowing depth. The harrowing result is even, and the harrow runs steadily along the soil," Kuusinen says. "Based on my experience, I find that traditional s-tine harrows are too light for my farm's soil and cultivation methods," he adds.

Kuusinen has positive experiences with Multiva. In fact, he has had several Multiva machines. He switched to the first generation Multiva TopLine Super harrow several years ago due to the fact that it was among the first stubble harrows on the market. He is especially pleased with Multiva's warranty: "Multiva has performed excellently in aftersales marketing."

TOPLINE SUPER XL MULTI-PURPOSE METHOD

One harrow for every application

Thanks to its excellent cultivation qualities, the same harrow can be used for seedbed preparation and stubble cultivation in the spring, as well as for straw harrowing in the autumn. Furthermore, the TopLine Super XL harrow enables shallow cultivation in the autumn following the harvest. The harrow tines can be equipped with equipped with goosefoot tine points to combat weeds.



TECHNICAL DATA: TOPLINE SUPER XL

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TopLine Super XL	600	700	800	900	1000	1250	1500
Number of tines	59	67	77	87	101	129	143
Tine spacing, mm	100	100	100	100	100	100	100
Number of tine axles	9	9	9	9	9	9	9
Working width, cm	600	680	780	880	1000	1300	1450
Frame length, cm	410	410	410	410	410	410	410
Transportation width, cm	300	300	360	360	440	440	440
Transportation height, cm	310	350	380	425	440	440	440
Power requirement, hp	140	180	220	250	280	360	400
Tyre size	340/55-16	340/55-16	340/55-16	340/55-16	340/55-16	340/55-16	340/55-16
Number of tyres	8	8	8	8	10	10	14
Weight, kg	4230	4880	5650	6090	7370	9320	11025

* Traction power requirement is indicative and is defined for a working depth of 5 cm



Open structure

The eight tine axles of Avaran, evenly distributed over the whole frame, create the foundation for an open, plant residue penetrating structure. Long, 3.3 meter frame allows a generous distance between the tine axles. The optimum tine distribution for excellent penetration has been tried and tested.

Full cut with goosefoot tine point

Straight goosefoot tine points are available for both Multiva Avaran and TopLine Super XL harrows as accessories. With goosefoot points, Avaran produces a very smooth seedbed with up to 12 cm tine spacing. Goosefoot point is a very effective tool for the prevention of weeds. Therefore Avaran with goosefoot points is an excellent cultivator for organic farming as well.



AVARAN

- VERSATILE PERFORMANCE

Multiva Avaran is an S-tine harrow for efficient seedbed preparation of lightly cultivated, minimum tillaged and plowed soil. Avaran is also suitable for shallow stubble cultivation under good conditions with 12 cm tine spacing.

8 tine axles and strong 10x65 mm TerraSuper tines ensure good soil penetration and provide an effective and versatile combination for soil preparation.



AVARAN - VERSATILE PERFORMANCE

Impressive crumbling

The vibration of Avaran's TerraSuper tines is extremely aggressive. TerraSuper tine's ability to crumble the ground is in a class of its own. Strong vibration also improves the penetration of plant residue. Together with powerful rear accessories, Multiva Avaran's crumbling performance is high also in dry conditions. When using a denser tine spacing, Avaran cultivates the soil very efficiently and produces a smooth cultivation base.



TECHNICAL DATA: AVARAN

Avaran	500	600	700	800
Number of tines	63/42	75/50	87/58	97/64
Tine spacing, mm	80/120	80/120	80/120	80/120
Number of tine axles	8	8	8	8
Working width, cm	500	600	700	800
Frame length, cm	330	330	330	330
Transportation width, cm	300	300	300	300
Transportation height, cm	270	300	340	390
Power requirement, hp	110	140	180	220
Tyre size	250/65-14,5	250/65-14,5	250/65-14,5	250/65-14,5
Number of tyres	6	8	8	8
Weight, kg	3200	3620	3920	4220

* Traction power requirement is indicative and is defined for a working depth of 5 cm

Narrow transportation width

With Multiva Avaran harrows, transportation on road is easy and safe. All Avaran models have the transportation width of 3 m.

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Harrow that grows

Optima T is in a league of its own when it comes to adaptability. On some models, even the working width can be increased whenever necessary. Optima T600 can be extended into T700, and T800 can be extended into T900. The extensions are easy to mount with bolts.

Working depth that is easy to adjust

The working depth is easy to use, accurate and adjustable at 5 mm increments.



OPTIMA T

- BEST IN CLASS

Optima T is a powerful harrow for varying soils. Its spacious frame structure, flotation tyres and sturdy TerraFlex tines make Optima an excellent harrow for varying conditions.

Optima T has been used and tested on thousands of farms for years, and it has been proven to work on lighter soil types as well as on heavy clays.



MULTIVA STORY

Farm Manager Zsolt Podgornik works at 1500-hectare farm at Nagyhegyes in the Hajdúság region, one of the largest agricultural areas of eastern Hungary. The farm utilises modern technology.

All of the plants are seeded in the spring, which requires the use of high-capacity cultivators. When it was time to purchase a new harrow, the farm began looking for machines with the working width of at least 10-12 metres. "The large working width was a key requirement, but Multiva stood out with its premium quality," says Zsolt Podgornik.

The farm procured the Optima T 1250, which was commissioned in the spring of 2014 for seeding and fertilising. The harrow was pulled with a 400-hp tractor, cultivating at a high speed and a greater working depth. Thanks to the farm's approach, there was no need to worry about the soil drying up: seeding is done immediately after cultivation, after which the soil is irrigated.

In the spring of 2015, the farm performed shallow cultivation for sugar beet. "Optima T is suitable for fine work with exact adjustments.," Podgornik states.

OPTIMAL CULTIVATION

The Optima T models have a rigid, durable and highly work depth maintaining Multiva TerraFlex tine. Stable work depth produces a smooth seedbed and cultivation layer, making conditions for sprouting most favorable. Optima T is a heavy harrow, but large tires keep the set working depth regardless of the soil type. Thanks to its long chassis and seven tine axles, it is also very clog-proof.

TECHNICAL DATA: OPTIMA T

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Optima	T600	T700	T800	T900	T1000
Number of tines	79	91	105	117	129
Tine spacing, mm	75	75	75	75	75
Number of tine axles	7	7	7	7	7
Working width, cm	600	700	800	900	1000
Frame length, cm	300	300	300	300	300
Transportation width, cm	340	340	340	340	420
Power requirement, hp	100	120	140	160	200
Tyre size	250/65-14.5	250/65-14.5	300/65-12	300/65-12	300/65-12
Weight, kg	3100	3500	4450	4850	5190

* Traction power requirement is indicative and is defined for a working depth of 5 cm

Innovative solutions for new practices

At present, new farming practices are thriving. Hybrid farming, organic farming or no-till are examples of the innovative minds of farmers. Always looking ahead in a continuously changing world has led to new practices adopted by farmers around the planet. All the time, farmers evaluate their practices on the path to develop a more economic and environmentally sustainable way of producing food and products.

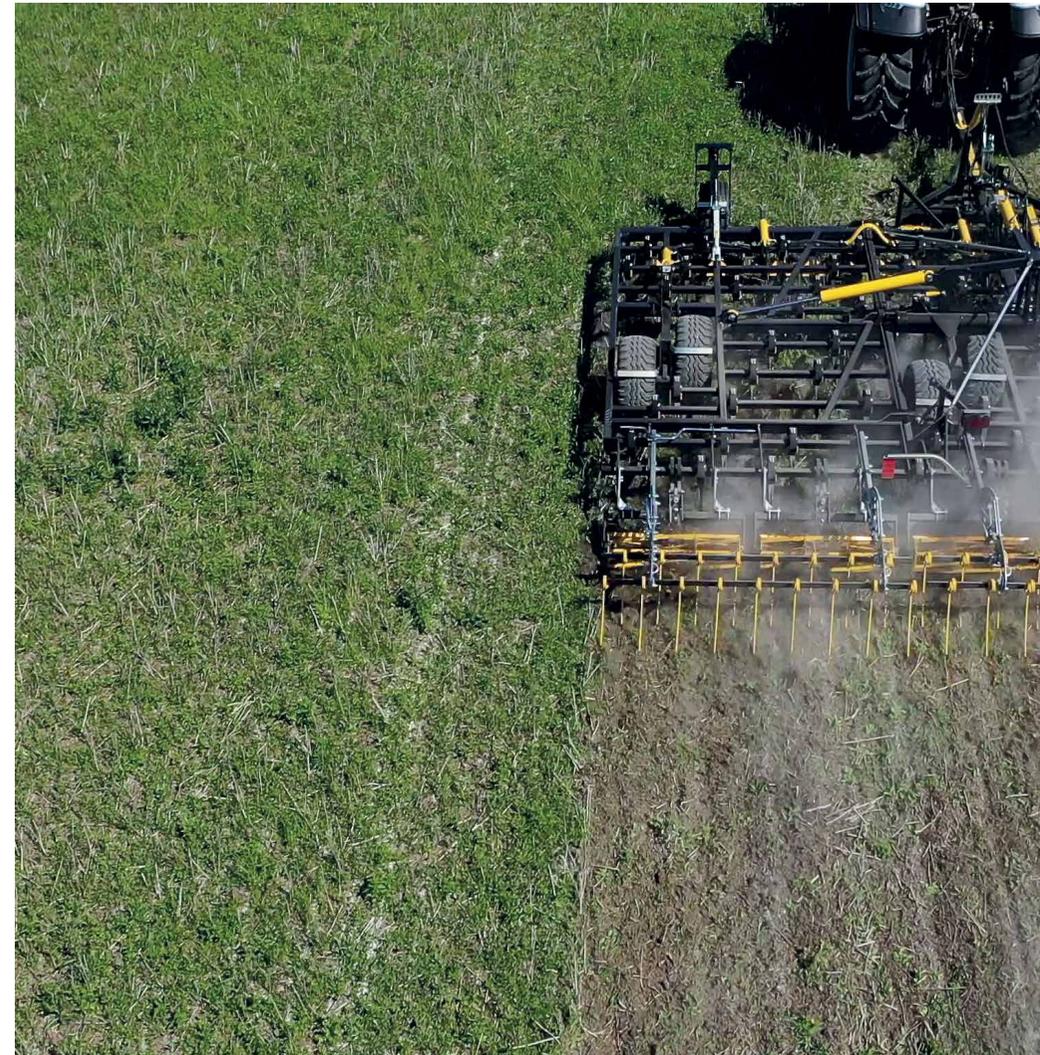
Multiva aim to meet the demand of the innovative spirits, looking for efficient machinery to accomplish the daily tasks. For the developing carbon farming methods Multiva offers tools with no-till seeders and minimum tillage equipment.

Solutions for weed management

To meet the requirement of farmers looking to combat weeds prior to drilling or after harvest, we offer the TopLine Super XL and Avaran harrows. The two harrows are equipped with our strong TerraSuper tine ensuring a minimum variation in terms of working depth.

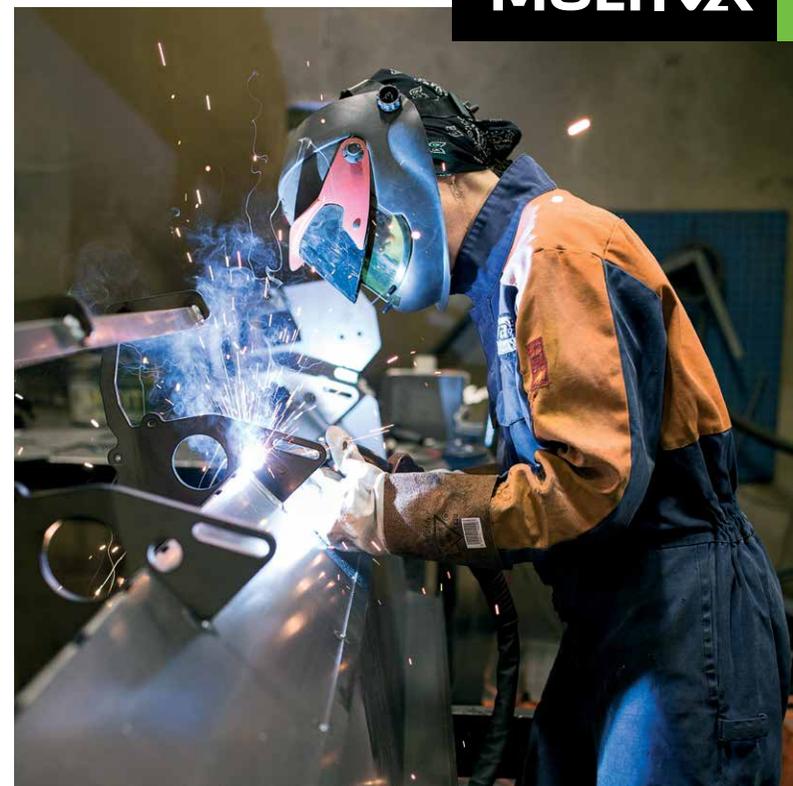
The weed control can be performed by utilizing a 140 mm goosefoot tine point to obtain a shallow and straight cut. The goosefoot tine point in combination with unique two-row rear harrow allow the weeds to be cut and pulled to the surface and left to dry out.

The efficiency of the machines can be further increased by mounting a seed hopper, allowing to drill cover crops, OLS or other species as well as cultivating at the same time. To cope with the challenges in dry conditions, even the TopLine Super XL can be fitted with a rear hitch allowing to pull a field roller behind to conserve moisture and increase accessibility to water for the small seeds.





MULTIVA





Customizable product

The mounted DiscMaster+ is easy to adapt with accessories to be a semi-trailed cultivator, upgrading the machine's functionality significantly. The rear axle weight of the tractor is significantly reduced during headland turns compared to a mounted machine. A towed machine is also smoother to transport on the road. The cultivator can also be fitted with a small seed sowing machine.

Quick and efficient cultivation

Disc cultivators are capable of cultivating large areas quickly. Their high work achievement facilitates, for example, manure earthing. This way, valuable nutrients can be mixed to soil and utilised by the plants. DiscMaster+ can be used at a very shallow cultivation depth.



DISCMASTER+

- EFFECTIVE AND AGILE

The mounted Multiva DiscMaster+ is an efficient stubble cultivator for medium-sized tractors and farms. The open structure and high frame clearance make it a clog-proof cultivator.

Multiva DiscMaster+ is, in fact, very suitable for earthing large amounts of plant residue, such as winter wheat or even corn stubble.



DISCMASTER+

- TRAILED MODEL FOR LARGE AREAS

Trailed DiscMaster+ models are efficient stubble cultivators designed to cover large areas. They utilise the same cultivation technique as the mounted models. Towable models have two sections, and they can be folded into transport position with hydraulics.

The disc roller is divided into three parts, enabling the transport wheels to be located between the cultivation discs and the roller. This unique design makes the cultivator more agile in turns, and more stable when working.

Aggressive mixing of soil

The vertical tilt angle of the discs is receiving, which drives the discs towards the soil and achieves good mixing effect. This way, the soil is loosened and turned even in poor conditions, and the aggressive discs cultivate the plant residue efficiently. The heavily cultivating discs operate very well at wide range of speeds.

Multifunctional machine with strong construction

DiscMaster's optimum disc size allows for precise seedbed cultivation as well as deeper basic cultivation. Multiva DiscMaster+ disc cultivators have frames that are dimensioned to be very strong and durable. The Double Grade special steel with strong structural integrity ensures a long service life.



DISCMASTER+

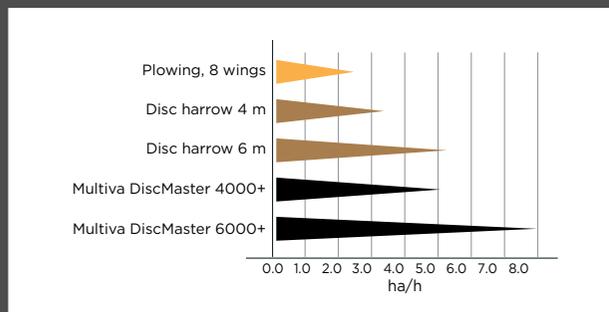
- COST-EFFECTIVE CULTIVATION



Bearing with a labyrinth seal

As the result of stringent product testing, DiscMaster+ features disc axles containing permanently lubricated bearings with labyrinth seals.

During testing, the labyrinth seal has been found to keep bearings free of dirt, guaranteeing an extremely long service life.



Effective cultivation that saves you money

Performance of a short disc harrow compared to a traditional disc harrow or a plow is significant, as shown in the accompanying table.

The performance difference is based on the high working speed of a disc cultivator. This will also result in lower labor, fuel and maintenance costs.

TECHNICAL DATA: DISCMASTER+

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DiscMaster+	300	350	400	4000	5000	6000
Working width, cm	300	350	400	400	500	600
Number of discs	23	27	31	31	39	47
Disc diameter, mm	520	520	520	520	520	520
Number of sections	1	1	1	2	2	2
Power requirement, hp	100-120	115-140	130-160	140-170	170-210	200-250
Transportation width, cm	335	360	400	300	300	300
Transportation height, cm				320	360	410
Tyres	400-15.5	400-15.5	400-15.5	500/50-17	500/50-17	500/50-17
Weight, kg	2095	2300	2560	4420	4780	5230

MULTIVA

STORY

Backó Farm is operating on 900 ha, growing wheat, barley, corn, sorghum and alfalfa, mainly to provide feed for their animal husbandry business. They are feeding 650 sows, 13.000 fatteners and 370 dairy cows in a year. The products from their arable production are dried in their own dryer, which has extra capacity to help out nearby farmers. The farm's fields are located in the hilly western border region of Hungary, mostly with medium-heavy and heavy soils with some clay.

"We decided to invest into the Multiva DiscMaster 6000+ after we tried different models. Until now we have been using a heavy disc and field roller to cultivate the stubble after the summer harvest, and it was about time to replace the old machinery" - said Ferenc Szegedi, managing director of the company. "Now we can cultivate and close the fields in one pass, and the DiscMaster 6000+ can easily do 30 ha in one shift with good results" - he adds.

They plan to use the machine in the autumn as well to produce seedbed for their winter crops, and if needed, also before the spring seeding. "We see already that the DiscMaster+ is a sturdy machine, we plan to use it throughout the year whenever the weather allows it" - finalizes Ferenc Szegedi.





MULTIVA SEEDERS - SUCCESSFUL ESTABLISHMENT

When choosing Multiva seeder you will succeed in establishing crops in all conditions. Multiva seeding technology gives possibility to seed versatily in plowed fields, after minimum tillage, as well as directly to stubble as no-till. Exact seeding

and optimal placement of fertilizer and seed ensure strong sprouting and good basis for the growth. The operating costs of Multiva seeders are very low. The double disc opener used in the seeders cut the soil cleanly and effectively

without significant cultivation effect. The power requirement is low and the fuel consumption very moderate. Also the wearing of the double discs is low and the service life is very long. Therefore the service costs are also very small.



FOR CULTIVATED SOIL

In cultivation system based on primary and secondary cultivation the Multiva seeding method offers extremely good and accurate placement of the seed and uniform sprouting around the field in all conditions. It is very well suited for seedbed created by S-tine cultivators, power harrows or disc cultivators. The Multiva seeding method is not sensitive to the unevenness of the seedbed thanks to the high coulter pressure and unique depth control system.



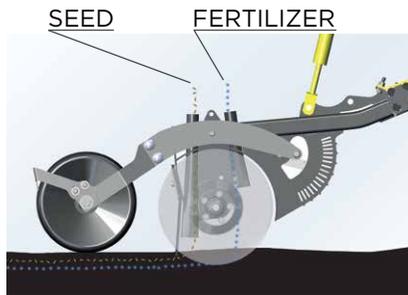
FOR MINIMUM TILLAGED FIELDS

In many circumstances, light cultivation of the soil is helpful in germinating of the volunteer grains, in the control of weeds, and in speeding up the drying and warming of the soil. Light cultivation before sowing is done with the Multiva TopLine Super XL harrow or disc cultivator. Cultivation can also be carried out using the seeder's own front cultivator.



FOR DIRECT SEEDING

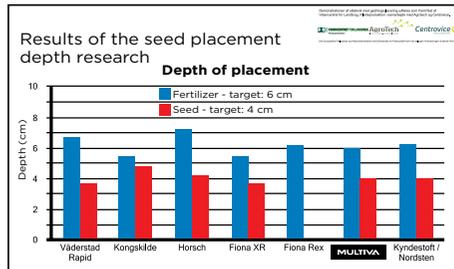
With Multiva Forte FX, direct seeding can be achieved in all conditions, even in the toughest soil due to the high coulter pressure. The maximum coulter pressure can also be achieved with empty hoppers.



SEED AND FERTILIZER SEPARATELY

In Multiva seeders seed and fertilizer are placed from the same coulter to seedbed close to each other. Small layer of soil in between the seed and fertilizer prevents direct contact. Fertilizer is fed from the front of the disc to the bottom of the seedrow. The seed

is led from the back of the disc to the seedrow slightly above the fertilizer. The seedrow closes due to the packing effect of the covering wheel and the rear wheels, so that the seed is guaranteed to get good soil contact.



EXACT SEEDING

Thanks to the unique coulter structure of the Multiva drills, the seeding depth remains uniform even on uneven fields. The Cerex and Forte FX -models have depth control with the covering wheel, which runs

immediately after the coulter. When the depth regulating closing wheel is close to the coulter the vertical depth variation is minimal and the placement very exact.

FERTILIZER
IN THE SAME
ROW



FERTILIZER
IN SEPARATE
ROW

STRONG SPROUTING AND FAST EARLY DEVELOPMENT

The position of the fertilizer close to the seed ensures plentiful supply of nutrients for the plant's developing root system. In dry and cold soil phosphorus is only slightly mobile for 1-2mm. If the nutrients would be placed 6cm away to a separate row it would take

considerable amount of time for the developing root system to reach them. In Multiva seeding method the plants develop strong root system and the early development is much stronger.



COST-EFFECTIVE SEEDING

The pulling resistance of the effective soil-cutting double coulter is small and there are fewer coulters than in traditional seeding machines. In addition, due to the large diameter of the transport wheels, the rolling resistance of the seed drill in the field is small.

Due to these factors, the power requirement and fuel consumption of the Multiva seed drill are low. The Multiva seeding machine is cost-efficient and fast.



Exact seeding

In Multiva Cerex -seeders seed and fertilizer are placed to the soil through the same coulters. Fertilizer is fed from the front of the coulters to the bottom of the seed furrow. The seed is placed from the rear of the coulters slightly above the fertilizer. The seedrow closes due to the packing effect of the covering wheel.

Exact placement is ensured by the depth controlling covering wheel. The seeding depth remains uniform even on rough field surfaces. Thanks to the individual control for every coulters even the hopper filling level does not affect the seeding depth.

Sufficient coulters pressure

The double discs openers used in the Multiva Cerex -seeders can have maximum coulters pressure of 80kg. This ensures accurate seeding and placement even on minimum tilled fields.

Service-free coulters

The new coulters used in the Cerex -seeders is very durable and service-free. Rubber suspension is used in the coulters frames as protection against obstacles. The covering wheels' frame have a service free joint. Thanks to the ingenious construction no lubrication nipples are required in the coulters.



CEREX

- RELIABLE PERFORMER

Multiva Cerex all-around -seeder is meant for plowed, minimum tilled or cultivated soils. Its ingenious and service-free coulters make the Cerex seeders an economic tool for farms which rely on cultivation and seedbed preparation.

Cerex -seeders use a new type of coulters which has advanced technical solutions for the Forte direct seeders incorporated, the seeding depth controlling covering wheel as an example.



Additional features with accessories

Multiva seeders can be equipped according to the customers needs. For example front levelling board enhances the machine's performance when seeding directly to plowed or cultivated field.

Multiva Cerex is an unprecedented combination of sturdiness, seeding precision and cost effectiveness.

Capacity and user-friendliness

Cerex -seeders have hopper and frame structure which is exceptionally sturdy and durable. The large hopper makes effective seeding and high work achievement possible. Cerex -machines have rear walking platform which is user-friendly and safe.



Innovative power transmission

Cerex seeders use new and innovative power drive for the seeding axles. The power for the seeding axles is transmitted from the transport wheels with wheel drive system known from the boggie drive assistant used in the lorries.

The system ensures uninterrupted drive in all conditions. The varying soil types do not affect the rotational speed of the system. The simple method is also very reliable and durable.

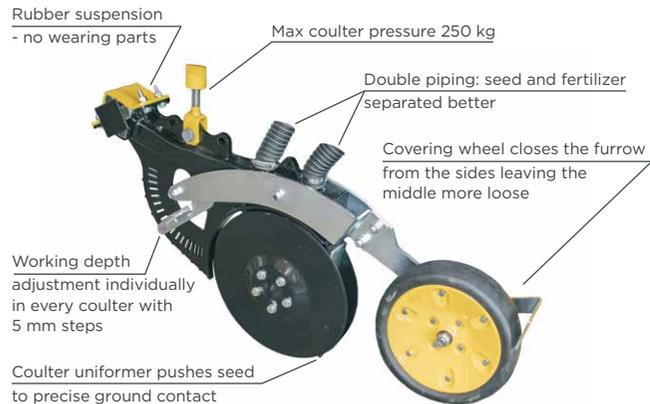




New FX couler

The new Multiva FX- couler is developed to offer unparalleled accuracy of seed and fertilizer placement, durability and care-free operation. The double disc couler with large diameter is wear-resistant and service-free, there is for example no greasing nipples in the couler.

FX COULER



The multi-purpose Multiva FX couler is ideal for all soil and cultivation types. It does not clog even under the toughest conditions.



FORTE FX

- SUCCESSFUL SEEDING IN ALL CONDITIONS

The renewed Multiva Forte FX machines represent the most reliable, versatile and accurate seeding technology on the market. The new FX couler technology is developed to ensure the best agronomical results with reliable and service-free construction.

Seed and fertilizer are seeded at the same time with the same couler at different depths. Multiva Forte FX is suitable for both cultivated soil as well as direct seeding. By choosing the Multiva seeding method, you can flexibly adjust to different conditions.



FORTE FX

THE MOST VERSATILE SEEDING METHOD ON THE MARKET

Multiva Forte FX is a seeder built for even the most difficult no-till conditions. It is also well suited for the seeding of plowed or minimum tilled fields from different soils from soft organic to the hardest of clays. Robust mechanical feeding, advanced control and monitoring system together with strong and durable construction ensure long service life and reliability in all conditions.

The Multiva method is perfectly suited for varied farm conditions and different cultivation methods.



Precise adjustments

In Multiva seeding machines, the adjustment of the seeding quantity is done by controlling the length of the feeding roller. Also the controlling of the rotational speed of the feeding axle is possible, thus achieving excellent seed quantity accuracy even for small seeds. The unique seed control equipment of the Multiva drill allows for a large amount of fertilizer and seed to be sown. It is also fast and easy to do the calibration.



Easy and wide-ranging adjustment of coulter pressure

The coulter pressure of Multiva seeders is adjusted by means of hydraulics between 50-250 kg. Thanks to this, accurate seed depth is achieved even on hard soils. The visual display shows the user the coulter pressure, so that the adjustment can be made conveniently while driving, for example on varying soil types.



High seeding capacity

Multiva Forte sowing machines have the most spacious hopper on the market. The large container size and the high maximum speed guarantee an excellent work achievement. The dividing wall of the hopper is adjustable and the roller cover of the hopper is self-rolling.



Forte FX6000 has the largest hopper on the market (8m³) with an adjustable wall. Thanks to the large hopper, the refill frequency is lower and the work achievement is high.

Thanks to its large tyre size, the machine is light to pull in the field while the rolling resistance is small even on soft terrain. The optional front levelling board with aggressive twin blades enable sowing directly even to plowed soil.

Multiva Forte FX6000's precise and powerful electric feeders allow large feed rates for both seed and fertilizer, but also for accurate sowing of small seeds.



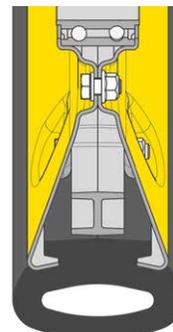
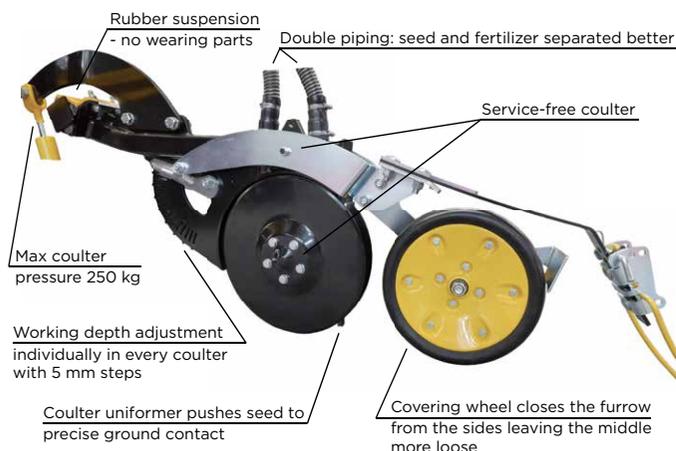
FORTE FX6000

- SEEDING CAPACITY FOR BIGGER AREAS

The Forte FX6000 is an air seeder that utilizes the new Multiva FX coulters technology. Fully independent coulters units are individually pressed hydraulically, keeping the seeding depth constant at the whole width of the drill despite the roughness of the field.

Accurate seeding depth, high air volume, and therefore large seed and fertilizer volume per hectare, strong and reliable construction and large hoppers make the Forte FX seeder the best and most cost-effective choice for both direct seeding and seeding cultivated soil.

FORTE FX6000 - SEEDING CAPACITY FOR BIGGER AREAS



PRIMARY ACCESSORIES FOR CEREX AND FORTE FX

Gearboxes



Front packer wheels



Front levelling board



Small seed hopper



Front straw harrow



Rear harrow



Innovative covering wheel

FX-coulters use an effective covering wheel with a large diameter. Its operation is safe and secure in all conditions. The rubber in the covering wheel is stiff on the sides, causing the seed furrow to close completely, ensuring good seed-to-soil contact. The covering wheel is hollow and soft in the middle, preventing too harsh compression just on top of the sprouting seedling. The soft rubber used is self-cleaning even in wet conditions. Sturdy steel rim and steel belt reinforcements allow high coulters pressures up to 250 kg.

Durable and service free FX-coulters

Multiva FX6000-seeder uses innovative FX-coulters which are durable, secure and service-free. Its seeding quality is also extremely precise thanks to the covering wheel controlling the placement depth.

TECHNICAL DATA: FORTE

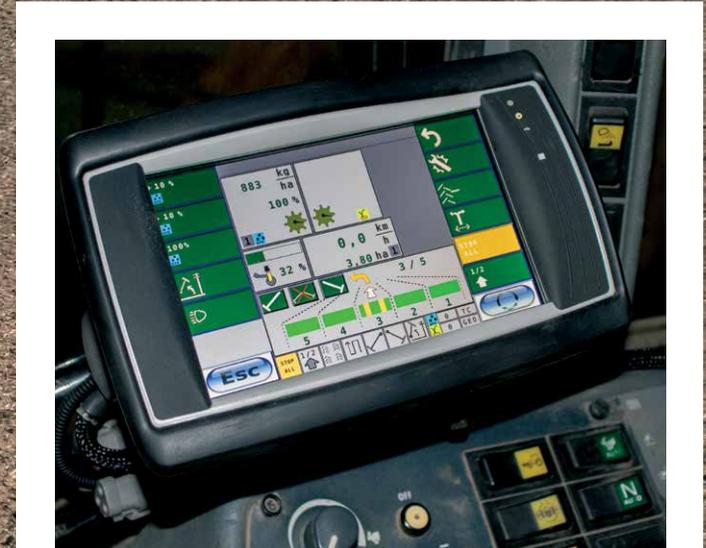
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FORTE	FX300	FX400	FX6000
Working width, cm	300	400	600
Transportation width, cm	300	409	300
Hopper filling height, cm	210	210	300
Weight, kg	4200	5500	9300
Hopper volume, l	3500	4800	8000
Small seed hopper volume, l	240	320	
Coulters pressure, kg	50-250	50-250	50-250
Tyre size	250/80-18	250/80-18	500/50R-17
Number of coulters	20	26	36
Row spacing, mm	150	154	167
Work speed, km/h	8-12	8-12	8-12
Power requirement, hp	90	120	200

TECHNICAL DATA: CEREX

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CEREX	300	400
Working width, cm	300	400
Transportation width, cm	300	409
Hopper filling height, cm	210	210
Weight, kg	3300	4350
Hopper volume, l	3500	4800
Small seed hopper volume, l	240	320
Coulters pressure, kg	20-80	20-80
Tyre size	250/80-18	250/80-18
Number of coulters	20	26
Row spacing, mm	150	154
Work speed, km/h	8-12	8-12
Power requirement, hp	90	120



MULTIVA CONTROL SYSTEMS

The new Multiva control systems are developed for easier user experience and more productive properties.

Design of the control systems is fresh and the development has been focused to offer to the user the best possible work efficiency and increased user value in the Multiva seeders.

Multiva SeedPilot

The new Multiva SeedPilot control system is a tool to use the Multiva seeders without compromise.

It is extremely intuitive and user-friendly and it is very easy for the operator to gain the benefits of the increased work efficiency.

SeedPilot is delivered with high quality 7" color touch screen. All the necessary information is readily available on the main page of the SeedPilot software.

Also, the monitoring of the implement is effortless with clear symbols in the status bar. The SeedPilot also offers the possibility to monitor the adjustable coulter pressure directly from the screen as well as multiple memory slots for example fertilization calibration values.



Multiva SeedPilot ISOBUS

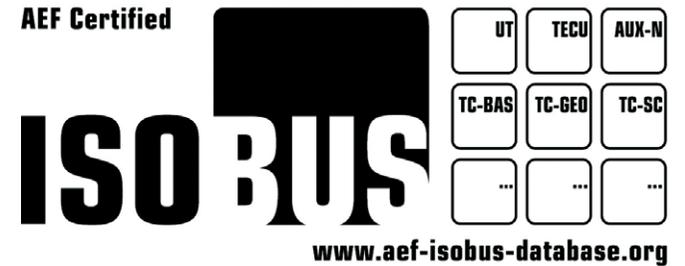
The intuitive SeedPilot control system is also available in Isobus version enhancing the product properties even further.

All the benefits of the SeedPilot control software are available in all the Isobus equipped tractors with just a simple connection.

The SeedPilot Isobus offers support to TC-BAS and TC-GEO properties giving possibility to control the seeder with predetermined tasks as well as control it for example with pre-made fertilization maps with the help of GPS.

AEF certified ISOBUS system

Multiva SeedPilot Isobus is an officially AEF certified Isobus system.



The Multiva Forte FX6000 air seeder is easy to operate with the ISOBUS-ready Artemis controller, which offers compatibility with most tractors.

Multiva Forte FX and Cerex 300-400 are also available with RDS 200 controller as an alternative.





MULTIVA

Karsten Sørensen is operating an arable farm in the Western part of Sealand, Denmark. The cultivated area is roughly 75 hectares and the soils are mostly medium clay. Within the last 10 years, the strategy on the farm has changed, moving from a traditional plough based system to minimum tillage. The crop rotation is made up by 2/3 spring crops and 1/3 winter crops. Prior to all spring crops, catch crops are drilled to increase the organic matter in the soil. In the last years, Karsten has been moving more and more towards a no-till system based on the principles of Conservation Agriculture. The straw is left on the field and in combination with applying more catch crops, the soil has got more fertile throughout the years.

In 2020 the farm invested in a Multiva Forte FX seed drill to be able to do no-till drilling and have a versatile tool for all

conditions. The seed drill is utilized to drill catch crops and main crops direct in the stubble and in cultivated soils. The soil is only cultivated if the conditions demand it.

When drilling spring barley, the farmer has noticed a clear positive effect by the Multiva system. In the spring, 250 kg of fertilizer (10-9-18+7,6 sulfur) was added while drilling. This led to a very even and strong germination and sprouting. Placing fertilizer close to the seed but separately, has had a very positive effect on the growth and development.

Even in a dry and challenging year like this, the germination has been optimal with the Forte FX. The precise placement of seed and fertilizer ensure an even germination and growth which also helps to fight the weeds.

The experience from practicing minimum tillage for several years is a clear reduction in germination of weeds. Shifting from a plough-based system to minimum tillage and even no-till in some years, have reduced the problem with grass weeds by far. The Forte FX fits very well into the strategy of the farm and allows for a flexible system as the drill performs in all conditions.



MTY Kokko is a farm operating in Ylivieska, Finland, seeding annually barley, oats and spring canola on approximately 400 hectares, of which 200 hectares are contract work. The farming methods are mainly traditional with plowing, seedbed preparation with S-tine and seeding with Multiva Cerex 400. Also some minimum tillage (60ha) with short disc.

"The Cerex seeder fits the needs of our farm very well. The emergence has been even with hardly any seeds that would not have been germinated" – said farm owner Pekka Kokko.

"The seeding depth is easy to adjust precisely according to the conditions and the uniformer inside the couler ensures seed placement. We have noted that the rear harrow is a good accessory and that the half lifting in the headlands work as a beneficial feature."

Earlier good experiences with VM seeder made it easy to switch to Multiva. "I'm used that during the work repairs or down time is not needed. The double disc couler is an excellent solution when seeding bigger areas and in varying conditions. SeedPilot controller is easy to use. The seeder also accepts a lot of plant residue in the soil without clogging. The coulters rotated always without any problems. The seeder is as if it enjoys to be pulled 12-14km/h and the coulters perform like a dream without any jumping or bouncing. I am very satisfied with the selection of this seeder and I would choose Cerex again, especially because of the impressive coulters and the ease of use."

"I am very pleased with the machine. Multiva builds high-quality equipment which endure rough usage also in contracting" – Pekka summarizes.





Practical extension cassettes

Multiva TRM trailers can be equipped with optional extension cassettes. The heavy-duty steel extension cassettes provide an easy and economical solution to extending the capacity of a trailer for transporting more lighter materials. The extension cassette can be conveniently mounted on the trailer with, for example, a front loader.

Sturdy and thoroughly welded body

The chassis and the body of the trailer are robotically welded throughout. The body bottom is made of Hardox high-strength steel. The lower edges of the body are bevelled, and there are no crosswise welding seams on the inner surfaces, making unloading easy even with smaller tipping angles. TRM trailers feature higher volume compared to trailers of other manufacturers in the same capacity class.

TRM

- MEETS YOUR NEEDS

TRM is a sturdy, high-quality and cost-effective general purpose trailer. Its versatility and durability make the trailer a sensible and efficient choice for various transportation applications. The trailer can handle earthmoving and grain transportation with uncompromised efficiency.

The TRM trailers require fairly little space to operate, making unloading easy even in smaller facilities. Trailer heights vary between 2.7-2.8 m with the grain extension and open tailgate. The hydraulic tailgate can be opened on top of the extension without increasing the height of the trailer.





Durability by special steel

The body sheets of HD trailers are made of Hardox steel that offers three times the yield strength and multiple times the durability of the regular S355 (Fe52) steel, which is typically used on trailer bodies. The robot welded Double Grade special steel further enhances the trailer's sturdiness.



Leader in tube bar chassis

The basic structure of Multiva trailers has always been the tube bar chassis. The structure has extreme torsional strength. High material strengths and thoughtful structural details combined with Ruukki's Double Grade steel further increase the strength of the chassis.

TRM HD

- HEAVY DUTY FOR DURABILITY

TRM HD trailers are designed for earthmoving applications. Thanks to their efficiency, durability and a wide array of accessories, HD trailers are the perfect transportation solution for contractors as well as large farms.

The extensive accessory selection of the TRM HD trailers guarantee their suitability for any transportation application. These features make HD trailers extremely versatile and user-friendly. For example, the drawbar suspension improves maneuverability and safety.

TRM AND TRM HD

- MAJOR FEATURES AND EXCELLENT DURABILITY



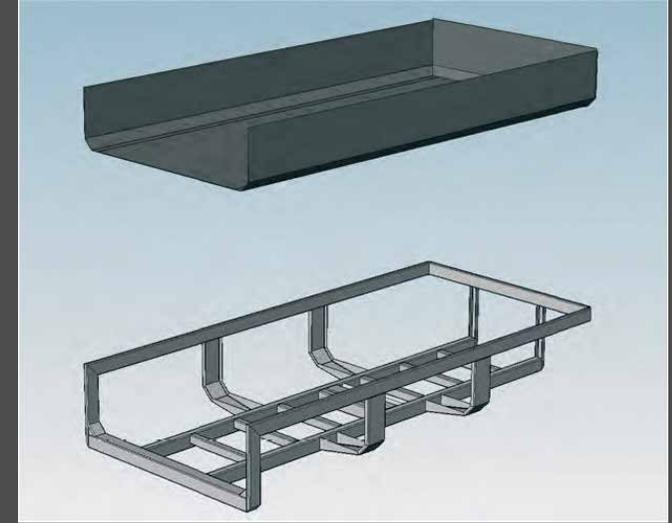
Sideways opening flip-down tailgate

Multiva earth moving trailers have a sideways opening flip-down tailgate as an optional factory accessory. Tailgate is easy to use and its top can be set to open up or to the side. When opened to the side, bulk cargo or, for example, an excavator is easy to load.



Drawbar suspension

Hydraulic drawbar suspension makes the user experience comfortable. Hydraulic cylinders and pressure accumulators make the suspension very effective.



Durable structure with special steel

TRM trailers are manufactured of special steel by robotic welding. In body Hardox special steel is used which offers three times the yield strength and multiple times the durability of the regular Fe52 steel, which is typically used on the trailer body. The high level of yield strength of the steel ensures that the body can withstand hard impacts without deformations. The Double Grade special steel further enhances the trailer's sturdiness. Furthermore, this extremely durable structure is achieved without any additional weight.

TECHNICAL DATA: TRM HD

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MODEL	TRM 160HD	TRM180 HD
Volume standard, m ³	9,9	10,5
Volume with extension cassette, m ³	19	20,4
Volume with silage extension, m ³	36,2	38,8
Technical capacity, t	16	18
Axles	Bogie	Bogie
Brakes	2-wheel(400x80)	2-wheel(400x80)
Drawbar suspension	Hydr.	Hydr.
Body inner H x W x L	75 x 238 x 550	75 x 238 x 590
Height, cm	190	210
Total width, cm	260 (255)	260 (255)
Standard tyre	550/45-22.5	600/50R22.5
Tip	2x6	2x6
Tip oil requirement, l	30	38
Weight, kg	3850	4580

TECHNICAL DATA: TRM

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MODEL	TRM13	TRM16	TRM18
Volume standard, m ³	7,3	9,2	9,9
Volume with extension cassette, m ³	14,5	18,3	19
Volume with silage extension, m ³	-	35,5	36,2
Technical capacity, t	13	16	18
Axles	Bogie	Bogie	Bogie
Brakes	2-wheel(300x90)	2-wheel(300x90)	2-wheel(400x80)
Body inner H x W x L	70 x 238 x 440	70 x 238 x 550	75 x 238 x 550
Height, cm	175	185	200
Total width, cm	260 (255)	260 (255)	260 (255)
Standard tyre	500/50-17	550/45-22.5	600/50R22.5
Tip	1x5	2x6	2x6
Tip oil requirement, l	13	30	30
Weight, kg	2850	3150	4150



Innovative body structure

Thanks to the bend of the side plates and heavy duty support beams, the body is stronger and larger than before. The conical body made of high quality steel with robotic welding offers excellent unloading performance under all conditions. The hydraulic tailgate is made of a plate that has no welding joints. This makes the structure highly resistant to wear and tear.

User-friendly solution

Our trailers have been developed with emphasis on safety and user-friendliness. For example, the practical roll cover accessory improves the trailer's user-friendliness and safety. The user is able to cover the trailer manually from the ground. The cover is rolled over the trailer with a handle which is included in the delivery.



TR

- QUALITY, DURABILITY AND CAPACITY

Multiva TR utility trailers feature innovative transportation solutions that facilitate everyday operations.

The trailers are very mobile on roads and fields, facilitating transportation while reducing fuel consumption. The extremely durable trailers are made of high quality steel.



TR HD

- TOP FEATURES FOR TRANSPORT

Multiva TR HD trailers are a transport solution for demanding users, and represent the best quality on the market.

The trailer's standard equipment level is high and the trailers are durable, user-friendly and safe. Thanks to its robust design, the trailers are well suited even for high driving speeds.

Versatile trailer

The versatile accessories of the TR and TR HD trailer product line ensure its suitability for various applications. The trailer's capacity can be easily and quickly increased with a silage extension cassette. Available as an accessory is also a low extension for grain transport. Air brakes are available for Multiva trailers with over 16tn capacity.

Top accessories as standard

TR HD trailers have a high level of standard equipment. The trailers have a hydraulic drawbar suspension as standard, which adds significantly to the trailer's driving comfort, eliminating shocks and oscillations between the trailer and the tractor. With TR 300HD, the standard hydraulic axle suspension makes the chassis unprecedentedly stable, both in the field, on the road and while tipping. The steering rear axle makes it even easier to handle the trailer.





MULTIVA
STORY

Jo Poppe is farming the Elingård farm in Gressvik, near Fredrikstad of Østfold county, Norway. His farm produces grain, grass feed and milk. The farm has 300 hectares of arable land. Grass is produced at 80 hectares for the farm animals, with some of the produce sold on the market.

The farm's soil types range between sand and clay, which is why Poppe has chosen the Multiva Optima T600 harrow, which is suitable for varying soil types. The Elingård farm has relied on Multiva's equipment for grain transportation for a while now. The previously used TR190 trailer served very well, encouraging Poppe to increase his transportation capacity by buying a new TR 250 trailer. The investment has already proven its value in service. The annual transportation figures range between 1500-2000 tonnes.

"I have had very positive experiences in terms of the functionality and performance of Multiva machines. The support from Multiva and the retailer have been excellent, and we've enjoyed solid collaboration."

Jo says the machines meet the farm's needs perfectly, particularly due to their practical features. For example, the large capacity of the TR 250 is excellent match for the farm's grain dryer. In the north, the harvest season is limited, which means that the harvesting and drying chain must be very functional.

The right-sized trailer that can fill up the grain dryer in one go makes harvesting significantly smoother. Jo Poppe appreciates the sturdiness of the TR 250. "Multiva is a strong brand. Their machines are sturdy", Poppe summarises.

TR AND TR HD

- TOP FEATURES FOR TRANSPORT

TECHNICAL DATA: TR AND TR HD TRAILERS

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Model	TR200	TR230	TR200HD	TR250HD
Volume standard, m ³	21,2	21,2	21,2	23,4
Volume with extension cassette, m ³	-	23,2	-	25,6
Volume with silage extension, m ³	35,8	35,8	35,8	39,5
Technical capacity, t	16	18	16	18
Axles	Bogie	Bogie	Bogie	Bogie
Brakes	2-wheel (300x90)	2-wheel (400x80)	2-wheel (400x80)	2-wheel (400x80)
Drawbar suspension	-	-	hydr.	hydr.
Body inner H x W x L	160 x 230 x 575	160 x 230 x 575	160 x 230 x 575	160 x 230 x 635
Height, cm	280	290	280	300
Total width, cm	255	255	255	255
Standard tyre	550/45-22.5	600/50R22.5	550/45-22.5	600/50R22.5
Tip	2x6	2x6	2x6	1x5
Tip oil requirement, l	30	30	30	37
Weight, kg	4140	4370	4250	4950



HOOKSYSTEM

- FLEXIBLE TRANSPORT SOLUTION

The idea behind the Multiva HookSystem concept is to provide a cost-effective and customizable transport solution. One HookSystem chassis can be fitted with a number of different trailer bodies for different purposes. For example, a number of trailer bodies can be filled at the edge of the field, which will only be transported out at the end of the day.

The trailer can be equipped with 710/40R tires for improved performance under dipping conditions. The HookSystem concept introduces add-ons and provides a platform for every use.

Reliable hook control

The Multiva HookSystem hook base functions are controlled by an innovative hydraulic-mechanical operating system. Operation is done directly with the tractor hydraulics and requires three double-acting hydraulic outputs. The use is extremely reliable, easy to use and safe in all situations, as there are no failure prone electronics.



Slender platform change angle

The pulling angle is only 18 degrees at lowest. Thanks to this picking up a fully loaded body is easy and safe. The maximum load can be up to 18 tonnes (body + load). Bogie locking cylinders automatically lock in the body-change mode thus moving the support point backwards, giving the tractors rear axle more weight.

TECHNICAL DATA: HOOKSYSTEM

Model	HookSystem 18
Technical capacity, t	18
Minimum pulling angle	18
Tipping angle, deg.	53
Body length, m	5,3 - 6,2
Axles	Bogie
Brakes	2-wheel (400x80)
Tip oil requirement, l	20
Body locking	hydr.
Height of body supports, cm	120
Tyres	600/50R22.5
Weight, kg	3650

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