

MANURE MANAGEMENT

MACHINES



ROUGHER THOUGHTS

Organic manure's contribution is an undeniable fact in the field. Çelikel®'s manure management machines are equipped with special hardwares in order to maximize the benefit from the manure.

Animal fertilizers are valuable sources that –if used correctly- can replace chemical fertilizers. But if animal fertilizers are not managed very carefull they become a source of smell and emission, they lead to loss of nutrition and a threat to ground waters. In order to execute the manure management successfully, Çelikel® designed Crafter®, Cruiser® and Scud®.



Crafter, Ryker, Cruiser & Scud

RCRAFTER

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MACHINES

In today's highly competitive market, you can't afford to skimp on quality. With our products, you can always stay ahead of the curve. CRAFTER® is more than a machine, we enriched it with special equipments to maximize the benefit businesses' can make from the organic manure.



Crafter

PALLET SYSTEM

Crafter® has foldable pallets which keep on working without any problem in case of a collision with materials that can harm the mechanism. In addition to this, after stopping it has a axle system which slows down safely to increase the lifespan of the machine.



GUILLOTINE BACK COVER

Crafter® presents the opportunity to adjust manure spreading level from tractor via hydraulic guillotine cover system. Back cover is equipped with strong hydraulic cylinders to be able to move vertically. And it can be opened and closed without getting affected by the manure inside the trailer.



Cruiser

If your heart does not race when you look at CRUISER®, call a doctor! Most definitely your heart stopped beating!

More pressure with each gallon, more progress with each decare! Presenting the new machine of Çelikel®, CRUISER®! You are no longer alone with your battle for productivity!



DISTRIBUTOR

Çelikel Cruiser® was designed by using a special angled fertilizer multiplier plate in order to distribute the liquid fertilizer as desired. The distribution distance of the Cruiser® can be up to 65 meters thanks to the optional centrifugal pump and top thrower feature, which is designed with the tough terrain conditions in mind.

Çelikel® focuses on finding solution for any possible problems that our clients might have. One of the major problems of the businesses' animal manure was solved with Scud®. Due to carbide plated auger system and specially designed strainer Scud® makes it easy to separate manure. With manure acid-resisting Scud® you are in charge of manure management.

Using organic manure in the field increases the efficiency. You can see how Cruiser® is serious in performance via pressure and vacuum indicators which will make it easier to use liquid fertilizers in the field! Cruiser®'s perfect pump intake and pressure power makes it easy to fill the tank. After filling the tank you may easily fertilize the field.



MANURE MANAGEMENT

M A C H I N E S

Behind every success is a flawless design. If you value perfection, you deserve RYKER®. That's why we made the quality you deserve a reality. We offer you RYKER®, which ensures homogeneous organic fertilization of your arable lands. Differentiating from its competitors with its distribution width, RYKER® is a masterpiece of Çelikel engineering in fertilizer distribution with a working width of up to 25 meters.

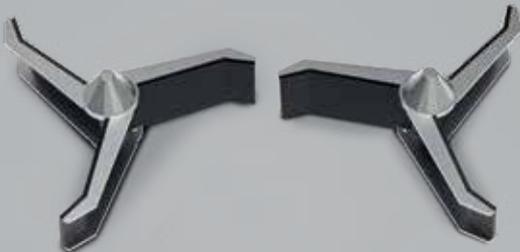
RYKER® is an indispensable machine for those who want to take quality and productivity to the upper limits. RYKER® is the name of quality.



Ryker

THROWING PALLET SYSTEM

Thanks to its special form, RYKER®'s 3-winged thrower pallets, which are capable of spreading homogeneous fertilizers up to 25 meters, will provide you with an excellent usage opportunity.



ABSORBER SYSTEM

While distributing fertilizer in your field, RYKER®'s special shock absorber system, which absorbs both the load on the trailer and the disturbances that may arise from the unevenness in the field, prevents it from being transmitted to the tractor, offers you comfort and quality.

Scud

Scud® facilitates the separation of manure with its carbide coated auger system and specially designed sieves.

Manure management is under your control with Scud®, which can withstand fertilizer acid for many years...



The choice of those who know the secret of efficiency...

It performs a real separation process and completely separates liquid and solid fertilizers from each other and maximizes your efficiency in cultivation areas.

Çelikel® focuses on the problems of manufacturers...

Animal manure, which is one of the biggest problems of businesses, can be turned into profit thanks to Scud®.



Manure separators are the heart of manure management systems. It is vital that the separator has a long service life and works without problems in order to separate the manure accumulated in the manure pond. You too can rely on Scud® unconditionally in your manure management business.



MANURE MANAGEMENT

MACHINES

One of the most important factors in increasing productivity in agriculture is organic fertilization. With its V type body, 250 cc power distributor pallet hydromotor, powerful transmission and chassis system, specially designed shooter track system, special shock absorber system and many more features of Ryker®, it is now

a child's play for you to distribute manure. In addition, thanks to the homogeneity of the distributed fertilizer, you will save fuel while increasing your efficiency.

Ryker® is the name of power, confidence and efficiency.



■ WARNING LIGHT SYSTEM

Çelikel Ryker® is equipped with an illuminated warning system in order to prevent possible occupational and traffic accidents during the fertilizer distribution process and in traffic conditions. Located in the lower part of the rear, this system consists of signal, reverse and stop warning lights.

■ STRONG CHASSIS

Ryker® series manure spreader trailers stand out with their strong chassis that maximizes the comfort and safety of the user even in the most difficult road and field conditions. Thanks to this chassis, you will be able to use your machine safely in all conditions.

■ HYDROMOTOR

Çelikel engineers, who dreamed of Ryker®, aimed maximum power in their designs. A 250 cc hydromotor is used for the distribution pallet and chain system of Ryker®. In this way, your machine allows you to easily distribute the fertilizer even at full capacity.

■ CHAIN SYSTEM

Ryker®'s Grade 80 chain conveyors, which transmit the fertilizer to the distributors with the milled distribution group gearbox, are powered by a 250 cc hydromotor. The Ryker® fertilizer spreader has a chain driven floor structure. The Ryker® chain form is made of extra-reinforced material to eliminate the tension of the chains with the load on the fertilizer loaders.

■ SCISSOR AXLE

Ryker® uses a scissor shaft, which allows flexible operation and minimum pressure on the tractor. The scissor shaft of the Ryker® type is designed so that you can easily use the machine in dented, mounded fields.

■ THROWING PALLET

Thanks to its special form, the 3-winged Ryker®'s thrower pallets, which are capable of spreading homogeneous fertilizers up to 25 meters, will give you an excellent usage experience.



■ V BODY

Ryker® has a specially designed V-shaped body. In this way, the fertilizer contained in it easily descends and is easily distributed. In addition, thanks to its V structure, extra load is not placed on the thrower pallets and hydromotor.

■ WIDE TYRE

In order to get the best efficiency from organic fertilizer, the time period that the fertilizer should be distributed is winter and spring months when the terrain and weather conditions are difficult. The wide-surfaced and durable tires used in Ryker® Solid Manure Spreader Trailers allow you to complete the operation without being affected by difficult terrain conditions with its free movement and maneuverability.

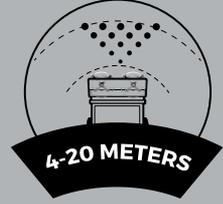
■ SHOCK ABSORBER

Ryker® has been designed with a strong shock absorber system against overloads that may come to the tractor. While distributing fertilizer in your field, Ryker®'s special shock absorber system, which absorbs both the load on the trailer and the disturbances that may arise from the unevenness in the field, prevents it from being transmitted to the tractor, offers you comfort and quality.

MANURE MANAGEMENT

MACHINES

An immense contribution which organic manure brings is beyond any doubts. Çelikel®'s manure management machines are equipped with special hardwares in order to maximize the benefit from the manure. Spreading width and homogeneity which Crafter® provides makes it a masterpiece of Çelikel® engineering. It can work up to a width of 25 meters.



■ STRONG CHASSIS

Crafter® is designed to with a strong chassis structure to keep the user safety a top priority even on the most challenging road and field conditions.

■ HYDRAULIC CONTROL

Crafter® is equipped with hydraulic control interface to increase usability. In the front of Crafter®, You can operate the hydraulic jack with three hydraulic control levers located on the front of the Crafter® and apply fertilizer after lifting the rear hydraulic gate.

■ WIDE TYRE

Çelikel prefers the best partners to keep the machines working flawlessly even in the most difficult conditions. Çelikel uses innovative tires that provide high resistance to the most challenging terrain conditions, thanks to the high load capacity, strength and anti-soil compaction, thus achieving flawless results.



■ CHAIN CLEANING SYSTEM

There is a chain cleaning rubber in manure spreading machines to prevent manure from damaging machine's parts. Clean chains will prevent manure from getting out of manure reservoir and machine's parts will not be under corrosion threat.

■ STRONG AXLE STRUCTURE

The shaft with which we connect the cardan shaft used between the tractor and the machine is linked to a solid shaft structure. This shaft is designed to work flawlessly even under difficult working conditions and thus will assure you.

■ HYDRAULIC BREAK SYSTEM

There is a hydraulic break system on the axle to provide safe usage of Crafter. Simply by connecting hydraulic break hose to the tractor the system will be connected to tractor and whenever you need it, you can slow down the machine and the tractor due to the hydraulic break system.



■ CHAIN SYSTEM

There is a chain cleaning rubber in manure spreading machines to prevent manure from damaging machine's parts. Clean chains will prevent manure from getting out of manure reservoir and machine's parts will not be under corrosion threat.

■ SCISSOR AXLE

The Crafter® uses a scissor shaft, which allows flexible operation and minimum pressure on the tractor. The scissor shaft of the Crafter® type is designed so that you can easily use the machine in dented, mounded fields.

■ TRANSMISSIONS

The gearboxes used in the Crafter® are designed to perform flawlessly due to clear manufacturing process. The combination with a triple reduction gear for the rotation of the augers is made with especially reinforced materials. This way, the system is taking into account foreign materials that can fly out of the fertilizer.

MANURE MANAGEMENT

MACHINES

We offer the best solution for customer with problem solving machines; we are changing the rules of the game with original agricultural solutions in Turkey and around the world; we design the machines of the future by recognizing potential needs. Almost everyone is

trying to make machines but only Çelikel® is doing it differently. CRUISER® is a confidence crushing machine for its competitors with overwhelming design, superior features! More pressure with each gallon, more progress with each decare!



**EXPORT
VACUUM PUMP**

**EXPORT
GUILLOTINE VALVE**



■ WARNING LAMP

The machine is equipped with flashing lights to prevent potential work accidents. The warning system is placed on top of the CRUISER® so it is visible at night and dark working conditions.



■ STRONG CHASSIS

A chassis specially designed by Çelikel engineers, supporting a robust Cruiser® body and minimizing fluid movement in the tank, forms the backbone of the machine.



■ FLOAT

Safety is maintained at the highest level in the Cruiser®, and the dual float system prevents liquid from damaging the pump. At the same time, a double float system has been installed to prevent overflow that can happen during the filling process.

CRUISER

IN A CLASS BY ITSELF.

■ PRESSURE AND BAR GAUGES

The pressure and bar indicators used in the CRUISER® make the machine easier to use, allowing the user to start irrigation and vacuuming processes on time. When the pressure gauge shows 1 bar, it means the machine is ready to spray, and when the pressure gauge shows 200 mm / Hg, the machine is ready to vacuum.

■ SCISSOR AXLE STRUCTURE

The Crafter® uses a scissor shaft, which allows flexible operation and minimum pressure on the tractor. The scissor shaft of the Crafter® type is designed so that you can easily use the machine in dented, mounded fields



■ WAVE BREAKER

There is a wave breaker system inside the tank of Cruiser® to prevent the liquid from sudden lumping, foaming or upheavel. Thanks to this weight balance inside the machine the threat of rolling over is eliminated.

■ WIDE TYRE

The best time for getting the most of the organic manure is winter and spring when the field and weather conditions are the most challenging. For this matter in Cruiser® manure spreading trailers we used wide and durable tyre to increase the range of movement and maneuver ability.

■ SUSPENSION

With the Cruiser®, Çelikel® engineers developed a robust suspension system that can endure tractor overloads. In this system, deformations that can occur during sudden starts and stops are prevented by transferring the load to the suspension springs in the drawbar.

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MACHINES

Çelikel manure management systems are flawless systems to minimize the potential difficulties of the manure collection, dehydration and usage processes of dairy and livestock farms. Regardless of the scale of your business, Çelikel® offers manure management solutions to meet the demands of producers.



Manure separators are at the heart of manure management systems. In order to separate the manure inside the reservoir, it is important that the separator has a long lifespan and runs smoothly. You too can rely on Scud® unconditionally in your fertilizer business.

CARBIDE PLATED
AUGER

STAINLESS
AUGER CORE

LARGE
RESERVOIR

STAINLESS
RESERVOIR

HIGH
SECURITY
PLATFORM

SIEVE
OPTIONS

SCUD4000 SCUD6000

PRODUCT	POWER	SIEVE	AUGER	ÇALIŞMA VOLTAJI	E. PANO-SU
SCUD 6000	5,5 kW	316 Quality Stainless Steel Special Edition	Special hard surface filled 304 Quality stainless steel	220/380 V	Included
SCUD 4000	7,5 kW	316 Quality Stainless Steel Special Edition	316 Quality stainless steel, special solid filling	220/380 V	Included

PRODUCT	ENGINE POWER	PUMP REV	WORKING VOLTAGE	E. PANEL
SCUD MIX 110	11 kW	400 rpm	220/380 V	Included
SCUD MIX 185	18,5 kW	400 rpm	220/380 V	Included
SCUD MIX 220	22 kW	400 rpm	220/380 V	Included

PRODUCT	ENGINE POWER	PUMP REV	WORKING VOLTAGE	E. PANOSU
SCUD PUMP 55	5,5 kW	1400 rpm	220/380 V	Included
SCUD PUMP 75	7,5 kW	1400 rpm	220/380 V	Included
SCUD PUMP 110	11 kW	1400 rpm	220/380 V	Included
SCUD PUMP 185	18,5 Kw	1400 rpm	220/380 V	Included

PRODUCT	TYPE	ENGINE POWER	WHEEL DRIVER NUMBER	SCRAPPER HEIGHT	SCRAPPER WIDTH	ROAD LENGTH
SCUD SCRAPER H	Hydraulic	3-4 kW	1	17 cm	1-5 m	50 m
SCUD SCRAPER C	Chained	1,1 kW	1	17 cm	1-5 m	50 m
SCUD SCRAPER CR	Chained Roped	1,1 kW	1	17 cm	1-5 m	50 m
SCUD SCRAPER R	Roped	0,55 kW	2	17 cm	1-5 m	50 m



■ MIXER®

Scud Mix® is a specially to mix the clumped manure gathered at the bottom and the liquid manure on top of the manure reservoir. Homogeneously mixed manure will be separated better by the separator.

■ SCUD PUMP®

Scud Pump® is a unique stainless pump which can operate without the use of a chopper thanks to its unique open stainless steel fan system. With its steel cast body it can absorb all impacts coming from outside and will never let you down even in difficult conditions.

■ SCUD SCRAPER®

Scud Scraper® series scrapers have the options to work hydraulically, chained and roped. Thanks to open stainless fan system it works without a chopper. SCUD scapper works perfect regardless of any external shock.

CRAFTER TRAKTÖR VE TARIM MAKİNELERİ	X7	X13	X15	X18	X20
LENGTH-A	5890 mm	7395 mm	8120 mm	7725 mm	8355 mm
WIDTH-B	2265 mm	2265 mm	2965 mm	2965 mm	3115 mm
MAX HEIGHT -C	2870 mm	2935 mm	2985 mm	3325 mm	3295 mm
LOADING HEIGHT -D	2450 mm	2500 mm	2620 mm	2960 mm	2930 mm
TYRE TRAIL WIDTH -E	1720 mm	1760 mm	2545 mm	2425 mm	2620 mm
EMPTY WEIGHT	4000 kg	4750 kg	5835 kg	6150 kg	6400 kg
NET MANURE WEIGHT (loading over the top line of the unit)	8900 kg	13200 kg	16000 kg	19500 kg	22000 kg
NET MANURE WEIGHT (COVER LINE)	8250 kg	12500 kg	15000 kg	17500 kg	20000 kg
MAX TOTAL WEIGHT	13250 kg	18620 kg	22335 kg	25650 kg	28400 kg
REQUIRED POWER	60 HP	70 HP	90 HP	120 HP	150 HP
MAX CAPACITY M ³	7,40m ³	11 m ³	13,30 m ³	16,30m ³	17,35 m ³
SPREADER SYSTEM	Vertical Spreader (Swiper)	Vertical Spreader (Swiper)	Vertical Spreader (Swiper)	Vertical Spreader (Swiper)	Vertical Spreader (Swiper)
PTO SPEED	540 rpm				
SPREADING AREA	4...20 m				
WHEEL SIZES	400/60 R 15,5	400/60 R 15,5	550-60.22.5	550-60.22.5	600-50.22.5
THE NUMBER OF WHEELS	2	4	4	4	4
SUSPENSION SYSTEM	FIXED	Tandem	Tandem	Tandem	Tandem
BRAKE SYSTEM	Optional	Optional	Standard	Standard	Standard

CRAFTER
TRAKTÖR VE TARIM MAKİNELERİ

MANURE DENSITY IS CALCULATED AS 25 TONS/M³.

TECHNICAL VALUES ARE VALID FROM THE DATE OF RELEASE. ÇELİKEL TARIM MAKİNELERİ LTD. ŞTİ. KEEPS THE RIGHTS TO MAKE CHANGES IN DESIGNS OF THE MACHINES WITHOUT ANY PUBLIC DECLARATIONS RESERVED.

RYKER TRAKTÖR VE TARIM MAKİNELERİ	RYKER R10 SOLID MANURE SPREADER
LENGTH-A	7110 mm
WIDTH-B	2200 mm
MAX HEIGHT -C	2845 mm
LOADING HEIGHT -D	2480 mm
TYRE TRAIL WIDTH -E	1750mm
EMPTY WEIGHT	3500 kg
NET MANURE WEIGHT (loading over the top line of the unit)	13750 kg
NET MANURE WEIGHT (COVER LINE)	12500 kg
MAX TOTAL WEIGHT	17250 kg
REQUIRED POWER	70 HP
MAX CAPACITY M ³	11 m ³
SPREADER SYSTEM	3-Winged Thrower Pallet (2 Pieces)
PTO SPEED	540 rpm
SPREADING AREA	4...20 m
WHEEL SIZES	400/60 R 15,5
THE NUMBER OF WHEELS	4 pcs
SUSPENSION SYSTEM	Tandem
BRAKE SYSTEM	Optional

RYKER
TRAKTÖR VE TARIM MAKİNELERİ

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CRUISER <small>IN A CLASS BY ITSELF.</small>	CRUISER Z3	CRUISER Z5	CRUISER Z10	CRUISER Z20
LENGTH	4350 mm	5880 mm	7670 mm	9500 mm
HEIGHT***	2470 mm	2651 mm	3045 mm	3345 mm
WIDTH***	2000 mm	2150 mm	2617 mm	2525 mm
WEIGHT***	1200 kg	1914 kg	2940 kg	5500 kg
LOADED WEIGHT	4800 kg	8900 kg	14740 kg	28500 kg
WORKING WIDTH *	14 - 20 m	14 - 20 m	16 - 25 m	16 - 30 m
CAPACITY	3000 lt.	5000 lt.	10000 lt.	20000 lt.
MINIMUM POWER REQUIREMENT**	30 kW/40 hp	40 kW/55 hp	52 kW/70 hp	82 kW/110 hp
PTO REV	540 RPM	540 RPM	540 RPM	540 RPM
WHEEL SIZES	12,5/80 15,3	400/60-15,5	550/60-22,5	550/60-22,5
THE NUMBER OF WHEELS	2	2	2	4
AXLE SYSTEM	With Brake	With Brake	With Brake	Tandem Scissor
ROTATING AXLE SYSTEM	-	-	-	Optional
HYDRAULIC BRAKE SYSTEM	Standard	Standard	Standard	Standard
WARNING LIGHTS	Standard	Standard	Standard	Standard
EXTERNAL FILLER CAP	Standard	Standard	Standard	Standard
HYDRAULIC SPREADING VALVE	Standard	Standard	Standard	Standard
MANUEL SUCTION VALVE	Standard	Standard	Standard	Standard
HYDRAULIC SUCTION VALVE	Optional	Optional	Optional	Optional
VACUUM SAFETY VALVE	Standard	Standard	Standard	Standard
PRESSURE SAFETY VALVE	Standard	Standard	Standard	Standard
MANURE SEPARATOR TANK	Standard	Standard	Standard	Standard
INTERIOR TANK SAFETY VALVE	Standard	Standard	Standard	Standard
HYDRAULIC JACK	Standard	Standard	Standard	Standard
LOADING POSITION FRONT LEFT	Standard	Standard	Standard	Standard
LOADING POSITION BACK	Optional	Optional	Optional	Optional
PUMP****	ImportED (Battioni Pagani Mec 5000)	Import (Battioni Pagani Mec 6500), Import (Moro Kaiser Air Pm 60)	Import (Battioni Pagani Mec 8000), Import (Moro Kaiser Air Pm 70)	Import (Battioni Pagani Mec 13500)
GEOMETRIC PUMP CAPACITY ****	5000 L/min	7000 L/min	8000 L/min	
SUCTION DEPTH *	6 M	6 M	6 M	6 M
AUTOMATIC LOADING	-	-	Optional	Optional
AUTOMATIC LOADING FIXED PIPED	-	Optional	Optional	Optional
LOW LEVEL SPREAD (FOR AREAS WITH TREES 4 inch height)	Standard	Standard	Standard	Standard
LOW LEVEL SPREAD (FOR AREAS WITH TREES 6 inch height)	Optional	Optional	Optional	Optional
CONE SPREAD (FOR AREAS WITHOUT TREES 4 inch height)	Standard	Standard	Standard	Standard
CONE SPREAD (FOR AREAS WITHOUT TREES 6 inch height)	Optional	Optional	Optional	Optional
DOUBLE CONE SPREADER	-	Optional	Optional	Optional
SPREAD PIPED (9-12-15-18-21-24m)	Optional	Optional	Optional	Optional
SLIDING PIPED SPREAD BOW (9-12-15m)	Optional	Optional	Optional	Optional
UPPER SPREADER	Optional	Optional	Optional	Optional
UPPER SPREADER RANGE (45° - 5 BAR)*	40 - 60 m	40 - 60 m	40 - 60 m	40 - 60 m
TOP THROWER ADJUSTABLE ANGLE	Optional	Optional	Optional	Optional
HYDRAULIC TOP THROWER	Optional	Optional	Optional	Optional
HYDRAULIC UPPER RELEASE VALVE	Optional	Optional	Optional	Optional

CRUISER
IN A CLASS BY ITSELF.

*MAY VARY ACCORDING TO MANURE DENSITY, SPREADING VALVE BEING OPEN AND INTERIOR PRESSURE.

**IS TRACTOR PTO OUTPUT VALUE. IT MAY VARY ACCORDING TO THE FIELD CONDITION (SLOPE, GROUND TOUGHNESS, GROUND STRUCTURE ETC).

***MAY VARY DEPENDIN ON THE MACHINE OPTIONS.

VALUES ARE BASE MODEL VALUES.

****VACUUM PUMP MODEL AND TECHNICAL SPECIFICATIONS MAY VARY DEPENDING ON THE PRODUCT OR UPPER SPREADER OPTION.

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