

#### Where the seed meets the soil.











As long as the farmer and the land have a smile on their faces!







# Agricultural Machinery is Irtem's Job!

When Irtem was founded in Tekirdağ-Hayrabolu in 1967, the target was evident: To be "the name that puts a smile on soil's and farmers' faces" in agricultural machinery sector...

Irtem, which at first claimed a place among the leading manufacturers of seeding machines in a very short time, switched to quality and mass production by adding Computer Aided Design (CAD) and Computer Aided Manufacture (CAM) benches to its technological substructure in 1997, recognizing that becoming a world brand requires manufacture in international standards.

With the sheet metal processing station and ERP system becoming operational in 1996, efficiency, speed and standardization increased even more.

In year 2010, with the robot technology becoming operational for production, the production quality was elevated to higher levels.

9000 m2 indoor production area doubled and increased to 18.000 m2. By manufacturing not seasonally but throughout the year with three factory buildings, it became possible to meet the demands of the customers immediately.

Irtem, whose range of products consists 5 primary products and tens of sub product types and expands continuously, takes solid steps on the way of being the first brand that comes to mind when agricultural machines are mentioned and offering long lasting products to our farmers.





# Why is Irtem just what your field wants from you?

Because by constantly listening to our farmers, Irtem proceeds with its improvement-enhancement activities according to their needs and demands.

Because Irtem never deviates from the world standards in production.

Because Irtem always observes the technological advancements and improves all of its units, from the raw materials to the equipment pool, with the advancing technology.

Because Irtem offers appropriate solutions just at the right time.

Because Irtem focuses on customer satisfaction with all its employees.

Because Irtem is always there for its clients with dealers and services, both domestic and abroad.

Because Irtem dedicates the sum of all its knowledge, experience and its entire technological substructure to providing long-lasting products for our farmers.

Because Irtem is focused on putting smiles on our farmer's and soil's faces.





# **New Projects**

In 2017,we attended to Agritechnica 2017 Fair with these 2 machines. Our research&development team continue to work on the new projects.

TranSeeder R250 (2 in 1 - Tillage and Sowing)

As the latest project of R&D team, Transeeder R250 is useful for combined sowing operations. It's possible to seed on the last unharvested crop without to use another equipment for tillage.













Pneumatic Precision Planters









Hose Reel Irrigation Machines

Where the seed meets the soil.



## Pneumatic Precision Planters

are modern planting machines that can plant the seeds in a row individually with utmost precision.

Thus pneumatic planting machine ensures minimum seed consumption and optimal product yield. It is possible to plant sunflower, corn, soybean, peanut, watermelon, melon, squash, non-fibrous cotton, beet, cucumber, fennel, tomato, kochia, vegetable and onion seeds with utmost precision. The distance between rows can be in between 27 cm and 90 cm. Distance above rows is variable. There are 4, 5, 6, 8, 12 rows are in available.

The planting units consist of major components such as a furrow opener with adjustable level which scrapes large lumps of soil and dry soil in the front, the seed tank, seed cell, diffusing unit, seed planting axe, covering hoes with adjustable level pressure whell and a cord which adjusts the level of the pressure wheel. In machine with fertilizer equipment, the fertilizer thanks may be optionally made of plastic or steel.

There are different options according to sowing unit types, fertilising units, frames and the number of rows.

Sowing units can be in two different types:

-Axe type

-Disc type

For disc type machines, fertiliser coulters are also produced with double-discs.

Frame types; this machine has x-frame and fixed frame options. It is very easy and safe to slide the sowing units on x designed frame alternative.

Fertiliser units; the planter can be with or without fertiliser tank. There are two types of fertiliser tanks which are plastic and metal.



#### The attachment design

of the planter is a modern solution for the connection to the tractor. Just one person can easily connect the planter to the tractor.

#### This bar

facilitates to set units without spend much effort.



#### The distance

between units are adjusting easily thanks to special produced X-Frame.



are opening and closing by the support of hydraulic pistons.





## **AXE TYPE**

Usually it is more appropriate to prefer where there is no straw waste on the field and for the planting of delicate seeds.

On the machine, pressure and depth settings can be adjusted with the help of the wheel positioned at the rear of the unit.

For axe type machines, fertilizer legs are also produced in spring load axe type.



			<b>∕</b> Rows <b>/</b> Rows		Rows		Rows	Rows		
Specifications	Unit	With Fertiliser	Hwithout with 5		) Without Fertiliser	With Ferti <b>l</b> iser	) Without Fertiliser	With Fertiliser	S Without Fertiliser	
Width	mm	2980	2980	3250	3250	3880	3880	5750	5750	
Height	mm	1730	1730	2680	2680	2580	2580	1940	1940	
Lenght	mm	2150	2150	2290	2290	2150	2150	2070	2070	
Seed Tank Volume	Litre	4 x 42	4 x 42	5 x 42	5 x 42	6 x 42	6 x 42	8 x 42	8 x 42	
Fertiliser Tank Volume	Litre	400	-	520	-	520	-	800	-	
Disc Ho <b>l</b> e Diameter	mm	1-6	1-6	1-6	1-6	1-6	1-6	1-6	1-6	
Disc Ho <b>l</b> e No	pcs	Variable	Variable	Variable	Variable	Variable	Variable	Variable	Variable	
Distance Between Rows	mm	700	700	700	700	700	700	700	700	
Row-Top Distance	cm	1-177	1-177	1-177	1-177	1-177	1-177	1-177	1-177	
Operating Speed	Km/h	5-7	5-7	5-7	5-7	5-7	5-7	5-7	5-7	
Required Power	HP	70+	70+	80+	80+	90+	90+	120+	120+	
Weight	Kg	950	680	1020	890	1150	955	1700	1500	

# IrTem Agri Machines

## **DISC TYPE**

Usually it is more appropriate to use where there is plenty of straw waste on the field.

Depth settings can be adjusted with the help of the wheels next to the planter discs, while pressure is applied with V-shaped pressure wheels at the rear of the unit.

Also optionally a seed pressure wheel is attached to the rear side of the planter discs for small and delicate seeds.



More durable and convenient plastic seed tanks.



The pressure wheels which are behind the discs provide best seed covering and protect humidity in the soil.





#### **TELESCOPIC FRAME**

Produced both in coulter type and disc type.
The machine is designed in way that the units on two ends are clustered in the main frame.
The purpose is to prevent the machine from going off the measurements that are set by highway commission by clustering during road transportation.

**irTem** 

Agri Machines



The compact and usable design of the seed disc and vacuum system offer perfect precision planting.



It's very easy to set units in seconds with unit lifting arm.





## Pneumatic Precision Planters

**Optional Parts** 

Seed Control System

You can calculate the area that you sowed by using this device. It's possible to see how many seed you spent from the screen. It alerts the operator if the seed not fall on the ground.



Front Pressure Wheel Setv

This feature is an essential for beet planting by the pneumatic precision planter.



Disc TypeFurrow Opener

According to soil conditions and sowing choices, this option is available for our customers.



Extra tank for powder chemicals and fertilizers with MaterMacc® Micro Volumex dosage system.





# Universal Seed Drills

are modern planting machines that are capable of precise planting because of their variable-speed transmission box.

Universal seed drill is a transmission-type modern plantig machine that may plant all cereal seeds like wheat, barley, oat and rye and large and medium seeds such as corn, soybean, pea, chickpea, lentil, rape with precision.

Thank to this transmission gear, it can also plant small seeds such as canola, clover, kochia, onion, carrot, tomato, and, spinach with utmost precision.

The universal seeders are available in different models according to some different properties listed below.

Coulter Types can be in three different types:

- -Spring loaded axe type of coulter
- -Single disc type of coulter
- -Double disc type of coulter

Attachment to the tractor can be either with 3 point linkage system which means hydraulic mounted type or the seeder can be trailed. Trailed seeders can not be with spring loaded coulters. Also for the double and single disc type of coulters are available for certain sizes. Please have a look at the following pages.

Fertiliser Units; The seeder can be with or without fertiliser unit. The ones with fertiliser unit have hoppers divided in two where one section is for seed and the other for fertiliser. Also there are two gearboxes in order to make dosage adjustment for seed and fertiliser independent from one another.

Working width; In order to get the suitable machine, you have to determine the size of the seeder. Please have a look at the technical specification tables for each type and choose the correct size of the seeder.







## The variable-speed transmission is stable, durable and precise for every kind of seed

sowing operations.

It's simple to adjust the amount of the seed to be sowed which was calculated, by the lever and the scale on the transmission box.



The marking operation is very easy by the support of hydraulic pistons which are standard in all universal seed drill models.





# SPRING LOAD COULTER

The universal seed drill is a planting machine of hydraulically suspended type which is capable of planting by attaching to a tractor by a three-point suspension mechanism

Structurally, the coulters are made by attaching casts with rivets to the coulter plates which are attached to a metal sheet. It is possible to set equal planting depths with this type of coulters.

The variable-speed transmission and planting seed gears enable the seeds to be spread to the soil evenly and in desired amount. Fertilizer is spread with sheave gears, thanks to the variable-speed transmission on the machine.

In spring load coulters, coulters are attached to three-row frame. Purpose of this is to reduce the risk of gathering of straws between the coulters.

Distance between rows is 125 mm. These type of machines are manufactured as 18, 20, 22, 24, 28, 32 rows and with or without fertilizer equipment.

Optionally, the machines can be equipped with indentation systems and decare-meters.



Spring loaded axe-type coulters perform best soil dipping.



The special designed housings provide optimal seeding compatibly with different seeds. It's possible to follow wheel line with optional tramlining system.



To open and close the markers will take just seconds with hydraulic support.



Considerations	-14		Spring Load Coulter										
Specifications Ur	nit			5pg =0									
Number of Coulters p	ocs	18	20	22	24	28	32						
Distance Between Rows m	nm	125	125	125	125	125	125						
Work Width m	nm	2250	2500	2750	3000	3500	4000						
Handling Width m	nm	2535	2785	3035	3285	3830	4300						
Handling Height m	nm	1580	1580	1580	1580	1580	1580						
Handling Length m	nm	2390	2390	2390	2390	2390	2390						
Seed Tank Volume	Lt	300	330	360	390	480	530						
Fertiliser Tank Volume	Lt	280	310	340	370	540	500						
Tank w/oFertillser Volume	Lt	580	640	700	760	930	1030						
Tire Size		600/16	600/16	600/16	600/16	7.0/15.3	7.0/15.3						
Operating Speed Kr	m/h	5-7	5-7	5-7	5-7	5-7	5-7						
Weight	Kg	820	880	940	980	1230	1340						
Required Power	KW	37-45	45-52	52-60	60-66	75-82	82-90						
Required Power	HP	50+	60+	70+	80+	100+	110+						





#### **SINGLE DISC**

The universal seed drill is a planting machine of hydraulically suspended type which is capable of planting by attaching to a tractor by a three-point suspension mechanism.

Single discs machines have a seed-directing system as standard. Thus the seed falls to the back of the coulter, into the drill from a very short distance.

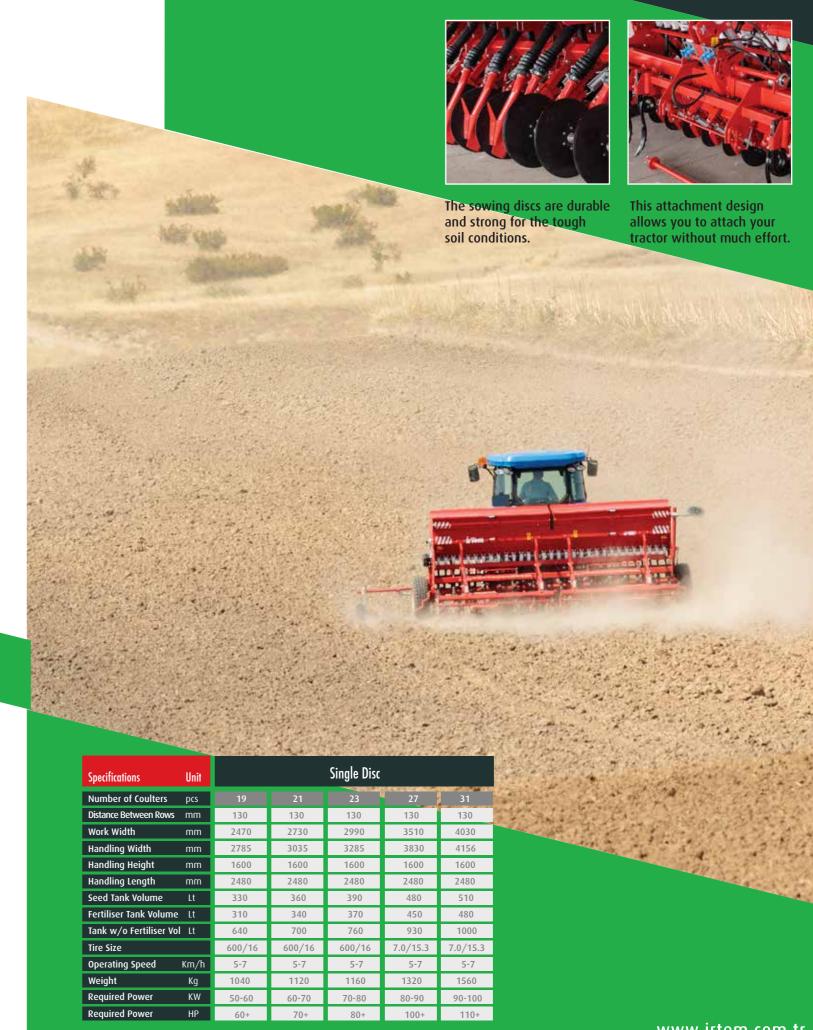
The variable-speed transmission and planting seed gears enable the seeds to be spread to the soil evenly and in desired amount. Fertilizer is spread with sheave gears, thanks to the variable-speed transmission on the machine.

The distance between rows is 130 mm in single disc machines.

This type of machines are manufactured with 19, 21, 23, 27, 31 rows and with or without fertilizer equipment

Optionally, the machines can be equipped with indentation systems and decare-meters.







#### **DOUBLE DISC**

The universal seed drill is a planting machine of hydraulically suspended type which is capable of planting by attaching to a tractor by a three-point suspension mechanism.

Double disc machines should be used in the cases where there is plenty of straw in the field. There are pressure wheels behind the coulters. These pressure wheels apply pressure on the falling seed.

The variable-speed transmission and planting seed gears enable the seeds to be spread to the soil evenly and in desired amount. Fertilizer is spread with sheave gears, thanks to the variable-speed transmission on the machine.

The distance between rows is 130 mm in double disc machines.

This type of machines are manufactured with 19, 21, 23, 27, 31 rows and with or without fertilizer equipment

Optionally, the machines can be equipped with indentation systems and decare-meters.



The cultivator legs fluff the soil out for a succesfull sowing operation.



The plastic seed hoses are durable and they provide a good seed flow.



The discs are designed to use them in the cases where there behind the discs provide best



The pressure wheels which are is plenty of straw in the field. seed covering and protect humidity in the soil.



Specifications	Unit		(	Double Disc	C	
Number of Coulters	pcs	19	21	23	27	31
Distance Between Rows	mm	130	130	130	130	130
Work Width	mm	2470	2730	2990	3510	4030
Handling Width	mm	2785	3035	3285	3830	4156
Handling Height	mm	1600	1600	1600	1600	1600
Handling Length	mm	2480	2480	2480	2480	2480
Seed Tank Volume	Lt	330	360	390	480	510
Fertiliser Tank Volume	Lt	310	340	370	450	480
Tank w/o Fertiliser Vol	Lt	640	700	760	930	1000
Tire Size		600/16	600/16	600/16	7.0/15.3	7.0/15.3
Operating Speed	Km/h	5-7	5-7	5-7	5-7	5-7
Weight	Kg	1160	1210	1320	1640	1790
Required Power	KW	60-70	70-80	80-90	90-100	100-110
Required Power	HP	60÷	70÷	80÷	100+	120÷



## TRAILED TYPE

Trailed type universal seed drills are designed for the tractors which are 60 hp or more. This means, you don't need a high power tractor for the sowing operations.

Trailed type universal seed drills can sensitively plant all the grain seeds such as wheat, barley, oat, rye and the seeds of coarse or medium size such as corn, soy, pea, chickpea, lentil, ball etc.

Thanks to variable-speed tranmission, it can also sensitively plant the small seeds such as canola, clover, sorghum, onion, carrot, tomato, spinach etc.

It's produced as 3 and 4 meters, single disc type and double disc type with and without fertiliser unit options.



It's possible to adjust and fix the pressure of the sowingunits.



The tank hatch opens teasily with the support of the dampers.



This pin is used for to disconnect the wheels from the gearbox and access to transportation mode.



SpecificationsUnitWith DiscNumber of Coulterspcs20Distance Between Rowsmm140Work Widthmm2800Handling Widthmm3600Handling Heightmm1580Handling Lengthmm3600Seed Tank VolumeLt3000Fertiliser Tank VolumeLt390Tank w/o Fertiliser VolLt370Tire Size7.50×16/12HROperating SpeedKm/h5-7WeightKq1310		COLUMN TO SERVICE STATE OF THE PERSON NAMED IN COLUMN TO SERVICE STATE OF THE PERSON NAMED IN COLUMN TO SERVICE STATE OF THE PERSON NAMED IN COLUMN TO SERVICE STATE OF THE PERSON NAMED IN COLUMN TO SERVICE STATE OF THE PERSON NAMED IN COLUMN TO SERVICE STATE OF THE PERSON NAMED IN COLUMN TO SERVICE STATE OF THE PERSON NAMED IN COLUMN TO SERVICE STATE OF THE PERSON NAMED IN COLUMN TO SERVICE STATE OF THE PERSON NAMED IN COLUMN TO SERVICE STATE OF THE PERSON NAMED IN COLUMN TO SERVICE STATE OF THE PERSON NAMED IN COLUMN TO SERVICE STATE OF THE PERSON NAMED IN COLUMN TO SERVICE STATE OF THE PERSON NAMED IN COLUMN TO SERVICE STATE OF THE PERSON NAMED IN COLUMN TO SERVICE STATE OF THE PERSON NAMED IN COLUMN TO SERVICE STATE OF THE PERSON NAMED IN COLUMN TO SERVICE STATE OF THE PERSON NAMED IN COLUMN TO SERVICE STATE OF THE PERSON NAMED IN COLUMN TO SERVICE STATE OF THE PERSON NAMED IN COLUMN TO SERVICE STATE OF THE PERSON NAMED IN COLUMN TO SERVICE STATE OF THE PERSON NAMED IN COLUMN TO SERVICE STATE OF THE PERSON NAMED IN COLUMN TO SERVICE STATE OF THE PERSON NAMED IN COLUMN TO SERVICE STATE OF THE PERSON NAMED IN COLUMN TO SERVICE STATE OF THE PERSON NAMED IN COLUMN TO SERVICE STATE OF THE PERSON NAMED IN COLUMN TO SERVICE STATE OF THE PERSON NAMED IN COLUMN TO SERVICE STATE OF THE PERSON NAMED IN COLUMN TO SERVICE STATE OF THE PERSON NAMED IN COLUMN TO SERVICE STATE OF THE PERSON NAMED IN COLUMN TO SERVICE STATE OF THE PERSON NAMED IN COLUMN TO SERVICE STATE OF THE PERSON NAMED IN COLUMN TO SERVICE STATE OF THE PERSON NAMED IN COLUMN TO SERVICE STATE OF THE PERSON NAMED IN COLUMN TO SERVICE STATE OF THE PERSON NAMED IN COLUMN TO SERVICE STATE OF THE PERSON NAMED IN COLUMN TO SERVICE STATE OF THE PERSON NAMED IN COLUMN TO SERVICE STATE OF THE PERSON NAMED IN COLUMN TO SERVICE STATE OF THE PERSON NAMED IN COLUMN TO SERVICE STATE OF THE PERSON NAMED IN COLUMN TO SERVICE STATE OF THE PERSON NAMED IN COLUMN TO SERVICE STATE OF THE PERSON NAMED STATE OF THE PERSON NAMED STATE OF THE PERSON NAMED STATE OF THE PERSON NAM	NESKIE THIS DESIGNATION
Distance Between Rows mm 140  Work Width mm 2800  Handling Width mm 3600  Handling Height mm 1580  Handling Length mm 3600  Seed Tank Volume Lt 3000  Fertiliser Tank Volume Lt 370  Tank w/o Fertiliser Vol Lt 370  Tire Size 7.50×16/12HR  Operating Speed Km/h 5-7	Specifications (	Unit	With Disc
Work Width mm 2800  Handling Width mm 3600  Handling Height mm 1580  Handling Length mm 3600  Seed Tank Volume Lt 3000  Fertiliser Tank Volume Lt 390  Tank w/o Fertiliser Vol Lt 370  Tire Size 7.50×16/12HR  Operating Speed Km/h 5-7	Number of Coulters	pcs	20
Handling Width mm 3600 Handling Height mm 1580 Handling Length mm 3600 Seed Tank Volume Lt 3000 Fertiliser Tank Volume Lt 390 Tank w/o Fertiliser Vol Lt 370 Tire Size 7.50×16/12HR Operating Speed Km/h 5-7	Distance Between Rows of	mm	140
Handling Height mm 1580 Handling Length mm 3600 Seed Tank Volume Lt 3000 Fertiliser Tank Volume Lt 390 Tank w/o Fertiliser Vol Lt 370 Tire Size 7.50×16/12HR Operating Speed Km/h 5-7	Work Width	mm	2800
Handling Length mm 3600  Seed Tank Volume Lt 3000  Fertiliser Tank Volume Lt 390  Tank w/o Fertiliser Vol Lt 370  Tire Size 7.50×16/12HR  Operating Speed Km/h 5-7	Handling Width	mm	3600
Seed Tank Volume         Lt         3000           Fertiliser Tank Volume         Lt         390           Tank w/o Fertiliser Vol         Lt         370           Tire Size         7.50×16/12HR           Operating Speed         Km/h         5-7	Handling Height	mm	1580
Fertiliser Tank Volume Lt 390  Tank w/o Fertiliser Vol Lt 370  Tire Size 7.50×16/12HR  Operating Speed Km/h 5-7	Handling Length	mm	3600
Tank w/o Fertiliser Vol Lt 370 Tire Size 7.50×16/12HR Operating Speed Km/h 5-7	Seed Tank Volume	Lt	3000
Tire Size         7.50×16/12HR           Operating Speed         Km/h         5-7	Fertiliser Tank Volume	Lt	390
Operating Speed Km/h 5-7	Tank w/o Fertiliser Vol	Lt	370
	Tire Size		7.50×16/12HR
Weight Kg 1310	Operating Speed K	m/h	5-7
	Weight	Kg	1310
Required Power KW 45-52	Required Power	KW	45-52
Required Power HP 60+	Required Power	HP	60÷



**İrTem** 



#### • APV®Fertilizer

This is the new feature for applying the microgranulised fertilizers with the universal seed drills.



#### • Tracer unit

Tracer unit is a solution to drop a trace after the seed drill which will be used for the applications like spraying, irrigation, fertilization, etc. This feature facilitates to move in the field without waiting until the plants are come into leaf.

#### Tramlining System

The tramlining system is useful for to make a traffic line in the field. When it's programmed for the tramlining operation, it stops the seeding on the row which was selected before.



# Fertilizer Spreaders

are granule, easy-to-use, modern fertilizing machines.

The fertilizer spreader is a modern granule fertilising machine which is manufactured in two types as hydraulic type and trailed type with two discs, hydraulic control and PTO shaft.

The fertilizer spreaders are easily transported to the field where fertilizing shall take place, and there is no need to take a second tractor to the small fields thanks to our machines with a high storage capacity.

The fertilizer spreaders may be manufactured with hydraulic controls. Thanks to the hydraulic control, fertilizer flow can be easily controlled at the boundaries of the field from the tractor cab.

Also, it is possible to individually control the fertilizer spreading discs at the boundaries thanks to the hydraulic control.





The spreader discs are rotated by a transfer shaft which takes power from PTO shaft.



There is a mixer for the fertilizer and a filter for the undesired stuff in the fertilizer tank.



These discs provide equal and optimal fertilizer spreading.



Specifications	Unit	FS 1200
Tank Volume	Lt	1200
Work Width	mt	6-24
Width	mm	2200
Length	mm	1282
Height	mm	1560
Operating Speed	Km/h	6-14
Operating Capacity	Kg/Dekar	0 - 150
Ferti <b>l</b> ising Area	Dekar/Saat	10-50
Weight	Kg	340
Control System		Hydraulic



#### **TRAILED TYPE**

Fertilizer spreaders manufactured as trailed type are attached to a tractor by linkage system.

There are mechanisms with rotating discs on each of its two sides. Hydraulic system on the machines is actuated through the PTO shaft of the tractor. Primary tank has a capacity of 1000 lt which is increased to 3000 lt with appurtenances.

The mixing shaft in the fertilizer tank is in an horizontal position and rotates at a lower rate. This mixing shaft never turns the fertilizer into powder. In this way, the fertilizer is ensured to spread throughout the field in a more homogenous manner.

The fertilizer spreading work width of the machine may reach 12 – 15 – 24 meters, but depending on the type of fertilizer, setting can be done by changing the angles and wing sizes on the disc.





Fertilizer dosage can be adjusted by the hydraulic system optionally.



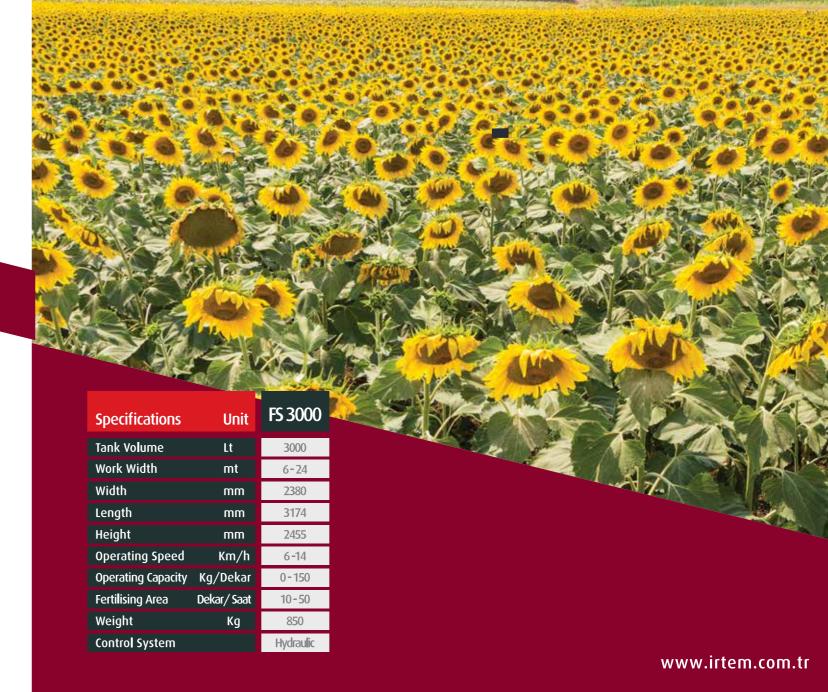
The spreader discs are rotated by a transfer shaft which takes power from PTO shaft.



The stairs make easier to reach the fertilizer tank.



There is a mixer for the fertilizer and a filter for the undesired stuff in the fertilizer tank





# Cultivator

# This is the modern Cultivator Which is used to hoe the soil following the plantation and to struggle with the weeds.

irtem Cultivator is a modern hoeing machine which is used in order to loosen the soil of the plant that is being developed following the plantation and to struggle with the weeds.

The procedure of loosening the soil is a procedure which is required for accelerating the plant root development by increasing the rate of air in the soil and by reducing the evaporation and water loss. Thanks to the adjustable discs connected to the units, it helps to cover the developing plant with soil and to break the soil crusting which had formed between the rows. The units have a structure of which the distances between the rows and depths can easily be adjusted and they operate easily without being effected from the heights on the land since they operate independent of each other.

There is a movement disc with transmission in the machines with fertilization equipment. This way, the desired quantity of the fertilizer to be thrown can accurately be adjusted. In the machines without fertilization equipment, guide discs are attached, instead of move ment disc, so that the machine does not divert from between the rows. Consequently, the machine enables hoeing without slipping even sloped land and without damaging the plant.

irtem Cultivator is produced with or without fertilization equipment as based on the demand.

## **Cultivator**









The desired quantity of the fertilizer to be thrown can accurately be adjusted by the transmission table.



This hoeing machine has X chassis which is facilitate to slide units.



		5	Rows	7 Rows			
Specifications	Unit	With Fertiliser	Without Fertiliser	With Fertiliser	Without Fertiliser		
With	mm	3000	3000	4500	4500		
Height	mm	1420	1420	1420	1420		
Length	mm	2510	2260	2510	2260		
Operation Depth	mm	0-120	0-120	0-120	0-120		
Fertiliser Tank Volume	Litre	360	-	496(2x2	48) -		
Distance Between Rows	mm	600-750	600-750	600-750	600-750		
Operating Speed	Km/h	5-8	5-8	5-8	5-8		
Required Power	НР	50-70	40-60	75-100	40-60		
Weight	Kg	760	600	1020	790		



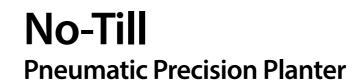
# No-Till Pneumatic Precision Planters

is a modern planting machine that is useful for precise planting to an unprocessed land.

Stubble planter is a modern planting machine that can plant seeds precisely and individually to an unprocessed soil.

Main advantages of the zero tillage, direct planting method, usage of which gradually increased all over the world, are as follows:

- Decreases the risk of erosion,
- Increases the infiltration of rain into the soil and by decreasing the evaporation, it helps retain moisture within the soil,
- Improves the soil structure by increasing the amount of organic matter in the topsoil,
- Encourages biological life and activity within the soil,
- Decreases the number of required machines, power requirement of the tractor (its size), fuel consumption, repair and maintenance costs for mechanization,
- Prevent high temperatures and temperature changes around the seed,
- Decreases the fuel consumption by 50-60% as it limits the mechanization operations to planting with only one passage,
- Decreases the time and labor requirements by 50-60 %,
- Under critical conditions such as when a few days are appropriate for planting, it provides a great advantage.











		<b>⚠</b> Rows
Specifications	Unit	Without Fertiliser
With	mm	3600
Height	mm	2000
Length	mm	3160
Seed Tank Volume	Litre	4x32
Fertiliser Tank Volum	Litre	900
Disc Hole Diameter	mm	1 - 6
Disc Ho <b>l</b> e No	pcs	Variable
Distance Between Rows	mm	650 - 760
Row-Top Distance	cm	1 - 177
Operating Speed	Km/h	5 - 7
Required Power	HP	80 - 100
Weight	Kg	2320



**IrTem**Agri Machines







# Hose Reel Irrigation Machine

# is a functional, user-friendly agricultural machine.

Hose-reel irrigation machines are flexible systems which provide a big irrigation capacity for your fields. The benefits of using these machines for irrigation can be listed as:
Low cost of investment compared with other systems
Long economic life
Water saving

Correct use of water supplies
Energy saving
Labour saving
Irrigation efficiency
Flexibility

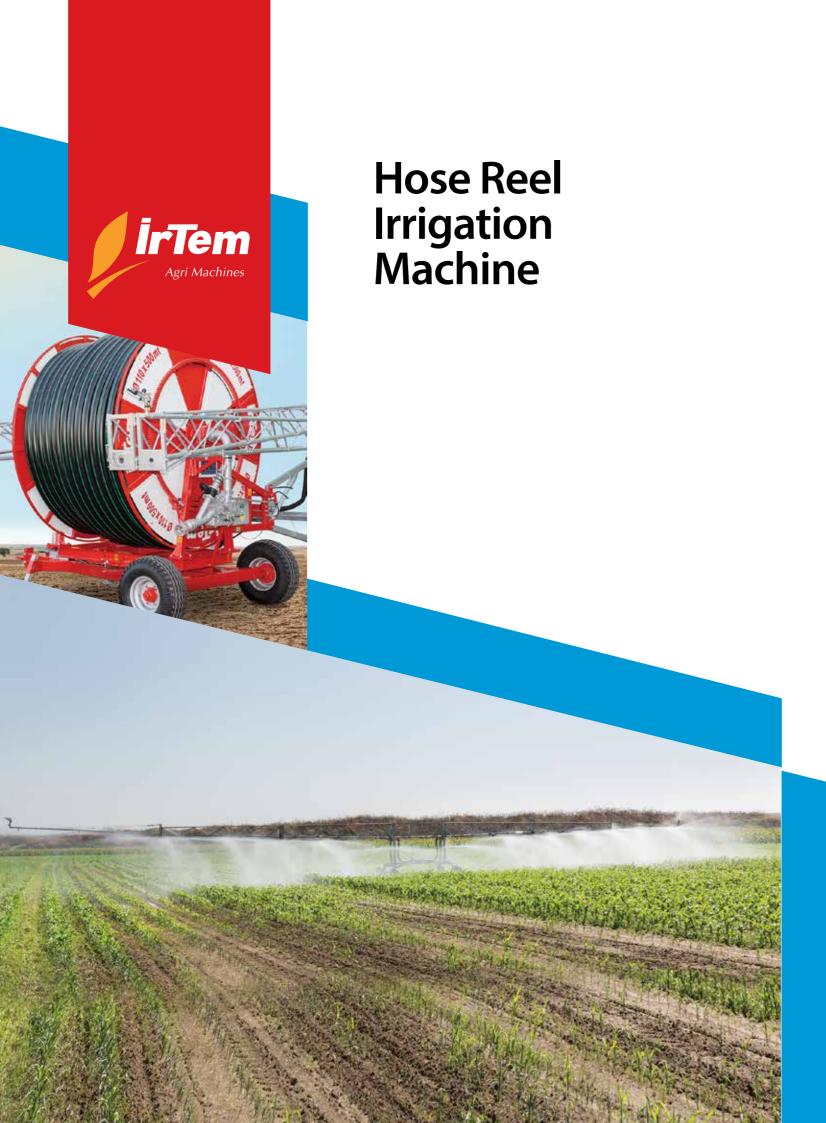
The components of the system are the following:

Polyethylene hose with 10 mm of thickness in elastic chacteristics, resistance to traction, granting bigger flow rates: all this make them better usable on any kind of soil. The control panels, functioning at low voltage (12 Volt) and feeded by batteries and solar panels, offer many performances like: measuring of unwound hose and metres of hose to be rewound, control of flow rate, possibility to programm work speed, possibility to programm total time of irrigation.

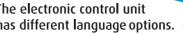
Water turbine & gearbox, which we may call the heart of the machine. The turbine transfers the water power to the gearbox. The gearbox with 4 different speed levels gives the motion to the rewinding system. We use top quality COMER components on our machines.

Sprinklers used on hose-reel irrigation machines have oscillating arm quick or slow return, having performances with throws varying from 30m to 75m, ensuring an excellent water breaking. The change of many tyoes of nozzles enable the farmer to choose the most suitable water breaking for his field and cultivation. We use top quality SIME sprinklers on our machines.

Spraying booms, as an alternative to sprinklers, enable the use of hose-reel irrigation machines also on delicate cultivations as vegetables and, thanks to use of atomizers and sprayers, they work at very low pressure with an energy saving until 50% as regards the use of sprinklers. The booms, manufactured in galvanised steel with excellent eveness and fine water atomization.









The electronic control unit has different language options. In the sprinkler (Mariner from Italy) on the wing increases the irrigation distance.





	TECHNICAL SPECIFICATIONS OF THE IRRIGATION GUNS															
٨	MARINER Ø 110	Planted irrigation	WATER PER DECARE (m³)													
Gun diameter	Gun meter pressure value	Gun irrigation diameter	Capacity	area (%80 of the gun irrigation area is taken)	Gun cart velocity (Meter/Hour) (m/h)											
mm	kg /cm²	mt	m³/h	No wind	10	13	16	19	22	25	28	31	34	37	40	43
	3	84	39.3	67.2	58	45	37	31	27	39	35	31	29	26	24	23
26	4	94	48.0	75.20	64	49	40	34	29	26	23	21	19	17	16	15
	5	102	49.6	81.60	61	47	38	32	28	24	22	20	18	16	15	14
	6	108	62.2	86.40	72	55	45	38	33	29	26	23	21	19	18	17
	3	90	55.0	72.00	76	59	48	40	35	31	27	25	22	21	19	18
28	4	98	63.7	78.40	81	63	51	43	37	33	29	26	24	22	20	19
	5	104	71.2	83.20	86	66	53	45	39	34	31	28	25	23	21	20
	6	110	78.0	88.00	89	68	55	47	40	35	32	29	26	24	22	21









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