



# CATALOG



**OTech**  
LEADING IRRIGATION

 A FARMFRONT COMPANY

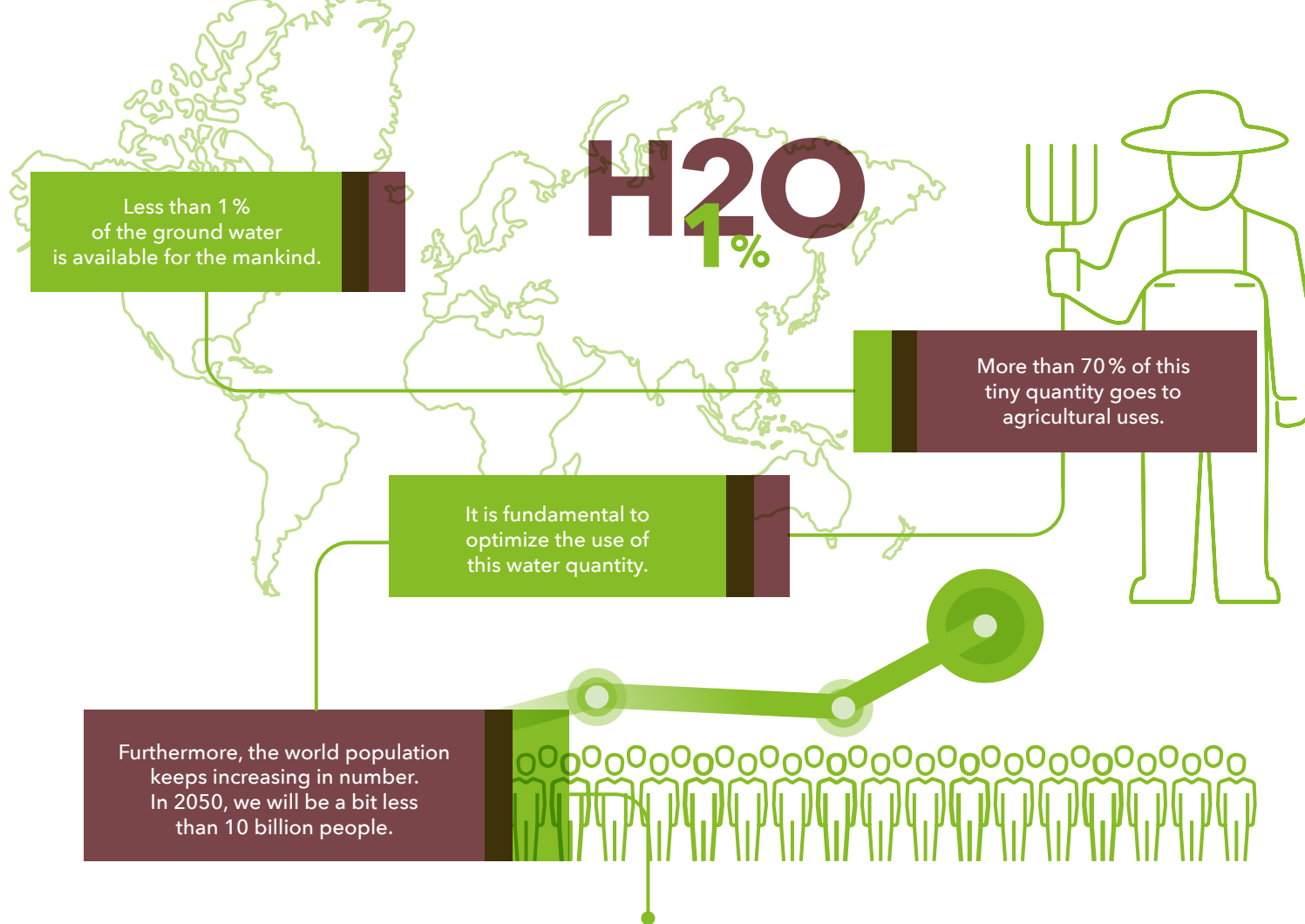
Working at the Farmfront of Irrigation

[www.farmfront.com](http://www.farmfront.com)



**OTECH**

LEADING IRRIGATION



**It is our present, it is our future.  
A hungrier and hungrier and, most of all, thirstier and thirstier planet.**

The higher water consumption is for agricultural uses. The outdated irrigation systems reduces the water availability for the local communities and for the environment in general. Also these obsolete irrigation practices jeopardises the productiveness of the fields and cause serious economic and social damages.

With respect to the not irrigated or badly irrigated soils, Otech pivots and laterals products can increase:



Every drop is like gold. It is life, it is the future.

It is getting rarer and rarer, more and more uncertain and precious.

For this reason, water must be collected, guided and given out with great care and precision.

Otech knows how many water drops every square metre of your field needs.

We know how to provide and give out these drops to the ground, in order to let it yield its best while exploiting as less as possible.

Intelligence, technology, care and passion.



# HISTORY OF OTECH PLANT IN PUYOÔ

At the beginning of the 1980s, Lockwood, an American manufacturer leader in the new pivot industry, decided to establish himself outside the USA to conquer new markets. Aquitaine, a region in the south-west of France, was the destination he chose for its big farming potential and for its opportunities. Thanks to its sanded soils, its adequate climate and its water resources, easily exploitable, the development of the mechanized irrigation by those pioneers rapidly promoted this region in the front row in Europe. Nowadays, this ancient marshy desert is the garden of Europe. Thereby, the plant in Puyoô is the first industrial irrigation pivot production outside the USA. Inside these buildings, built by Gustave Eiffel, they would build the first 62 m span, currently standard. To become compatible with the highest European corn hybrids, they transformed the towers in order to get a better standard ground clearance. In parallel with the development of a mechanised farming, Otech include the latest technologies, both for the machine production (robotization) and for the irrigation control and management (machine remote control system).





# YOUR NEEDS, OUR METHOD. THINKING BEFORE MAKING

On a farm, the irrigation is always an important investment. As we operate on the business outcome, the work organisation and the natural

resources, it is fundamental to take the adequate time to choose the most appropriate installation. Otech can be your partner in this project to define with you the best solution for your needs.



-  **STEP 1**
-  **STEP 2**
-  **STEP 3**
-  **STEP 4**
-  **STEP 5**

- Soil, size and field shape, difference in height, relief, outline and obstacles.
- Weather forecast.
- Cultivation, plant, specific water needs. Method of application for the irrigation.
- Available resources (water, electricity, implementation, etc.).
- Specific client's needs. Economic survey: investment costs and usage costs.

-  **STEP 6**
-  **STEP 7**
-  **STEP 8**
-  **STEP 9**
-  **STEP 10**

- Project concept, creation and sizing of water and electric supply.
- Production, ISO, NF, EN, etc.
- Logistics, preparation, shipment.
- Installation, implementation.
- Customer service, spare parts, maintenance.

# OTech

FIRST





# YOUR NEEDS OUR RANGE

Thanks to the configurator, you can take advantage of Otech decades of expertise to develop your irrigation solution.

OPTION   CUSTOMIZATION	PREMIUM 	+		CLIMATE	CUSTOMIZED SPRINKLER SURVEY   SPECIFIC OPTIONS AND STRUCTURE   WEATHER STATION AND SOIL HUMIDITY SENSORS
		+		QUALITY OF WATER	FILTRATION   CUSTOMIZED SPRINKLER SURVEY   STEEL SPAN PIPES THICKNESS 4 MM   PLASCOAT SPAN   POLYPLAS SPAN   STAINLESS STEEL PIPES
		+		SOIL	CUSTOMIZED SPRINKLER SURVEY   VARIABLE IRRIGATION RATE   ADAPTED UNDER-SPAN GROUND CLEARANCE
		+		POWER SUPPLY	ELECTRIC GENERATOR   DOUBLE PIVOT   MOVABLE PIVOT   HYDRAULIC PIVOT   DITCH-FED LATERALS   SOLAR IRRIGATION SYSTEM
		+		TIMES	AUTOMATION   REMOTE CONTROL
		+		TOPOGRAPHY AND GROUND GEOMETRY	END GUN   PIVOT SECTOR   TOWABLE TOWER   FOLDING TOWER   HYDRAULIC TOWER   FOLDABLE OVERHANG   CUSTOMIZED LATERALS   ADAPTED SPAN GROUND CLEARANCE
	FIRST 	+	FIELD + FLOW		STANDARD PRODUCT: FIRST CHOICE AT THE BEST PRICE  SIMPLE AND RELIABLE: BETTER VALUE FOR MONEY / IRRIGATED SURFACE  OPTIMISED SOLUTION







**OTECH**  
PREMIUM

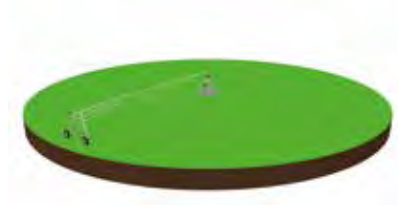


**PIVOT  
LATERAL  
—  
FIRST**





# PIVOT POINT FIRST



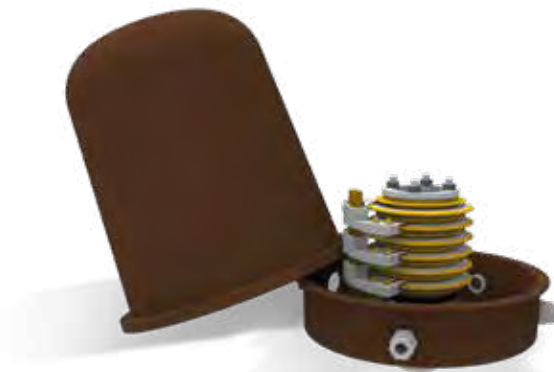
The pivot point is the center of the irrigated circle. Its function is to keep the span in the parcel center. Hence, it must withstand two main forces: a traction force of the moving spans and the weight of the first span. Besides the single resistance of each element of the pivot point,

the global structural resistance of the assembly is essential. For this reason, Otech uses top-quality steel and a NF EN ISO 1461 galvanisation to get a tried and tested structure, composed of an electric management system in compliance with the NF EN909 February 2009 + A1.



## Mini Pivot

**Compact** pyramidal structure in galvanised steel with two belts on either side with a **4 mm thick pipe**. Watertightness through swivel on vertical pipe guaranteed by lip seal from the low pressures. The best value for money for the appliances up to max two spans that reduces the required volume of the concrete slab to preserve more cultivated surface.



## Electric Collector

Electric collector with minimum twelve rings (25 A to 500 V) IP233 anti-UV watertight under cap, mounted on watertight ball bearing, triple reach contacts, terminal block, predisposed for additional rings and angular coder.

**French manufacturing on Otech concept**



## Central Element

As standard, coupling with the first IP233 anti-UV watertight, span relieve pressures on the upper elbow for tough grounds. Galvanised steel coupler to protect two low-pressure lip seals against environmental threats (UV, sandstorms, etc.).



## Pivot ST

Galvanised steel pyramidal structure with four belts on either side with **4 mm thick pipe**. Watertightness through swivel on vertical pipe guaranteed by low pressure lip seal.



## Control box Eco rain

IP66 conforming to IEC 60529 watertight double-doored steel box. Colour RAL 8028. Surface finish Epoxy-polyester powder. Simple electromechanical control system to manage the irrigation safely on the medium-size pivots (ST127).

Otech  
**EC RAIN**



## Control box Evo Rain

IP66 conforming to IEC 60529 watertight double-doored steel box. Colour RAL 8028. Surface finish Epoxy-polyester powder. The most complete electromechanical control system to manage the irrigation safely.

Otech  
**EVO RAIN**



# LATERAL CARTS FIRST



## 2RM1-S

The 2RM1-S lateral has two drive wheels and allows the machine to move laterally in automated back and forth to irrigate

a rectangular parcel. The hydraulic supply is pulled by the motor powered from one or more successive hydrants.



## 4RM1

The 4RM1 lateral has four drive wheels and allows the machine to move laterally in automated back and forth to irrigate

a larger rectangular parcel. Equal to the 2RM1-2, it tows a hose that may be longer thanks to a higher pulling power.



## Swivel elbow power supply

The swivel elbow allows the connection of the polyethylene or flexible hose on the cart and the setting up of the buckle at the time of the inversion at the end of the parcel in order to reduce the human interventions on the machine

## Wheels

The wheels are ballasted with antifreeze gel to enhance the traction cart function.



## Control box Opti Rain

IP66 conforming to IEC 60529 watertight double-doored steel box. Colour RAL 8028. Surface finish Epoxy-polyester powder. Simple electromechanical control system with synoptic for the fully safe management of the irrigation on the 2RM1-S and 4RM1 laterals.



## Above ground guidance

The lateral First is equipped with a hockey stick guidance system based on a furrow dug into the ground to guarantee an easy use, reliability, safety and precision.

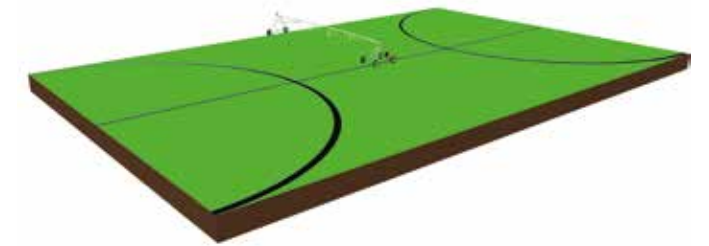
## Hose traction

According to the needs, the supply hose can be in polyethylene or flexible with a diameter adapted to the machine needs.



## Control box Maxi Rain

IP66 conforming to IEC 60529 watertight double-doored steel box. Colour RAL 8028. Surface finish Epoxy-polyester powder. Simple electromechanical control system with synoptic to safely manage the irrigation on the 4RMVE laterals.



## 4RMVE

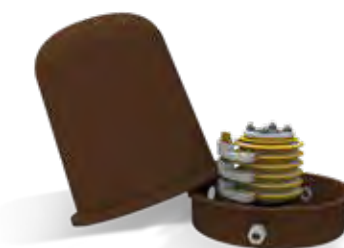
The lateral 4RMVE First allows the irrigation of a rectangular parcel with fewer spans. Indeed, the machine moves on half the width of the parcel and automatically makes a half-turn at

the end to start the irrigation on the other half of the parcel. This appliance combines a sideways shifting to a rotating pivot. Its four drive wheels make it able to tow a remarkable hose length.



## Upper 90° elbow

The rotating upper elbow is mounted on bearings to balance the loads on the cart axis, simplifies the rotation while ensuring a maximum alignment precision.



## Colector

Electric collector with min. twelve rings (25 A at 500 V) under IP233 anti-UV watertight bonnet mounted on watertight ball bearings, triple contact reach, terminal blocks arranged for the addition of extra rings and angular coder.

**French production on Otech concept.**



# ST FIRST TOWER

The tower supports the main pipeline and ensures the hydraulic and mechanical connection between the spans. It is motorized and enables the displacement of the machine. It also must resist to the various mechanical pressures such as the torsions due to the relief, to the stresses on the gear and to the forces between the spans. This span-structured tower is designed with galvanized steel high-quality components. The tower Otech offers an under-span clearance of 3.20 m, perfect for the high-growing crops.



## Tower control unit

Highly reliable control unit equipped with an adjustable circuit breaker to protect the gear motor and an antiparasitic module to guarantee the maximum durability of the micro switches. Control linkage

instainless steel and Delrin (no blocking due to oxidation is possible). Rigid connector board in galvanized steel and bonnet in injected anti-UV polyethylene tainted in the mass. Bonnet locking by stainless steel fastenings.

## Coupling

4 mm coupling tube in galvanized steel. Cardan hinge with distribution of the stresses on four fixation points. Wind proof undetachable span connection enables a big

suppleness of movement and accepts gradients up to 25%\*. Junction with galvanized steel coupler to protect two low-pressure lip seals against environmental threats (UV, sandstorms, etc.).

*\* It refers to the limits of usage of the technical appendix.*

## Drive train: Wheels

As standard, 14.9 x 24 wheels six ply irrigation profile with inner tube.

Rims in galvanized steel fitted with valve protection.



## Centerdrive

Tropicalized motor 055 kW in 1500 tr/min with stainless steel stator. High performance (95 %). Reliable amperage, reliable energy consumption, prolonged lifetime. Watertight cabling made and tested in Otech factory.



## Transmission

22 mm square transmission in galvanized steel and coupled to a cardan in aluminium.



## Gearbox

Wheel reduction fitted with reversible mounting. Reduction ratio 1/50.

# ST SPAN FIRST

Modular system which allows the substitution of one 12 m pipe with two identical 6 m pipes for a more comfortable transport.

Standard rod for easy assembly

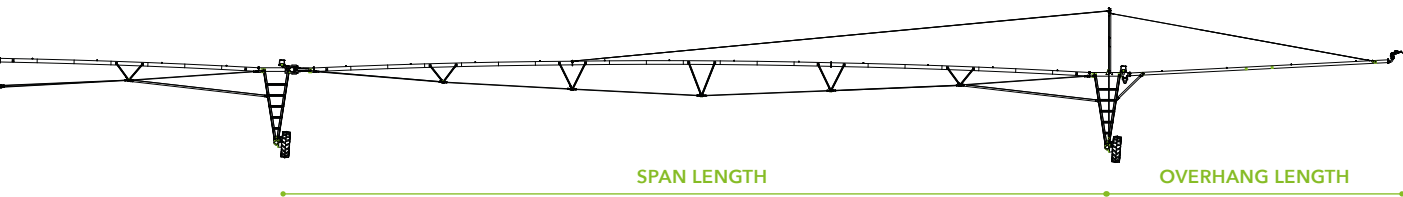
The ST span is the modular structure between two towers composed of 6 and 12 m pipes and stiffened by elements called angles and rods. The diameter sizing of the pipe depends of the machine flow and of the tolerated water speed. The regular and symmetrical bend of the Otech span enables a uniform distribution of the stresses all along the structure. The combination of the high strength steel with the min. 3 mm thick line pipes and the angles, as well as the S355 steel rods guarantees an excellent resistance and durability.

Ø127 Ø139,7 Ø168,3 Ø193,7 Ø219,1 Ø244,5

Outside diameter of the tubes, thickness available in 3 and 4 mm

# OVERHANG

The machine can have a pipeline at the end supported by wires in galvanized steel. This overhang structure increases the irrigated surface beyond the final tower, hence it lowers the cost per hectare of the system. Besides the wires, additional pipes support the reinforce of the overhang structure in order to support important lengths too.



PRODUCT LINE	SPAN						OVERHANG
	ST127	ST141	ST168	ST193	ST219	ST245	
LENGTH (METERS)	32,40			.	.	.	6,60
	38,35			.	.	38,45*	12,75
	44,30				44,40	.	18,70
	50,30				50,40	.	24,65
	56,25				56,35*	.	30,60
	62,20			.	.	.	.

*\* Only available in 4 mm-thick pipe*

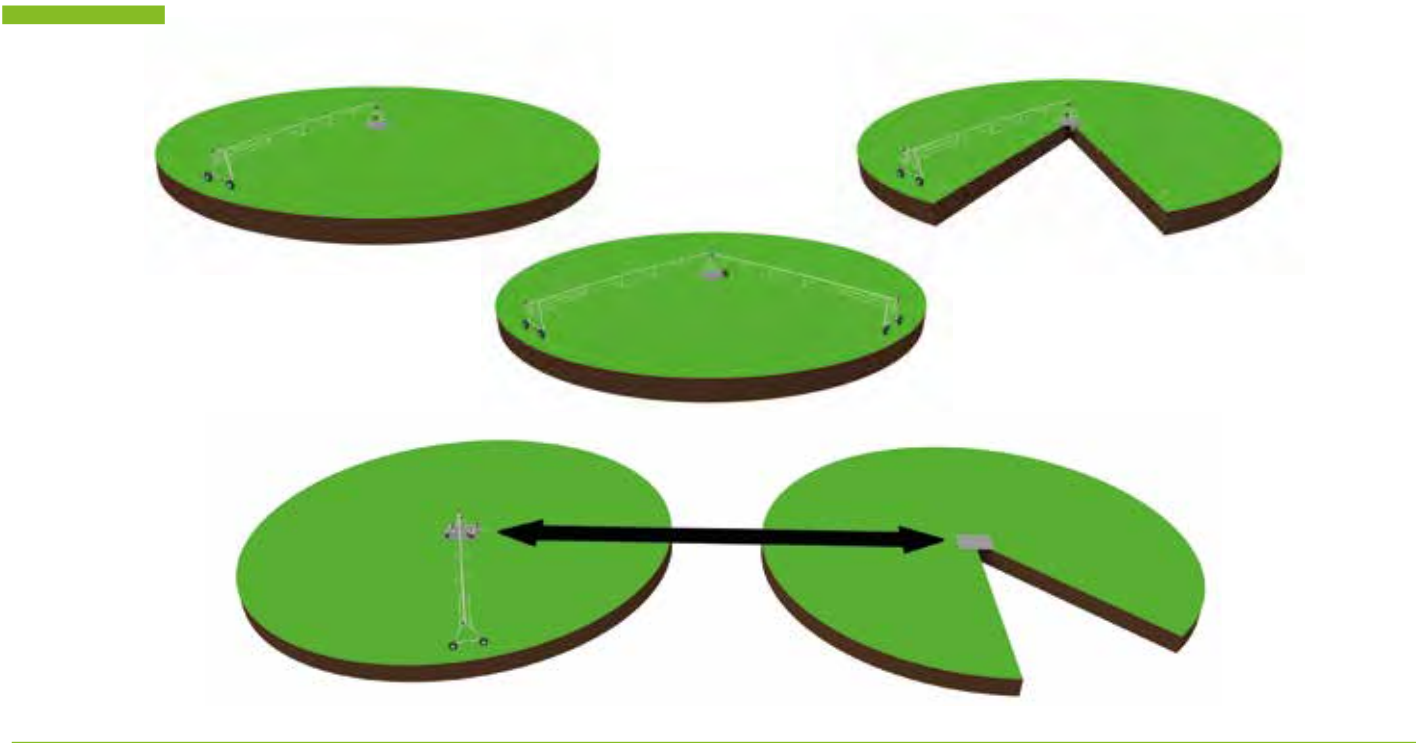


# PIVOT LATERAL — PREMIUM





# PIVOT POINT PREMIUM



## Pivot sector

The angular-sector pivot involves an automatic inversion of the spans at the end of the parcel. It enables to cover an irrigated area despite a fragmented parcel.



## High clearance Pivot

The 4.80 m high clearance pivot suits for high-growing crops (sugar canes, arboriculture, etc.) and to pass above the obstacles (buildings, machines, etc.).



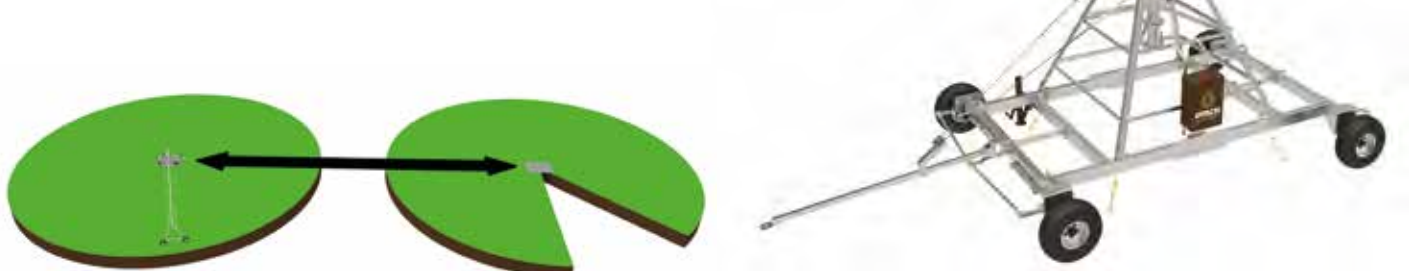
## Double Pivot

The double pivot enables the distribution of the flow along two span lines with independent functioning. This way, the pressure losses and the energy needs are reduced. The immediate pluviometry is reduced as well. This system is particularly adequate on large parcels in arid areas because enables the irrigation to come back sooner onto the cultivation.



## On-wheel movable pivot

The 4-wheeled movable pivot is equipped with a central element on movable frame fitted with a towing bar. The towers with pivoting wheels can be lined up with the axis of the spans to enable a tractor to displace the entire machine. Thanks to this pivot, the cost price per hectare of the irrigation system gets reduced by increasing the area covered by the same structure.



## On-ski Pivot

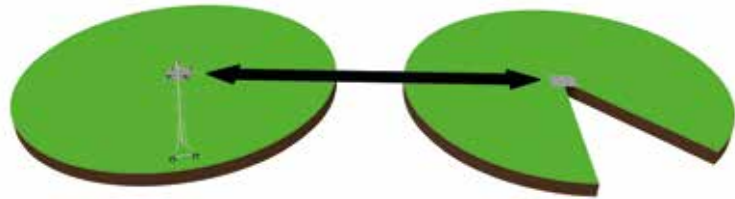
The on-ski movable pivot is equipped with an on-ski central element with coupling. The towers with pivoting wheels can be lined up with the axis of the spans to enable a tractor to displace the entire appliance. Thanks to this pivot, the cost price per hectare of the irrigation system gets reduced by increasing the area covered by the same structure.





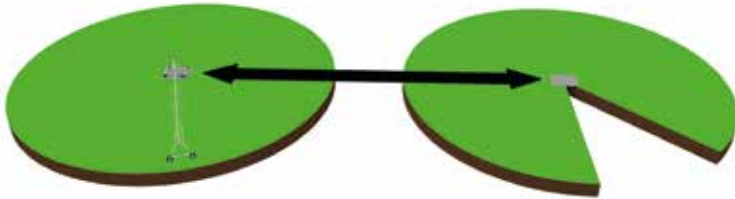
## Speedy Rain

The Speedy Rain is an independently movable machine. During the irrigation phase, the pivot point is rotatably driven by the spans. During the displacement phase, the functioning seems like the functioning of laterals. Tractors are not necessary. All wheels are oriented to the same direction – a wired remote moves the system. In certain cases, the guidance system can be used for an automatic functioning between two hydrants.



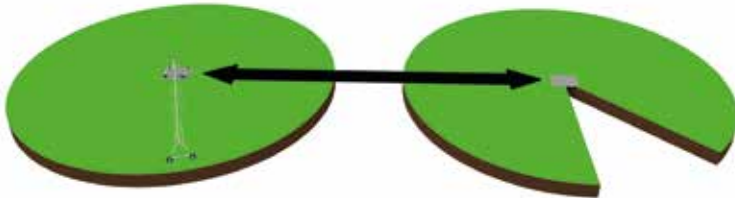
## Two-wheeled movable pivot

The two-wheeled movable pivot is equipped with a swivel elbow tied up to the concrete slab and a towing bar. Exactly like Speedy Rain, its pivot point is rotatably driven by the spans. Thanks to towing bar and wheels pivoting on the towers, a tractor can displace the system.



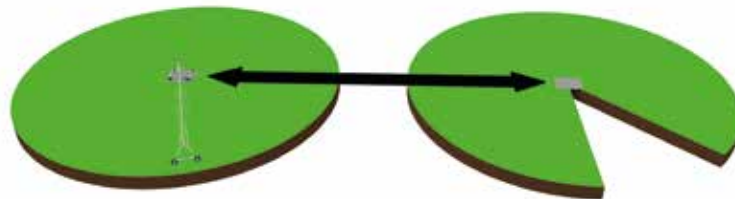
## Hydraulic pivot

Compact pyramidal structure in galvanized steel with two belts on each side in 4 mm thick pipe, this structure reduces the volume of concrete slab to preserve more cultivated surface. Sealing by rotating connection on vertical pipe provided by lip seal at low pressures. Device without need of electricity, one span maximum in ST127 length 56 m or 62 m with an overhang of 24 m or 30 m. Flow rate to be respected from 33 m³/h to 80 m³/h and pressure from 4.3 bar to 6 bar.



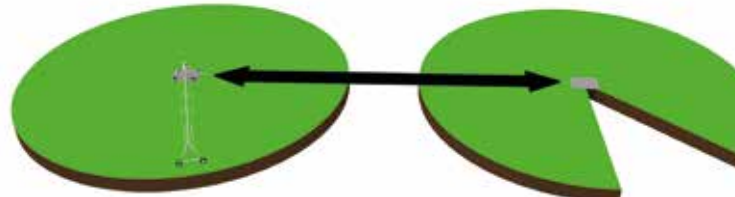
## Movable hydraulic pivot

The movable hydraulic central unit is a compact pyramid structure made of galvanized steel, with two belts on each side in 4 mm thick pipe, this structure reduces the volume of concrete slab to preserve more cultivated surface. It is equipped with a three-point tractor hitch and a tower with detachable wheels, which allows it to move from one position to another. Sealing by rotating connection on vertical pipe provided by lip seal at low pressures. Device without need of electricity, one span maximum in ST141 length 56 m or 62 m with an overhang of 24 m or 30 m. Flow rate to be respected from 33 m³/h to 80 m³/h and pressure from 4.3 bar to 6 bar.



## Movable Mini Pivot

The movable mini pivot is a compact pyramidal structure to maximize the cultivation surface. It has a three-point trailer hitch and a tower with disengageable gearboxes to enable its displacement to different positions.



### Speedy Rain

IP66 conforming to IEC 60529 watertight and double-doored steel box. Colour RAL 8028. Surface finish Epoxy-polyester powder. The most complete electromechanical control system for safe irrigation management, with various electromechanical options available.

**SPEEDY RAIN** Otech



### Eco Rain

IP66 conforming to IEC 60529 watertight and double-doored steel box. Colour RAL 8028. Surface finish Epoxy-polyester powder. Electromechanical control system to safely manage the irrigation on the medium-size pivots (ST127), with different electromechanical options available.

**ECO RAIN** Otech



### Evo Rain

IP66 conforming to IEC 60529 watertight and double-doored steel box. Colour RAL 8028. Surface finish Epoxy-polyester powder. Electromechanical control system to safely manage the irrigation with different electromechanical options available.

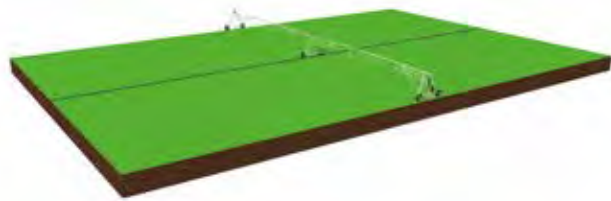
**EVO RAIN** Otech



# LATERAL CARTS PREMIUM

## 2RM1

The 2RM1 lateral has two drive wheels and enables the automatic lateral back-and-forth displacement of the machine to irrigate a rectangular parcel. This lateral cart can be equipped with disengageable gearboxes that can enable the displacement from a parcel to the other thanks to a tractor. In order to have this function of displacement, please consult us to offer you additional accessoires. The water supply is pulled by the motor powered from one or more successive hydrants.



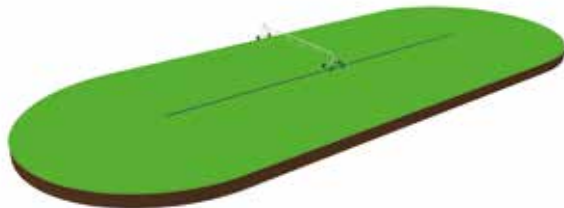
## 4RM1-2

The 4RM1-2 lateral has four drive wheels and enables the automatic lateral back-and-forth displacement of the machine to irrigate larger rectangular parcels. Like the 2RM1, it tows a hose that can become longer thanks to a higher pulling power. Unlike the 4RM1, the spans are divided on both sides of the cart.



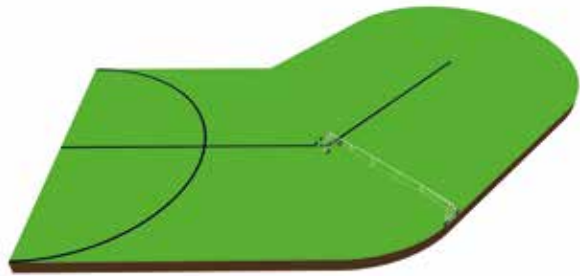
## 4RMVE

The 4RMVE lateral allows to irrigate Hippodrome parcel type. Indeed, the machine develops on the half of the parcel width and automatically makes a total or partial external - or internal - rotation at the endpoint of the course. Its four drive wheels is able to tow a remarkable hose length. By combining a side-translation displacement with a pivot rotation, this machine allows to irrigate parcels of complex shapes.



## 4RMG

The 4RMG lateral can carry out combined courses (linear + circular) like those of the 4RMVE Premium lateral. A wheel rotation wired remote system of the cart enables to change the operating axis and to adapt itself to the parcel shape.



## 4RMGD

The 4RMG-D lateral has the same functions of the 4RMG and a tractor can displace it thanks to a traction towing bar.



## 4RMVE - Ditch-Fed

The Ditch-fed laterals - 4RM1, 4RM1-2 and 4RMVE - are water fed through a lateral or central ditch. The water is directly pumped by self-cleaning strainers and an embedded pump unit that can be electrically or diesel powered. The electric energy can be also produced by a generator. These totally automatic machines can have extraordinary path lengths and cover oversized surfaces.



## Opti Rain

IP66 conforming to IEC 60529 watertight and double-doored steel box. Colour RAL 8028. Surface finish Epoxy-polyester powder. Electromechanical control system with synoptic to safely manage the irrigation on the 2RM1, 4RM1 and 4RM1-2 laterals, with different electromechanical option available.



## Maxi Rain

IP66 conforming to IEC 60529 watertight and double-doored steel box. Colour RAL 8028. Surface finish Epoxy-polyester powder. Electromechanical control system with synoptic to safely manage the irrigation on the 4RMVE, 4RMG and 4RMG-D laterals, with different electromechanical option available.





# ST PREMIUM TOWER

## High and ultra-High tower

The 4 or 4.90 m under truss rods raised tower is perfect for high-growing crops like sugar canes, arboriculture, etc. and to pass over obstacles like buildings, machines, etc. It also allows an under span ground clearance on uneven parcels. Used on the final tower, it can enable to lift an overhang to pass over the obstacles.



## Low tower

The 2.20 m under truss rods low tower is perfect for low growing crops like turf, vegetable gardens, etc. and for tropical areas subject to hurricanes.



## Towable tower

The towable tower is fitted with reinforced supports and orientable wheels with disengageable gearboxes. Once the wheels are oriented in the wheel axis of the machine, the machine can be towed to the next position. The wheel orientation can be manual or electric (option).



## Folding tower

The folding tower allows to increase the irrigated surface by bordering the obstacles. It can be placed on any tower of the pivot. The system is all automatic and the sprinkler package is properly sized for a regular watering in the folded and deployed modes. The tower is equipped with a ball bearing slewing ring that serves as rotating hydraulic connection. It also guarantees a smooth rotation in order to ensure the watertightness. This unique conception makes it the model with the highest fold angle on the market, of 170°.



## Hydraulic tower

The hydraulic tower (pivot HD) captures the irrigation water power thanks to a turbine and conveys this rotation movement to the wheels. Thus, the pivot HD does not need electric power because the motorisation is given by the combination turbine/gearbox. This system can fully equip the machine on a section of maximum one span plus the overhang. The water necessary for the rotation is entirely re-injected into the irrigation circuit to avoid any losses.



# ST SPAN PREMIUM

## 3 mm and 4 mm thick span

The standard 3 mm thick span is composed of 12 m and 6 m pipes in high strength hot dip galvanized steel. The same span is also available in steel pipe 4 mm thick. This strong thickness guarantees a durability particularly increased in case of aggressive irrigation water.



## Plascoat span

The Plascoat coated span is composed of 6 m long and 3 mm thick tubes in hot-dip galvanized steel on which is applied a thermoplastic coating as additional protection. This treatment has been used in industry for more than 30 years has a remarkable resistance to abrasion, corrosion and cavitation. This option is particularly suitable to face aggressive waters and chemigation. Its smoothness reduces the pressure losses (energy efficacy) and strongly restricts the sediment adhesion. This protective coating is extended along the entire hydraulic line, from the bottom up to the end of the overhang and can be also applied on the connection accessories. This option is available on the whole span models.



## Polyplas span

The Polyplas span with polyethylene protective coating is composed of 6 m long and 3 mm thick tubes in hot-dip galvanised steel with an internal polyethylene pipe. This is a further option to protect from the aggressive water irrigation and chemigation. The polyethylene protective coating is available for the ST127, 168 and 193 pipes diameter, others diameter available upon request . In order to increase the protection of the entire hydraulic line, the pivot point pipe, elbows and the tower couplers are coated in Plascoat.



# OVERHANG

## 3 mm and 4 mm thick overhang

The standard 3 mm thick overhang is composed of 12 m and 6 m long pipes in high strength steel hot dip galvanized pipes. Like the premium span, these overhangs are available with 4 mm thick pipes too. This higher thickness guarantees a durability particularly increased in case of aggressive irrigation water.



## Foldable overhang

The foldable overhang increases the irrigated surface thanks to a pivot or to a lateral in order to automatically avoid the obstacles. While approaching the obstacle, an electric cylinder enables the 24 m (or 30 m) long overhang to fold to 87° counter clockwise. The sprinklers and the gun installed on the overhang get interrupted whereas the machine keeps irrigating the obstacle area. In certain cases, a supplementary gun can be fixed on the tower to adjust the irrigated length.





# ACCESSORIES FOR PIVOTS AND LATERALS



Water supply accessories for pivot point

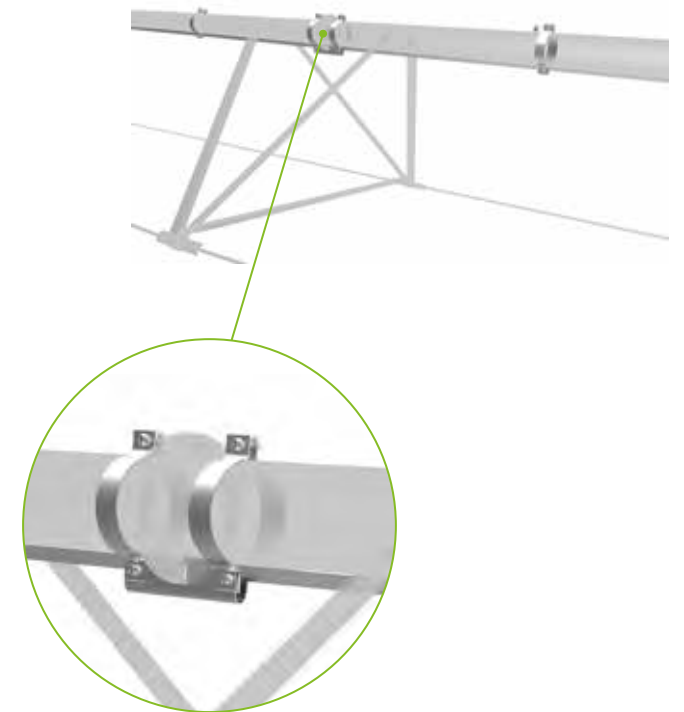
Buried gooseneck, connecting tube between flanges and lower elbow.



V- and T-filters



Hydraulic valves and flowmeter



Anti-theft cable system for span

Fertigation



Electric supply accessories  
(enclosed or soundproof power generators)

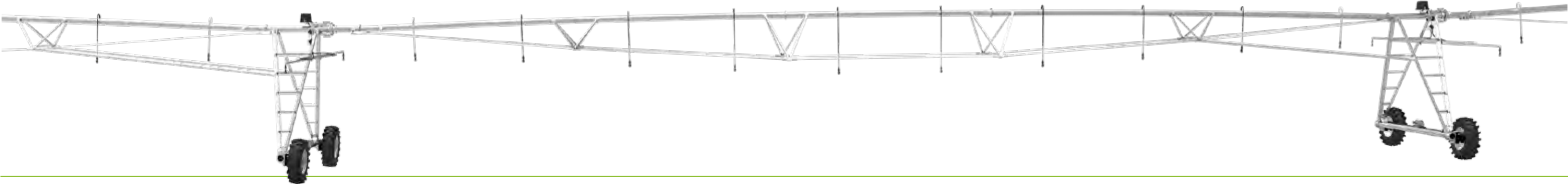


Water supply accessories for laterals





# SPRINKLER PACKAGE



In order to optimize the agronomic outcomes and to give more value to the irrigation, the water must be distributed in adaptable ways to plants and soil and according to the climate conditions. The water distribution must be regular in order not to leave over irrigated or under irrigated areas. Moreover, the water physical-chemical features must impact as less as possible on the machine integrity, on the cultivation and on the soil. A sprinkler selected to respect all these parameters will result in the best long-term outcomes

**The main factors to be considered are:**

- The type of crop: germination sensitivity, foliage sensitivity to humidity, cultivation practice (rows cultivation);
- The soil features: infiltration capacity, sensitivity to soil sealing;
- The climate conditions: wind and evaporation;
- The water quality: loaded water; ferrous water.



**There are a lot of technical solutions to solve these problems and they must be properly found depending on each situation. In particular, you can act on:**

- The mode of application of the water (drop shape and speed) thanks to the kind of sprinkler: oscillating, rotary, spray or impact;
- The sprinkler height from the ground, in order to irrigate as close as possible to the crop growing;
- The kind of drop tube to avoid the problems caused by the wind;
- The sprinkler operating pressure to affect the water drop size and speed;
- The distribution and orientation of the sprinklers at the wheels, with sprinklers moved onto boom backs and/ or with sector sprinklers to keep the wheel tracks in good conditions.



According to the needs, it is possible to install a watering device at the end. Such device can be useful to cover areas outside the covered area by the machine. As it is installed at the end of the machine, the irrigated surface can be remarkable, therefore such an investment is particularly profitable. You can install:

- A gun, useful for its irrigation efficiency;
- An end sprinkler, that works with the same pressure of the sprinklers to save some energy on the pumping plant.



Otech works with the best international sprinkler suppliers and can satisfy all your requests. Your Otech dealer can help you to make the best choice that will make the difference for your machine.





# MAXIMUM INTERACTION BETWEEN CONTROL SYSTEM AND MACHINE

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Thanks to our experience started dozens of years ago in the irrigation field and in the control of our machines, Otech has developed intuitive and simple systems, in accordance with the ground needs. Thanks to a constant exchange of information with our users and our clients, we succeeded in developing a complete range of irrigation management systems suitable for different constraints. For a recognised and experienced reliability, we work with the most performing partners and select our material to guarantee the best trustworthiness even in the most difficult operating conditions. Whatever your needs are, we have the solution that will best suit your expectations.



# ELECTROMECHANIC CONTROL BOX FOR PIVOT/LATERAL

According to your needs, Otech offers different technical management tools to help the users to control the operations of their machines. Depending on control panel models you choose our systems help you to save time, energy and money for a smarter irrigation solution. The control panels are offered in three different body :



## Standard Steel

Colour RAL 8028, IP66 conforming to IEC 60529, IK10 conforming to IEC 62262, surface finish Epoxy-polyester powder, three points lock, 3 mm double-bar



## Option Polyester

Reinforced with fiberglass, colour grey RAL 7035, IP66 IEC 60529, IK10 IEC 62262, fire resistance 960 °C IEC 62208, ambient air temperature for storage -35 ° to 90 °C, 3 mm double-bar lock.



## Option Stainless steel

Surface finish lock: chromium plated - body and door: Scotch-Brite® brushed, IP66 conforming to IEC 60529, IK10 conforming to IEC 62262, two points lock, 3 mm double-bar. Easy management for small pivot;

### 100% electromechanical control panel:

Simple control panel in use and maintenance (standard components and wiring diagrams)



Transform your 100% electro-mechanical control panel into hybrid control panel with the addition of Otech's dedicated kits. You will then be able to benefit from our latest intelligent remote management solutions RAINLOC® or RAIN DRIVE®



**Custom :** each of our control panel can be customised to adapt to the different irrigation needs of each parcel



## Easy management for small and medium pivots



### ECORAIN<sup>Otech</sup>

- Exclusive Otech percent timer cyclique compressor, delay, dosing pump, etc.
- Safety warning light
- Change of direction
- Water or dry movement management
- Multi options available: reversal, delay, dosing pump, booster pump, etc.
- Voyant de sécurité
- **Lockable switch**
- **Hour counter**

## Easy management for large pivots



### EVO RAIN<sup>Otech</sup>

- Exclusive Otech percent timer for the speed control, 1 % accuracy
- Start/stop control
- Change of direction
- Water or dry movement management
- Multi options available: reversal, booster pump, delay, dosing pump, etc.
- Safety warning light
- **Lockable switch**
- **Hour counter**
- **Voltmeter with changeover switch on all three phases**
- Machine operating synoptic: machine setting in motion, ongoing displacement direction, low pressure / status mechanical machine
- Almost unlimited number of integration option

## Easy management for Speedy Rain pivots



### SPEEDY RAIN<sup>Otech</sup>

- Exclusive Otech percent timer for the speed control, 1 % accuracy
- Start/stop control
- Change of direction
- Water or dry movement management
- Multi options available: reversal, booster pump, delay, dosing pump, etc.
- Safety warning light
- **Lockable switch**
- **Hour counter**
- **Voltmeter with changeover switch on all three phases**
- Machine operating synoptic: machine setting in motion, ongoing displacement direction, low pressure / status mechanical machine
- Almost unlimited number of integration option
- Wheel control for movement and rotation of the Speedy Rain by wired remote control



## Course management of the back-and-forth lateral machine



### PTI RAIN

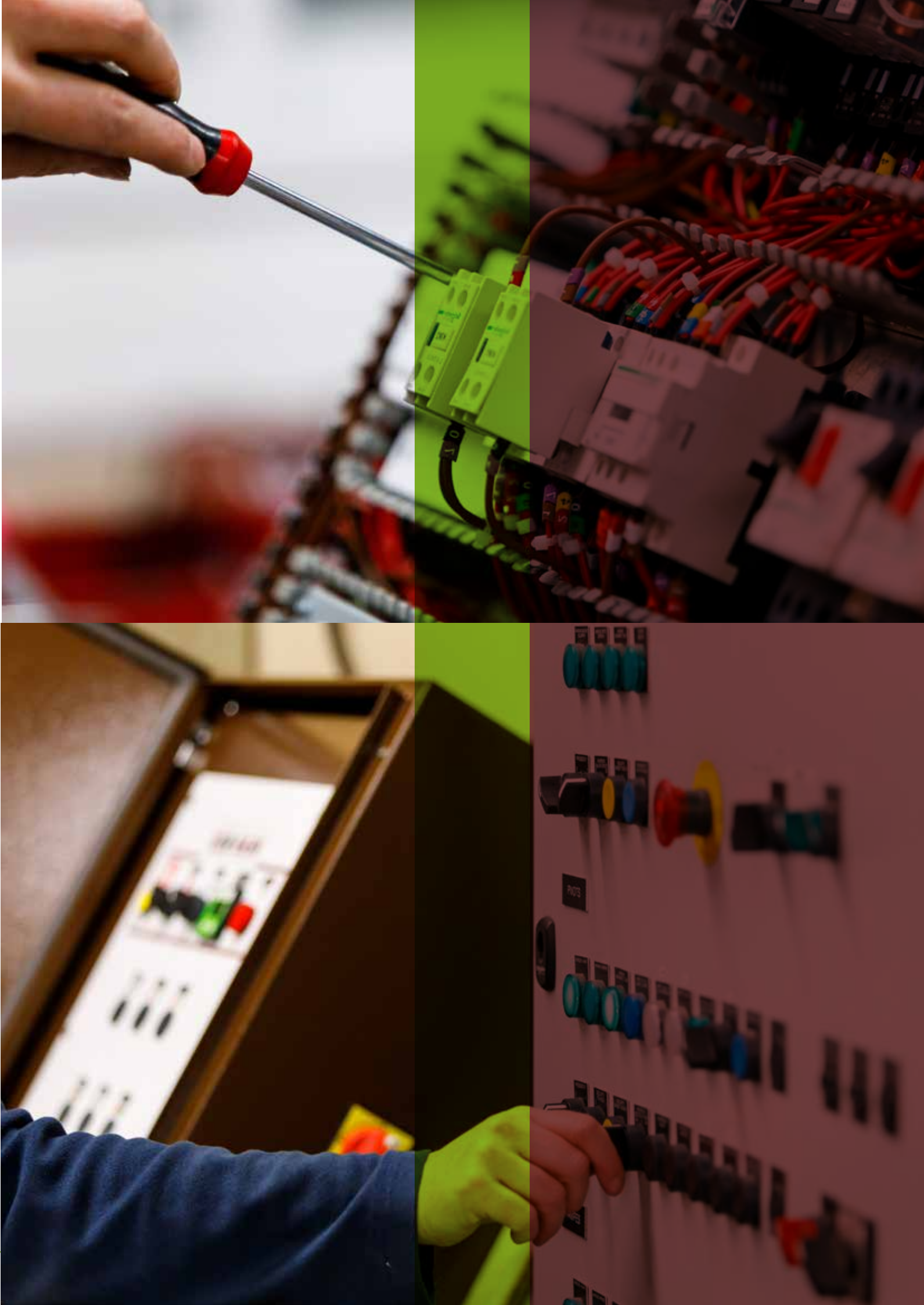
- Exclusive Otech percent timer for the speed control, 1 % accuracy
- Start/stop control
- Change of direction
- Water or dry movement management
- Multi options available: reversal, booster pump, delay, dosing pump, etc.
- Safety warning light
- **Lockable switch**
- **Hour counter**
- **Voltmeter with changeover switch on all three phases**
- Machine operating synoptic: machine setting in motion, ongoing displacement direction, low pressure / status mechanical machine
- Almost unlimited number of integration option

## Course management of complex laterals for racecourses with outward/inward rotations



### MAXI RAIN






- Exclusive Otech percent timer for the speed control, 1 % accuracy
- Start/stop control
- Change of direction
- Water or dry movement management
- Multi options available: reversal, booster pump, delay, dosing pump, etc.
- Safety warning light
- **Lockable switch**
- **Hour counter**
- **Voltmeter with changeover switch on all three phases**
- Machine operating synoptic: machine setting in motion, ongoing displacement direction, low pressure / status mechanical machine
- Almost unlimited number of integration option
- **Compatible box for gyratory and movable laterals**





# ADVANCED IRRIGATION MANAGEMENT AND REMOTE CONTROL SYSTEMS

For an advanced management of your irrigation, Otech presents the DOSITECH the fully integrate management and remote control system. The control panels are offered in three different bodies, the standard model in Steel RAL 8028, options in stainless steel and Polyester.

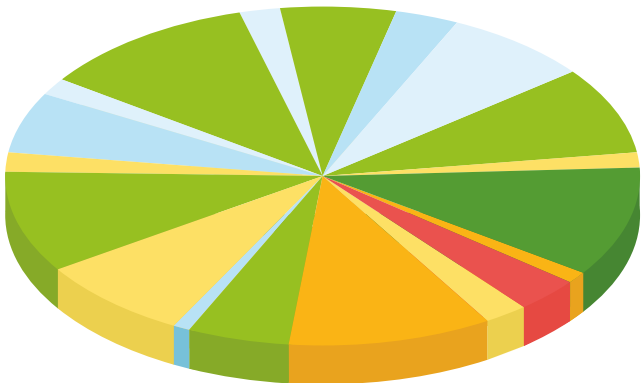
-  Control panel for pivot ST127 / ST168 / ST193 / ST245 machine
-  Complete, clear and simple human-machine interface
-  Contrôle panel modularity depending on fields constraint choosing machine communication modem and machine positionning sensing device
-  Hybrid system fully electronic or electromechanical for a simple to precision irrigation depending on machine user
-  Time and money saving thank to the mix of machine remote control tools and electromechanical panel

## Complete local and remote irrigation management on a multi-sector field



- High-brightness display colour
- Analog pressure sensor
- Management of the irrigation by doses or speed according to the sector and the direction of the machine
- Delay programming
- Weekly programming of automatic operating slots
- Display of machine mechanical and hydraulic status
- Information on position via GPS or angular coder
- Automatic stop for a given position
- Automatic reversal for a given position
- Endgun management by area
- Auxiliary management by area
- Anti-skid safety
- Arrival date and time calculation of the machine to a set position
- Multi options available: booster pump, delay, dosing pump, etc.

To retain the possibility of using the machine through a simple electromechanical control, the simplified control option is available.



Adjust the correct dose brought to your crop growing according to its needs and save water thanks to Otech VRI system.



# MASTER RAIN

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Take control of your machine  
remotely

Time is money.  
Just one click to check the position of all  
machines and avoid several displacements.  
The control gives the quality of your job.  
Thanks to the real-time management of  
your irrigation, Master Rain is the best  
solution to remotely control the various  
machines through one interface only, like  
pivots and laterals on several parcels, to  
guarantee their good functioning for great  
performances and to best save water and  
energy.  
Master Rain is the most cutting-edge  
solution in the irrigation industry.

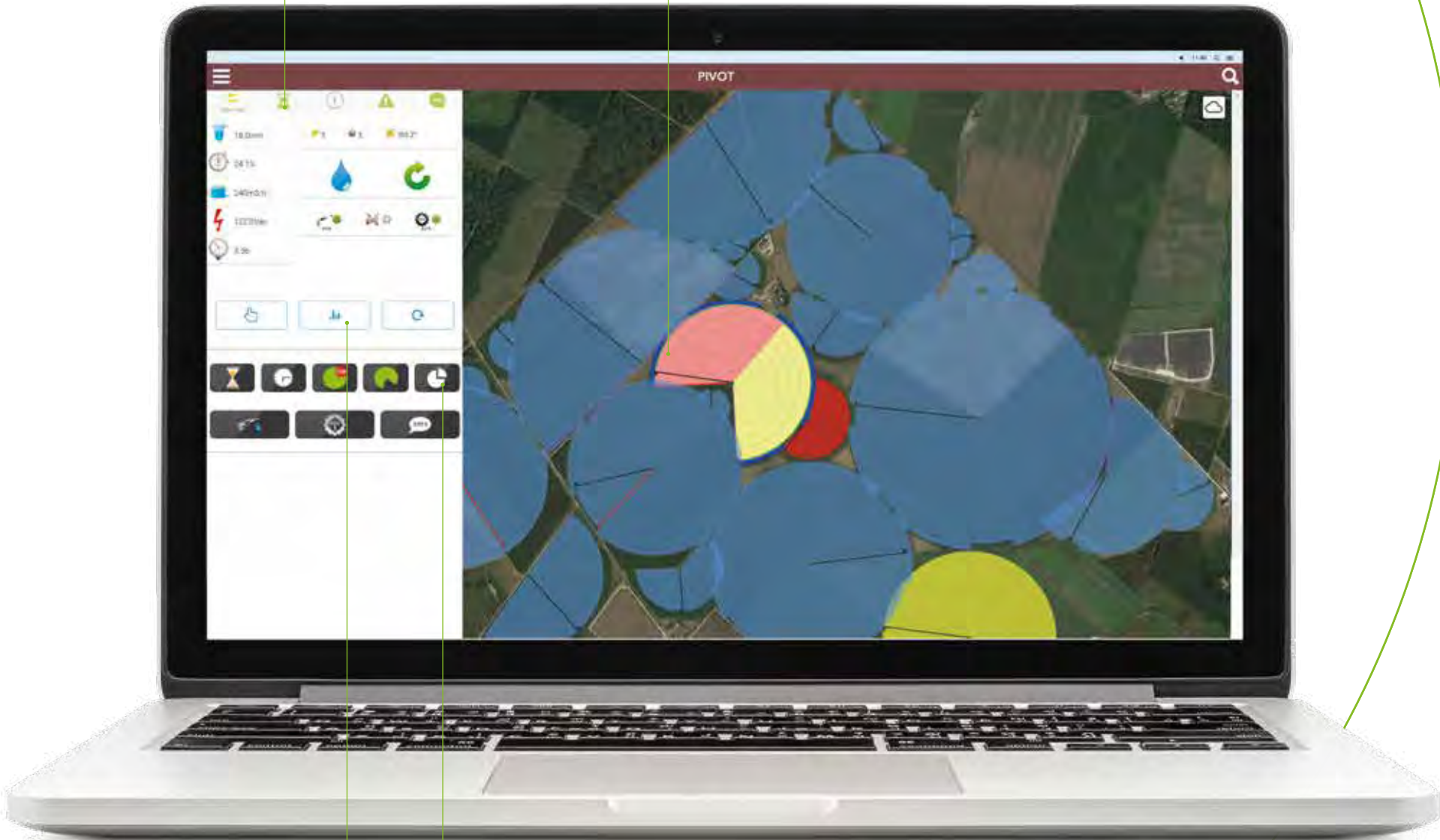




THE SMARTER MANAGEMENT TOOL PROVIDE A COMPLETE REMOTE CONTROL OF A SINGLE OR GROUP OF EQUIPMENTS. ON/OFF STATUS, WATER, ENERGY, WEATHER AND HISTORY FOR A BETTER AND EFFICIENT DECISION.

Complete operation status updated every minute

Clear and complete representation of the machine parameters and status



Access to the functioning and irrigation record

Quick and intuitive access to the machine setting-up

Mobile functions

Access to all Master Rain functions from your smartphone.



COLOUR AND ICON STATUS FOR EACH MACHINE TO DIRECTLY VISUALISE THE OPERATION STATUS OF ALL MACHINERY



# REMOTE CONTROL PRODUCTS FOR PIVOTS AND LATERALS

The farmers are requiring more and more performing tools to manage the irrigation. Otech offers you its range of remote management tools which represent one of the best technical solutions in the field of irrigation by pivots and laterals.

## Rainloc

Manage the critical irrigation parametres of your pivot or lateral easily and remotely with Rainloc:

- Easy and remote control of your machine: ON/OFF machine;
- Management of the critical irrigation parametres;
- SMS alarm on machine failure;
- GPS position and pressure;
- Easy and quick installation on almost all brands.

Otech  
**RAINLOC**

## Raindrive

Driving and setting up your irrigation completely and remotely with Raindrive.

### Pivot:

- Total remote machine control: gun, pump, dose, speed, direction, one accessory;
- Management via GPS: machine position, VRI sector, gun, accessories;
- Complete machine status by sms notification.

### Linear:

- Total remote machine control: gun, pump, dose, speed, direction, two accessories;
- Management via GPS: machine position, VRI sector, gun, accessories;
- Complete machine status by sms notification.

Otech  
**RAIN DRIVE**

## Dositech

Drive and set up your irrigation remotely with Dositech.

### Pivot:

- Local interface installed in the intuitive box for a quick programming of the machine;
- Possible addition of modular extension board according to the client's needs;
- Total remote or local machine configuration;
- Management via GPS: machine position, VRI sector, gun, accessories;
- Complete machine status notification by SMS.

### Lateral:

- Local intuitive interface installed for a quick machine programming;
- Possible addition of modular extension board according to the client's needs;
- Total remote or local machine configuration.

Otech  
**DOSITECH**  
REVOLUTION





# COMPARATIVE TABLE

PIVOT BOX LATERAL BOX ELECTROMECHANICAL/ELECTRONIC	ECO RAIN	EVO RAIN	OPTI RAIN	MAXI RAIN	DOSITECH REVOLUTION
LOCAL CONTROLS/AUTOMATION					
Machine speed adjustment					
Water application					
Sector VRI					
Machine stop					
Direction control					
Start delay					
Reversal delay					
Arrival delay					
In-line stop					
Automatic reversal					
Gun management with auto stop per area or ON/OFF**					
Accessory management with auto stop per area or ON/OFF**					
Dosing pump management / ON/OFF stirrer					
Voltage drop safety					
Pressure drop safety					
Booster pump control					
Weekly program					
VISUALISATION					
Water failure lamps					
Simple mechanical failure lamps					
Advanced mechanical failure lamps					
Advanced machine functioning lamps					
Complete machine functioning lamps					
Tower default indicator					
Machine input voltage reading					
Functioning in water hour counter					
Machine pressure reading via sensor					
Flowmeter					
Machine position representation in parcel					
Ongoing implementation speed					
Ongoing implementation dose					
DESIGN					
SCHNEIDER electromechanical parts					
High brightness screen display colour					
Irrigation remote management					
Report of machine status every minute					
Functioning history					
Hybrid system enabling a simple electronic or electromechanical control					

- Always included
- Possible as option only
- Not suitable

\* Unavailable  
function on  
Raindrive lateral

◦ On pivot  
1 accessory is managed  
Simple ON/OFF

\*\* Just ON/OFF

TELEPROCESSING PRODUCT RAINLOC/RAINDRIVE / DOSITECH FOR PIVOT AND LINEAR	RAINLOC	RAINDRIVE	DOSITECH REVOLUTION
REMOTE CONTROLS / AUTOMATION			
Machine speed adjustment			
Water Application			
Sector VRI			
Machine stop			
Direction control*		*	
Start delay			
Reversal delay			
Arrival delay			
In-line stop			
Automatic reversal			
Gun management with auto stop per area or ON/OFF			
Management of 2 accessories with auto stop per area or ON/OFF°		◦	◦
Dosing pump management / ON/OFF stirrer			
Pressure drop safety			
Booster pump control			
Weekly program			
VISUALISATION/INSPECTION			
Simple remote visualisation of machine functioning			
Advanced remote visualisation of machine functioning			
Complete remote visualisation of machine functioning			
Alarm SMS/simple machine notifications			
Alarm SMS/advanced machine notifications			
Control and complete box visualisation of the machine			
Tower default indicator			
DESIGN			
Hybrid system enabling a simple electronic or electromechanical control			
High brightness box display			
Machine GPS position			
Machine pressure via pressure sensor			
Flowmeter			



# TELEPROCESSING PRODUCT ACCESSORY

Further to the high request of the irrigation market, Otech is more and more engaged in the development of control and remote-control products for your installations.

## Powerain

Thanks to Powerain control and easy remote control of your power generator, you can save time and energy:

- Simple functioning status of the power generator visible remotely: from functioning to default stop;
- ON/OFF start-up remote control generator;
- SMS alarm for generator status;
- Power generator battery voltage with remote access.

Otech  
**POWERAIN**

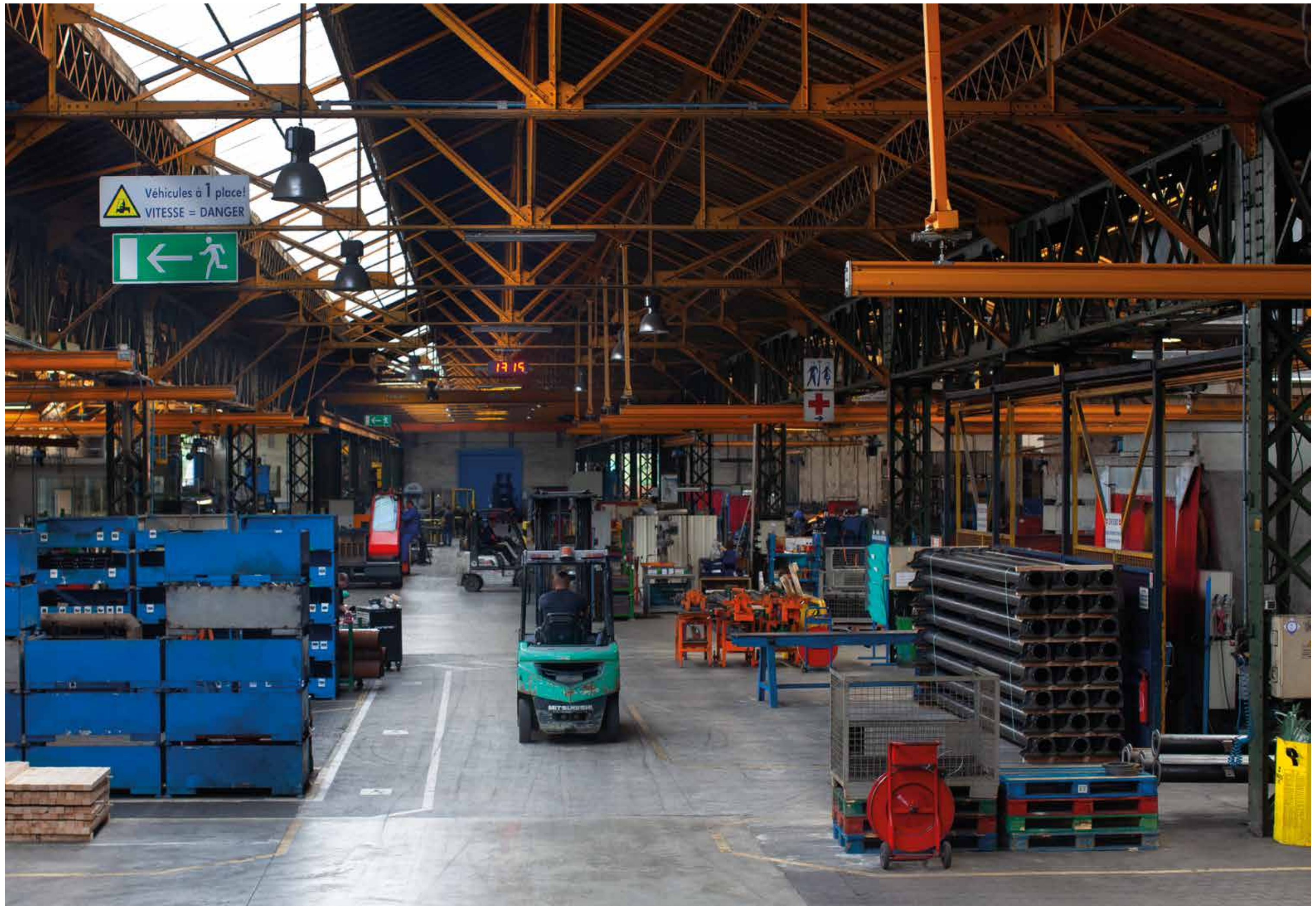






**OTECH:  
HEART, HEAD, SOUL**

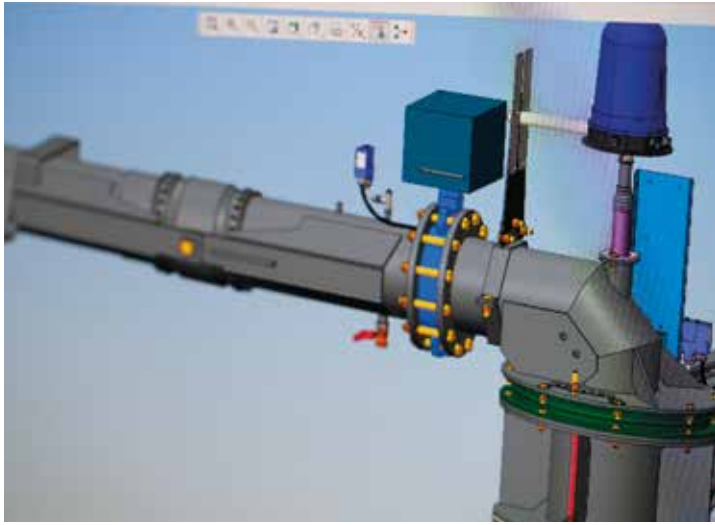
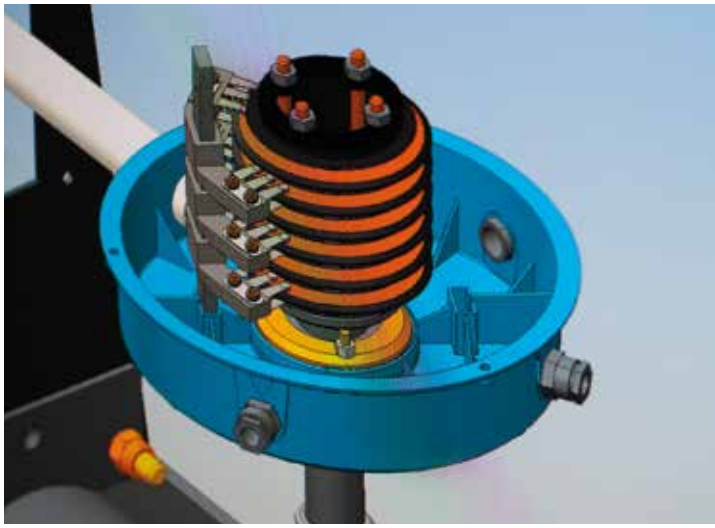




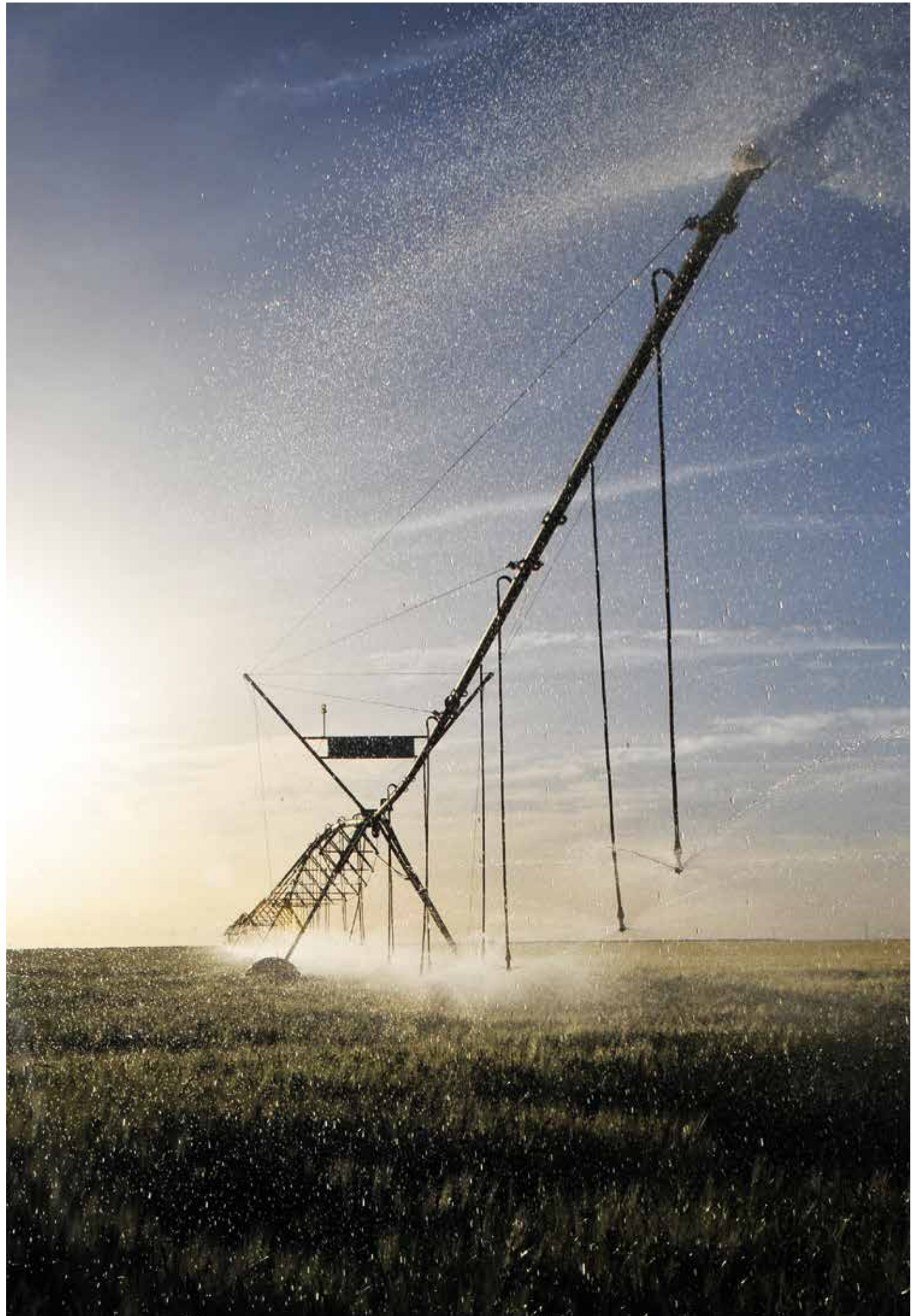








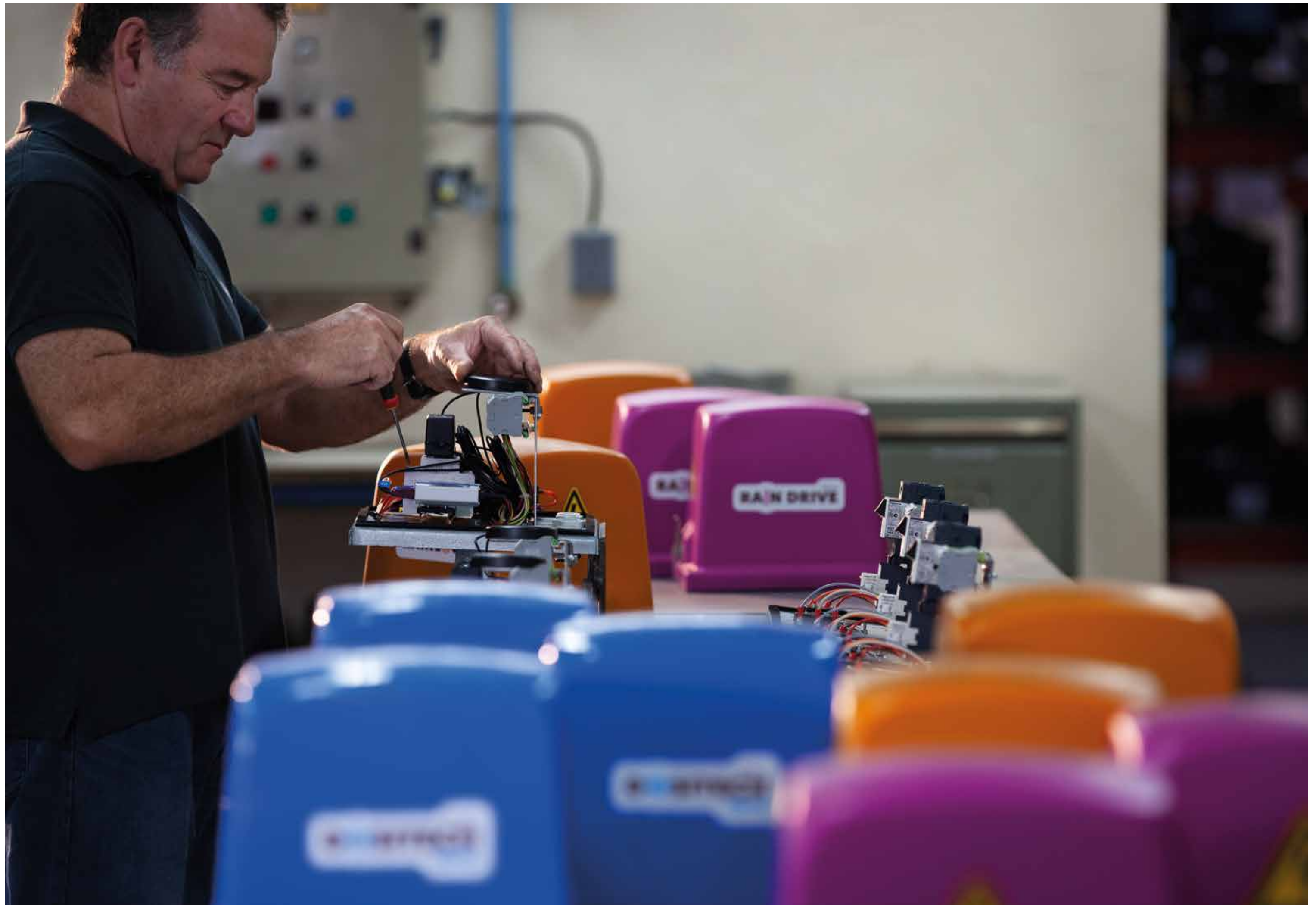
















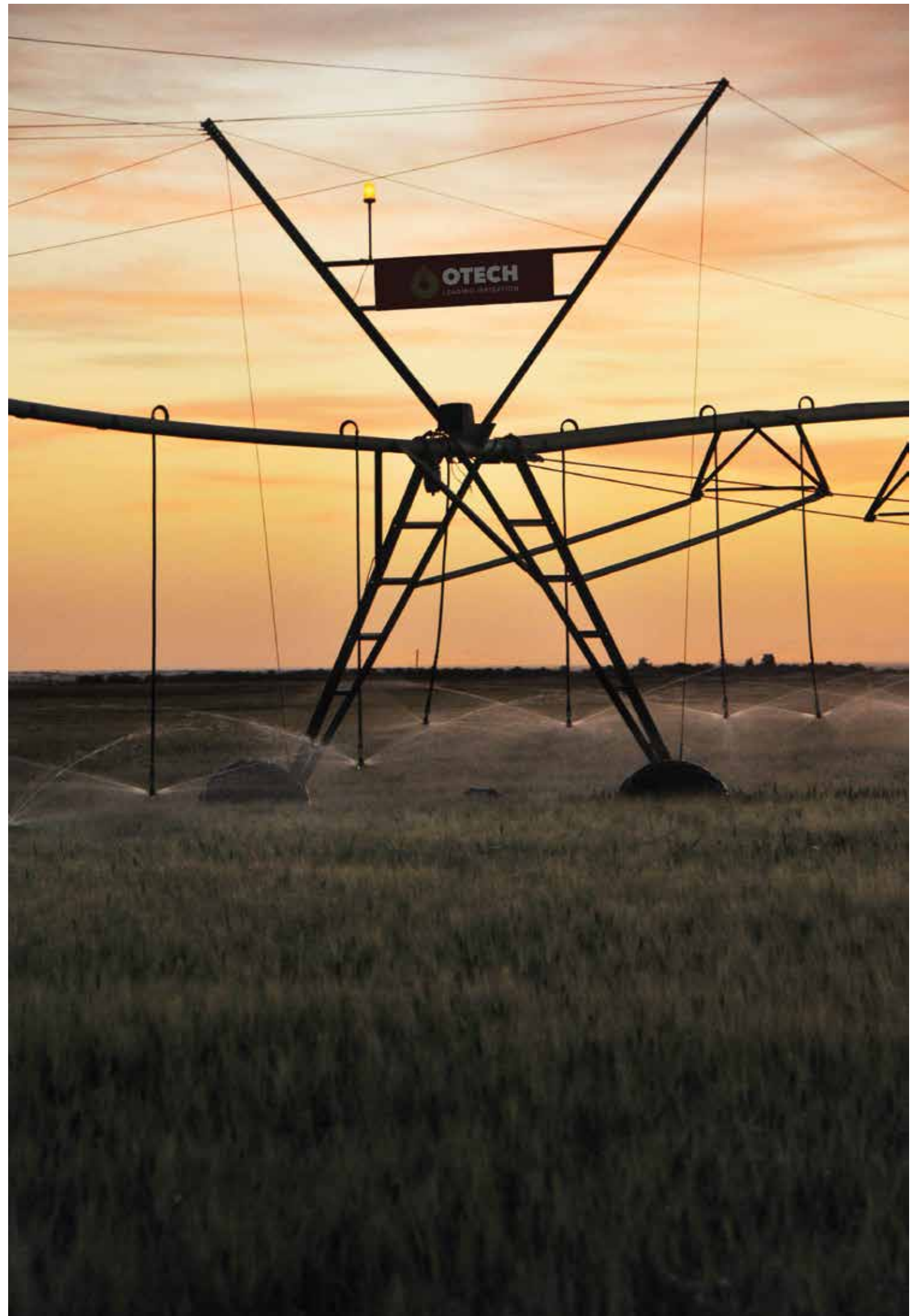
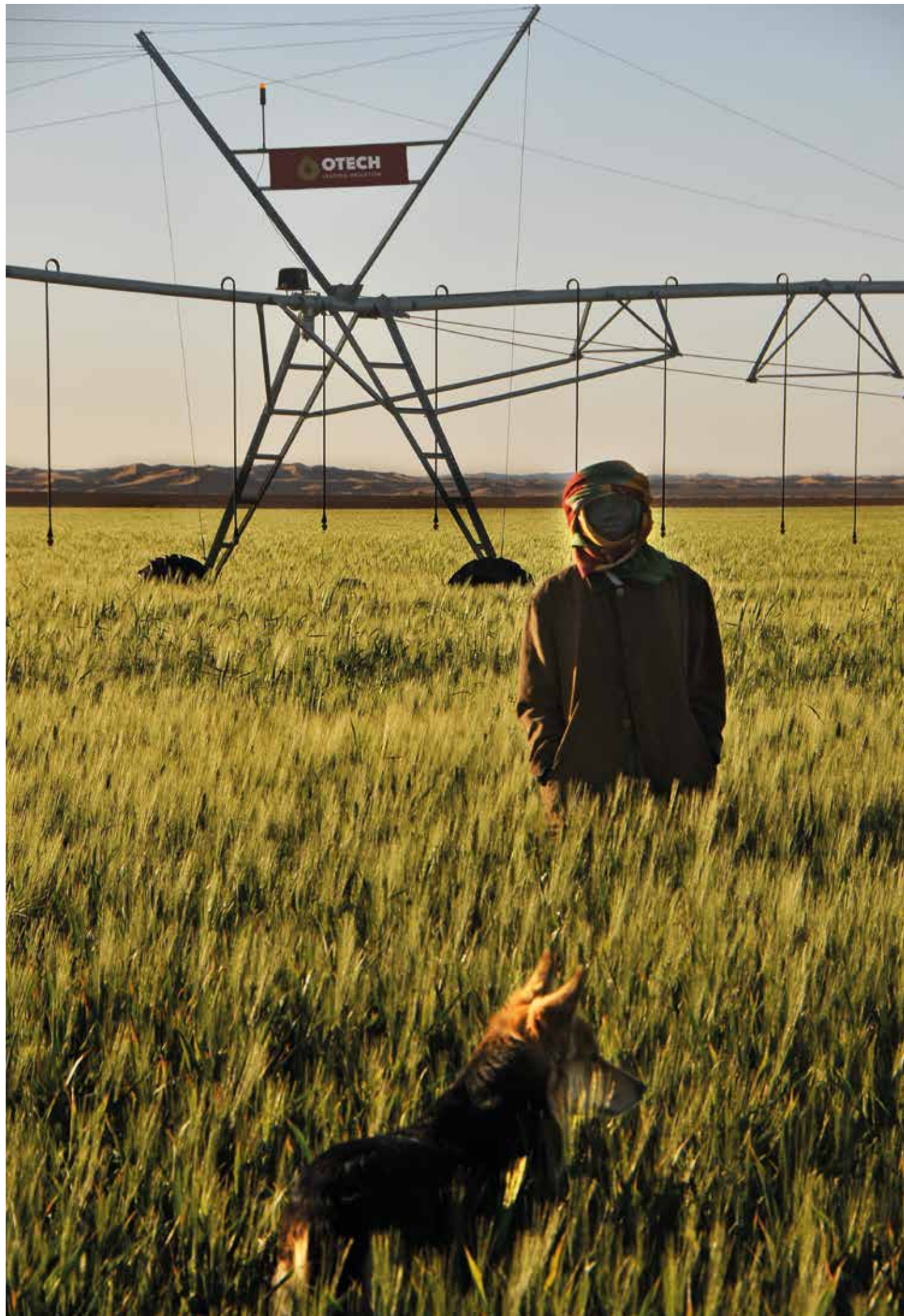












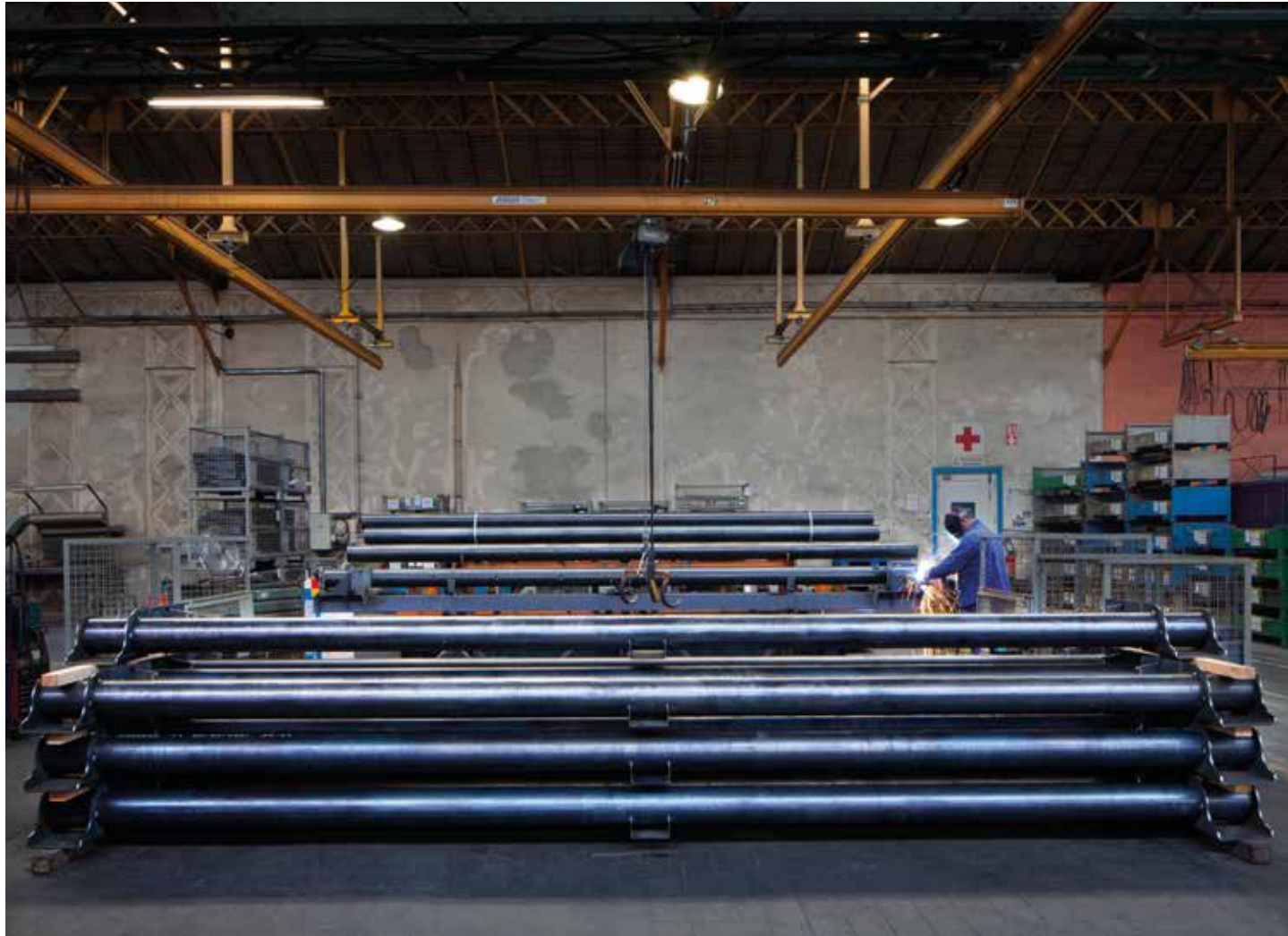
























DOSITECH



OTECH

LEADING IRRIGATION





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