







# *since 1954*

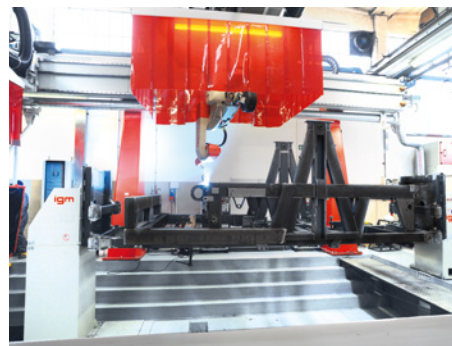
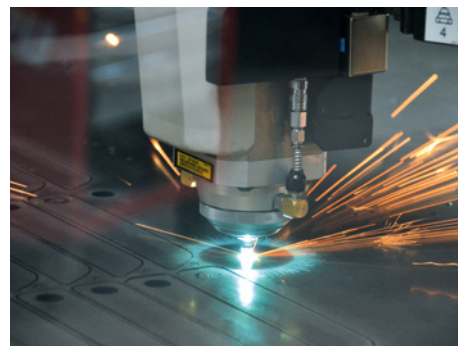
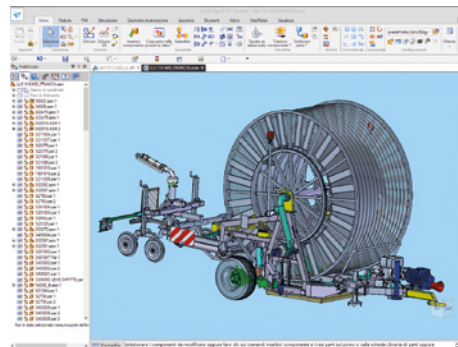
## *The true Irrigation*

Founded in 1954 by Ugo Casella and currently led by Francesco, Ettore, Paolo and Roberto Casella. 100 employees, based in Carpaneto Piacentino (PC), area of 75,000 sq.mt., with 25.000 sq.mt. of Office and Buildings, spare parts warehouse, workshop, machinery exhibition. Leader in the construction of machines and equipment for irrigation and distribution sewage and in the use of satellite technology VRT. Reliability, quality and an after-sales service timely and qualified by the use of internal staff.



# Company technologies

Machinery constructed in compliance with European CE standards as a warranty of quality and safety





# Leading services



# Engine-controlled rewinding system

## IDEAL SYSTEM FOR EFFECTIVE ENERGY SAVING

This type of machine exploits a small diesel engine for both hose rewinding and hydraulic controls. The main advantage of this system is that it does not absorb water power which can hence be completely used for irrigation. The pressure losses of the machine are thus reduced by 25-30% with an average fuel consumption of the diesel engine of 300gr/h. Such solution makes this system suitable for the mounting of hoses having large diameter and remarkable length (up to 700 m). Moreover, it is the only system allowing spreading of manures or waste waters at high rewinding speeds (10 to 150m/h).

## COMPLETE HYDRAULIC SYSTEM

Composed of: servo-drawbar front jack (mod. EXP.M excluded). Jacks allowing lowering the wheels for the carriage position or lifting them for the working position by leaning the machine on a turning step which allows for 360° rotation (mod. EXP.M excluded). Jacks on rear stabilizers securing the machine to the ground in the working position and turning into lifting elements for the sprinkler trolley during the carriage phase. The platform lowering during the working phase ensures the machine a good stability thus allowing the mounting of long hoses on models LLS, PX, PL, PLS. Independent oversized stabilizer jacks as well as step hydraulic rotation are also available as optional accessories.

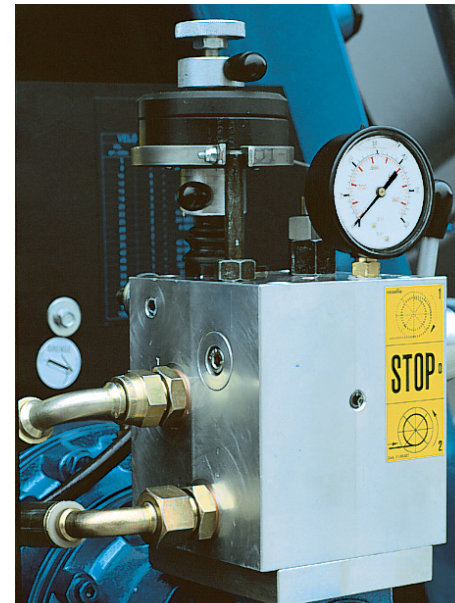
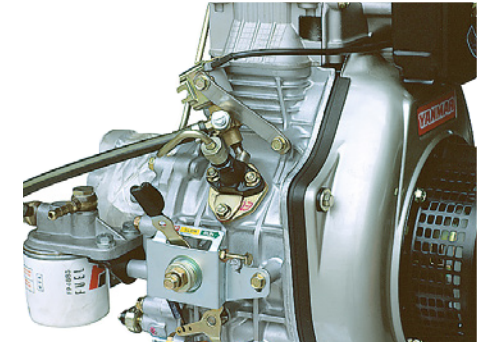
## HYDRAULIC CONTROL

Performances:

- Hose rewinding speed adjuster (10 to 150m/h). Max speed of 200-300-2000 m/h on demand.
- Rewinding speed mechanic-hydraulic compensator.
- Lever for the control of hose rewinding - stop - reverse rotation.
- Automatic stop in case of end of working and wrong hose rewinding.
- Automatic protection against PE hose breaking by a valve calibrated to the maximum allowable strain with regard to the PE hose mounted on the machine.

## ENGINE STOP

Device allowing stopping the diesel engine and the hose rewinding in case of water supply stop (optional).



## WATER INLET

Special care has been devoted to the design of water inlet by means of large diameter pipes and wide radius elbows to prevent any pressure loss.

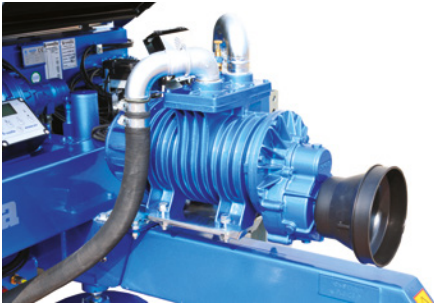




# Accessories

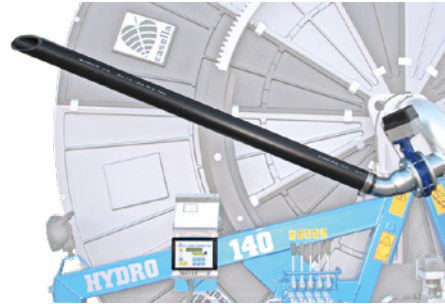
## DISCHARGE VACUUM PUMP

Device allowing the quick discharge of the water inside the hose at the end of the working phase to enable carriage and favour the hose unwinding.



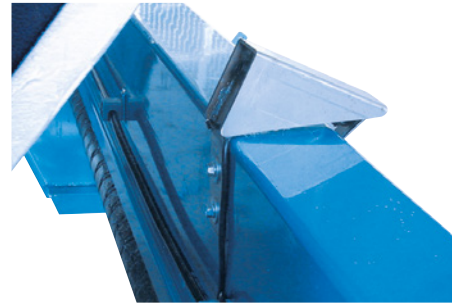
## DISCHARGE VALVE

Device allowing discharging a great amount of water at the end of the working phase so as to decrease line pressure to be used to stop the pumping station.



## END OF UNWINDING ALARM

Photocell sending out a visual and/or acoustic alarm when the hose has reached the final phase of unwinding.

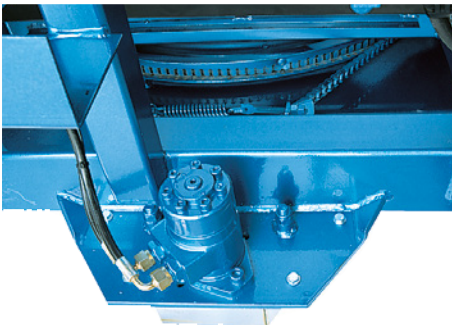


## SOUNDPROOF HATZ ENGINE

Thanks to the soundproofing box, the noise is much lower. Over 50 meters, the engine noise is mixed with the sounds of the environment in which the machine is located.

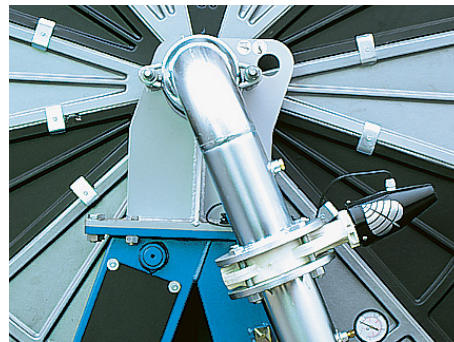


## HYDRAULIC ROTATION



## SLOW STOP

Device allowing the automatic stop of the water inlet at the end of the working phase with possibility of controlling the pumping station overpressure stop.



## WATER INLET ON 2 SIDES

Pipe to feed water on 2 sides of the machine thus enabling easy connection to the hose.



# State-of-the-art technology Electronic compensation

The ELECTRONIC COMPENSATION system keeps the rewinding speed constant even with different winding diameters and hose traction forces. When the desired speed is selected the electronic compensation system detects - by a rear sensor (A) - the hose rewinding actual speed and by acting on the hydraulic control valve (B) corrects automatically the rewinding speed to the selected value.

**HYDRO-CONTROL 260**

- Length of unwound hose up to 1000 meters
- Initial pause 0 to 99 min.
- Hose re-winding control 5 to 999 m/h
- Final pause 0 to 99 min.
- End of irrigation
- Automatic calculation of speed by programming the irrigation time.

During irrigation the back-lit display shows: irrigator rewinding speed in m/h, remaining length to be rewound, remaining time to the end of irrigation.



**HYDRO-CONTROL 160**

- Length of unwound hose up to 1000 meters
- Hose re-winding control 5 to 250 m/h.

During irrigation the back-lit display shows: irrigator rewinding speed in m/h, remaining length to be rewound, remaining time to the end of irrigation.



**HYDRO-CONTROL 260 PLUS**

Same characteristics as 260, plus the possibility of programming up to 8 different irrigation conditions, varying the length of each domain and the speed of return.



**HYDRO-CONTROL 260 GSM**

Same characteristics as 260, plus a GSM module which, through sms, communicates machine state and warn in case of malfunction. The user, also through sms, can change irrigation parameters and, if necessary, switch off the machine. Some other functions are programmable: pressure controller, anemometer, etc... It is applicable both to 260 version, and 260 PLUS.

**PROGRAMMING RAINFALL**

New possibility to program by setting the desired rainfall (mm). You need to set the nozzle diameter, sprinkler pressure and the width that is irrigated and the control unit automatically calculates the speed of return.



**SENSOR FOR HOSE REWINDING SPEED MEASUREMENT**



**HYDRAULIC VALVE CONTROL OF REWINDING SPEED DRIVEN BY AN ELECTRIC MOTOR**





ENGINE CONTROL UNIT (optional)  
on mod.: EXPM, L, LL, LLS, PX  
ON/OFF panel with button. Main  
functions: oil level, alternator, battery,  
protection of irrigation computer



ENGINE CONTROL UNIT on mod.:  
PL, PLS (optional on the other models)  
Adds to the features of the previous  
model a number of other functions:  
electronic control of the pressure rewinding  
pipe, counter, alarm reports, ecc...



MEMBRANE DEVICE FOR THE  
READING OF MANURE PRESSURE  
This device prevents the obstruction  
of pressure gauges and manometers  
when using manures or waste waters.

MANURE PRESSURE GAUGE  
(0-4) - (4-15) atm



MANURE MANOMETER 0-16 atm



MANURE SENSOR FOR  
ELCOS CONTROL UNIT



## Sprinklers

Sprinkler mod. MASTER V-A



Sprinkler mod. TWIN 202



Sprinkler mod. 200 SK



# EXP.M

90/500 — 100/500 — 110/400 — 120/300

This machine can be oriented to 270°, hose rewinding by Diesel engine. Pull start engine and hydraulic system to control hose rewinding by side ring gear. Hydraulic rear stabilizers.

CE

mod. 110/400





# L 90/500 — 100/500 — 110/500 — 120/400 — 125/330

Machine with hose  
rewinding by diesel  
engine and hydraulic  
system for automatic  
hose rewinding by  
side ring gear. Wheel  
hydraulic lifting and

lowering to the ground  
platform. Hydraulic  
rear stabilizers. Front  
hydraulic piston.  
Electric engine starter.  
360° rotation.

CE

mod. 125/330



**LL** 100/550 — 110/500 — 120/450 — 125/430 — 140/400

**LLS** 110/650 — 120/620 — 125/600 — 140/550 — 150/400 — 160/350

Machine with hose  
rewinding by diesel  
engine and hydraulic  
system for automatic  
hose rewinding by  
side ring gear. Wheel  
hydraulic lifting and

lowering to the ground  
platform. Hydraulic  
rear stabilizers. Front  
hydraulic piston.  
Electric engine starter.  
360° rotation.

CE

mod. 140/500 LLS





Machine with hose  
rewinding by diesel  
engine and hydraulic  
system for automatic  
hose rewinding by  
side ring gear. Wheel  
hydraulic lifting and  
lowering to the ground  
platform.

Hydraulic rear stabilizers.  
Front hydraulic piston.  
Electric engine starter.  
360° rotation. Ability to  
mount 2 or 4 wheels.

Possibility to have tandem axles. See page 15

mod. 150/530



# PL 125/600 — 140/550 — 150/500 — 160/350

Machine with hose  
rewinding by diesel  
engine and hydraulic  
system for hose  
rewinding by exclusive  
system equipped with  
double side traction  
chains. Wheel hydraulic  
lifting and lowering to

the ground platform.  
Hydraulic independent  
rear stabilizers. Front  
hydraulic piston. 360°  
rotation. Mechanical  
front brackets. Discharge  
vacuum pump lt. 8000.  
Irrigation computer  
Hydro control 160.

Electric engine starter.  
Electronic control of  
rewinding pressure.



mod. 150/400





# PLS

125/800 — 140/780 — 150/650 — 160/520 — 180/430

Machine with hose  
rewinding by diesel  
engine and hydraulic  
system for hose  
rewinding by exclusive  
system equipped with  
double side traction  
chains. Wheel hydraulic  
lifting and lowering to

the ground platform.  
Front hydraulic piston,  
front hydraulic brackets,  
independent rear  
stabilizers, 360° rotation.  
4-wheels trolley.  
Discharge vacuum pump  
lt. 11000. Irrigation  
computer Hydro control

160. Electric engine  
starter. Electronic control  
of rewinding pressure.

CE

mod. 150/550 PLS



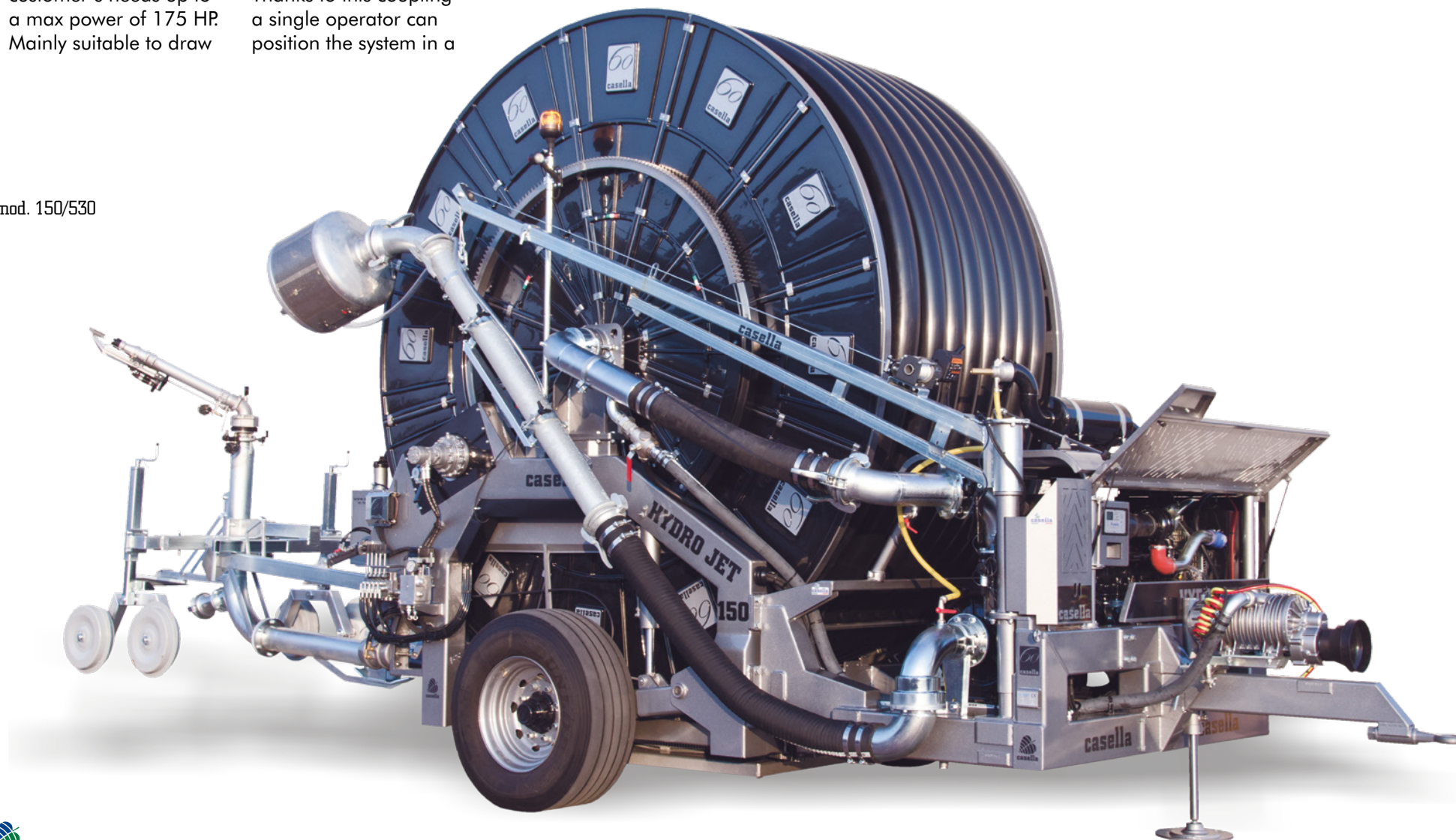
Special machine - keeping the basic features of mod. PX to be supplemented with a motor-pump conceived according to the customer's needs up to a max power of 175 HP. Mainly suitable to draw

water directly from the irrigation ditches by means of a flexible arm with max radius of 6 m; or from low pressure underground hoses. Thanks to this coupling a single operator can position the system in a

short time through very simple operations. A further energy saving is achieved since the rewinding hose and hydraulic motion

are controlled by the engine. Ability to mount 2 or 4 wheels.

mod. 150/530





The front part of the chassis is removable: thanks to a system of removable plates it is possible to equip the machine in the PX version with single cylinder engine for hose rewinding and PXMP version with motorpump. Then the machine is very compact for transport on trucks.



It is also possible to mount a balancer to obtain a machine with 4 wheels. The structure of the chassis remains the same as a guarantee of the versatility in the preparation of this machine. The 4-wheel variant is also available for PX.



# PLMP

125/600 — 140/550 — 150/500 — 160/350

Special machine - keeping the basic features of the mod. PL - to be supplemented with a motor-pump conceived according to the customer's needs up to a max power of 250 HP. Mainly suitable to draw water directly from the irrigation ditches by

means of a flexible arm with max radius of 6 m; or from low pressure underground hoses. Thanks to this coupling a single operator can position the system in a short time through very simple operations.

A further energy saving is achieved since the rewinding hose and hydraulic motion are controlled by the engine.

CE

mod. 150/450





# PLSMP

125/800 — 140/780 — 150/650 — 160/520 — 180/430

Special machine - keeping the basic features of the mod. PLS to be supplemented with a motor-pump conceived according to the customer's needs up to a max power of 250 HP. Mainly suitable to

draw water directly from the irrigation ditches by means of a flexible arm with max radius of 6 m; or from low pressure underground hoses. Thanks to this coupling a single operator can

position the system in a short time through very simple operations. A further energy saving is achieved since the

rewinding hose and hydraulic motion are controlled by the engine.



mod. 150/500



# PLLSMP 4R

140/780 — 150/650 — 160/520 — 180/430

SPECIAL

60

Special machine - keeping the basic features of the mod. PLS to be supplemented with a motor-pump conceived according to the customer's needs up to a max power of 250 HP. Mainly suitable to

draw water directly from the irrigation ditches by means of a flexible arm with max radius of 6 m; or from low pressure underground hoses. Thanks to this coupling a single operator can position the system

in a short time through very simple operations. A further energy saving is achieved since the rewinding hose and hydraulic

motion are controlled by the engine.

CE

mod. 180/400





# Patented

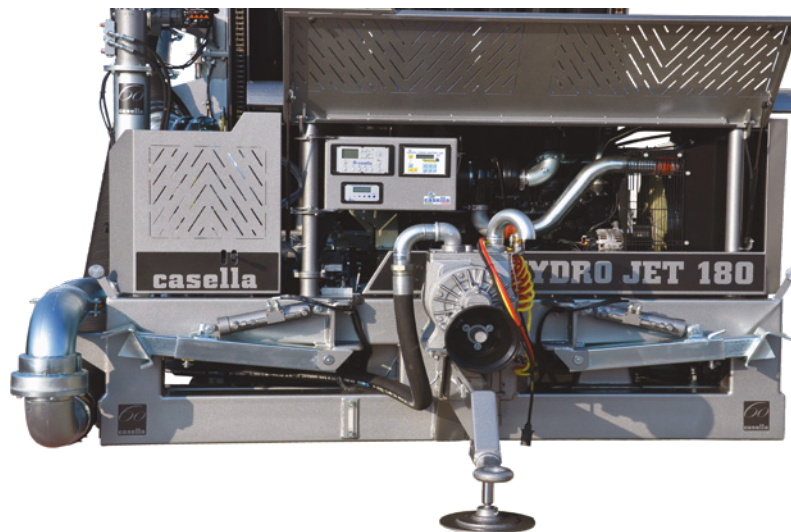
(independet control of the wheels)

The revolutionary system makes oscillating the arm, that joins the two wheels, through the transfer of the oil between the two hydraulic jacks that support it. This also allows to amortize small bumps. An appropriate

hydraulic system allows to lift the front wheels to facilitate the maneuvers for the positioning of the machine. During on-road use, the machine must absolutely travel with the four wheels on the ground.



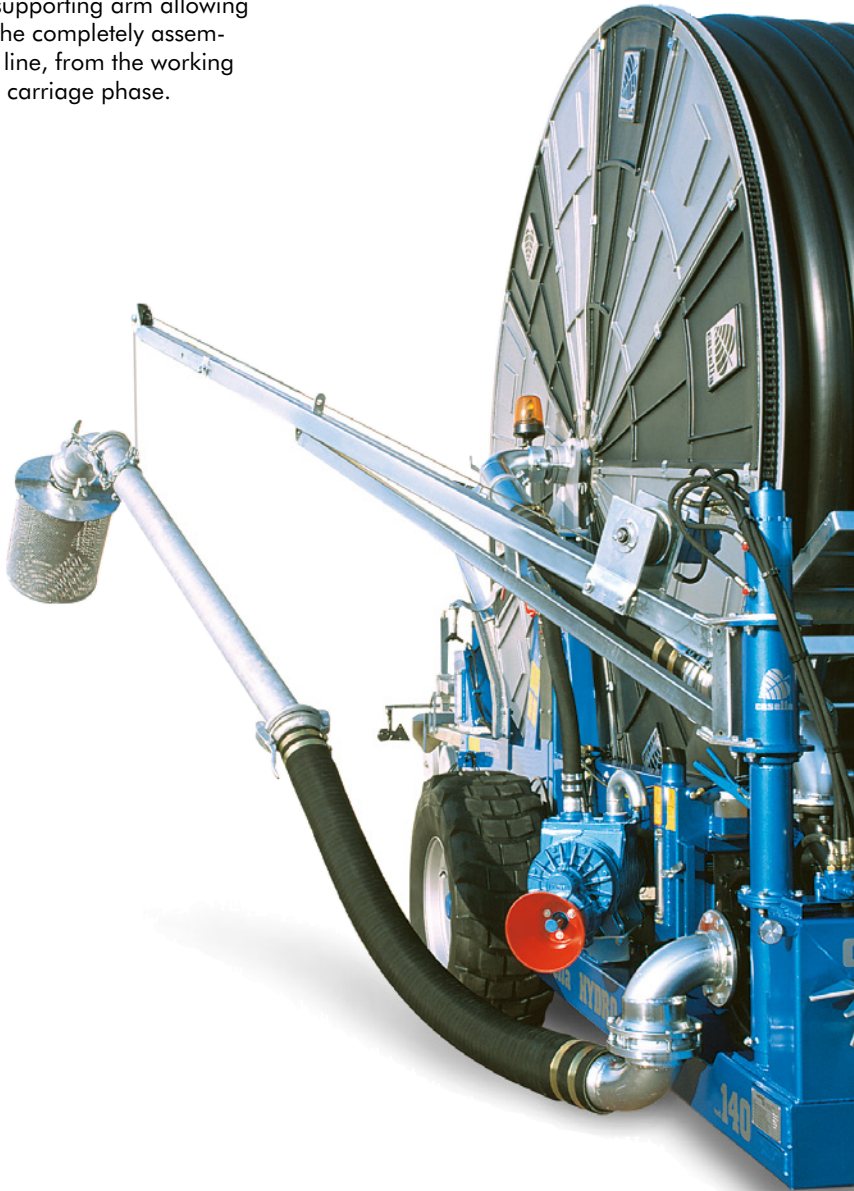
Full protection of the motorpump, the front panel can be lifted and allows easy access to the controls of the electronic control. The drilling of the plates airs the entire system.



# Built-in motor-pump accessories

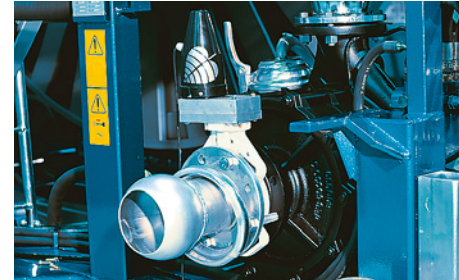
## WINCH ARM

Extractable supporting arm allowing positioning the completely assembled suction line, from the working phase to the carriage phase.



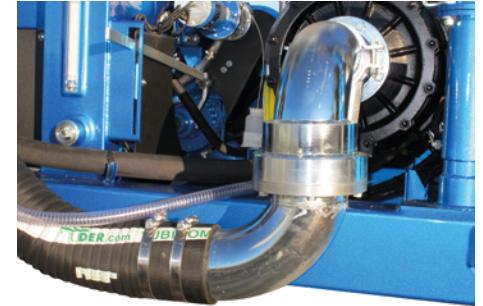
## PUMP SUCTION SLOW STOP

Device to stop water inlet in case of re-launch pump function or to stop the pumping station under overpressure conditions.



## SUCTION HOSE REVOLVING JOINT

To easily position the suction hose both in the working and the carriage position.



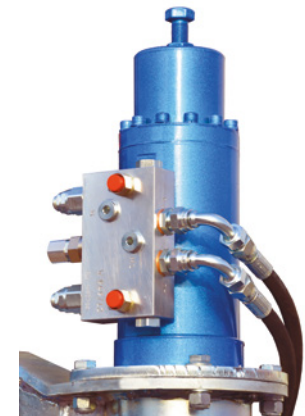
## ELECTRIC LIFTING SUCTION ARM

To lift the suction hose by means of the electric winch controlled by pushbutton; this in order to facilitate positioning of the arm. Also available with hydraulic rewinding.



## SUCTION ARM HYDRAULIC ROTATION

To rotate the suction arm by means of the hydraulic motor from the working to the carriage phase.





Aspiration valve with automatic self-cleaning



Additional overturning platform for models PLMP, PLSMP, 4R



ADDITIONAL TANK  
300 additional litres to the machine tank capacity.



AUTOMATIC SUCTION FILLING  
Electric motor-controlled vacuum pump to easily and quickly fill the suction hose.



Engine single cylinder for rewinding independent of the pipe



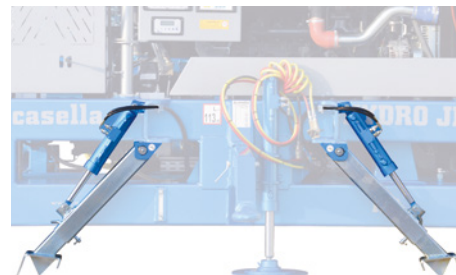
CONTROL PANEL  
Complete solution of electronic junction box for the pressure control of rewinding pipe.



REMOTE CONTROL FOR HYDRAULIC MOTIONS  
Distance control of all hydraulic motions, thus facilitating machine positioning operations.



HYDRAULIC FRONT BRACKETS  
To further reinforce the machine anchoring to the ground. Essential for machines using very long hoses.



ELECTRO-HYDRAULIC DISTRIBUTOR



# Trolleys



## STANDARD TROLLEY

Two-wheels trolley with central slide adjustable in height (0.50 m) and width (m 1.80 to m 3). Possibility of mounting iron-cement wheels - 40 kg each.



## 4-WHEELS TROLLEY

Reinforced trolley with four oscillating iron-cement or rubber wheels. Height and width adjustable.



## 4-WHEELS TROLLEY WITH ADDITIONAL WEIGHTS

Like the 4-wheels trolley with four oscillating iron-cement or rubber wheels but also with the addition of 8 weights of 14 kg each.



## THREE-WHEEL EXPORT TROLLEY

Trolley with 3 iron-cement or rubber wheels, with sliding central wheel. N.B. for Export mod. only.



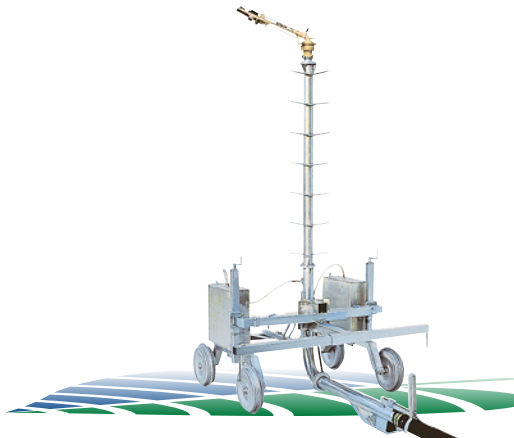
## FOGGIA TROLLEY

Special trolley with 3 iron-cement or rubber wheels.



## DECENTRALIZED TROLLEY

It has the same features of the Foggia trolley but with sprinkler holding pipe to the side, so that the PE hose follows the tractor track.



## ORCHARD TROLLEY

Special 4-wheels trolley suitable for over-foliage irrigation (4 m) with water ballasts and ladder for sprinkler adjustment.



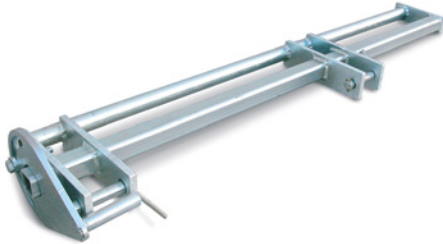
## SELF-LEVELLING TROLLEY

Special 4-wheels trolley suitable for variable depth ditch operation with automatic adaptation to the ditch depth.



#### TOMATOES BAR

To unwind the PE hose along the tractor track.



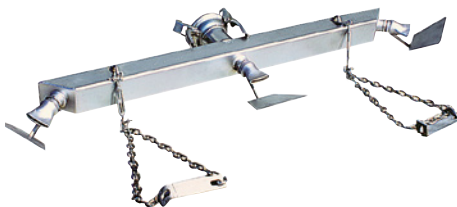
#### TROLLEY WIDTH SCREW ADJUSTMENT

For an easy adjustment of the trolley track also during irrigation



#### THREE-OUTLET MANURE BAR

Device to be coupled to the trolley pipe extension for manure spreading



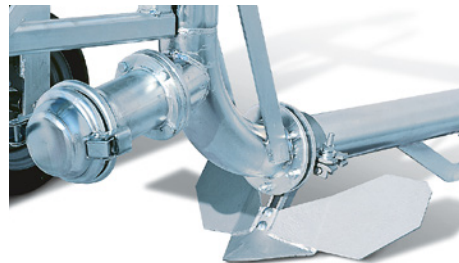
#### NELSON 200 SK SPRINKLER

Special for huge flow rates (4000 l), and long ranges (90 m).



#### BEET PLOWSHARE

By correctly positioning the share in the inter-row it is possible to remove the beet leaves and unwind the hose on the bare round.



#### ROTORKIT (ONLY FOR SIME SPRINKLERS)

Mechanical device for automatic inversion of the sense of rotation.

#### DOUBLE ROTORKIT (ONLY FOR SIME SPRINKLERS)

Mechanical device for automatic inversion of the sense of rotation. Ability to set up multiple angles of irrigation



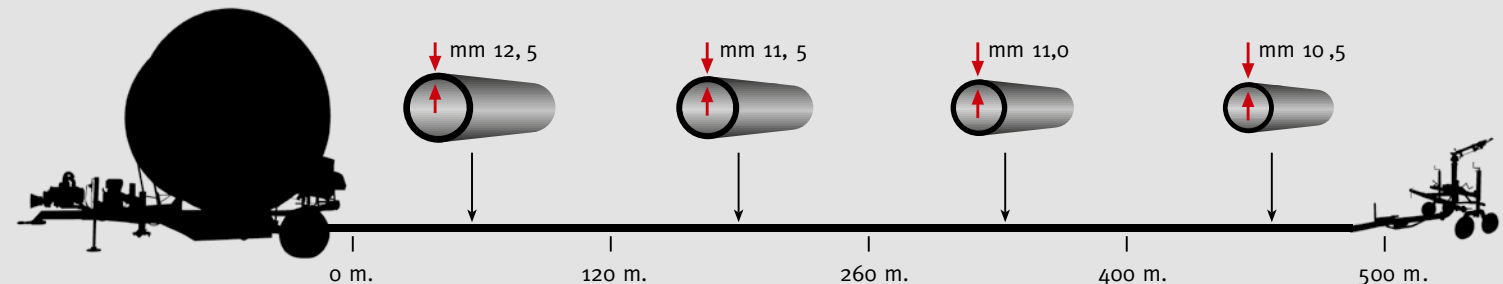
#### COMPACTOR ROLLER

To compact the ground on which the PE hose is to be positioned thus reducing the contact surface and hence friction; essential for models with long hoses and condensate presence (well water).



#### DIFFERENTIATED THICKNESS POLYETHYLENE HOSE

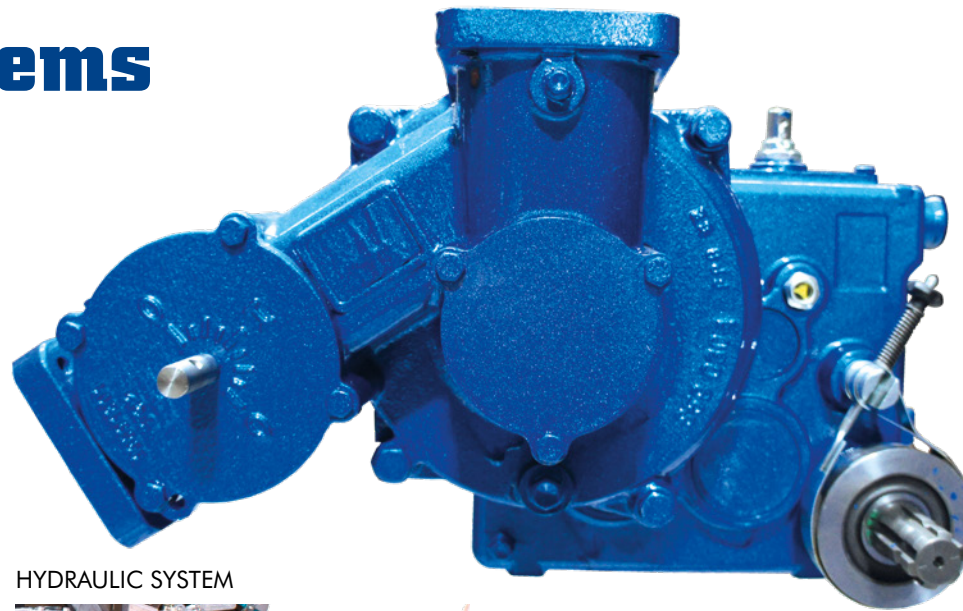
This solution gives the advantage of having an oversized thickness on the hose initial section - the most stressed - such thickness constantly decreases toward the trolley, thus making the hose resistant without changing the hose internal average diameter. This solution allows for the mounting of very long hoses without the risk of ovalization or elongation.



# Turbine systems

## TURBINE

Hose reels with turbine rewinding. The turbine uses the water and rewinds the pipe through a gear-box. The high-quality system is made by a turbine directly connected with gear box and a by-pass valve that can be driven mechanically or electrically: an efficient and easy irrigation.



## DISCHARGE VALVE

Device allowing discharging a great amount of water at the end of the working phase so as to decrease line pressure to be used to stop the pumping station.



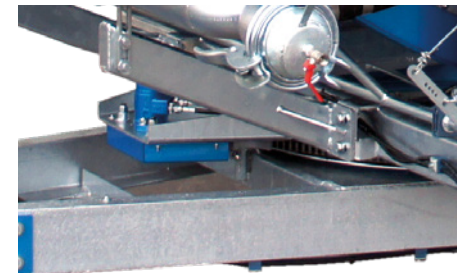
## HOT-GALVANIZED CHASSIS



## HYDRAULIC SYSTEM



## HYDRAULIC ROTATION



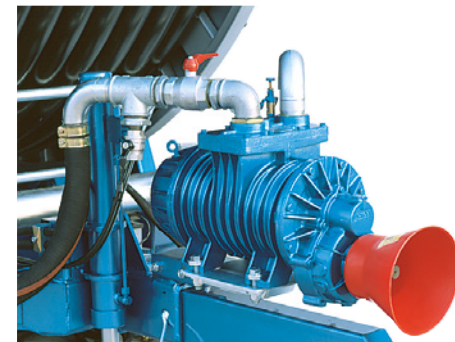
## COMPUTER

Computer for rewinding speed control, with solar panel and stainless box.



## DISCHARGE VACUUM PUMP

Device allowing the quick discharge of the water inside the hose at the end of the working phase to enable carriage and favour the hose unwinding.



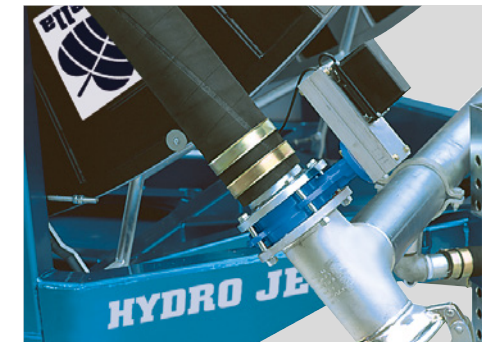
## WATER INLET ON 2 SIDES

Pipe to feed water on 2 sides of the machine thus enabling easy connection to the hose.



## SLOW STOP

Device allowing the automatic stop of the water inlet at the end of the working phase with possibility of controlling the pumping station overpressure stop.





# HY-TURB



mod. 75/300

**S**

**75/400 — 82/350 — 90/300**

Hot-galvanized hose reel.

Turbine for water flows from 400 to 1000 litres/minute (24 – 60 m³/hour).

4 gears + drive shaft joint for tractor p.t.o.

Rotation of the upper frame with many positions (from 0° to 270°).

Hydraulic lifting of the sprinkler trolley.

Trolley with 3 rubber wheels.

Sprinkler with different nozzles.

Flexible high pressure hose for connection of the water line.

Tyres 10.0/80-12

**90/500 — 100/500 — 110/400 — 120/300**

Hot-galvanized hose reel.

Turbine for water flows from 650 to 1250 litres/minute (39 – 75 m³/hour).

4 gears + drive shaft joint for tractor p.t.o.

Rotation of the upper frame with many positions (from 0° to 270°).

Hydraulic lifting of the sprinkler trolley.

Trolley with 3 rubber or iron wheels.

Sprinkler with different nozzles.

Flexible high pressure hose for connection of the water line.

Double water inlet.

Front mechanic brackets.

Tyres 10.0/75-15.3



mod. 110/400

**M**

# HY-TURB L

110/620 — 120/500 — 125/480

CE

Hot-galvanized hose reel.

Turbine for water flows from 800 to 1600 litres/minute (48 – 93 m<sup>3</sup>/hour).

4 gears + drive shaft joint for tractor p.t.o.

Hydraulic Rotation of the upper frame with many positions (from 0° to 270°).

Hydraulic lifting of the sprinkler trolley.

Hydraulic front foot.

Trolley with 3 rubber or iron wheels.

Sprinkler with different nozzles.

Flexible high pressure hose for connection of the water line.

Double water inlet.

Front mechanic brackets

Tyres 11.5/80-15.3

mod. 110/500



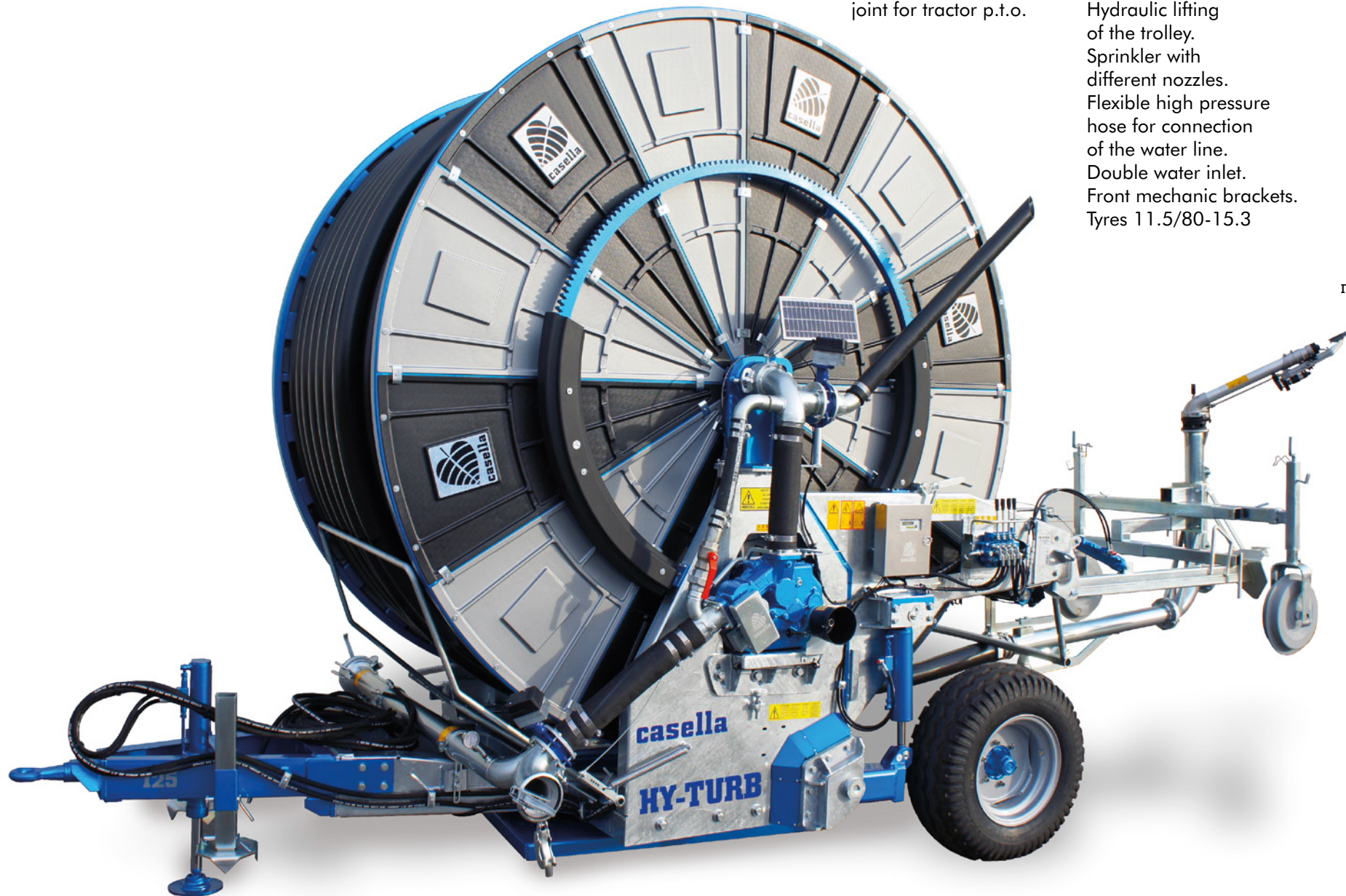


# HY-TURB P

110/620 — 120/520 — 125/500 — 140/450

Hot-galvanized hose reel.  
Turbine for water  
flows from 800 to  
2000 litres/minute  
(48 – 120 m<sup>3</sup>/hour).  
4 gears + drive shaft  
joint for tractor p.t.o.

Wheel hydraulic lifting  
and lowering to the  
ground platform.  
Hydraulic rear stabilizers.  
Front hydraulic piston.  
360° rotation.  
Hydraulic lifting  
of the trolley.  
Sprinkler with  
different nozzles.  
Flexible high pressure  
hose for connection  
of the water line.  
Double water inlet.  
Front mechanic brackets.  
Tyres 11.5/80-15.3



mod. 125/400

## SWITCHBOARD SIM 0-E 12VDC (optional)

Start & Stop with electronic key with button. Customizable code for the protection.

Alarms management for turn off the engine in case of: Low pressure of oil - High

temperature of water - Level of cooling liquid - Control of working pressure - Stop the

engine with timer - Water pump exclusion - Settings for high and low working pressure -

Main functions > Engine number r.p.m.; Fuel level; Total working hours ; Working pressure

(bar); Change of engine oil (maintenance); Voltage of battery; Report of events.

### OPTIONAL:

Electronic accelerator, automatic working, kit for the cleaning of the aspiration valve, signal system with GSM.



Motorpump for drip irrigation,  
with filters and fertilizing integrated systems



Motorpump for irrigation from lake or canals



Sound-proof motor-pump



Motor-pump unit on self-supporting frame with fuel tank. JOHN-DEERE and IVECO-FPT motors. Caprari or Rovatti multi-rotor pumps, according to the customer's needs. On demand: sound-proof casing, oversized fuel tank, reduction gear clutch unit for vertical pumps operations and special applications.

CE

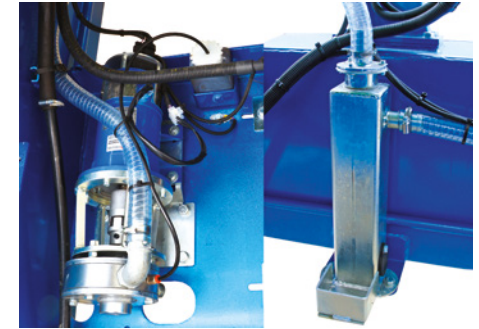
WINCH ARM



DELIVERY REVOLVING JOINT



AUTOMATIC SUCTION FILLING  
Electric motor-controlled pump  
to fill the suction hose.



170 hp JOHN DEERE  
High capacity centrifugal pump



175 hp FPT  
manure motor-pump

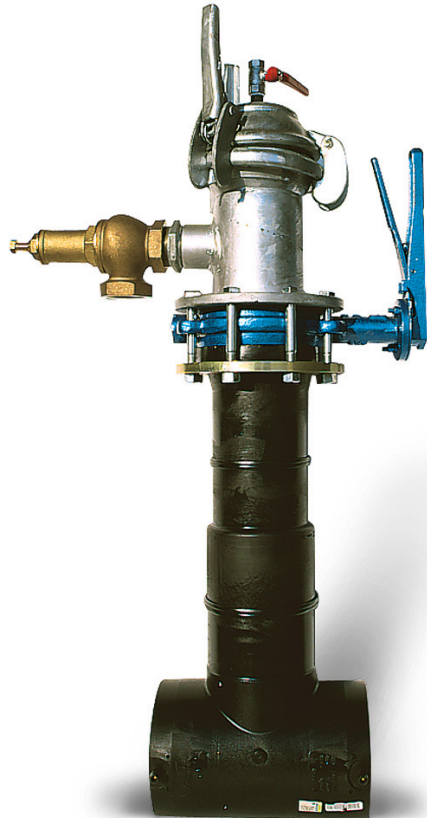


# Underground systems

IRRIGATION - FERTILIZING IRRIGATION - MANURE SPREADING



Electric welded Tee union in PE with threaded butterfly stop valve and ball hook with cap.



Electric welded PE threaded elbow with ball hook and cap.



S/S butterfly valve.

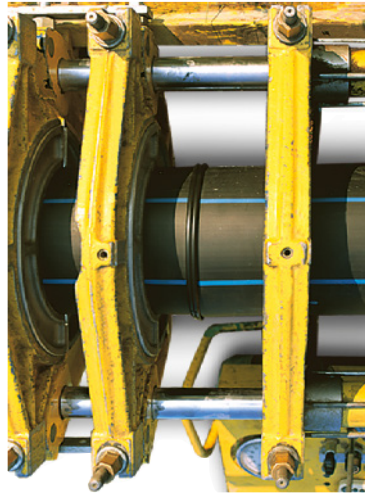




Exemple of PE hose for tank drain.



Example of PE hose 'head-to-head' welding - bar system version (over Ø 160).



Cement pit with galvanized steel cover for the protection of water intakes.



PE reel carriage (up to Ø 160).



Welding example of electric welded PE hoses.



Laying of the hose into the digging.

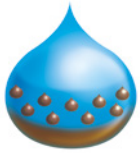


Special pump suction fittings





# Manure spreading

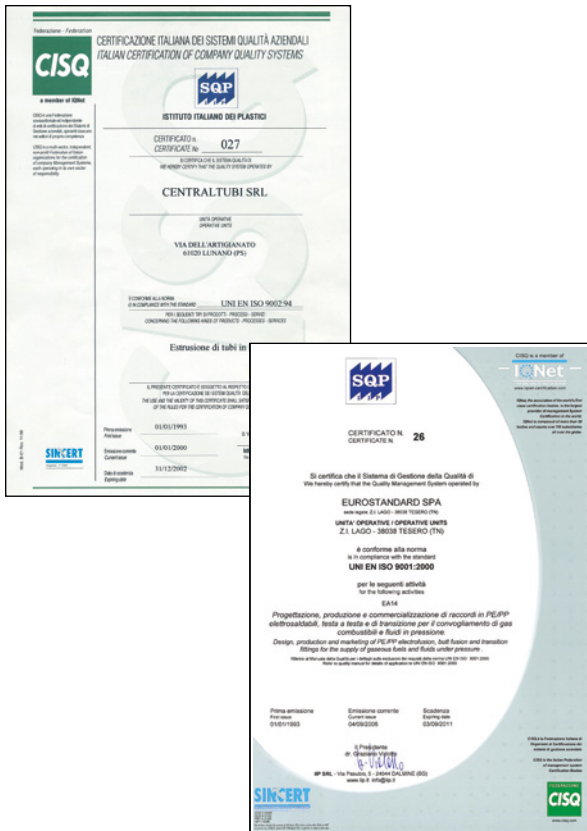


water

fertilizing irrigation

manure

Certifications of hoses and couplers.



Welding of PE hoses by licensed engineers (UNI 9737 standard) issued by the Istituto Italiano della Saldatura (Italian Institute for Welding) of Genoa.

Mod. 90/350 coupled to special irrigation boom for focused spreading of manure, rewinding speed 2000 m/h (SWITZERLAND).



Example of operation with vertical axis motor-pump and underground system for irrigator feeding.



Special sprinkler for low pressure manure spreading (2-3 atm).



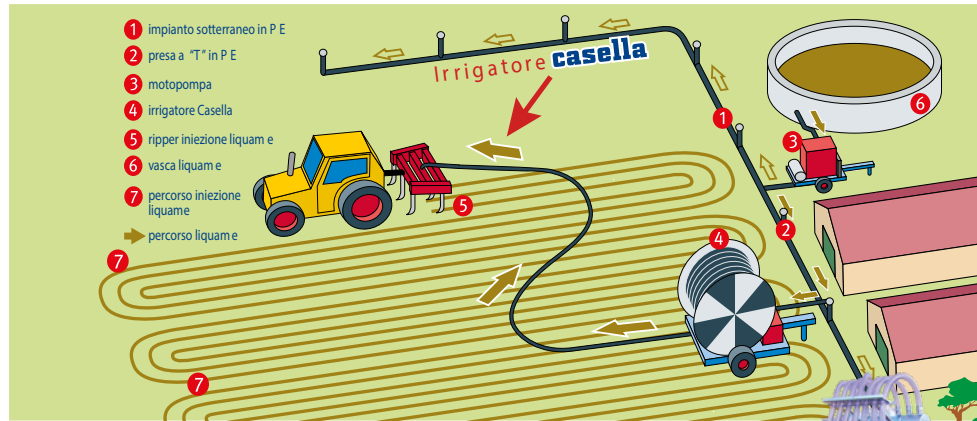
Manure spreading with pick-up from tank.





# Manure underground injection

Ripper 3 m - 7 anchors – how to transform manure into a resource



- Possibility of burying even 200 m<sup>3</sup>/h, with zero environmental impact, so the biggest problem of manure distribution (stink) doesn't exist anymore.
- All organic matter contained in manure is absorbed by ground and does not evaporate anymore; It will be completely available for subsequent cultivations.
- Placer mining effects caused by rain after distribution are reset to zero, and even ground water or surface water pollution, on hill terrains too.
- Manure buried distribution during cultivation of the terrain: it saves a passage without making compact the terrain, even with wet terrain.
- Use of the same system (underground pipes PE and Casella irrigator) even for irrigation and fertilizing irrigation.
- The underground polyethylene pipe completely welded is the most reliable solution for the transport of manure and water; it has indeed an almost unlimited duration.



CASELLA solution for manure buried distribution through ripper, is the final answer to "manure" problem. From warehousing pool, by means of a pump, the manure will be transferred to an underground polyethylene pipe, conveniently designed with many output to reach all farm's lots. Casella irrigator is connected to one of these sockets, and the pipe to the ripper. The tractor, which is attached to ripper, cover the entire field lengthwise following a particular distribution scheme. Manure will be injected nonstop for a depth of 20/30 cm through special pipes locked behind each ripper's anchor. Usually anchors are 30/40 cm distant, so the distribution will be undifferentiated and persistent on all terrain. During the march inversion, an idraulic valve will interrupt manure flux.

Distribution manifold and idraulic valve controlled by tractor.



Hydraulic distributor  
(uniform low pressure usage)



During the march inversion, manure supply to the ripper will be closed. The electronic central unit mounted on the pump reads pressure increase and open manure drainage. Reopening again ripper supply, pressure decrease and the drain valve shut down.





# Precision Farming



## Smart Smiley Sensor PATENTED SYSTEM

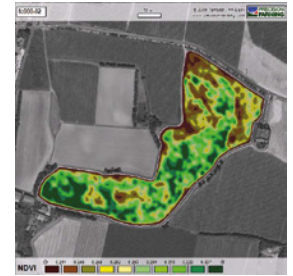
Unmatched in its way, it is a multiparameter sensor specifically developed for the characterisation of the vegetation canopy and of the micro-environment in vineyards and orchards (MECS-VINE) or row crops (tomatoes, corn, etc.) (MECS-CROP). The application on variable rate (VRT) agricultural machines optimizes and reduces the quantity of chemical and organic fertilizers or products for crop protection (from 20 to 50%). Possibility of real time use: while the sensor is mapping, a control unit controls the VRT machines on the back side of the tractor for a proper VRT distribution.



Usage in vineyards and orchards



Usage in open fields



Vigour map for precision farming

## Hydrosat

The irrigation system Hydro Sat is composed by: a control unit on which are stored the irrigation maps and a satellite receiver mounted on the sprinkler (with its solar panels that ensures autonomy). The control unit and the platform communicate using a radio-modem system. The rewinding speed of the trolley is so modulated according to the different needs of irrigation identified by the map.



## Rippersat

VRT manure distribution, according to specific maps. Through a central unit on the tractor, it is possible to change the speed advancement and so the quantity of manure distributed. While the ripper covers the field and passes through different fertilizing limitation zones, the system adapts to the needed variability modifying speed advancement. A sophisticated electronic meter allows to record the actual capacity on the central unit, producing a GPS coordinates map of distribution.



## Variable rate technology spreader Spread-Sat

- Standard capability 500 liters
- Compensated weighting system
- Work with inclination till 40° both transversal and longitudinal
- Automatic Variable rate metering
- Integrated GPS Receiver
- Broadcasters or localized distributor system
- Easy-use display in the cabin: it fits for all kind of tractors
- Possibility to distribute changeable doses of product according to a distribution map.





# The true irrigation

Sprinkler: 4000l/min, 9 atm, 90m jet length, ideal for pipes Ø150-160-180.



Hose reel mod.PLSMP with motorpump and direct suction.



SPRAY BOOM: irrigation with spray boom with rewinding speed up to 300 m/h.



Prompt after-sales service.



# Compactor Rolls

Mod. 4,60 CAMBRIDGE — 3 floating hydraulic 4,60 mt. CAMBRIDGE rolls. Wheels 10.0 / 75 15.3 / 6HOLES/ 10 webs. Nr.39 couple of disks CAMBRIDGE series. Weight 2300 kg. Width during transport mt. 2,20. Length during transport mt. 3,50.

Mod. 5,60 CAMBRIDGE — 3 floating hydraulic 5,60 mt. rolls CAMBRIDGE. Wheels 10.0 / 75 15.3 / 6HOLES/ 10 webs. Nr.47 couple of disks CAMBRIDGE series. Weight 2600 kg. Width during transport mt. 2,20. Length during transport mt. 3,95.

Mod. 6,30 CAMBRIDGE — 3 floating hydraulic 6,30 mt. rolls CAMBRIDGE. Wheels 10.0 / 75 15.3 / 6HOLES/ 10 webs. Nr.53 couple of disks CAMBRIDGE series. Weight 2860 kg. Width during transport mt. 2,20. Length during transport mt. 4,30.

Mod. 4,60 SIMPLE — 3 floating hydraulic 4,60 mt. sections roller. Wheels 10.0 / 75 15.3 / 6HOLES/ 10 webs. Empty weight 1650 kg - fully loaded weight 2450 kg. Width during transport mt.2, 20. Length during transport mt. 3,50. Roll Ø 610mm - depth.10mm

Mod. 5,60 SIMPLE — 3 floating hydraulic 5,60 mt. sections roller. Wheels 10.0 / 75 15.3 / 6HOLES/ 10 webs. Empty weight 1770 kg - fully loaded weight 2790 kg. Width during transport mt.2, 20. Length during transport mt. 3,95. Roll Ø 610mm - depth.10mm

Mod. 6,30 SIMPLE — 3 floating hydraulic 6,30 mt. sections roll. Wheels 10.0 / 75 15.3 / 6HOLES/ 10 webs. Empty weight 1.900 kg - fully loaded weight 2980 kg. Width during transport mt.2, 20. Length during transport mt. 4,30. Roll Ø 610mm - depth.10mm



Crumbling roll mod. Cambridge



Compactor roll mod. Simple



Width available: 4,60 5,60 6,30 mt.





# Tomato trailers

Bilateral dumper for tomato harvesting, capacity 6 cubic meters. The dump body can be tipped over both the right side and the left one of the dumper (mod. CPL 60) or back side (mod. CPP 60). The height varies from 2,40 to 3,60 meters. Hydraulic brake mechanically operated.

CE

**New** Possibility to have tandem axles and 4 wheels



mod. CPL 60



mod. CPL 60, stainless steel container

# Technical details

Technical Data	Mod. HY-TURB S			
Ø PIPE (mm)	63	75		82
PIPE LENGTH (m)	300	250	300	220
MAX CAPACITY (l/min)	300	600	550	850
WEIGHT (kg)	1710	1690	1760	1680
HEIGHT (m)	2495	2495	2495	2495
LENGTH (m)	5180	5180	5180	5180
WIDTH (m)	1645	1645	1645	1645

Technical Data	Mod. HY-TURB M										
Ø PIPE (mm)	82	90		100			110				120
PIPE LENGTH (m)	320	350	400	320	350	400	300	320	350	400	270
MAX CAPACITY (l/min)	700	800	750	1100	1000	900	1400	1400	1300	1250	1600
WEIGHT (kg)	2930	3130	3240	3210	3290	3530	3240	3300	3490	3640	3380
HEIGHT (m)	3250	3250	3250	3250	3250	3250	3250	3250	3350	3350	3350
LENGTH (m)	6300	6300	6300	6300	6300	6300	6300	6300	6300	6300	6300
WIDTH (m)	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000

Technical Data	Mod. HY-TURB L																			
Ø PIPE (mm)	120			125				110					120			125				
PIPE LENGTH (m)	300	350	400	270	300	320	330	450	500	550	600	620	450	470	500	350	400	430	450	480
MAX CAPACITY (l/min)	1600	1500	1400	2000	1900	1800	1800	1200	1100	1000	900	850	1300	1200	1200	1700	1600	1500	1500	1400
WEIGHT (kg)	4230	4430	4630	4140	4260	4350	4390	4700	4880	5060	5240	5310	4900	4980	5090	4530	4780	4900	4990	5110
HEIGHT (m)	3700	3700	3700	3700	3700	3700	3700	3800	3800	3800	3800	3800	3800	3800	3800	3800	3800	3800	3800	3800
LENGTH (m)	6600	6600	6600	6600	6600	6600	6600	6600	6600	6600	6600	6600	6600	6600	6600	6600	6600	6600	6600	6600
WIDTH (m)	2530	2530	2530	2530	2530	2530	2530	2530	2530	2530	2530	2530	2530	2530	2530	2530	2530	2530	2530	2530

Technical Data	Mod. HY-TURB P															
Ø PIPE (mm)	110					120			125				140			
PIPE LENGTH (m)	450	500	550	600	620	450	500	520	350	400	450	500	300	350	400	450
MAX CAPACITY (l/min)	1300	1200	1200	1200	1200	1600	1600	1600	1900	1800	1800	1800	2000	2000	2000	2000
WEIGHT (kg)	5270	5450	5630	5810	5880	5470	5670	5750	5130	5350	5560	5770	5090	5310	5530	5760
HEIGHT (m)	3,76	3,76	3,76	3,76	3,76	3,76	3,76	3,76	3,76	3,76	3,76	3,76	3,76	3,76	3,76	3,76
LENGTH (m)	7,63	7,63	7,63	7,63	7,63	7,63	7,63	7,63	7,63	7,63	7,63	7,63	7,63	7,63	7,63	7,63
WIDTH (m)	2,54	2,54	2,54	2,54	2,54	2,54	2,54	2,54	2,54	2,54	2,54	2,54	2,54	2,54	2,54	2,54

Technical Data	Mod. L																
Ø PIPE (mm)	90		100			110					120			125			
PIPE LENGTH (m)	400	450	350	400	450	300	320	350	370	400	300	350	400	270	300	320	330
MAX CAPACITY (l/min)	800	800	1100	1000	1000	1400	1400	1400	1400	1300	1600	1600	1600	1900	1900	1900	1900
WEIGHT (kg)	3460	3640	3510	3720	3850	3500	3560	3740	3800	3880	3770	3940	4120	3720	3840	3910	3950
HEIGHT (m)	3,15	3,3	3,15	3,3	3,3	3,15	3,15	3,3	3,3	3,3	3,3	3,3	3,3	3,37	3,37	3,37	3,37
LENGTH (m)	7,02	7,02	7,02	7,02	7,02	7,02	7,02	7,02	7,02	7,02	7,02	7,02	7,02	7,02	7,02	7,02	7,02
WIDTH (m)	2,55	2,55	2,55	2,55	2,55	2,55	2,55	2,55	2,55	2,55	2,55	2,55	2,55	2,55	2,55	2,55	2,55

Technical Data	Mod. LL												
Ø PIPE (mm)	100		110		120	125				140			
PIPE LENGTH (m)	500	550	450	500	450	350	400	420	430	300	320	350	400
MAX CAPACITY (l/min)	1000	1000	1300	1200	1600	1900	1800	1800	1800	2200	2200	2200	2200
WEIGHT (kg)	4740	4880	4970	5150	5070	4970	5200	5300	5340	4800	4900	5030	5260
HEIGHT (m)	3,68	3,68	3,68	3,68	3,68	3,68	3,68	3,68	3,68	3,68	3,68	3,71	3,71
LENGTH (m)	7,66	7,66	7,66	7,66	7,66	7,66	7,66	7,66	7,66	7,66	7,66	7,66	7,66
WIDTH (m)	2,55	2,55	2,55	2,55	2,55	2,55	2,55	2,55	2,55	2,55	2,55	2,55	2,55



Technical Data	Mod. LLS																							
Ø PIPE (mm)	110		120				125				140				150		160							
PIPE LENGTH (m)	550	600	500	550	600	620	450	500	520	600	350	400	420	450	500	300	400	350						
MAX CAPACITY (l/min)	1200	1200	1600	1500	1500	1500	1800	1800	1700	1700	2200	2200	2200	2200	2100	3000	3000	3200						
WEIGHT (kg)	5500	5700	5440	5640	6110	6190	5600	5830	5920	6570	5210	5450	5540	5770	6100	5330	6120	6380						
HEIGHT (m)	3,78	3,78	3,78	3,78	4,13	4,13	3,78	3,78	3,82	4,13	3,78	3,78	3,78	3,82	4,13	3,89	4,15	4,15						
LENGTH (m)	7,66	7,66	7,66	7,66	7,66	7,66	7,66	7,66	7,66	7,66	7,66	7,66	7,66	7,66	7,66	7,66	7,66	7,66						
WIDTH (m)	2,55	2,55	2,55	2,55	2,55	2,55	2,55	2,55	2,55	2,55	2,55	2,55	2,55	2,55	2,55	2,55	2,55	2,55						

Technical Data	Modello PX																											
Ø PIPE (mm)	110		120						125						140						150					160		
PIPE LENGTH (m)	450	550	400	440	510	550	630	670	390	430	500	540	620	650	370	400	390	420	450	480	500	530	370	400	300	500	530	350
MAX CAPACITY (l/min)	1300	1200	1600	1600	1600	1500	1400	1200	1800	1800	1800	1700	1600	1600	2200	2200	2200	2200	2200	2100	2100	2100	3000	3000	3000	2800	2800	3200
WEIGHT (kg)	6100	6460	6010	6160	6610	6760	7350	7510	6280	6470	6950	7130	7790	7930	6260	6400	6500	6640	6780	6920	7310	7450	7080	7240	6460	7790	7960	7500
HEIGHT (m)	3,75	3,85	3,75	3,75	3,85	3,85	4,2	4,2	3,75	3,75	3,85	3,85	4,2	4,2	3,75	3,75	3,85	3,85	3,85	3,85	4,2	4,2	4,2	4,2	3,95	4,2	4,2	4,2
LENGTH (m)	7,85	7,85	7,85	7,85	7,85	7,85	7,85	7,85	7,85	7,85	7,85	7,85	7,85	7,85	7,85	7,85	7,85	7,85	7,85	7,85	7,85	7,85	7,85	7,85	7,85	7,85	7,85	7,85
WIDTH (m)	2,8	2,8	2,8	2,8	2,8	2,8	2,8	2,8	2,8	2,8	2,8	2,8	2,8	2,8	2,8	2,8	2,8	2,8	2,8	2,8	2,8	2,8	2,8	2,8	2,8	2,8	2,8	2,8

Technical Data	Modello PX - 4R																											
Ø PIPE (mm)	110		120						125						140						150				160			
PIPE LENGTH (m)	450	550	400	440	510	550	630	670	390	430	500	540	620	650	370	400	390	420	450	480	500	530	370	400	300	500	530	350
MAX CAPACITY (l/min)	1300	1200	1600	1600	1600	1500	1400	1200	1800	1800	1800	1700	1600	1600	2200	2200	2200	2200	2200	2100	2100	2100	3000	3000	3000	2800	2800	3200
WEIGHT (kg)	6340	6700	6250	6400	6850	7000	7590	7750	6520	6710	7190	7370	8030	8170	6500	6680	6740	6880	7020	7160	7550	7690	7320	7480	6700	8030	8200	7740
HEIGHT (m)	3,75	3,85	3,75	3,75	3,85	3,85	4,2	4,2	3,75	3,75	3,85	3,85	4,2	4,2	3,75	3,75	3,85	3,85	3,85	3,85	4,2	4,2	4,2	4,2	4,2	3,95	4,2	4,2
LENGTH (m)	7,85	7,85	7,85	7,85	7,85	7,85	7,85	7,85	7,85	7,85	7,85	7,85	7,85	7,85	7,85	7,85	7,85	7,85	7,85	7,85	7,85	7,85	7,85	7,85	7,85	7,85	7,85	7,85
WIDTH (m)	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3

Technical Data	Mod. PL																	
Ø PIPE (mm)	125					140						150						160
PIPE LENGTH (m)	350	400	450	500	600	350	380	420	450	500	550	300	350	400	430	440	450	350
MAX CAPACITY (l/min)	1900	1800	1800	1800	1700	2200	2200	2200	2200	2100	2100	3000	3000	3000	2800	2800	2800	3200
WEIGHT (kg)	5570	5800	6180	6410	7150	5830	5980	6180	6340	7000	7240	6190	6480	6760	6930	6990	7040	6950
HEIGHT (m)	3,66	3,66	3,88	3,88	3,94	3,95	3,95	3,95	3,93	4,12	4,12	4,12	4,12	4,16	4,16	4,16	4,16	4,16
LENGTH (m)	8,0	8,0	8,0	8,0	8,0	8,0	8,0	8,0	8,0	8,0	8,0	8,0	8,0	8,0	8,0	8,0	8,0	8,00
WIDTH (m)	2,91	2,91	2,91	2,91	2,91	2,91	2,91	2,91	2,91	2,91	2,91	2,91	2,91	2,91	2,91	2,91	2,91	2,91

Technical Data	Mod. PLS																
Ø PIPE (mm)	110	125			140				150				160			180	
PIPE LENGTH (m)	700	650	700	750	540	640	740	780	500	550	600	620	400	420	490	350	400
MAX CAPACITY (l/min)	1100	1600	1600	1500	2100	2100	2100	2100	2800	2800	2800	2700	3200	3200	3200	3750	3750
WEIGHT (kg)	8030	8500	8720	8970	8270	8840	9850	10000	8490	9170	9870	9990	8760	8900	9400	8890	10070
HEIGHT (m)	4,20	4,33	4,33	4,33	4,20	4,37	4,59	4,61	4,33	4,62	4,59	4,59	4,59	4,59	4,68	4,33	4,59
LENGTH (m)	8,35	8,35	8,35	8,35	8,35	8,35	8,35	8,35	8,35	8,35	8,35	8,35	8,35	8,35	8,35	8,35	8,35
WIDTH (m)	3,08	3,08	3,08	3,08	3,08	3,08	3,08	3,08	3,08	3,08	3,08	3,08	3,08	3,08	3,08	3,08	3,08

Technical Data	Mod. PXMP																											
Ø PIPE (mm)	110		120					125					140					150					160					
PIPE LENGTH (m)	450	550	400	440	510	550	630	670	390	430	500	540	620	650	370	400	390	420	450	480	500	530	370	400	300	500	530	350
MAX CAPACITY (l/min)	1300	1200	1600	1600	1600	1500	1400	1200	1800	1800	1800	1700	1600	1600	2200	2200	2200	2200	2200	2100	2100	2100	3000	3000	3000	2800	2800	3200
WEIGHT (kg)	8250	8610	8160	8310	8760	8910	9500	9660	8430	8620	9100	9280	9940	10080	8410	8550	8650	8790	8930	9070	9460	9600	9230	9390	8610	9940	10110	9720
HEIGHT (m)	3,75	3,85	3,75	3,75	3,85	3,85	4,2	4,2	3,75	3,75	3,85	3,85	4,2	4,2	3,75	3,75	3,85	3,85	3,85	3,85	4,2	4,2	4,2	4,2	3,95	4,2	4,2	4,2
LENGTH (m)	8,82	8,82	8,82	8,82	8,82	8,82	8,82	8,82	8,82	8,82	8,82	8,82	8,82	8,82	8,82	8,82	8,82	8,82	8,82	8,82	8,82	8,82	8,82	8,82	8,82	8,82	8,82	8,82
WIDTH (m)	2,8	2,8	2,8	2,8	2,8	2,8	2,8	2,8	2,8	2,8	2,8	2,8	2,8	2,8	2,8	2,8	2,8	2,8	2,8	2,8	2,8	2,8	2,8	2,8	2,8	2,8	2,8	2,8

Technical Data	Mod. FXMP - 4R																											
Ø PIPE (mm)	110		120						125						140								150					160
PIPE LENGTH (m)	450	550	400	440	510	550	630	670	390	430	500	540	620	650	370	400	390	420	450	480	500	530	370	400	300	500	530	350
MAX CAPACITY (l/min)	1300	1200	1600	1600	1600	1500	1400	1200	1800	1800	1800	1700	1600	1600	2200	2200	2200	2200	2200	2100	2100	2100	3000	3000	3000	2800	2800	3200
WEIGHT (kg)	8490	8850	8400	8550	9000	9150	9740	9900	8670	8860	9340	9520	10180	10320	8650	8830	8890	9030	9170	9310	9700	9840	9470	9630	8850	10180	10350	9960
HEIGHT (m)	3,75	3,85	3,75	3,75	3,85	3,85	4,2	4,2	3,75	3,75	3,85	3,85	4,2	4,2	3,75	3,75	3,85	3,85	3,85	3,85	4,2	4,2	4,2	4,2	3,95	4,2	4,2	4,2
LENGTH (m)	8,82	8,82	8,82	8,82	8,82	8,82	8,82	8,82	8,82	8,82	8,82	8,82	8,82	8,82	8,82	8,82	8,82	8,82	8,82	8,82	8,82	8,82	8,82	8,82	8,82	8,82	8,82	8,82
WIDTH (m)	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3

Technical Data	Mod. PLMP																		
Ø PIPE (mm)	125					140					150					160			
PIPE LENGTH (m)	350	400	450	500	600	350	380	420	450	500	550	300	350	400	430	440	450	350	
MAX CAPACITY (l/min)	1900	1800	1800	1800	1700	2200	2200	2200	2200	2100	2100	3000	3000	3000	2800	2800	2800	3200	
WEIGHT (kg)	7210	7440	7810	8040	8780	7550	7700	7910	8090	8750	9010	7900	8190	8490	8670	8730	8790	8580	
HEIGHT (m)	3,75	3,75	3,75	3,75	4,03	4,04	4,04	4,04	4,02	4,21	4,21	4,21	4,21	4,25	4,25	4,25	4,25	4,25	
LENGTH (m)	8,61	8,61	8,61	8,61	8,61	8,61	8,61	8,61	8,61	8,61	8,61	8,61	8,61	8,61	8,61	8,61	8,61	8,61	
WIDTH (m)	2,98	2,98	2,98	2,98	2,98	2,98	2,98	2,98	2,98	2,98	2,98	2,98	2,98	2,98	2,98	2,98	2,98	2,98	

Technical Data	Mod. PLSMP																
Ø PIPE (mm)	110	125			140				150				160			180	
PIPE LENGTH (m)	700	650	700	750	540	640	740	780	500	550	600	620	400	420	490	350	400
MAX CAPACITY (l/min)	1150	1600	1600	1500	2100	2100	2100	2100	2800	2800	2800	2700	3200	3200	3200	3750	3750
WEIGHT (kg)	9210	9670	9900	10000	9450	9990	11330	11540	10380	10350	11050	11170	9890	10000	10520	10800	11980
HEIGHT (m)	4,22	4,32	4,32	4,32	4,22	4,36	4,60	4,60	4,32	4,63	4,60	4,60	4,60	4,60	4,69	4,32	4,60
LENGTH (m)	8,85	8,85	8,85	8,85	8,85	8,85	8,85	8,85	8,85	8,85	8,85	8,85	8,85	8,85	8,85	8,85	8,85
WIDTH (m)	3,11	3,11	3,11	3,11	3,11	3,11	3,11	3,11	3,11	3,11	3,11	3,11	3,11	3,11	3,11	3,08	3,08

Technical Data	Mod. PLLSMP-4R								
Ø PIPE (mm)	140		150				160	180	
PIPE LENGTH (m)	740	780	500	550	600	620	490	350	400
MAX CAPACITY (l/min)	2100	2000	2800	2800	2800	2700	3200	3750	3750
WEIGHT (kg)	13800	14000	12930	13230	13930	14000	13410	12950	14150
HEIGHT (m)	4,60	4,60	4,63	4,63	4,60	4,60	4,69	4,32	4,60
LENGTH (m)	8,90	8,90	8,90	8,90	8,90	8,90	8,90	8,90	8,90
WIDTH (m)	3,2	3,2	3,2	3,2	3,2	3,2	3,2	3,2	3,2

These data and characteristics of the machines are not binding. The company reserves the right to make any alterations it deems necessary without prior warning.







