





Iromat I




IROMAT – Series



Applications in
agriculture – forestry – industry

-  Agriculture areas, up to approx. 35 ha
-  Vegetable cultivation | Fruit growing
-  Special crops
-  Environment protection (dust suppression etc.) | Wastewater irrigation

Available with the following PE pipe sizes:

-  max. 440 m special PE-pipe Ø 90 x 6,7 mm
-  max. 400 m special PE-pipe Ø 100 x 7,4 mm
-  max. 300 m special PE-pipe Ø 110 x 8,2 mm

Dimensions

Parameter	Unit	Value
Length ¹⁾	mm	5.300
Width ²⁾	mm	2.400 (3.000)
Height	mm	3.400
Track	mm	1.500 – 2.000
Empty weight ^{1), 3)}	kg	1.950
Ground clearance	mm	500
Tires		260 / 70 - 15.3 AW, 14PR

1) Without sprinkler skid, 2) Depending on the equipment of the machine, 3) Without PE-pipe

Weights





Parameter	Unit	Water	Value
PE-pipe Ø 90 mm x 440 m	kg	without	768
	kg	with	2.795
PE-pipe Ø 100 mm x 400 m	kg	without	858
	kg	with	3.138
PE-pipe Ø 110 mm x 300 m	kg	without	784
	kg	with	2.848

Sprinkler

Parameter	Unit	TWIN 101 ULTRA				
Nozzle diameter	mm	16	18	20	22	24
Nozzle pressure	bar	3,0				
Water consumption	m³/h	16,9	21,4	26,5	31,9	38,0
Throw range(WW)	m	33,7	35,9	38,2	39,1	39,9
Effective irrigation width ⁴⁾	m	57,3	61,0	65,0	66,5	67,8
Nozzle pressure	bar	4,0				
Water consumption	m³/h	19,5	24,7	30,7	36,9	43,9
Throw range(WW)	m	37,3	39,9	42,5	44,2	45,8
Effective irrigation width ⁴⁾	m	63,4	67,8	72,3	75,1	77,9
Nozzle pressure	bar	5,0				
Water consumption	m³/h	21,8	27,6	34,3	41,2	49,1
Throw range(WW)	m	39,8	42,5	45,2	47,3	49,3
Effective irrigation width ⁴⁾	m	67,7	72,3	76,8	80,4	83,8

4) Effective irrigation width = 2xWW-15% for overlapping and loss due to wind

Standard equipment

-  Portal axle chassis, single-axle with high ground clearance
-  Adjustable track: 1.500 – 2.000 mm
-  Combined agriculture-rail and tow-coupling connection
-  Special gearbox (4 gears) with adjustable band brake

- 🔧 Full casing
- 🔧 P.T.O shaft fast rewind
- 🔧 Hydraulic support legs at the back
- 🔧 Lockable turntable
- 🔧 Return stop at the pipe drum
- 🔧 Mechanical safety shut-down against winding faults
- 🔧 Fully galvanized water inlet
- 🔧 Low pressure - and total shut-down
- 🔧 Electronic speed control with pinion sensor
- 🔧 3-wheel sprinkler trolley, with automatic lifting at the end of irrigation
- 🔧 Large-area sprinkler TWIN 101 ULTRA

Special equipment

- 🔧 Compressed air brake system incl. operating licence acc. to Road Traffic Act (StVZO)
- 🔧 Hydraulic drive for turntable
- 🔧 Hydraulic support leg at the front
- 🔧 Pipe guidance device (mechanical)
- 🔧 Lighting installation
- 🔧 Solar panel for battery recharging
- 🔧 Additional sprinkler for close range (electronically controlled)
- 🔧 GSM control unit Water meter DN 80 non-calibrated or calibrated (on request)
- 🔧 Supply hose DN 90, 8m, 89 female/male
- 🔧 Discharge hose DN 90, 5m, 89 female
- 🔧 Supply hose reel for 12m flat hose DN 90
- 🔧 Wide tires 340 / 55-16
- 🔧 Large-area sprinkler at choice
- 🔧 Various, application-related sprinkler trolleys

Operating principle

HÜDIG has set standards in the development of irrigation machines. For over 100 years now, experience from agricultural irrigation has been used to develop and improve our products. With the help of a low-maintenance, flanged gear-turbine unit and a drive sprocket bolted to the reel, the PE pipe is pulled in safely even under the highest loads. The feed speed is controlled and monitored by the HÜDIG-Control electronic feed control and a pinion sensor mounted on the gearbox. The portal axle chassis also guarantees sufficient ground clearance for driving through higher crops.

Equipment



Automatic sprinkler trolley lifting

At the end of the irrigation cycle, the sprinkler wagon automatically lifting (the energy is taken from the water volume flow required for irrigation). The rear support legs are retracted manually via the oil hydraulics after irrigation is complete. This convenience reduces set-up times to a minimum.



Central control unit

All essential control elements, the HÜDIG-Control electronic feed control and the drive unit are combined in the control center behind a large, lockable cover. The individual elements are clearly arranged and easily accessible.

The drive unit is a free-flow turbine with a directly adapted gearbox. This combination is characterized by good efficiency. Overall, this arrangement impresses with good operating comfort and a high degree of easy maintenance.

The HC 2.009 electronic intake control ensures uniform irrigation intensity. Pre- and post-irrigation according to the conditions can be set intuitively from 1 - max. 250 minutes. Depending on the water supply conditions, draw-in speeds of 5 - 200 m/h are possible. Furthermore, many additional options (e.g. close-range sprinklers etc.) or various draw-in parameters (e.g. start/stop time) can be controlled using HÜDIG-Control.



Portal-axle chassis

The Iromat I has a single-axle portal axle chassis as standard. This design ensures a high ground clearance for driving through crops. An optionally available air brake system, including a TÜV certificate for obtaining an operating license in accordance with the German Road Traffic Licensing Regulations (StVZO), ensures safe participation in road traffic. Here too, the space-saving arrangement of the necessary brake system components guarantees sufficient clearance height.

The Hüdig coupling combination, designed with a standard towing eye, allows comfortable road transport in the towing jaw on the one hand and quick repositioning of the machine in the field with the agriculture rail on the other.

Wide tires size 340 / 55 - 16 are available as an option to the standard tires size 260 / 70 - 15.3.



Sprinkler trolley

The 3-wheel sprinkler trolley developed by HÜDIG has exceptional directional stability even on uneven terrain. A robust and wear-free level compensation system prevents the large-area sprinkler from dipping at the end of the irrigation process. A convenient, central pulling device is available for pulling out the hose in the tractor track with a narrow agriculture rail. For tall crops, e.g. maize, a maize sprinkler trolley can be used as an option.

For particularly heavy-duty applications, a 5-wheel sprinkler trolley with integrated tandem swing axle can also be used.

Dimensions

