

**DIECI**  
AUSTRALIA

HERCULES 120.10 | 190.10 | 230.10







## HERCULES HEAVY DUTY TELEHANDLER

The productivity of construction vehicles must be improved in order to reduce operating costs at worksites. Dieci meets these needs with a series of vehicles that evolve the construction range: more **versatile, high-performance, durable, reliable, intuitive** to operate and always safe.

The **Hercules** family, the strongest of the Dieci construction machines, breaks all limits in terms of load capacity, reaching a maximum payload of up to 21 tonnes and a height of 10 metres. Strength, stability and robustness make this telescopic handler a true legend for heavy-duty work.

Optimal performance, extreme power and lifting abilities, precision movement control, sound proofing for absolute comfort, and 2WS / 4WS / Crab steering modes. Maintenance is made easy thanks to durable components and materials that only require replacement after several hundred hours of use.

The Hercules range can be fitted with a **wide range of accessories** (winches, forks, buckets, EWP, bale clamps, cylinder grabs, wheel handlers etc.) or tools for specific needs or requirements.

## ABSOLUTE COMFORT: ITALIAN DESIGN AND STYLE

Dieci telehandlers have always been a combination of **comfort** and **functionality** which makes us stand out all over the world.

### Manoeuvrable & Effective

Get great capacity, control and precision with the **enhanced soft motion system**, allowing proportional and adjustable boom movements. Controls are automatically adapted with the equipment connected.

### 4-in-1 Joystick

The boom can be fully operated by the hydraulic control distributor-single joystick which also incorporates FNR, for easier and more practical direction control.

### Strong & Stable

Maximum stability and traction with tyres suitable for all terrains - 4 steering wheels and 4 driving wheels. High torque to ensure maximum performance and an electronically controlled engine for limited fuel consumption and emissions.

### Maximum Safety

ROPS - FOPS approved cab, designed with safety cell to prevent deformation in the event of the vehicle being overturned or a heavy load falling on the cab. Dieci Telehandlers comply with AS1418.19 / 10896.1.

**Deadman sensor**, combined with the operator presence sensor in the seat, prevents accidental operation.

The **Load Limiter Device** analyses vehicle stability in real time and inhibits any aggravating movements when the pre-set safety limits are reached.





# 10.20m

Max Reach

# 23,000kg

Max Capacity

# 135kW / 181hp

## Fork Swivelling Angle (120° - 144° dump rotation)

Is specially designed to increase the operating arc, which is particularly useful when dumping with the boom raised.

## Compensation Cylinder

Patented by Dieci - is located inside the lifting ram, ensures that the load on the boom is balanced at all times, thereby improving durability.

## Inching Pedal

An essential control that allows travel speed to momentarily slow down or come to a stop while still offering maximum power to boom functions to increase precision & productivity for delicate operations.

## Perfect Climate

Semi automatic air conditioning system with 6 outlet vents allows perfect air circulation inside the cabin, openable rear glass and roof and integrated electric driver's window.

## Hydrostatic Transmission

Guarantees power, reactivity and control in manoeuvres, while a single control unit measures the optimal working parameters through in-depth diagnostics.

## Comfort & Ease of Access

With soundproofing, an adjustable steering wheel (height and depth), storage compartments and various accessories such as the air suspension seat, enable operation in total comfort.

## Total Visibility

The large, curved windows of the cab offer a complete 360° outside view with uninterrupted visibility.

## Load Sensing

Variable flow pump for boom movements and power steering.

## LED Lights

Integrated LED work lights on perimeter, lateral rear, the boom and on the boom head.

## 160 - 170L Hydraulic Flow Rate

The 160 - 170lpm hydraulic flow maximises manoeuvrability in all applications.





# TECHNICAL DATA

## PERFORMANCE

Machine model	HERCULES 120.10	HERCULES 190.10	HERCULES 230.10
Maximum capacity	12000 kg (26455 lb)	19000 kg (41888 lb)	23000 kg (46297 lb)
Maximum lifting height on wheels	9.50 m (31.2 ft)	10.20 m (33.5 ft)	10.15 m (33.3 ft)
Maximum horizontal extension on wheels	5.1 m (16.7 ft)	5.15 m (16.9 ft)	5.11 m (16.8 ft)
Fork swiveling angle	144°	120°	113°
Pull-out force	9700 daN (21806 lbf)	16200 daN (36419 lbf)	18900 daN (42489 lbf)
Towing force	11000 daN (24729 lbf)	19500 daN (43838 lbf)	19500 daN (43838 lbf)
Maximum climb angle	36%	36.5%	35%
Unladen weight	6800 kg (37038 lb)	24500 kg (54013 lb)	29000 kg (63934 lb)
Max speed	35 km/h (21.7 mph)	23 km/h (14.3 mph)	22 km/h (13.7 mph)

## ENGINE

Machine model	HERCULES 120.10	HERCULES 190.10	HERCULES 230.10
Brand	FPT	FPT	FPT
Nominal power	104 kW (139 HP)	129 kW (173 HP)	129 kW (173 HP)
@rpm	2200 rpm	2200 rpm	2200 rpm
Operation	4-stroke	4-stroke	4-stroke
Injection	Electronic, Common Rail	Electronic, Common Rail	Electronic, Common Rail
Number and arrangement of cylinders	4, Vertical in line	6, Vertical in line	6, Vertical in line
Displacement	4485 cm <sup>3</sup> (274 in <sup>3</sup> )	6728 cm <sup>3</sup> (411 in <sup>3</sup> )	6728 cm <sup>3</sup> (411 in <sup>3</sup> )
Emission standards	Stage IIIA/Tier 3	Stage IIIA/Tier 3	Stage IIIA/Tier 3
Cooling system	Liquid	Liquid	Liquid
Intake	Turbo compressor 16 valve	Turbo compressor	Turbo compressor

## HYDRAULIC SYSTEM

Machine model	HERCULES 120.10	HERCULES 190.10	HERCULES 230.10
Hydraulic pump type	"Load Sensing" variable flow pump for boom movements. Gear pump for power steering.	"Load Sensing" variable flow pump for boom movements. Gear pump for power steering drive and for the cooling fan.	"Load Sensing" variable flow pump for boom movements. Gear pump for power steering drive and for the cooling fan.
Hydraulic pump capacity	160 L/min (42.3 gal/min)	170 L/min (44.9 gal/min)	170 L/min (44.9 gal/min)
Max. operating pressure	30.0 Mpa (4351 psi)	35.0 MPa (5076 psi)	35.0 MPa (5076 psi)
Distributor control	4in1 proportional Joystick	4in1 proportional Joystick	4in1 proportional Joystick

## TYRES

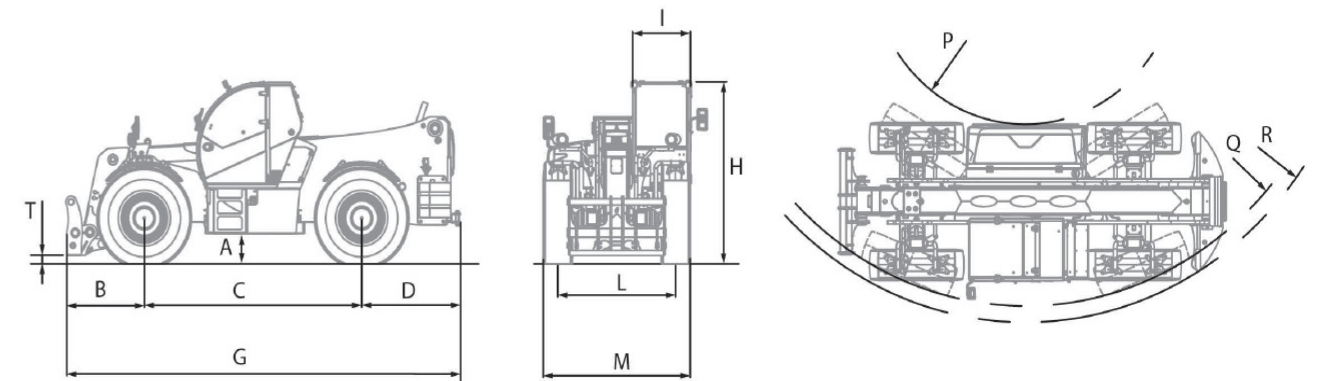
Machine model	120.10	190.10	230.10
Standard tyres	17.5x25"	20.5R25"	26.5R25"

## TRANSMISSION

Machine model	HERCULES 120.10	HERCULES 190.10	HERCULES 230.10
Transmission type	Hydrostatic with variable displacement pump	Hydrostatic with variable displacement pump	Hydrostatic with variable displacement pump
Hydraulic motor	Hydrostatic with continuous automatic adjustment	Hydrostatic with continuous automatic adjustment	Hydrostatic with continuous automatic adjustment
Reversal	Electro-Hydraulic	Electro-Hydraulic	Electro-Hydraulic
Inching	With hydraulic pedal for controlled forward movement	With hydraulic pedal for controlled forward movement	With hydraulic pedal for controlled forward movement
Transmission gearbox	Servocontrolled 2-speed	Servocontrolled 2-speed	Servocontrolled 2-speed
Differential		100% lockable	100% lockable

## DIMENSIONS

Machine model	HERCULES 120.10	HERCULES 190.10	HERCULES 230.10
A	490 mm (19.3 in)	530 mm (20.9 in)	470 mm (18.5 in)
B	1270 mm (50 in)	1320 mm (52.0 in)	1320 mm (52.0 in)
C	3300 mm (129.9 in)	3850 mm (151.6 in)	3850 mm (151.6 in)
D	1480 mm (58.3 in)	1630 mm (64.2 in)	1630 mm (64.2 in)
G	6050 mm (238.2 in)	6800 mm (267.7 in)	6800 mm (267.7 in)
H	2890 mm (113.8 in)	2930 mm (115.3 in)	2930 mm (115.3 in)
I	980 mm (38.6 in)	980 mm (38.6 in)	980 mm (38.6 in)
L	1975 mm (77.8 in)	2015 mm (79.3 in)	2180 mm (85.8 in)
M	2420 mm (95.3 in)	2600 mm (102.4 in)	2880 mm (113.4 in)
P	1490 mm (58.3 in)	3530 mm (139 in)	3530 mm (139 in)
Q	4350 mm (171.3 in)	6500 mm (255.9 in)	6530 mm (257.1 in)
R	4580 mm (180.3 in)	6500 mm (255.9 in)	6750 mm (265.7 in)
T	134 mm (5.3 in)	181 mm (7.1 in)	181 mm (7.1 in)



## LOAD CHARTS

