

TRACTEL, quality products for today's markets

DYNAFOR are load measuring devices which require a very high level of know-how about strain gauges and electronics together with quality production procedures in machining, electronic circuits, the technique of bonding strain gauges, assembly and calibration. TRACTEL continues to invest substantially in research and innovation maintaining its position in the forefront of this market speciality.



Machining
dynafor®



Bonding strain gauges



Assembly of
dynafor®



Calibrating
dynafor®

Extensive range of products and applications

The range of **dynafor®** equipment is completed by low capacity units (< 200 kg), load limiting and indicating devices, tensiometers for pretensioned wire ropes and other complementary engineering equipment.



handifor®
mini-weigher with
digital display



dynarope®
tensiometer



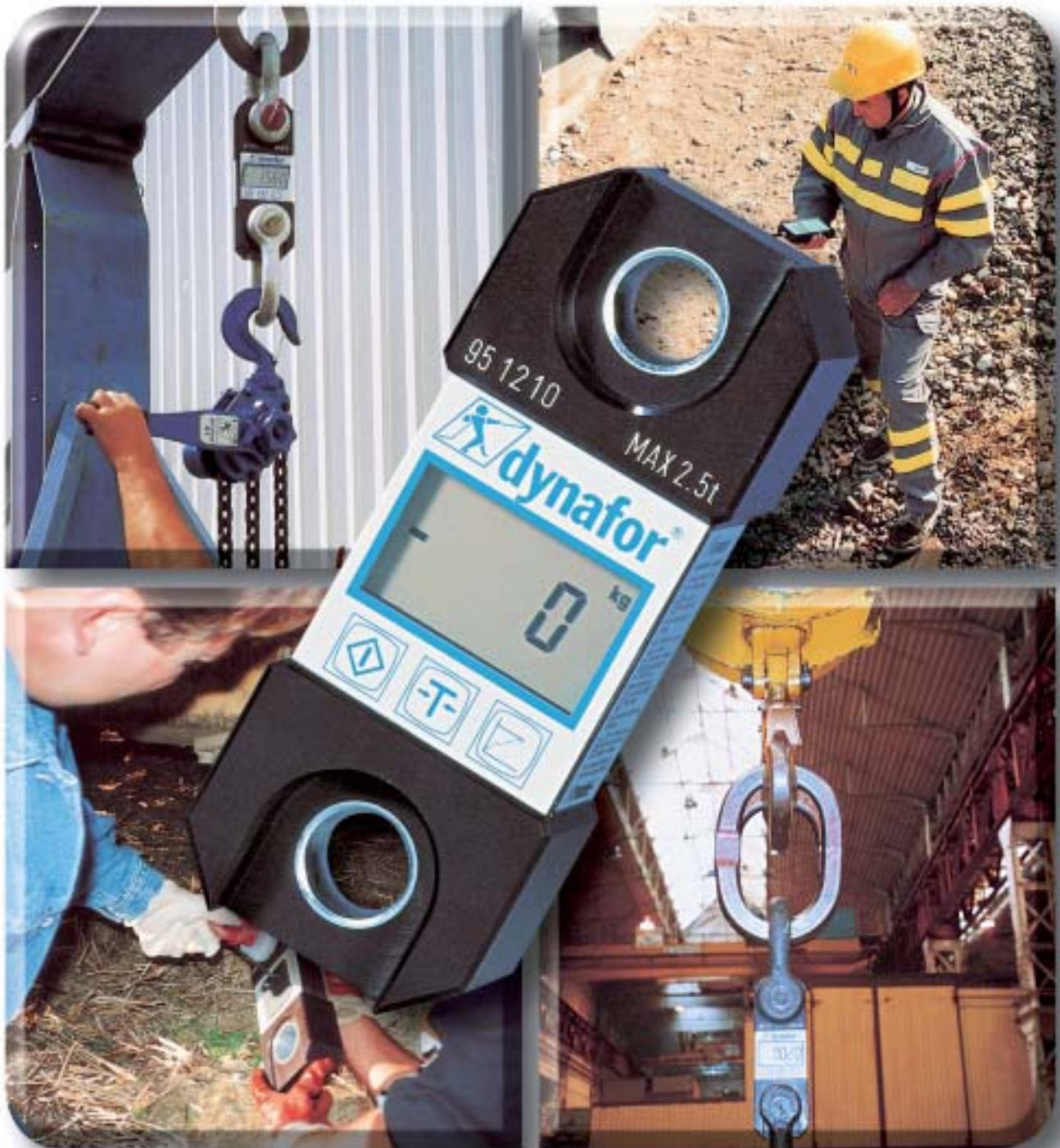
dynasafe®
load limiting devices



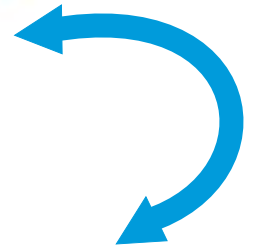
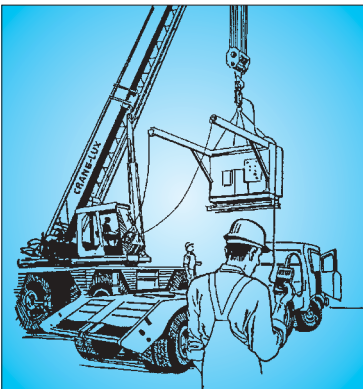
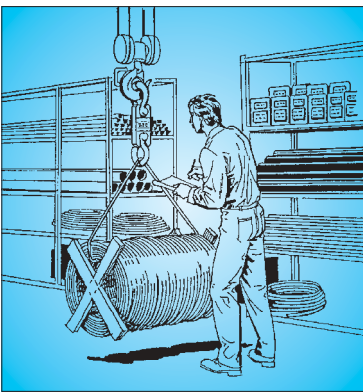
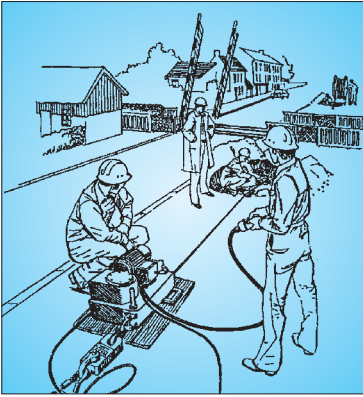
Captview
numeric sensor

dynafor®

dynamometers and LCD load indicators
250 kg to 250 t



dynafor® load checking and measuring devices:



Check weighing loads. Measuring pulling effort. A requirement for many applications:

transport, construction, inspection and safety organisations, monitoring lifting systems, checking data input and output in factories and on site, checking tension in power lines and guy ropes...

dynafor® load indicators with digital display meet these requirements.

- ◆ based on principle of strain gauges combined with the advanced technology of miniature electronics
- ◆ instant and accurate digital display of load applied
- ◆ microprocessor monitored functions: tare, peak hold, unit of measurement and configuration of unit
- ◆ all operations of **dynafor®** by soft-touch push button controls

Optional equipment

Remote readout for LLX and MWX Connection by cable (up to 50 m)

Functions:

- On/off of remote readout and connected Dynafor and control of all functions from the Dynafor

Model :

- Hand held with 18 mm (LCD) digits, powered by 9 V battery



Portable printer for LLX and MWX Connection by cable (up to 50 m)

Functions :

- Print out measurements on time-dated personalised ticket

Models :

- Aluminium casing, measuring 370 x 300 x 94 mm

Battery life:

- Up to 300 tickets
- Integrated charger, 220/230 VAC

Portable printer for LLX-TR

Same functions as above.

- reception of data by radio receiver within range of 60 m to 80 m
- may also be used with radio receiver handset to display the loads registered and to control the dynafor® LLX-TR



PC Interface for LLX and MWX Connection by cable (up to 100 m)

Functions :

- transfer value displayed from dynamometer to PC via RS 232 interface.

Models :

- Interface supplied with set of demonstration software and source files in TURBOPASCAL allowing specific applications to be developed.

Battery life:

- up to 12 hours before recharge
- supplied with charger, 220/230 VAC

PC Interface for LLX-TR

Same functions as above :

- transmission of data by radio; reception range 40 m to 60 m
- may also be used with radio handset to display the load and to control the dynafor® LLX-TR





Other DYNAFOR models

dynafor® LLX - TR

For mobile cranes, very long slings and in difficult conditions, etc.

Radio transmission of display to remote handset.

Same functions and capacities as standard dynafor® LLX

From the handset, infrared transmission for operation, tare and other functions to the dynafor® LLX TR.

- radio frequency: 433.92 Mhz (CEE standard)
- receiving range: 40 m to 60 m
- infrared transmission range: 10 m
- power supply: - Dynafor: 3 x 1.5 V batteries, R6/AA
- Handset/receiver: 2 x 1.5 V batteries, R6/AA
- reception possible using more than one handset or other optional equipment
- coding of data possible to allow several units to operate in proximity
- battery life: up to 150 hours



Other application

Tractel not only offers a wide range of **Dynafor** suitable for most of the standards applications but our **Research and Development Department** realizes also **customized products**.

The **Tractel Dynamometric Division** include the **Dynasafe Division** specialized in **dynamometric safety equipment** like **Load limiter devices** for cranes, **Traction or Compression** custom made load cells specially designed to **works in industrial surrounding**.

Score boards, Radio Transmission and **PC connection** complete our wide range of product.

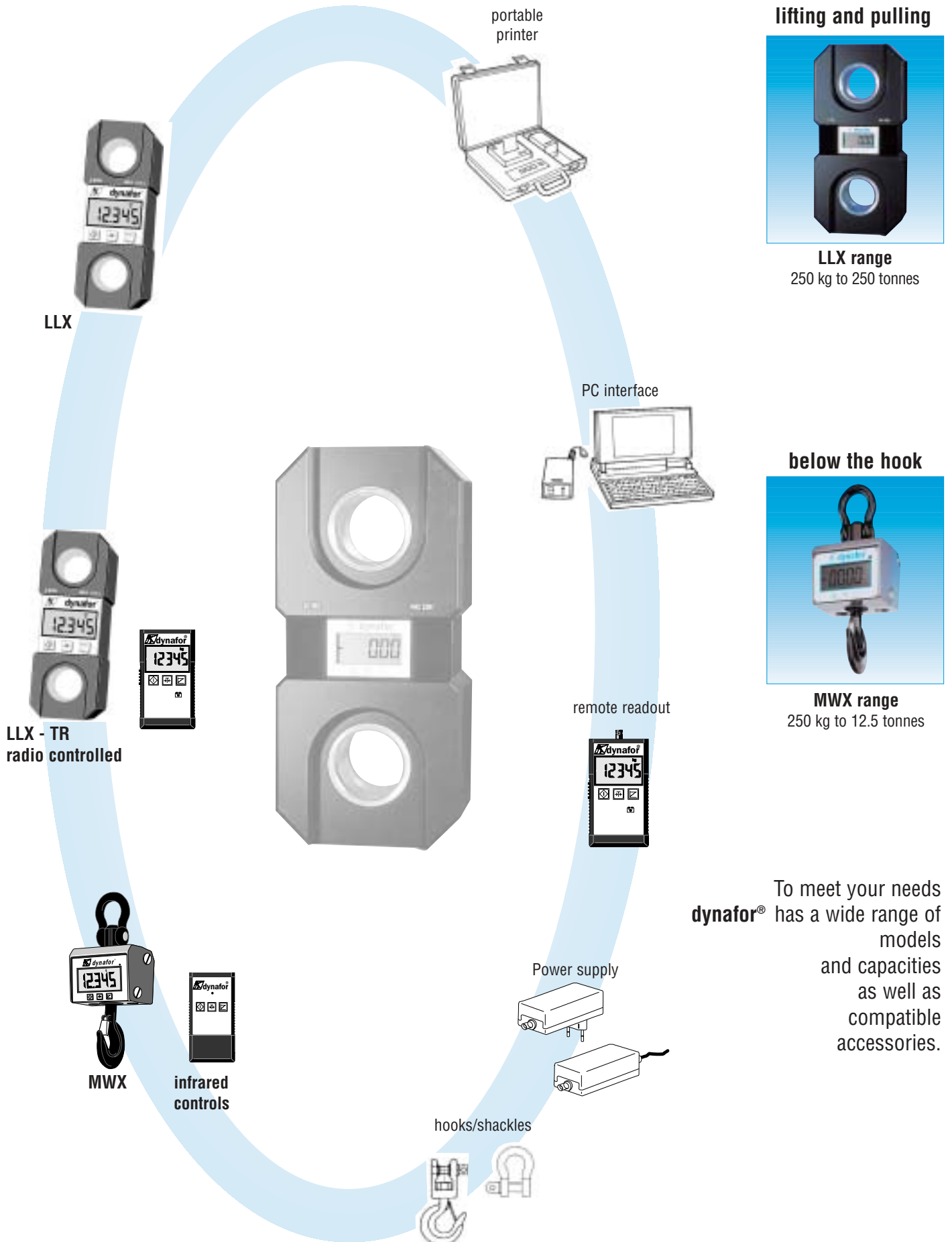
For more details, contact us.

for each application, the right solution

the complete range

the accessories

the main products



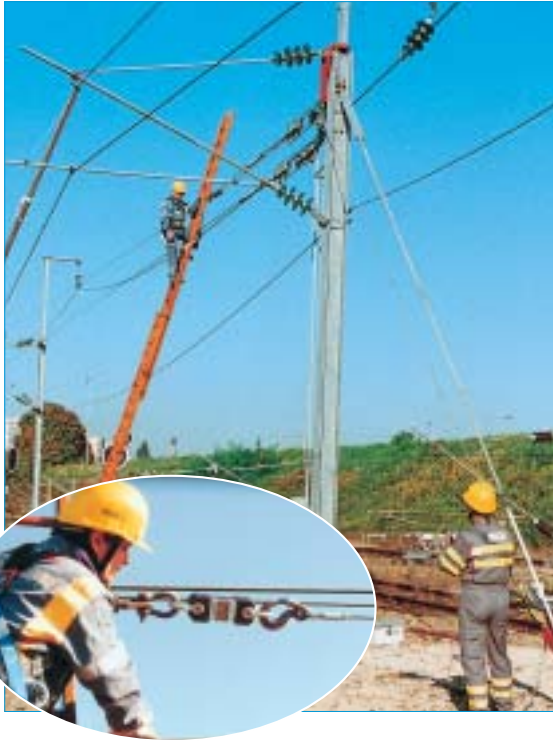
dynafor® LLX and MWX: a for lifting and

Compact and lightweight

- ◆ high strength aluminium alloy and up-to-date miniature electronics giving lightweight and compact units
- ◆ LLX units designed to take shackle each end providing solid anchor points
- ◆ MWX units with integrated top anchor eye and bottom safety hook, intended for below-the-hook applications on overhead cranes and other lifting systems

Safety and reliability

- ◆ strong with accurate digital display
- ◆ weatherproof and dustproof
- ◆ coefficient Safety: 4
- ◆ for MWX units, hook fitted with safety catch



Models	units	LLX- 0.25	LLX - 0.5	LLX- 1.25	LLX- 2.5	LLX - 5	LLX- 12.5	LLX- 25	LLX - 50	LLX- 100	LLX- 250
Capacity	t	0.25	0.50	1.25	2.5	5	12,5	25	50	100	250
Accuracy	+/- kg	0.5	1	2.5	5	10	25	50	100	200	500
Min. display	kg	0.1	0.2	0.5	1	2	5	10	20	50	100
Test load	t	0.5	1	2.5	5	10	25	50	85	145	333
Max. display	kg/t*	250.0	500.0	1250.0	2500	5000	12500	25000	50000	100.00*	250.00*
Height of digits	mm	18	18	18	18	18	25	25	25	25	44
Weight	kg	1.1	1.1	1.1	1.4	1,9	3,8	6,6	15,1	46,0	215
Dimensions (L x W x D)	mm	190 x 3 x 56	190 x 83 x 56	190 x 83 x 56	214 x 83 x 56	226 x 90 x 56	310 x 110 x 58	360 x 134 x 68	440 x 164 x 98	660 x 260 x 118	905 x 424 x 248

* For additional information, please ask for technical data sheets.

wide range of equipment pulling systems

Features:

- ◆ LCD display
- ◆ Display in mass or force
- ◆ Automatic zero when switched on
- ◆ Tare over full range
- ◆ Digital output for data processing
- ◆ Peak hold: maximum effort held in memory
- ◆ Low battery indicator
- ◆ Overload indicator

Technical data:

- ◆ Accuracy: +/- 0.2% of nominal capacity
- ◆ Battery life: 250 hours to 700 hours depending on the model (3 x 1.5V batteries: LR14/C or R6/AA)
- ◆ Weatherproofed to IP 65
- ◆ Operating temperature range: -10°C to +50°C
- ◆ Temp. compensation : automatic zéro adjustment when equipment free load is switched ON.

CEM certification

All models conform to Directive 89/336/CEE on electromagnetic compatibility. Output conforms to standard EN 55022, applicable to data processing equipment. Units unaffected by electromagnetic interference in industrial conditions to standard EN 50082.2.

Option:

For MWX models, 2.5 t, 5 t and 12.5 t:

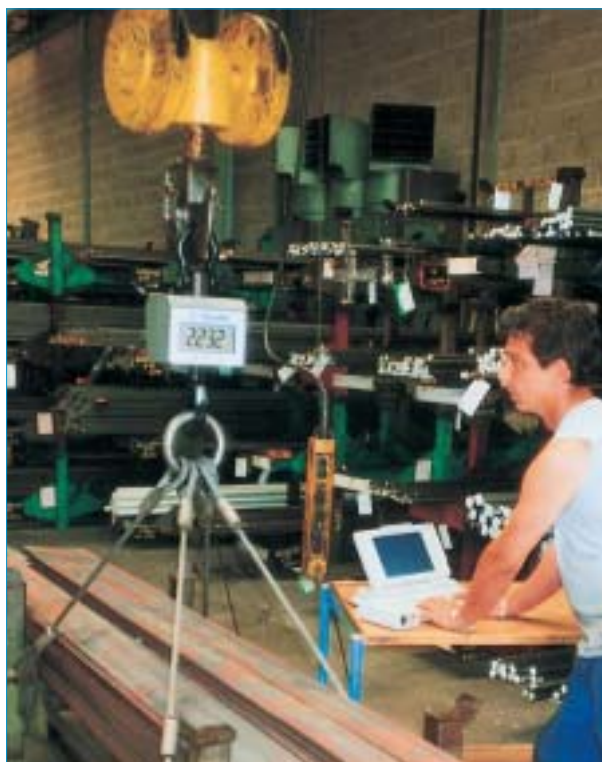
- ◆ Infrared controls: on/off, with full function controls

other models

For LLX models:

- ◆ Radio controlled units: remote display and operation of units

Accessories: see following page



Models	units	MWX- 0.25	MWX - 0.5	MWX- 1.25	MWX- 2.5	MWX - 5	MWX- 12.5
Capacity	t	0.25	0.50	1.25	2.5	5	12.5
Accuracy (0.2%)	+/- kg	0.5	1	2.5	5	10	25
Min. display	kg	0.1	0.2	0.5	1	2	5
Test load	t	0.5	1	2.5	5	10	25
Max. display	kg	250.0	500.0	1250.0	2500	5000	12500
Height of digits	mm	25	25	25	44	44	44
Weight	kg	4.7	4.7	4.7	7	8.5	21
Dimensions (H x W x D)	mm	440 x 138 x 160	440 x 138 x 160	440 x 138 x 160	440 x 200 x 177	510 x 200 x 177	682 x 200 x 205

* For additional information, please ask for technical data sheets