



Catalog 2023

Lifting & Handling | Measure & Control
Height Safety

Export



www.tractel.com

Tractel® is a world leading safety specialist providing reliable, innovative and cost-effective working-at-height solutions and services. These solutions are used in many end-user applications, in particular in industrial, construction, energy, telecoms and infrastructure projects..

Tractel® solutions portfolio comprises of:

- **Height Safety** - Leading provider of working-at-height personal protective equipment – fall arrest devices (Stopfor™, Blocfor™, Derope™), anchors, harnesses - as well as collective protective equipment, such as guardrails, (Bluewater™), safety gates (Fabenco™) and safety nets (Knot®).
- **Load Measurement & Control** - European leader in industrial load measurement and control – Dynafor™, Handifor™, Dynasafe™, Dynaline, Dynarope, and Dynaplug.
- **Lifting & Handling** - World leader in pass-through manual wire rope hoists (Tirfor®) and pass-through electrical wire rope hoists (Tirak™, Minifor™), clamps, pulleys and hooks, as well as ground handling equipment.
- **Temporary & Permanent Access** - World leader in hoists (Tirak®) and aluminium platforms (Alta, Skysafe™), mast climbing work and transport platforms and construction elevators (Scandclimber®), Building maintenance units and permanent access solutions for industry, infrastructure and buildings.
- **Services** - In-situ inspection and maintenance services for permanent access equipment, workshop maintenance and general overhauls of mechanical equipment, as well as training and rental services.



Established more than 80 years ago, **Tractel®** today has significant manufacturing facilities in Europe (France, Germany, Poland, Spain), the USA (Minneapolis, Houston), Canada (Toronto, Montreal), China (Shanghai), Singapore and Turkey. These facilities are supported by dedicated centres of excellence in R&D, engineering and safety standards.

Tractel® has customers in 120 countries, subsidiaries in 19 countries, 10 000 distributors around the world, and employs around 1 100 peoples.

This network of expertise, experience and geographical locations allows **Tractel®** to achieve global reach with local presence..



ESG – Environmental, Social and Governance Policy

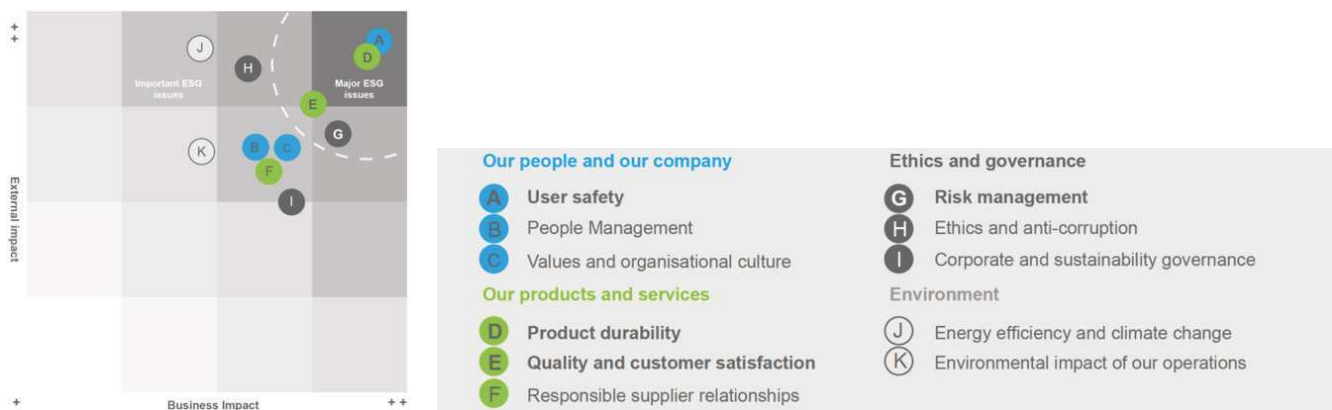
The Tractel Group has set-up an ambitious Environment, Social and Governance (ESG) policy. Our ESG policy commits us collectively to do more for people, society and the environment. We are convinced that those who share our ambition, be they customers, suppliers, shareholders or employees, will join us in this positive dynamic.

Our ESG policy was designed taking into account, among others, the European Non-Financial Reporting Directive, the upcoming Corporate Sustainability Reporting Directive (CSRD) and the UN Sustainable Development Goals.

Our ESG policy covers 11 focus areas that are grouped in 4 main pillars.



We set our priorities based on the dual materiality analysis shown below.



All 11 areas are covered by a detailed action plan, shared with, and owned by, company managers.

Our results are measured by 32 KPIs, ranging from CO2 emissions to work accidents and complaints-handling times. Each has a target by 2025.

SALES ORGANISATION

All our products are meant for professional use only.

Minimum value per order € 100 Net. Our supplies are manufactured according to the terms shown on our order acknowledgment, a copy of which is available on request. We reserve the right to modify, without prior notice, the characteristics, the equipment, the prices and Sales Conditions of our products. Our delivery time will be indicated on our order acknowledgment.

EXPORT DEPARTMENT

(sales and marketing)

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Product ranges

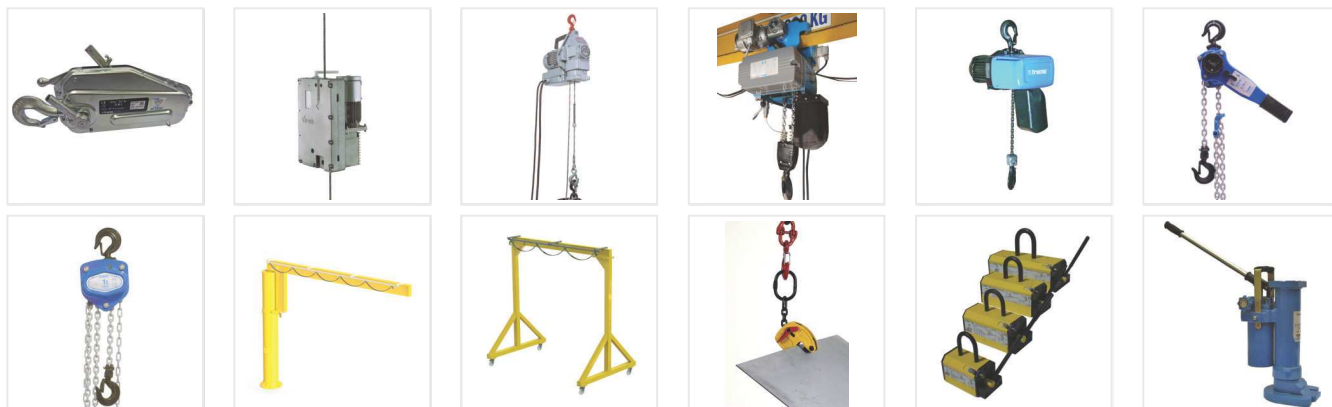
Height Safety Products & Systems



Load Measurement and Control



Lifting and Handling



Temporary & Permanent Access



Traceability platform

Instant access to key product information

Introducing **Tractel**®'s new product information and traceability platform – an exciting new tool giving you instant access to a range of technical information related to your product.

Simply use a QR code reader to scan the identification label on the product or packaging to gain access to the information you need; direct to your phone, tablet or computer.



Packaging product label
(on packaging)



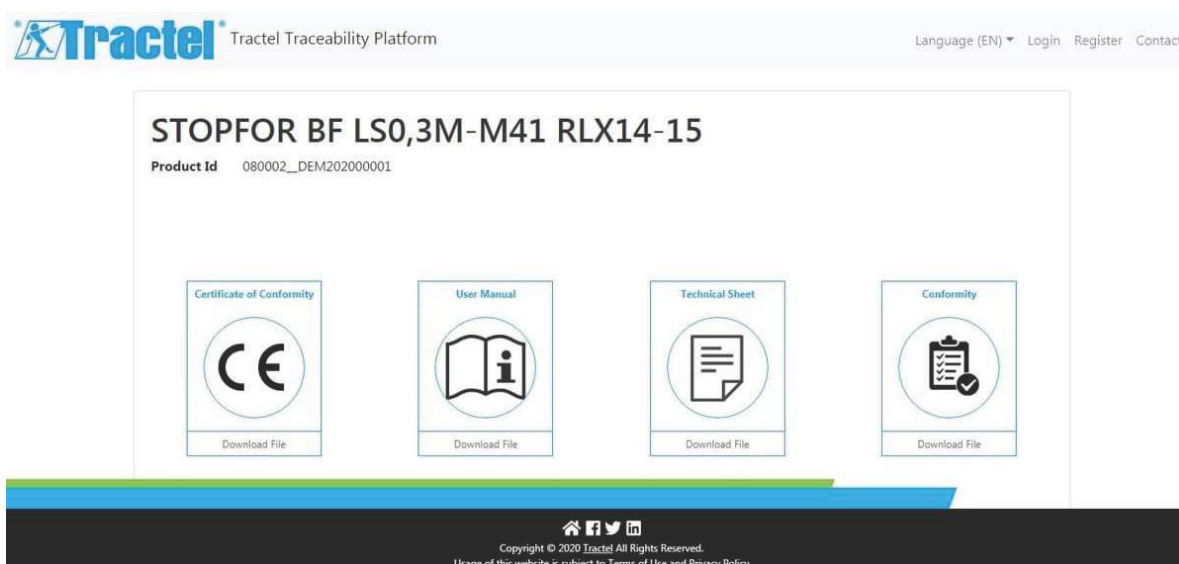
Product label
(on product)



EAN Code label
(on packaging)

Instant access to:

- **Product Identification information** (batch & serial number, manufacturing date etc).
- **Product Data** (available to download to your device):
 - Certificate of Conformity (Notified body product certificate)
 - User manual
 - Technical data sheet
 - Declaration of conformity
- **Traceability system**
 - TRACTEL® service information : summary of service performed by TRACTEL®
 - Possibility to register & trace the key life events of the equipment: date of the first use, attribution of the equipment to a user, periodic inspection, maintenance operation, disposal, etc...



Traceability platform

How to use it ?

- 1 Download a free QR code scanner on your smartphone, tablet or computer.



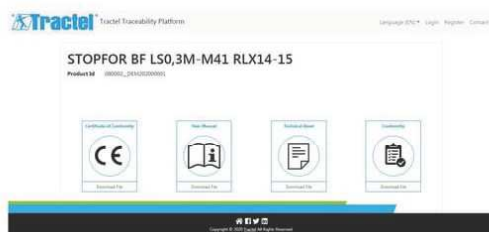
Example :
QR Code Reader for Android

- 2 Open the QR Code Scanner app and scan the code on the packaging or product.



You will be redirected to a special Tractel® website with a webpage dedicated to your product.

- 3 Find all the relevant information of the product you scanned.



Available downloads in PDF format:

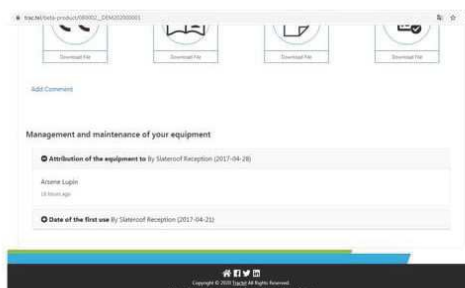
- Identification information of the product: batch & serial number, manufacturing date.
- Certificate of Conformity (Notified body product certificate)
- User manual
- Technical data sheet
- Declaration of conformity

- 4 Register to have immediate access to advanced functionalities.



- Details to create an account:
 - Name
 - E-mail address
- Create a password to secure your account.

- 5 Enter and track the key life information of your product.



- Date of the first use
- Attribution of the equipment to a user
- Periodic inspection
- Maintenance Operation
- Disposal

Summary

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2: Contacts

3: Product ranges

4: Traceability platform



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150: Fall arresters

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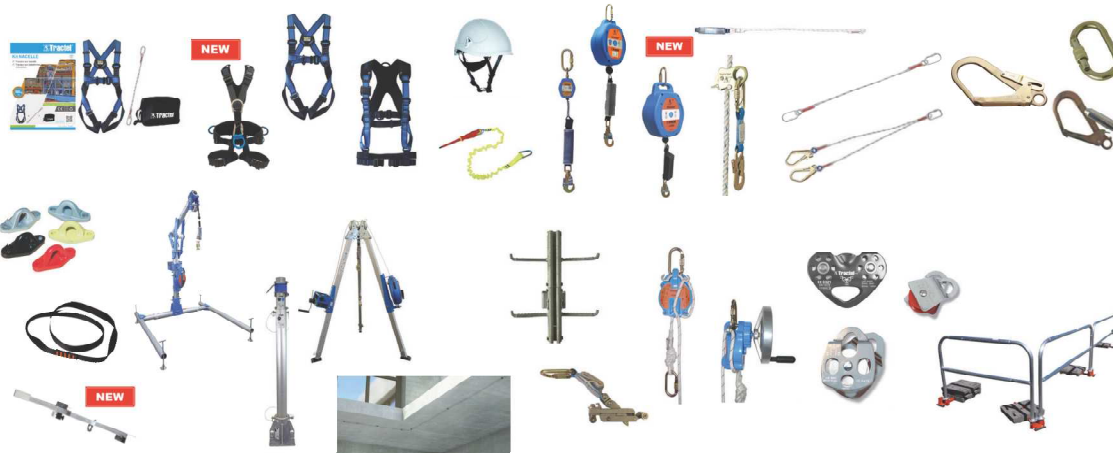
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171: Displays

172: DMU

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1. Lifting and handling



General safety recommendations

For lifting and load handling

For every use of lifting gear, it is mandatory to respect the safety instructions.

The rules outlined below refer to the right safety approach but don't replace the user manual's instructions of each lifting product.

The lifting operations must be carried out by trained operators.

Tractel® lifting gear provide optimum safety if handled properly.

What to do

- Verify the working load limit of your lifting gear, lifting accessories, different anchoring solutions and supporting structure.
- Verify that the lifting gear is in perfect condition and foreseen of a readable product label.
- Check the load lifting chain on possible damage
- Ensure the right load suspension and its accessories
- Carry out the periodical product inspections.
- Respect recommendations for stocking properly your gear.

What you should not do

- Starting the lifting operation while the load is not fixed properly or when persons are located in the working area.
- Balancing the load during lifting operations.
- Lifting/lowering the load without verification of the lifting speed.
- Have the load suspended during long extended periods.
- Move under loads.
- Drop lifting gear : hoists and winches should always be placed correctly on the floor.
- Modify one or more components of your lifting gear.



Advise - Audits - Assistance

Manage the safety and reliability of your lifting gear as well its compliance with legal requirements.

Legal and regulatory framework :

Because the best way to limit the risk is to anticipate it ...

Load lifting equipment can generate serious risks for everybody's safety.

Tractel® service approach

Tractel® accompagnies you with the safety management of your working environment.

Periodical inspections are aimed to maintain your lifting gear in good condition and are not intended to verify the compliance with the design rules. Therefore, the periodic inspection reports are not the reflection of the evaluation of the conformity with the regulation.

Approach Tractel® :

- Presentation of services by Tractel®
- Inventory review of the lifting gear
- Visit of the technical workshop
- Audit of the lifting gear and its working environment
- Verification and analysis of the safety logbook and the last audits of third party inspection agencies
- Proposal of actions to be carried out

In order to enable Tractel® to proceed at best to this audit, the auditee shall provide the following elements:

- List of the lifting gear
- Competent staff for the operation of the lifting gear
- The following documents: logbook, service records, user manuals, last audit reports from third party inspection agencies

2.

Measurement and Control



Dynafor loadcells

a wide range of dynamometers

	Handifor	Dynafor Industrial	Dynafor Pro	Dynafor Expert
Accuracy	±0,5%	±0,3 %	±0,2 %	±0,1 %
Capacity	20 kg to 200 kg	1 t to 20 t	1 t to 250 t	0,5 t to 10 t
Functions	Tare, Peak hold, Units change (kg, daN, lbs)	Tare, Peak hold, Units change (kg, daN, lbs)	Tare, Peak hold, Units change (kg, t, US ton, daN, lbs), Data saving, Multiple readings	Tare, Peak hold, Units change (kg, t, US ton, daN, lbs), Settable alarms, Data saving, Multiple readings
Display	Display integrated on the loadcell with 14 mm digits	Display integrated on the load cell with 18 mm digits	Multiple display options: <ul style="list-style-type: none"> • Multiple reading of load cells on the HHD, wireless range up to 400 m • Free app compatible with Android and iOS devices 	
			  <div>   </div>	
Battery life	Up to 100 h	Up to 300 h	Up to 1 000 h	
IP rating	IP40	IP65	IP65 as standard, IP67 available as option	IP64 as standard, IP67 available as option
Lifting accessories	None	Compatible with bow shackles	Compatible with bow shackles	Compatible with bow and clevis shackles
Applications	<ul style="list-style-type: none"> • Hand weighing 	<ul style="list-style-type: none"> • Overhead weighing • Force measurement testing • Towing applications • Safety and lifting applications 	<ul style="list-style-type: none"> • Overhead weighing • Force measurement testing • Towing applications • Safety and lifting applications • Water bag load testing • Heavylift projects • R&D projects • Load balancing • Load monitoring on lifting equipment 	<ul style="list-style-type: none"> • Overhead weighing • Force measurement testing • Towing applications • Safety and lifting applications • R&D projects • Load balancing • Load monitoring on lifting equipment



Handifor

A convenient electronic load indicator including hooks for measuring small weights, quickly and easily.

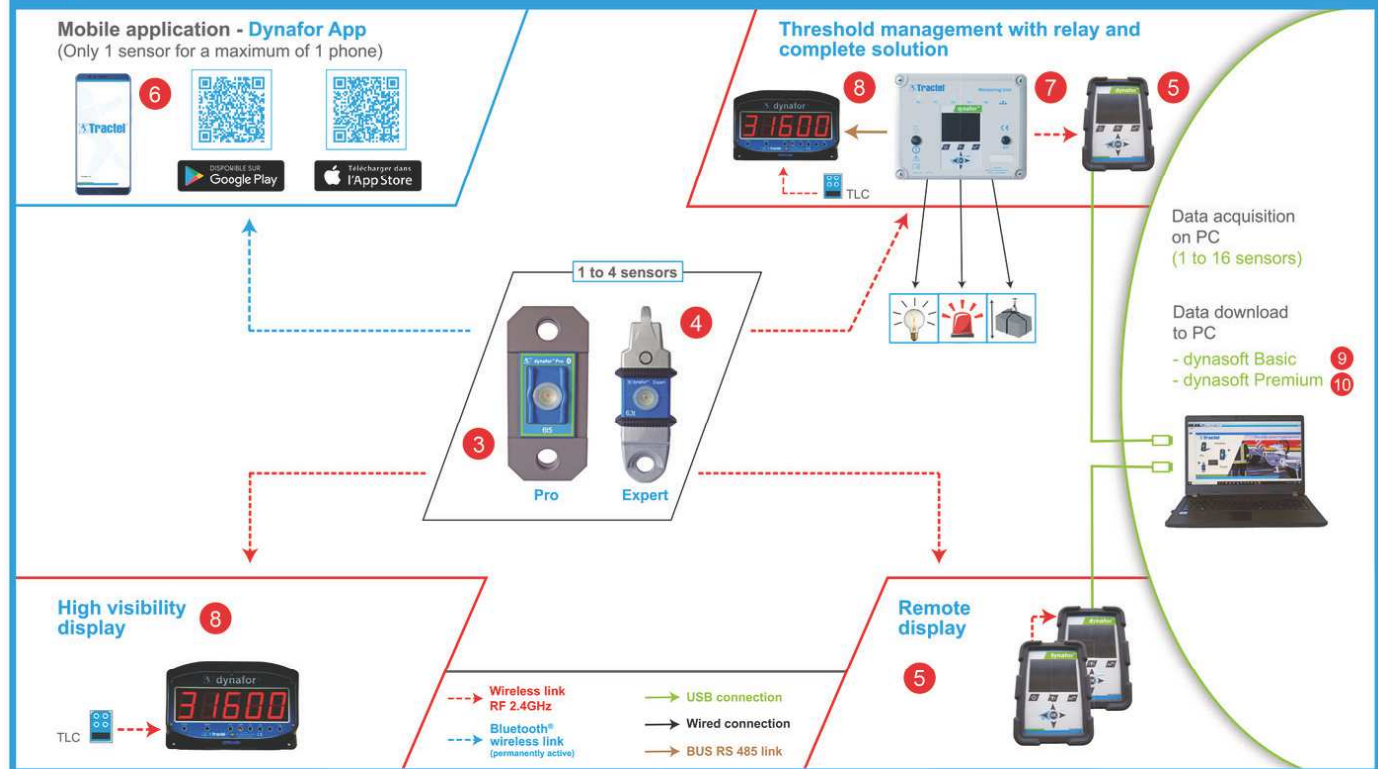
- 5-digit LCD display, 14 mm height
- Safety factor minimum of 4
- 0.5% accuracy of measuring range
- Units: kg, daN, lbs
- IP40 protection rating

Model	W.L.L (kg)	Accuracy (kg)	Rsolution (kg)	Weight (kg)	Code
Handifor 20	20	±0,1	0,1	0,5	199919
Handifor 50	50	±0,25	0,2	0,5	199929
Handifor 100	100	±0,5	0,2	0,6	199939
Handifor 200	200	±1	0,5	0,9	199949

Delivery includes the Handifor, S-hook and carabiner hook, user manual and declaration of conformity.
Supplied in sturdy cardboard packaging.



A Dynafor, a customised solution for each of your applications



Dynafor Industrial



Featuring an integrated display, the Dynafor Industrial series of load indicators provides great value, with an accuracy of 0.3%.

- Capacity range from 1t up to 20t
- 5-digit LCD display, 18mm height
- 0.3% accuracy of measuring range
- Automatic time off set at 20 min (removal in option)
- Multiple integrated functions : On, Tare, Peak Hold, Units change (kg, lbs, daN)
- IP65 protection rating
- QR code on front face leading to technical documentation and traceability at all time

Model	W.L.L (t)	Accuracy (kg)	Resolution (kg)	Weight (kg)	Product Code
Dynafor Industrial 1T	1	±3	1	0.75	260889
Dynafor Industrial 3.2T	3.2	±9.6	2	0.93	260899
Dynafor Industrial 6.3T	6.3	±18.9	5	1.44	260909
Dynafor Industrial 12.5T	12.5	±37.5	10	3.22	260919
Dynafor Industrial 20T	20	±60	20	4.95	260929
Option - Time off removal	-	-	-	-	281097

The delivery includes the Dynafor Industrial, its user manual, its calibration report and its declaration of conformity. Supplied in a plastic case with protective foam padding.



Bow shackles

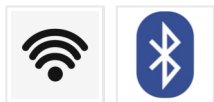
Model	Product Code
Bow shackle 0.5-3.2T	47916
Bow shackle 5T-6.5T	47926
Bow shackle 10T-12.5T	47936
Bow shackle 20T-25T	47946



Swivel hooks

Model	Product Code
Swivel hook 1T-3.2T	40977
Swivel hook 6.3T-6.5T	105567
Swivel hook 12.5T-15T	113227
Swivel hook 20T	105587

Dynafor Pro



The Dynafor Pro is the latest version of a versatile and robust wireless digital dynamometer, used in various weighing and force measurement applications.

- Capacity range from 1t up to 250t
- Wireless connection using Radio-Frequency 2.4Ghz with Tractel® Dynafor HHD, large displays AL63, DMU and software accessories, up to 400m
- Wireless connection using Bluetooth® with any smartphone equipped with our free app', up to 30m
- Both Bluetooth® and Radio-Frequency 2.4 GHz available simultaneously
- Various possibilities using several Pro and accessories
- 0.2% accuracy of measuring range
- IP 65 protection rating (IP 67 in option)
- QR Code apposed on product leading to technical and traceability documentation

Model	W.L.L (t)	Accuracy (kg)	Resolution (kg)	Weight (kg)	Product Code
Dynafor Pro 1T	1	±2	0,2	0.7	293369
Dynafor Pro 3,2T	3.2	±6,4	0,5	0.86	293379
Dynafor Pro 6,5T	6.5	±13	1	1.6	293389
Dynafor Pro 15T	15	±30	5	3,66	293399
Dynafor Pro 25T	25	±50	10	5.33	293409
Dynafor Pro 50T	50	±100	20	11.45	293419
Dynafor Pro 100T	100	±200	50	27.48	293429
Dynafor Pro 250T	250	±500	100	97.98	293439
Option - IP 67	-	-	-	-	281077
Option - ISO 376 calibration : 0.5T to 10T	-	-	-	-	109407
Option - ISO 376 calibration : 10T to 50T	-	-	-	-	109417

The delivery includes the Dynafor Pro, its user manual, its calibration report and its declaration of conformity. Supplied in a plastic case with protective foam padding



Dynafor HHD

Special offer when purchased with loadlink Dynafor



Intuitive, equipped with a colored-LED display, the Dynafor HHD is a complete and versatile handheld display, which offers endless functionalities.

Universal, the Dynafor HHD can be connected to our Dynafor Pro, Dynafor Expert and Dynafor Transmitter WL. Up to 4 equipments can be simultaneously connected.

Model	Product Code
Exclusivity - Dynafor HHD	293609

The delivery includes the Dynafor HHD, its user manual, its rugged plastic cover and its declaration of conformity. Supplied in sturdy cardboard packaging



Dynafor Pro

Lifting accessories



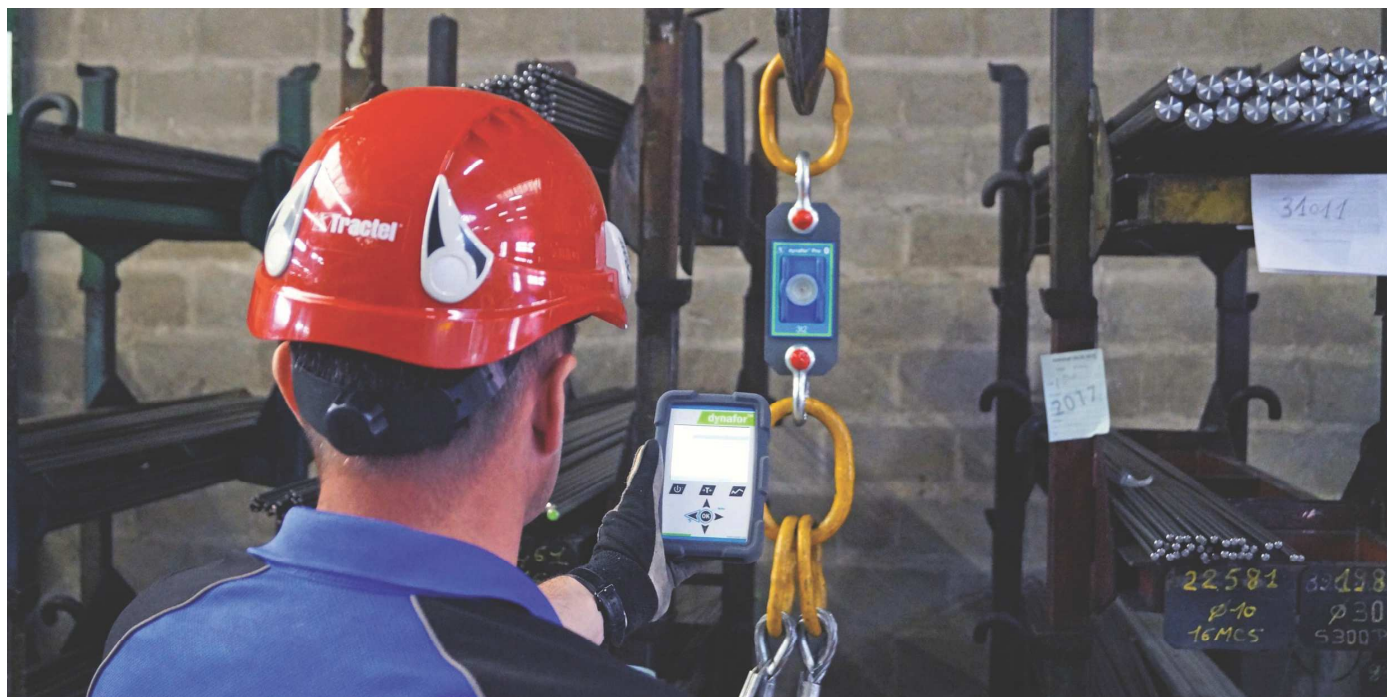
Bow shackles

Model	Product Code
Bow shackle 0.5-3.2T	47916
Bow shackle 5T-6.5T	47926
Bow shackle 10T-12.5T	47936
Bow shackle 15T	112427
Bow shackle 20T-25T	47946
Bow shackle 50T	47956
Bow shackle 100T	38166
Bow shackle 250T	93106



Swivel hooks

Model	Product Code
Swivel hook 1T-3.2T	40977
Swivel hook 6.3T-6.5T	105567
Swivel hook 12.5T-15T	113227
Swivel hook 25T	51207
Swivel hook 50T	51447



Dynafor Pro

Display accessories

Dynafor HHD

Wireless display



The Dynafor HHD is a complete and versatile handheld display.

Universal, it can be connected to our Dynafor Pro, Dynafor Expert and Dynafor Transmitter WL.

- Wireless range up to 400m
- Single and multi-sensors (max. 4) reading with sum function
- Multiple display units (daN, kg, t, US Ton, lbs,kN)
- Tare & Peak hold functions
- Ergonomic interface
- Settable alarms with incorporated buzzer
- Manual data recording with up to 100 measures
- Autonomy up to 24h. Equipped with rechargeable battery. Charger included.
- Can be used in combination with large displays AL63 and DMU for modular solutions
- Can be used with Tractel App at the same time
- QR Code apposed on product for technical and traceability documentation



Model	Product Code
Dynafor HHD	293449

The delivery includes the Dynafor HHD, its user manual, its rugged plastic cover and its declaration of conformity..
Supplied in sturdy cardboard packaging

Dynafor AL63

High visibility displays



The Dynafor AL63 is designed to visualize the efforts or loads measured by one up to 4 sensors in a large display.

It can be wirelessly connected to our Dynafor Pro, Dynafor Expert, up to 200m range.

- Connection from 1 up to 4 sensors, with automatic sum function.
- Visibility up to 45 m
- Tare, peak hold, unit's selection with the TLC remote control.
- Communication between Dynafor AL63 and sensors through RadioFrequency 2.4 GHz
- Can be used with monitor Dynafor DMU

Multiple configurations of monitors, sensors and displays are possible.



Model	Product Code
AL63 kit (incl. TLC remote control, connection unit)	294579
Power supply 110/230VAC -> 24 VDC	199046

The delivery includes the Dynafor AL63, its user manual, a remote control TLC, and its declaration of conformity.
Supplied in sturdy cardboard packaging

Dynafor Pro



Dynafor DMU

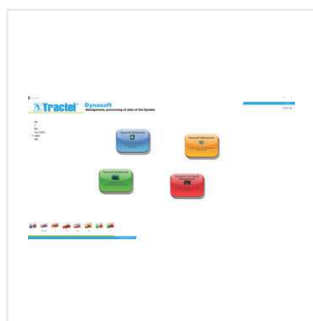
Display Monitoring Unit

The Dynafor DMU is a configurable safety device for managing 5 relays which are triggered in response to signals received from 1 or more electronic loadcells.

- Measure the rope tension or loads from 1 or more Dynafor Pro, Expert and Transmitter
- Manage 5 relays with adjustable thresholds and hysteresis
- Used for shutting down off equipments, powering on visual and audible alarms..
- Monitor the network
- Connect the unit to a AL63 LED display with a cable
- Connect the unit to a remote display HHD

Model	Product Code
Dynafor DMU - Display Monitoring Unit	293479
Power supply 110/230VAC -> 24 VDC	199046

The delivery includes the Dynafor DMU, its user manual, its declaration of conformity.
Supplied in sturdy cardboard packaging



Dynasoft - software for Dynafor

Connect your Dynafor load cells to your PC for additional functionality

The Dynasoft suite is composed of several modules:

- **Dynasoft Download** allows the transfer of measurements stored in our Dynafor HHD to the PC
- **Dynasoft Threshold Management** allows to transfer the alarm data saved in our Dynafor HHD to the PC
- **Dynasoft Monitoring** to perform real-time monitoring, recording and processing. The software needs to be used conjointly with our Dynafor HHD, and one to 16 Dynafor loadcells. Two packages are available. The basic and premium licenses are valid for an initial period of 1 year, which can be extended on expiration.

Model	Product Code
Dynasoft Basic (incl. Download & Threshold management) - First year	293509
Dynasoft Basic - renewal 1 year	287717
Dynasoft Premium (incl. Monitoring, Download & Threshold Management) - First year	294479
Dynasoft Premium - Renewal 1 year	287707

Softwares are delivered informatically, with an activation code.
Software activation requires Internet connection.



Dynafor Expert



The Dynafor Expert specific mechanical design allows it to be extremely precise.

- Capacity range from 0.5t up to 10t
- Wireless connection using Radio-Frequency 2.4Ghz with Tractel® Dynafor HHD, large displays AL63, DMU and software accessories, up to 400m
- Wireless connection using Bluetooth® with any smartphone equipped with our free app', up to 30m
- Both Bluetooth® and Radio-Frequency 2.4 GHz available simultaneously
- Various possibilities using several Expert and accessories
- 0.1% accuracy of measuring range
- IP 64 protection rating (IP 67 in option)
- Unique loadcell compatible with clevis hooks and shackles
- QR Code apposed on product leading to technical and traceability documentation

Model	WLL (t)	Accuracy (kg)	Resolution (kg)	Weight (kg)	Product Code
Dynafor Expert 0.5T	0,5	±0.5	0.1	2,3	293299
Dynafor Expert 1T	1	±1	0.2	2.3	293309
Dynafor Expert 2T	2	±2	0.5	2,3	293319
Dynafor Expert 3,2T	3,2	±3,2	0,5	2,3	293329
Dynafor Expert 5T	5	±5	1	3.35	293339
Dynafore Expert 6,3T	6,3	±6,3	1	3.35	293349
Dynafor Expert 10T	10	±10	2	6.45	293359
Option - IP 67	-	-	-	-	281067
Option - ISO 376 calibration : 0.5T to 10T	-	-	-	-	109407

The delivery includes the Dynafor Expert, its user manual, its calibration report and its declaration of conformity. Supplied in a plastic case with protective foam padding



Dynafor HHD

Special offer when purchased with loadlink Dynafor

Intuitive, equipped with a colored-LED display, the Dynafor HHD is a complete and versatile handheld display, which offers endless functionalities.

Universal, the Dynafor HHD can be connected to our Dynafor Pro, Dynafor Expert and Dynafor Transmitter WL. Up to 4 equipments can be simultaneously connected.

Model	Product Code
Exclusivity - Dynafor HHD	293609





Bow shackles

Model	Product Code
Bow shackle 0.5-3.2T	47916
Bow shackle 5T-6.5T	47926
Bow shackle 10T-12.5T	47936



Clevis shackles

Model	Product Code
Clevis shackle 0.5T-3.2T	111407
Clevis shackle 5T-6.3T	111417
Clevis shackle 10T	112207



Clevis Hooks

Model	Product Code
Clevis hook 0.5T-3.2T	111437
Clevis hook 5T-6.3T	111447
Clevis hook 10T	112217

Dynafor Expert

Dynafor HHD

Wireless display



The Dynafor HHD is a complete and versatile handheld display.

Universal, it can be connected to our Dynafor Pro, Dynafor Expert and Dynafor Transmitter WL.

- Wireless range up to 400m
- Single and multi-sensors (max. 4) reading with sum function
- Multiple display units (daN, kg, t, US Ton, lbs,kN)
- Tare & Peak hold functions
- Ergonomic interface
- Settable alarms with incorporated buzzer
- Manual data recording with up to 100 measures
- Autonomy up to 24h. Equipped with rechargeable battery. Charger included.
- Can be used in combination with large displays AL63 and DMU for modular solutions
- Can be used with Tractel App at the same time
- QR Code apposed on product for technical and traceability documentation



Model	Product Code
Dynafor HHD	293449

The delivery includes the Dynafor HHD, its user manual, its rugged plastic cover and its declaration of conformity..
Supplied in sturdy cardboard packaging

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High visibility displays



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It can be wirelessly connected to our Dynafor Pro, Dynafor Expert, up to 200m range.

- Connection from 1 up to 4 sensors, with automatic sum function.
- Visibility up to 45 m
- Tare, peak hold, unit's selection with the TLC remote control.
- Communication between Dynafor AL63 and sensors through RadioFrequency 2.4 GHz
- Can be used with monitor Dynafor DMU

Multiple configurations of monitors, sensors and displays are possible.



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AL63 kit (incl. TLC remote control, connection unit)	294579
Power supply 110/230VAC -> 24 VDC	199046

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Supplied in sturdy cardboard packaging

Dynafor Expert



Dynafor DMU

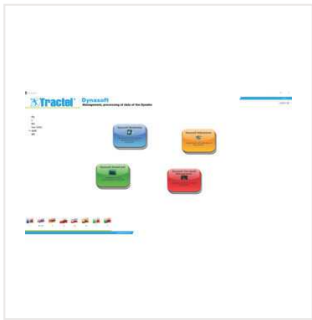
Display Monitoring Unit

The Dynafor DMU is a configurable safety device for managing 5 relays which are triggered in response to signals received from 1 or more electronic loadcells.

- Measure the rope tension or loads from 1 or more Dynafor Pro, Expert and Transmitter
- Manage 5 relays with adjustable thresholds and hysteresis
- Used for shutting down off equipments, powering on visual and audible alarms..
- Monitor the network
- Connect the unit to a AL63 LED display with a cable
- Connect the unit to a remote display HHD

Model	Product Code
Dynafor DMU - Display Monitoring Unit	293479
Power supply 110/230VAC -> 24 VDC	199046

The delivery includes the Dynafor DMU, its user manual, its declaration of conformity.
Supplied in sturdy cardboard packaging



Dynasoft - software for Dynafor

Connect your Dynafor load cells to your PC for additional functionality

The Dynasoft suite is composed of several modules:

- **Dynasoft Download** allows the transfer of measurements stored in our Dynafor HHD to the PC
- **Dynasoft Threshold Management** allows to transfer the alarm data saved in our Dynafor HHD to the PC
- **Dynasoft Monitoring** to perform real-time monitoring, recording and processing. The software needs to be used conjointly with our Dynafor HHD, and one to 16 Dynafor loadcells.

Two packages are available. The basic and premium licenses are valid for an initial period of 1 year, which can be extended on expiration.

Model	Product Code
Dynasoft Basic (incl. Download & Threshold management) - First year	293509
Dynasoft Basic - renewal 1 year	287717
Dynasoft Premium (incl. Monitoring, Download & Threshold Management) - First year	294479
Dynasoft Premium - Renewal 1 year	287707

Softwares are delivered informatically, with an activation code.
Software activation requires Internet connection.



Mechanical Dynasafe

Quick and reliable load limiters

Dynasafe Mecha

Wire rope load limiter

The Dynasafe Mecha is a mechanical load limiter to be installed on a steel wire rope.

- 2 independant thresholds (max. 4A / 230 VAC)
- Can be used for overload protection, wire rope slack detection and others
- Easy to mount
- Repeatability of 1%
- Cable gland output - Lenght 2m
- QR Code apposed on product for technical and traceability documentation
- Factory setting available in option

Model	W.L.L (kg)	Rope Diameter (mm)	Product Code
Dynasafe Mecha 3,2	3200	5-16	293599
Dynasafe Mecha 7	7000	17-26	198959
Dynasafe Mecha 12	12000	27-36	38668
Option Mecha 3,2 - Extra cable lenght (max 10m)			282847

The delivery includes the Dynasafe Mecha, its user manual, its declaration of conformity. Supplied in sturdy cardboard packaging



Dynasafe HF 05

Dead-end load limiter

The Dynasafe HF05 is a mechanical load limiter to be installed on a fixed point (dead-end or specific mechanical design)

- Capacity up to 8 t
- 2 independant thresholds (max. 4A / 230 VAC)
- Can be used for overload protection and others
- Cable gland output - Lenght 2m
- Factory setting available in option

Model	W.L.L (kg)	Product Code
HF05/1/A2/AL	500	207298
HF05/2/A2/AL	1 250	207308
HF05/3/A2/AL	2 000	207318
HF05/4/A2/AL	3 200	207328
HF05/5/A2/AL	5 000	207338
HF05/6/A2/AL	8 000	207348

The delivery includes the Dynasafe HF05, its user manual, its declaration of conformity. Supplied in sturdy cardboard packaging



Dynasafe Mecha and HF05 setting

Model	Product Code
Option - Factory preset for Mecha 3,2	281407
Option - Factory preset for Mecha 7	274647
Option - Factory preset for HF05, Mecha 12	73887

Price is for one threshold setting. For Mecha, setting is done on wire ropes of structure 6X36 or 7X19, at the nearest diameter available at factory.

Electronic Dynasafe

Applications

When a mechanical solution is not enough, and you want to :

- Display a load
- Integrate a sensor signal to your PLC (Programmable Logic Controller)
- Do real-time monitoring and relay management
- Manage several sensors individually and together

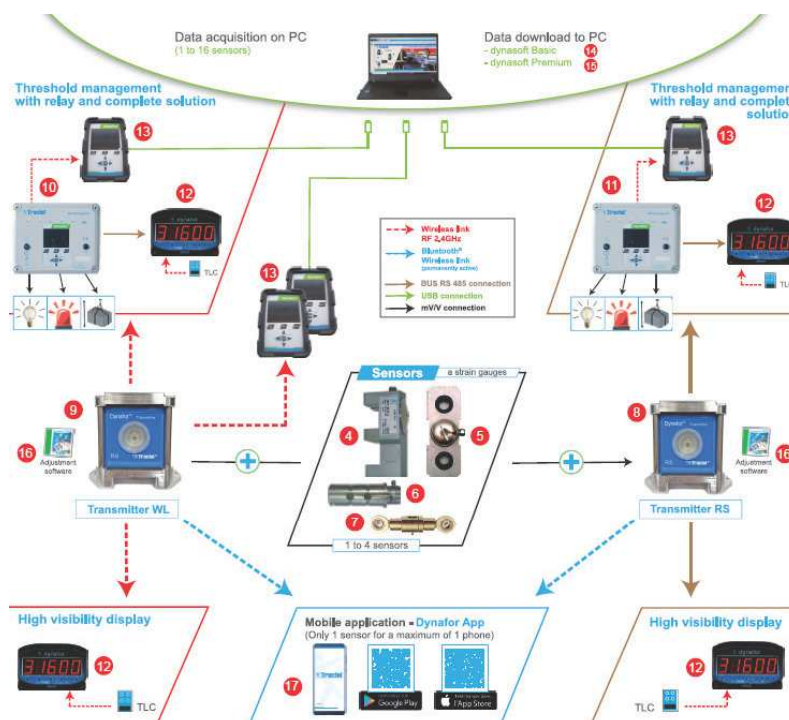
From the sensor definition, to the accessories option, Tractel supports you in defining an electronic solution that meets your requirements.

How to define a Dynasafe solution



1. Select or design a strain gauge sensor that fits perfectly in your application. Tractel offers standards sensors as well as specific sensors.
2. Define what type of connection do you need :
 - Wired connection through our Dynafor™ Transmitter RS
 - Wireless connection through our Dynafor™ Transmitter WL
 - Standard wired conditioner for analog output (4-20 mA, 0-10V)
3. Select the correct Tractel accessories to fulfill your needs

A fully modular system



Dynasafe HF35

Wire rope electronic sensor

- Electronic loadcell for installation on a wire rope
- 1% accuracy of measuring range
- Capacity range from 2t to 20t
- Compatible with wire rope diameters 5 to 45 mm
- Cable gland output
- Customized signal output : mV/V, 0-10V, 4-20mA, Hz

Specify wire rope diameter, capacity on fall and signal output with your request.



Dynasafe HF10

Wired loadlink

- Electronic loadcell for installation on dead-end or integrated in a machine
- 0.2% accuracy of measuring range
- Capacity range from 1.6t to 16t
- Cable gland output
- Customized signal output : mV/V, 0-10V, 4-20mA, Hz

Specify effort and signal output with your request.



Dynasafe HF50

Load pin

- Shear stress electronic loadcell for installation as a shaft
- Most integrated product with no headroom loss
- 0.5% accuracy of measuring range
- Mechanical design according to customer's specification
- Custom capacity
- Cable gland output
- Customized signal output : mV/V, 0-10V, 4-20mA, Hz

Fulfill the loadpin specification sheet with your request.



Others designs available. For any request please contact us at : adv@tractel.com



Signal conditionner

2. Connection



Dynafor Transmitter WL & RS

Conditionner



The Dynafor Transmitter WL & RS are conditionners used to format the signal generated by a strain gauge sensor into a signal readable by our wired and wireless accessories.

It can be used with any sensor that has a mV/V output.

- Capacity defined by the associated sensor
- WL version :
 - Radio-Frequency 2.4GHz chipset for wireless range up to 400m with our accessories (HHD, AL63, DMU and softwares)
 - Bluetooth chipset for a connection to any smartdevice equipped with our free app', up to 30m
 - Both Bluetooth and Radio-Frequency 2.4 GHz available
- RS version :
 - RS485 output (proprietary) for a wired connection with accessories.
 - Bluetooth chipset aswell as WL version
 - Both RS485 and Bluetooth available
- Powered by 3 AA batteries for WL version, RS485 for RS version
- Combined with our required software "Dynasoft Adjustment", the system {Dynafor Transmitter RS or WL + sensor} is adjustable by the end-user for high accuracy.

Model	Product Code
Dynafor Transmitter RS	293469
Dynafor Transmitter WL	293459

The delivery includes the Dynafor Transmitter WL & RS, its user manual, its rugged plastic cover and its declaration of conformity. Supplied in sturdy cardboard packaging

Dynasoft Adjustment

Option required to calibrate the system

The Dynasoft Adjustment is mandatory to calibrate the loadcell and its Transmitter. It allows the user to set the system capacity, and makes possible to reach high accuracy.

Model Name	Product Code
Dynasoft Adjustment	199529

Software is delivered with a USB dongle, used for the connection between the Transmitter and the PC.

Once the Transmitter is selected, the system can communicate with our wired and wireless Tractel accessories (DMU, HHD, AL), presented on next pages

Dynafor HDD

Wireless display



The Dynafor HDD is a complete and versatile handheld display.

Universal, it can be connected to our Dynafor Pro, Dynafor Expert and Dynafor Transmitter WL.

- Wireless range up to 400m
- Single and multi-sensors (max. 4) reading with sum function
- Multiple display units (daN, kg, t, US Ton, lbs,kN)
- Tare & Peak hold functions
- Ergonomic interface
- Settable alarms with incorporated buzzer
- Manual data recording with up to 100 measures
- Autonomy up to 24h. Equipped with rechargeable battery. Charger included.
- Can be used in combination with large displays AL63 and DMU for modular solutions
- Can be used with Tractel App at the same time
- QR Code apposed on product for technical and traceability documentation



Model	Product Code
Dynafor HDD	293449

The delivery includes the Dynafor HDD, its user manual, its rugged plastic cover and its declaration of conformity..
Supplied in sturdy cardboard packaging

Dynafor AL63

High visibility displays



The Dynafor AL63 is designed to visualize the efforts or loads measured by one up to 4 sensors in a large display.

It can be wirelessly connected to our Dynafor Pro, Dynafor Expert and Dynafor Transmitter WL, up to 200m range.

It also can be wired-connected to our Dynafor Transmitter RS.

- Connection from 1 up to 4 sensors, with automatic sum function.
- Visibility up to 45 m
- Tare, peak hold, unit's selection with the TLC remote control.
- Communication between Dynafor AL63 and sensors either through BUS RS 485, either through RadioFrequency 2.4 GHz
- Can be used with monitor Dynafor DMU

Multiple configurations of monitors, sensors and displays are possible.



Model	Product Code
AL63 kit (incl. TLC remote control, connection unit)	294579
Power supply 110/230VAC -> 24 VDC	199046
Bus cable RS485 (per meter)	31411
Connection Unit	244019
Dynafor TLC remote control	293499

The delivery includes the Dynafor AL63, its user manual, a remote control TLC, and its declaration of conformity.
Supplied in sturdy cardboard packaging



Dynafor DMU

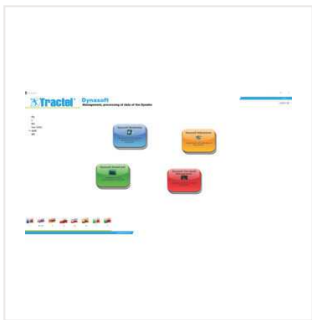
Display Monitoring Unit

The Dynafor DMU is a configurable safety device for managing 5 relays which are triggered in response to signals received from 1 or more electronic loadcells.

- Measure the rope tension or loads from 1 or more Dynafor Pro, Expert and Transmitter
- Manage 5 relays with adjustable thresholds and hysteresis
- Used for shutting down off equipments, powering on visual and audible alarms..
- Monitor the network
- Connect the unit to a AL63 LED display with a cable
- Connect the unit to a remote display HHD

Model	Product Code
Dynafor DMU - Display Monitoring Unit	293479
Power supply 110/230VAC -> 24 VDC	199046
Bus cable RS485 (per meter)	31411
Connection Unit	244019

The delivery includes the Dynafor DMU, its user manual, its declaration of conformity.
Supplied in sturdy cardboard packaging



Dynasoft - software for Dynafor

Connect your Dynafor load cells to your PC for additional functionality

The Dynasoft suite is composed of several modules:

- **Dynasoft Download** allows the transfer of measurements stored in our Dynafor HHD to the PC
- **Dynasoft Threshold Management** allows to transfer the alarm data saved in our Dynafor HHD to the PC
- **Dynasoft Monitoring** to perform real-time monitoring, recording and processing. The software needs to be used conjointly with our Dynafor HHD, and one to 16 Dynafor loadcells. Two packages are available. The basic and premium licenses are valid for an initial period of 1 year, which can be extended on expiration.

Model	Product Code
Dynasoft Basic (incl. Download & Threshold management) - First year	293509
Dynasoft Basic - renewal 1 year	287717
Dynasoft Premium (incl. Monitoring, Download & Threshold Management) - First year	294479
Dynasoft Premium - Renewal 1 year	287707

Softwares are delivered informatically, with an activation code.
Software activation required Internet connection.



Dynaro

Tension meters HF37 and HF45

Dynaro HF37

Compact, lightweight and handy device for low capacities

The Dynaro tension meter HF37 is a precision device for measuring forces in a tensioned cable or rope, without dismantling the installation.

Can be used for guy wire maintenance, architectural wire rope installations, sailing ships, etc.

- Quick direct mounting on the wire or rope
- Capacity range from 50 to 3000 kg
- Extensive wire rope database
- 3% accuracy of measuring range, if wire rope and diameter included in the database
- Compatible with diameters from 5 to 16 mm
- LCD display directly on the sensor
- Possibility to add a wire or rope in the database

Model	W.L.L (kg)	Rope Diameter (mm)	Product Code
Kit Dynaro HF37/1/LPT	50 - 1 500	5 - 13	190008
Kit Dynaro HF37/2/LPT	100 - 3 000	5 - 16	190018

The delivery includes the Dynaro HF37, its display, the software Loader Light, its CE certificate and its manual. Supplied in a robust plastic case.



Dynaline HF 45

Adapted for lifeline

Specific model, based on HF37 technology, adapted to measure precisely tension in lifelines.

- Quick direct mounting on the wire or rope thanks to modified fixing hooks
- Capacity range from 50 to 600 kg
- Specific lifeline wire rope database
- 3% accuracy of measuring range, if wire rope and diameter included in the database
- Compatible with diameters from 8 to 12 mm
- LCD display directly on the sensor
- Possibility to add a wire or rope in the database

Model	W.L.L (kg)	Rope Diameter (mm)	Product Code
Kit Dynaline HF45/1/LPT	50 - 600	8 - 12	187998

The delivery includes the Dynaline HF45, its display, the software Loader Light, its CE certificate and its manual. Supplied in a robust plastic case.

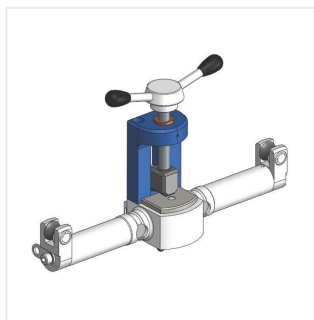


Database extension and softwares

Model Name	Product Code
Option - Specific calibration for database	111347
Software Loader Tech - Update of database remotely	193018
Software Loader Full (incl. Loader Tech + Loader Light)	187978
Software Monitor - Real time monitoring on PC	193028

In order to perform calibration, a specific sample is required.

Loader Light (unload data saved in the tensiometer) always included with the kit



Dynarope HF 36

Tension meter for high capacities

The Dynarope tension meter HF36 is a precision device for measuring forces in a tensioned cable or rope, without dismantling the installation. Can be used for equalising wire rope installations, guy wire tower applications, guy wire antennas and masts applications...

- Direct mounting on wire or rope, tightening by turning the wheel
- Extensive capacity range from 100 kg to 40t
- Various wire rope database
- 1% accuracy of measuring range, if wire rope and diameter included in the database
- Compatible with diameters from 5 to 44 mm
- Separate LCD display connected with LEMO cable
- Possibility to add a wire or rope in the database

Model Name	W.L.L (kg)	Rope Diameter (mm)	Product Code
Kit Dynarope HF36/1/LPT	100 - 5 000	5 - 13	187938
Kit Dynarope HF36/2/LPT	100 - 20 000	9 - 28	187948
Kit Dynarope HF36/3/LPT*	200 - 40,000	20 - 44	187958

*For efforts above 20t, the complementary hydraulic kit is required. Contact Tractel.

The delivery includes the Dynarope HF36, its displays, the LEMO cable connection, the software Loader Light, its CE certificate and its manual. Supplied in a robust plastic case.



Dynarope HF 36/RWT

Tension meter designed for railway applications

The Dynarope tension meter HF36 model RWT is a very specific tensiometer designed to measure tension on catenaries, without dismantling the installation.

- Direct mounting on wire or rope, tightening by turning the wheel
- Modified support points to match catenaries shape
- Capacity range from 100 to 5000 kg with specific database
- 1% accuracy of measuring range, if wire rope and diameter included in the database
- Compatible with diameters from 9 to 28 mm
- Separate LCD display connected with LEMO cable

Model Name	W.L.L (kg)	Rope Diameter (mm)	Product Code
Kit Dynarope HF36/1/RWT	100 - 5 000	9 - 28	190688

The delivery includes the Dynarope HF36, its displays, the LEMO cable connection, the software Loader Light, its CE certificate and its manual. Supplied in a robust plastic case.

Database extension and softwares

Model Name	Product Code
Option - Specific calibration for database	122350
Software Loader Tech - Update of database remotely	193018
Software Loader Full (incl. Loader Tech + Loader Light)	187978
Software Monitor - Real time monitoring on PC	193028

In order to perform calibration, a specific sample is required. Loader Light (unload data saved in the tensiometer) always included with the kit

Anchor test equipment

Anchor point testers and Dynaplug

Anchor Tester TA

Anchor testers TA are test specimens endowed with a breaking section calibrated to break under a determined traction force. The anchor tester must be installed between the anchor point to be tested and the loading device by means of shackles or any other adequate mechanical connection.

- Quick and reliable test
- Unique usage
- Capacity range from 600 to 4000 daN
- Breaking tolerance $\pm 10\%$

Model	Breaking load (daN)	Product Code
TA 600 - 20 plates	600	193269
TA 1000 - 20 plates	1 000	261769
TA 1200 - 20 plates	1 200	261779
TA 1500 - 20 plates	1 500	193279
TA 2000 - 20 plates	2 000	193289
TA 4000 - 10 plates	4 000	193299

The delivery includes the shear stress plates in batch of N plates, and its manual. Supplied in PE bag.



Dynaplug HF 44

Electronic anchor tester

The Dynaplug anchor tester is an electronic load cell designed to measure anchor strength in construction material. Its shape as a tripod has been especially designed to minimize its influence on the concrete around the fixing.

- Stand-alone anchor tester
- Capacity range from 1 500 to 5000 daN
- 0.5% accuracy of measuring range
- Height of legs adjustable between 70 and 190 mm
- Multiple accessories provided with the tester
- LCD display integrated on the device
- Data saving and possibility to monitor the tension on a PC in option

Model	W.L.L (daN)	Product Code
Kit Dynaplug HF44/1/LPT	1500	190028
Kit Dynaplug HF44/2/LPT	2500	190038
Kit Dynaplug HF44/3/LPT	5000	190048

The delivery includes the Dynaplug HF44, 4 studs M10/M12/M14/M16 and one traction fork, 3 threaded rods to adjust the height of the legs, the software Loader Light, its CE certificate and its manual. Supplied in a robust plastic case.



GENERAL CONDITIONS OF SALE AND SERVICE

GENERAL CONDITIONS OF SALE AND SERVICE v. 02.2020

1 – DRAWING UP OF THE AGREEMENT

Any order implies from the buyer, the acknowledgement by the buyer that he gets all required information to the conclusion of the agreement and the acceptance of the present terms. Therefore, no clause to the contrary may be set up against the seller if he has not formally accepted it in writing and notably all the general terms sent earlier by way of circular letters.

Unless otherwise specified, seller's quotation shall expire thirty (30) days from its date.

The sale agreement is perfect only after written acceptance by the seller of the buyer's order, or if not by the delivery.

An order which is accepted cannot be cancelled without the seller's prior and express consent.

2 – SPECIFICATIONS CONCERNING THE SUPPLY

The specifications mentioned in the seller's catalogues, price lists, leaflets and all advertising documents are for information purposes only. The seller reserves the right to carry out all changes he may consider appropriate on his models, even after acceptance of the orders, without, however, the essential specifications and performance being affected.

3 - PRICES Prices are understood in Euros free of any discount, taxes, or insurance for non packaged goods, ex-works (EXW Incoterms® ICC in force at the date when the contract is made).

Any possible costs for packaging, loading and conveying from the factory to the place of delivery shall be born by the buyer, unless otherwise agreed in writing.

4 - PAYMENTS Save exception specified in the special terms appearing on the front page, the price is payable at the seller's head office as follows:

- * part with the order (down payment)

- * the balance by accepted draft 30 days from the date of invoicing.

The payment of the down payment with the order does not in any way entitle the buyer to retract in return for giving up his down payment which, in the event of cancellation of the order, remains acquired to the seller as a compensation, subject to all other rights.

5 - SETTLEMENT

5.1 – The non-payment entails the event of default and causes that all debts even not outstanding ones are immediately due.

5.2 – Penalties for delay and compensation for recovery costs

In the event the special terms specify a deferred payment and that one of the due dates is not observed, the buyer by right and without a prior formal demand, shall lay open to penalties for delay which will be the result of the application of a rate equal to three times the rate of French legal interest.

In addition to penalties for delay, and due to late payment, the buyer, de jure and without prior formal demand, shall pay recovery costs equal to 40 euros. The seller will be entitled to obtain compensation from the buyer for any recovery costs exceeding that fixed sum and incurred due to the buyer's late payment.

5.3 - Penalty clause

By express agreement, the non payment on the due date shall entail, as a penalty clause, a compensation of 15% of the amounts due, plus the interest set in the agreement and any possible costs of litigation.

5.4 – Retention of title and risk of loss

The products, subject-matter of the present order, shall remain by formal agreement the seller's property until full payment of the agreed price, and all means of payment: cheques, drafts or other negotiable instruments shall be considered as payment only after the actual collection of their amount by the seller.

During the period between the delivery and the full payment of the price, the buyer, by formal agreement, shall only be considered as the simple depository of the products, the buyer shall have to pay the price on agreed due dates, or failing payment of a single payment, to pay the full price or, to return the products, or if not he shall incur the penalties provided for by the law.

As an exception to article 1196 of the French Code of Civil Law, the delivery itself shall place the products at the buyer's risks despite the fact the latter is only the depository until full payment is made.

On account of his capacity of simple depository until the full payment of the price, the buyer to whom the products are delivered will not be entitled to resell them or to alienate them by any mean, including by way of contract of pledge, security or otherwise.

However, he may:

- Either, after prior agreement of the seller and under its entire liability, have its buyer pay directly the product subject-matter of the present agreement to the seller.

- Or assign the benefit and the charges resulting from the present agreement, but on the formal condition of informing its assignee under its own liability that the products are subject to a reservation of title clause and that himself is only the depository until full payment of their price, in such a manner that said assignee has himself only the capacity of depository until the payment, and that the seller may be able to claim from him the payment or the return, if the amount of the price is not paid in whole on the date due.

GENERAL CONDITIONS OF SALE AND SERVICE

TRACTEL SAS GENERAL CONDITIONS OF SALE AND SERVICE v. 02.2020

6 – DELIVERY TIME & DELIVERY

6.1 – Delivery means the placing at disposal of the product on the site notified by the seller.

6.2 – The delivery time is the date entered by the seller on its acknowledgment of receipt of the order.

6.3 – Delivery times are given for information purposes and without commitment. The seller commits to deliver promptly the goods to the buyer provided that the seller gets all the information and documents required for the performance of the contract.

6.4 – It is expressly agreed that the seller shall owe no compensation for delay, except in the event of deliberate tortious intent.

6.5 - a) The buyer shall take delivery of its product(s) in the seller's premises within 30 days following the notification of the seller that the product(s) are ready for delivery.

b) At the end of this 30-day period, and after a formal demand by registered letter with advice of delivery sent to the buyer to remove the product(s) IMMEDIATELY, the seller shall be entitled to force the buyer to perform its obligations, notably to make the payments, the delivery being considered as made; in this case the seller shall store the products at the buyer's risks.

c) After the time-limit provided for in article b), the seller shall be able, if it deems this appropriate, to consider the agreement as terminated by the buyer, the payments received from the latter being acquired to him without prejudice of any other rights, and notably the seller shall be entitled to demand as a penalty clause the payment of a compensation equal to 15% of the sale price of the equipment. The seller shall then, after advising the buyer by registered letter, use the products as it wishes.

d) The products are delivered with their instructions manual for use; the user shall read them before using the products. The buyer shall check and see if he has the documents, if not it shall contact the seller to get them.

e) Acceptance: Without any written claims within 30 days following the date of delivery, the product shall be considered as without any visible defects and accepted.

7 – TRANSPORT AND INSURANCE

The steps the seller may be led to take in the interest and on behalf of the buyer as regards insurance, transport, do not prevail against the principle of the delivery in the factory or store of the seller.

The fact of possibly including the transport cost in the price does not constitute an exemption to the principle of the delivery made in the factory or the store of the seller. Any transport made by the seller itself, whether the costs are to be paid for by the buyer or not, is considered as made according to a contract of carriage separate from the sale agreement.

If there are no instructions, the seller dispatches the goods in the best interests of the buyer.

In all cases, it is up to the buyer to check everything, to make all reservations upon the arrival of the product and to lodge, if the need arises, against the carrier the appeals, which must be lodged within 3 days following the acceptance, provided for by articles L133-1 and L133-3 of the French commercial Code; should these formalities not be complied with, the carrier's liability may not be implemented and the seller cannot in any case be sued for this reason.

8 - WARRANTY

Term and extent of the Warranty

8.1 – All products are covered against defects in material and construction faults for a period of twelve (12) months from the date appearing on the delivery slip.

8.2 – (i) This warranty is strictly limited, after examination of the product by the seller and to suit its convenience, to the repair or replacement of the product recognized as defective, with the express exclusion of all accessory costs. (ii) Are only covered by the warranty the cost of replaced parts and labour used. Travel costs and hotel expenses for the personnel on the user's site as well as transport costs of the product concerned at the seller's factory and return are to be paid for by the beneficiary of the warranty.

8.3 – The warranty does not cover the damage resulting from bad assembly, insufficient maintenance, or normal wear. It does not apply to paints and coatings.

8.4 – Any defect bringing into play the seller's warranty must, failing forfeiture, be declared to the seller, with the invoice corresponding to the purchase of the product in question and all supporting documents.

8.5 – Exchanges or repairing of parts covered by the warranty cannot extend the warranty.

8.6 – The warranty will be removed from any product which is modified, altered, repaired outside the seller's workshops without the seller's prior written approval.

8.7- The seller's liability is expressly limited to the above-mentioned warranty.

8.8 – An action to enforce the warranty cannot justify any delay in payments.

9 – LIABILITY

Under no circumstances, shall the seller be held to indemnify the consequential direct or indirect damage or contingent damage, notably any operating losses, loss of profits or loss of earnings. The liability of the seller, all causes taken into account with the exception of bodily injuries and gross negligence, is limited to a sum with an upper limit fixed at the amount invoiced and collected of the supply alleged defective.

The buyer is responsible for the waiver in contract against the seller or its insurers beyond the limits and exclusions fixed above.

GENERAL CONDITIONS OF SALE AND SERVICE

TRACTEL SAS GENERAL CONDITIONS OF SALE AND SERVICE v. 02.2020

10 – SERVICE PERFORMANCE

The scale of service performance of the seller is understood exclusive of travel and hotel costs. The estimates for repairs of the seller not followed by an order are payable and include the operations of dismantling, reassembly and trips. Without a reply from the buyer within 30 days from the date appearing on the estimate, the equipment shall be returned as such, transport costs to be paid for by the buyer.

The customer agrees to place at the disposal of the seller a place required for the operation as well as the required means of lifting, handling and trial.

The seller reserves the right to take into account the weather conditions on the site and accept no responsibility for any possible delays due to these conditions or to the non conformity of the site with the public health and safety conditions. Under no circumstance will the seller's liability be sought for the consequences of equipment which stops operating while it intervenes.

The customer must make sure of the solidity of supports, anchoring or props of the equipment set up; it has the responsibility of checking the solidity and the conformity with safety rules.

11 – FORCE MAJEURE

The Parties shall not be held responsible for any delay or failure to execute one of its obligations within the scope of the contract should the delay or failure be the direct or indirect result of a case of force majeure, which is defined as an event beyond the control of the Parties and independent from their will, including but not limited to cyber-attack, civil conflict, revolution, war, acts of God, occurrence of a natural catastrophe and extraordinary weather.

Should the event of Force Majeure last for more than 1 (one) month since its date of notice, then the party suffering from Force Majeure shall be entitled to terminate immediately the present Contract without prejudice by registered letter.

12 - HARDSHIP CLAUSE

The Parties are aware of the fact that this contract is fair and equitable. By mutual agreement, the Parties waive the article 1195 of the French Civil Code and accept to deal with risks associated with changing circumstances.

13 – PERSONAL DATA PROTECTION

The seller processes personal data (full name, address, email, phone number,...) of its buyer's contacts.

The purpose of personal data processing is to perform orders and manage the relationship between the seller and the buyer. These personal data may be shared with companies located within the EU: the other TRACTEL companies, Credit-Insurance companies, Business Element and Microsoft.

No transfer of personal data to third countries (outside European Union) or international organisations is intended.

The buyer undertakes to inform the seller of any update regarding the personal data of the data subject and to inform them of the content of this clause. The data subject benefits from the right to require access to, rectification, erasure of their personal data or restriction to processing of their personal data or to object to processing as well as the right to data portability by writing to rgpd.tsas@tractel.com

The data subject also has the right to lodge a complaint with the CNIL.

The seller undertakes to take appropriate technical measures in order to ensure security and confidentiality of personal data. The seller undertakes to keep personal data no longer than necessary for the purposes of this personal data processing and in any case for a maximum period of 3 years from the last products order to the seller.

14 – PUBLICITY

The seller and/or any other TRACTEL company will be authorised to issue marketing material, publicity, promotion or advertising in whatever form, regarding the goods and services object of the Order; this authorization may be suspended further to the buyer's request.

15 – JURISDICTION

By formal agreement, any disputes or difficulties relating to the construction or to the performance of the present order shall be under the JURISDICTION of the COMMERCIAL COURT of TROYES (10 – France). The present terms are governed by French law excluding the United Nations Convention on Contracts for the International Sale of Goods (Vienne, 1980).

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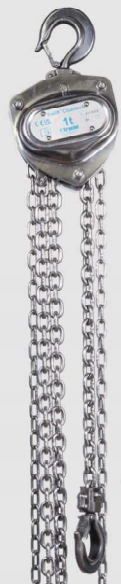
Safety harness
HT Access



Removable
X-Pad



Fall arrest device
Blocfor 20 Evo



Stainless steel trolley
Corso Cleantech



Manual chain hoists
Tralift Cleantech



Battery powered permanent magnet
Magfor auto



Blocks
EP

GLOBAL REACH



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