POTAIN®
by Manitowoc

Igo T 99
Guide Produit

Optimized performance.
Maximized profits.

6000 kg | 48 m | 1200 kg | 38.5 m

CE

Notes

Guides Produit are available under Manitowoc Direct > Potain at: www.manitowoc.com

This document is non-contractual. Constant improvement and engineering progress make it necessary that we reserve the right to make specification and equipment changes without notice. Illustrations shown are subject to modification and may include optional equipment and accessories, or may not include all standard equipment.

Contents

Igo T 99

CE In compliance with standards EN 13001 - EN 14439
UL/CSA compatible

Maximum load	6000 kg
Max. jib	48 m
Max. load at jib nose	1200 kg
Maximum hook height	38.5 m

ADAPTABILITY: flexible use

- Variable hook height providing flexibility for job sites of different sizes. Height:
  - standard: 20.5 m and 23.5 m
  - with 3 extension masts: 38.5 m
  - in raised 30° jib position: 56.5 m

  (12 working heights possible)
- 48 m max. jib, modular (31.7 m, 33.8 m, 40 m, 45 m, 48 m). Several available jib configurations: horizontal, raised 30°, folded, shortened
- Two assembly kinematics suitable for all job site configurations
- Two rear slewing radii, 3 m and 3.3 m
  With a short radius of 3 m, the Igo T 99 can be fitted as close to the building or on job sites with limited space.
- Operating from the remote control or from the cab

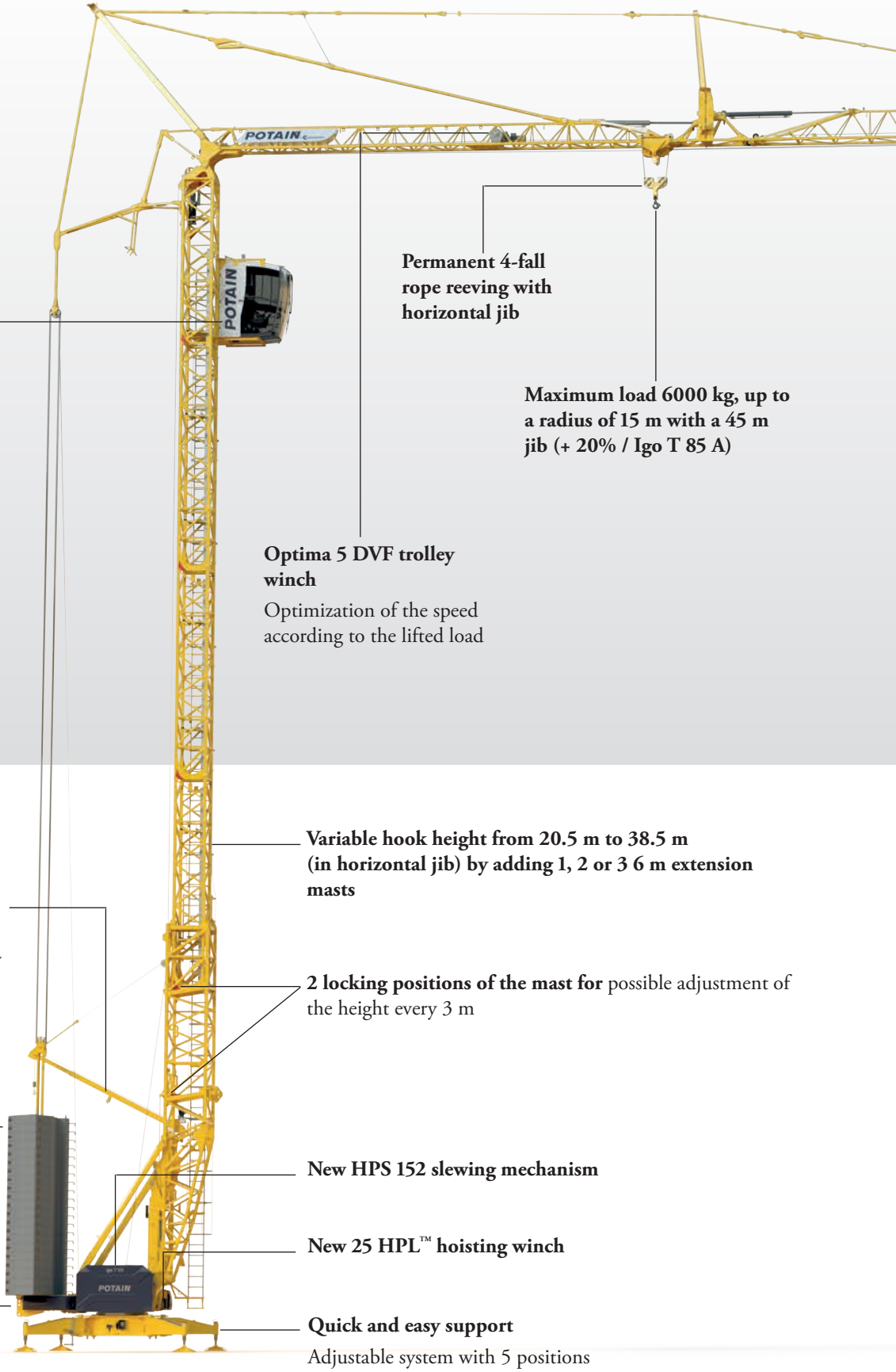
ERGONOMICS: easy to handle

- Ergonomic remote control, Hup type (fitting, operating and maintenance)
- Easy fitting of the crane: Smart Set-up
- Smooth and progressive movements during fitting
- Customization of the operating mode, Drive Control
- Smooth direction, good control of movement
- Limitation of work zones: Top Site
- Interference management: Top Tracing 3
- Integrated tool for diagnostics and maintenance
- Remote diagnostics, CraneSTAR Diag

OPTIMIZED TRANSPORT: economical and quick to move

- Compatibility with the current range of transport axles
- Convoys approved for RCE or TÜV
- Trailer or semi-trailer transport
- Difficult routes, long distances, bridges or tunnels, the Igo T 99 adapts to any environment
- Limited space requirements (15.65 m long) for a crane of this category, easy to maneuver on the job site

Features and strengths



Ultra View or Ultra View Light cab
Optional, fitting without additional means

Permanent 4-fall rope reeving with horizontal jib

Maximum load 6000 kg, up to a radius of 15 m with a 45 m jib (+ 20% / Igo T 85 A)

Optima 5 DVF trolley winch
Optimization of the speed according to the lifted load

Variable hook height from 20.5 m to 38.5 m (in horizontal jib) by adding 1, 2 or 3 6 m extension masts

Hydraulic ballasting derrick
Optional: slabs can be put in place without additional auxiliary equipment

2 locking positions of the mast for possible adjustment of the height every 3 m

Ballast slabs 2200 kg
Reuse of certain slabs of the Igo T 85 A + **new slab with auto-centering**

New HPS 152 slewing mechanism

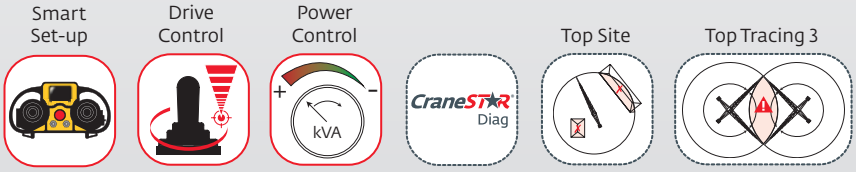
New 25 HPL™ hoisting winch

2 rear slewing radii, 3 m and 3.3 m

Quick and easy support
Adjustable system with 5 positions

Maximum hook height of 38.5 m or up to 56.5 m in raised jib position 30°

Max. 48 m jib (+ 3 m / Igo T 85 A), optional
45 m jib as standard
Modular jib
(31.7 m, 33.8 m, 40 m, 45 m and 48 m)



FIRST IGO T EQUIPPED WITH SMART SET-UP SOFTWARE

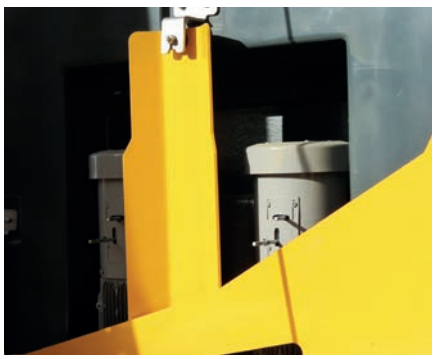
- Easy fitting of the crane
- User-friendly
- Protected access (access code)

CONTROL PANEL NEW DESIGN

- Functional and easily accessible
- Upward opening provides the technician with effective protection from bad weather conditions

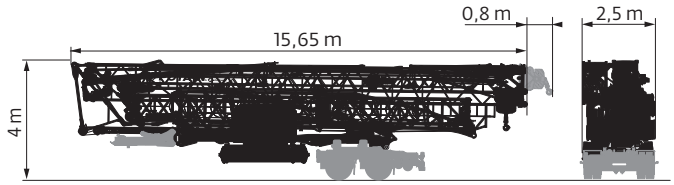
HPS SLEWING (High Performance Slewing)

- Flexibility in operating
- Precision of movement
- Sway limitation
- Counter-slewing
- Three operating profiles



ECONOMICAL AND EASY TO TRANSPORT

- Compatible with the current range of transport axles
- 25 km/h and 80 km/h transport axles - drawbar or fifth-wheel
- 3 convoys only for the transport of the crane, all options included
- Compatible with the Gapo
- Limited transport space requirements for a crane of this size guaranteeing good maneuverability



Two trolley positions during transport (impact on telescoping type)

Transport axles

Speed	Transport axle	Type of transport	Approval	Conversion kit	
				Front	Rear
25	**DJ126M/S125** [2] 3500 mm drawbar	Trailer	TÜV ISO 9001	kit 104	kit 210
25	**DJ126M/S215M** 2600 mm drawbar	Trailer		kit 100A	kit 203 kit 300
25	**SL121/S215M**	semi-trailer			kit 203 kit 300
80 [1]	**SL122/J215M** (referenced with VIN code)	semi-trailer	RCE e2*2007/46*0493*02 WVTA e2*2007/46*0493*02		kit 203 kit 300

[1] Depending on country traffic conditions (e.g. France: 90 km/h)
[2] Rear steering axle S125**D** available for France and other countries not subject to TÜV certification

Conversion kits

Kit 100A: FRONT modular kit
(Price code KT050)

DJ126M / S215M

Kit 104: FRONT modular kit
(Price code KT052)

DJ126M / S125(D)

Kit 300: empty return coupling kit
(SOLO transport)
(Price code KT059)

S215M
J215M

Kit 203: REAR modular kit
(Price code KT056)

S215M
J215M

NEW

Kit 210: REAR modular kit
(Price code KT071)

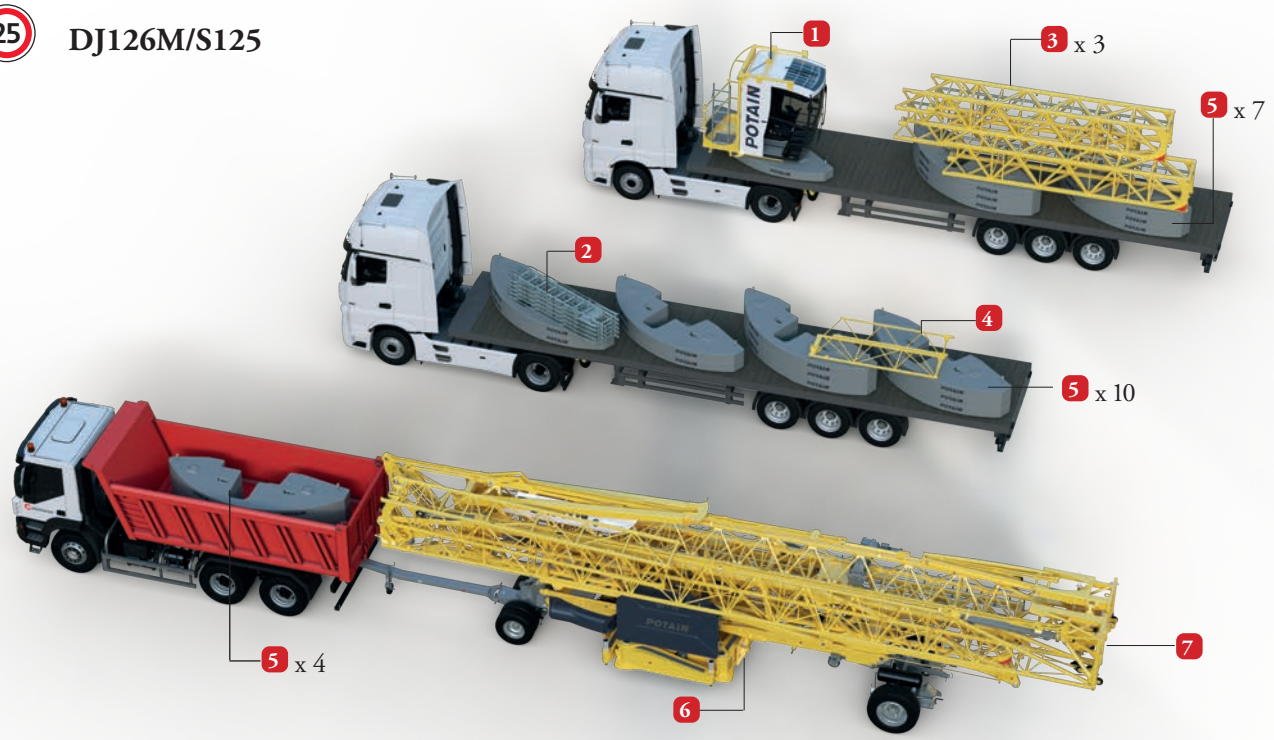
S125(D)

Transport

Packaging

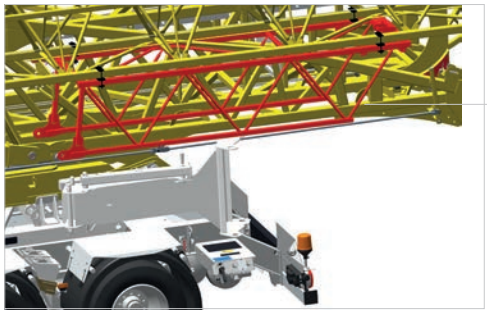
3 CONVOYS only for the transport of the complete Igo T 99, all options included (48 m jib extension, 3 extension masts, Ultra View cab and access, 21 ballast slabs)

25 **DJ126M/S125**



80 **SL122/J215M**

1 Cab - 1000 kg
2 Cab access - 200 kg
3 Extension mast - 935 kg
4 48 m jib extension - 100 kg
5 Ballast slab - 2200 kg
6 Lower support plate stored on the crane when transporting - 40 kg
7 Crane (without option or transport axle) - 20995 kg



48 m jib extension can be transported on the crane with the **S215M and J215M double axles**

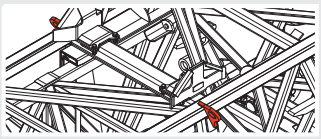
Fasteners are always provided if the 48 m jib option is ordered (Price code FL648).

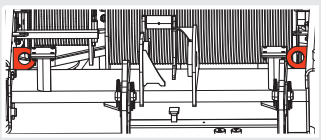
Low-bed trailer

2 possibilities:

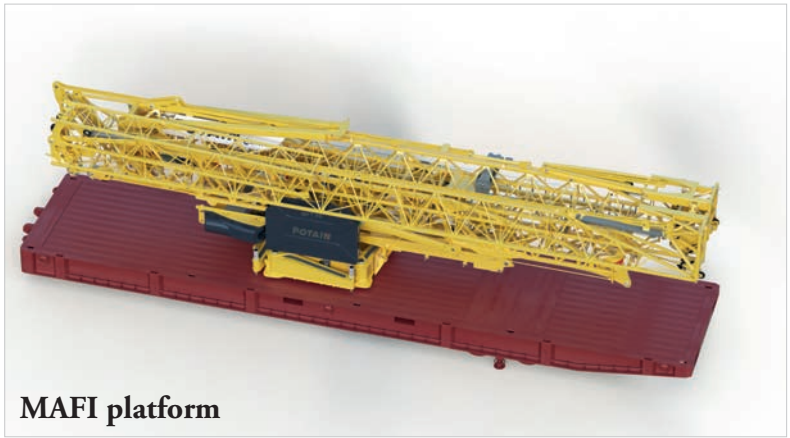
- Complete machine without transport axle
- Machine complete with front (demounted drawbar) and rear axles (only with DJ126M/S125)

UNLOADING OF THE CRANE 4 SLING POINTS





Maritime transportation



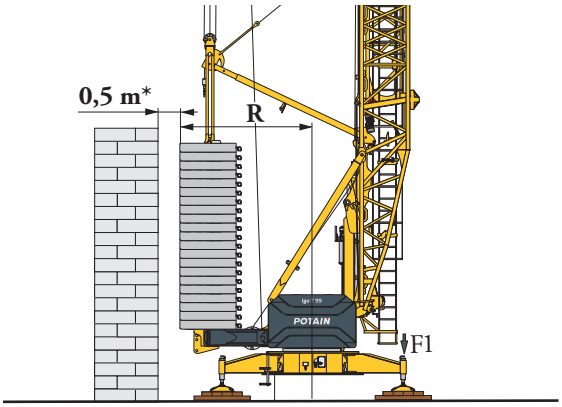
MAFI platform

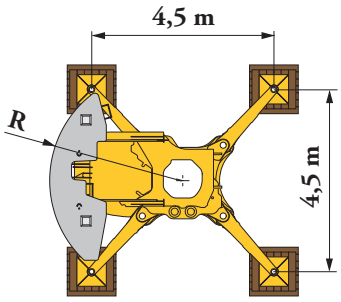
COMPACT FOOTPRINT
4.5 m x 4.5 m
Low space requirements of the crane on the ground

Footprint and rear slewing radius

- **4.5 m x 4.5 m square footprint,** designed for an average soil strength of 2.5 kg/cm²
- **2 rear slewing radii (R)**:
  - **3 m SHORT RADIUS** allowing the surface area to be reduced on the ground. The crane can, therefore, be fitted closer to the building or on job site with restricted space
  - **3.3 m RADIUS to** limit the number of ballast slabs

It is possible to install chains held by 4 supports (optional - Price code AD101). Quick and easy installation at the end of the 4 frame arms



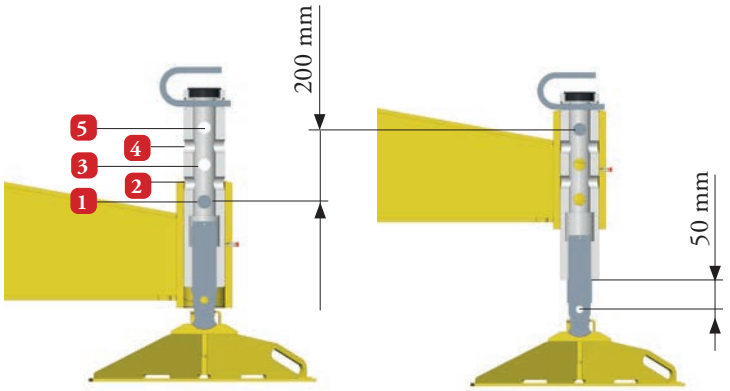


Reactions	In service	Out of service
F1	● 43.7 t	■ 40.6 t

* minimum regulatory distance according to the local legislation in force

Setting-up

- **Adjustable system** with several positions to adjust quickly the support height and **easily correct considerable tilting**



5 locking POSITIONS - 200 mm leveling + adjustment of the support screw with an amplitude of 50 mm

Ground supports

Low support plates

High support plates

- **Low 155 mm support plate** 600 mm x 600 mm**, provided as standard equipment**
- **High 375 mm support plate**, 600 mm x 600 mm available as **an optional** (Price code AT062)
  During the set up, they make wedging with the S215M and J215M axles easier because of their wide ground support.
  Not stored on the crane when transporting

- **Travelling available on request, processed in IPC:**
  - TVF, one speed 25 m/min controlled by frequency converter, 2 3 kW motors
  - No modification of the chassis legs
  - Specific machining on the fixed frame (oblong holes for arm locking)
  - Installation of two supports for winding the cables
  - Non-transportable crane boggies

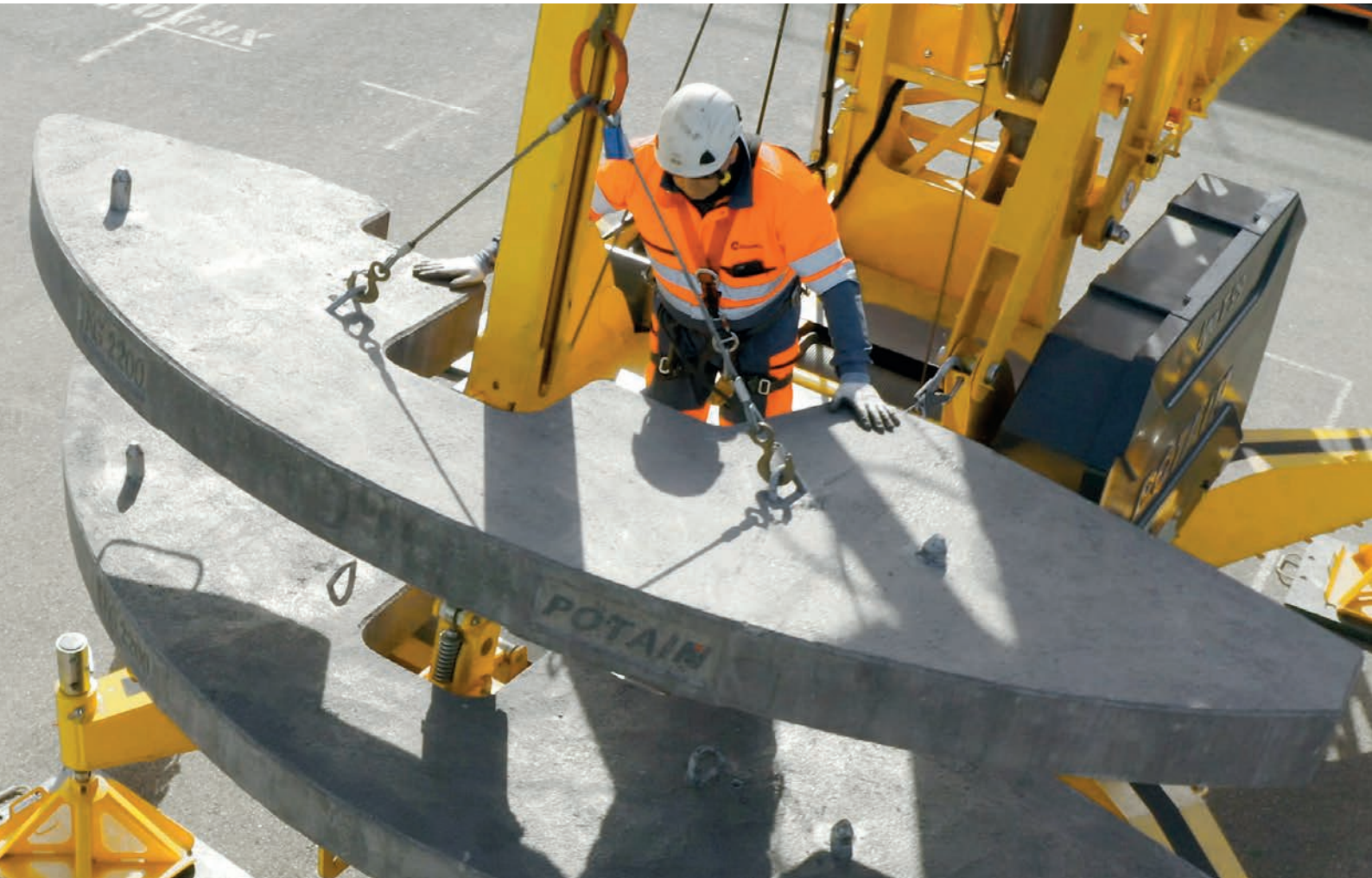
Designation	Spare parts code
EU pre-fitting travelling movement	84077397
US pre-fitting travelling movement	84077399
Straight track travelling movement	84104373
Complete 30/25 cable winder	82005528

Ballast slabs

- **3 BALLAST SLAB MODELS 2200 kg**
- Up to 21 ballast slabs depending on crane configuration and wind standard
- **New self-centering slab for easy ballasting**

	3 m rear slewing radius	3.3 m rear slewing radius	3 m and 3.3 m rear slewing radii
Spare parts code	**82014992**	**82012159**	**84110154**
			NEW 
Weight	Concrete slab, 2200 kg		
Centering	Steel	Steel	Concrete
Self-centering	☒	☒	☑
Number of speeds	2		
	Already used on the Igo T 85 A		Compatible with the Igo T 85 A

☞ Ballast configurations, see page 58/59



Control panel

DESIGN AND FUNCTIONAL, AT THE SERVICE OF THE USER

- Well placed and easily accessible, at ground level
- Door with upward opening, 2 cylinders, offering the technician effective weather protection.
- “U” plate with the power part on one side and the control part on the other side, so that everything is in sight
- Cabinet mounted on silent blocks, absorption and isolation of vibrations during transport
- U.S. version cabinet with fireproof resin

Qualified TECHNICIAN ACCESS

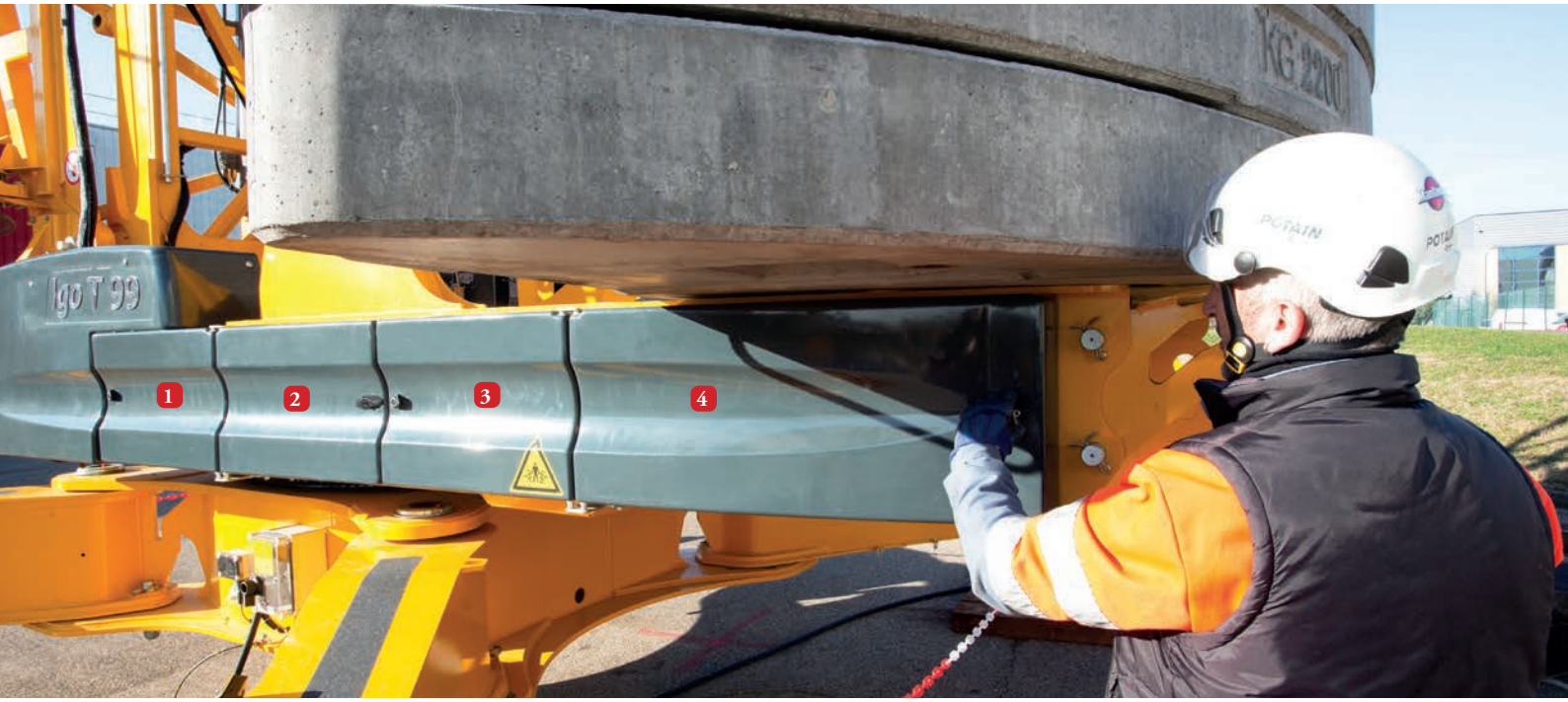
1. Removable cover isolates the two slewing motors from the rest of the electrical components
2. Document holder
3. “Assembly aid” adhesive

4 **CCS DISPLAY, STANDARD EQUIPMENT,** positioned at ground level

DIAGNOSTICS, FITTING AND TROUBLESHOOTING, MADE EASIER

Storage compartments

- Protected components, under keys with differentiation of locks
- Dedicated storage space for technical manuals, remote control (no loss)



1 Qualified TECHNICIAN ACCESS
Cab socket
Hoisting encoder

2 CRANE OPERATOR ACCESS
Technical manual

3 Qualified TECHNICIAN ACCESS
Crabbing, telescoping/ retaining system

4 CRANE OPERATOR ACCESS
Motorized lubrication or cartridges
Battery charger
Remote control
Auxiliary control unit

2 TYPES OF LOCKS:

CRANE OPERATOR ACCESS

Qualified TECHNICIAN ACCESS

Access

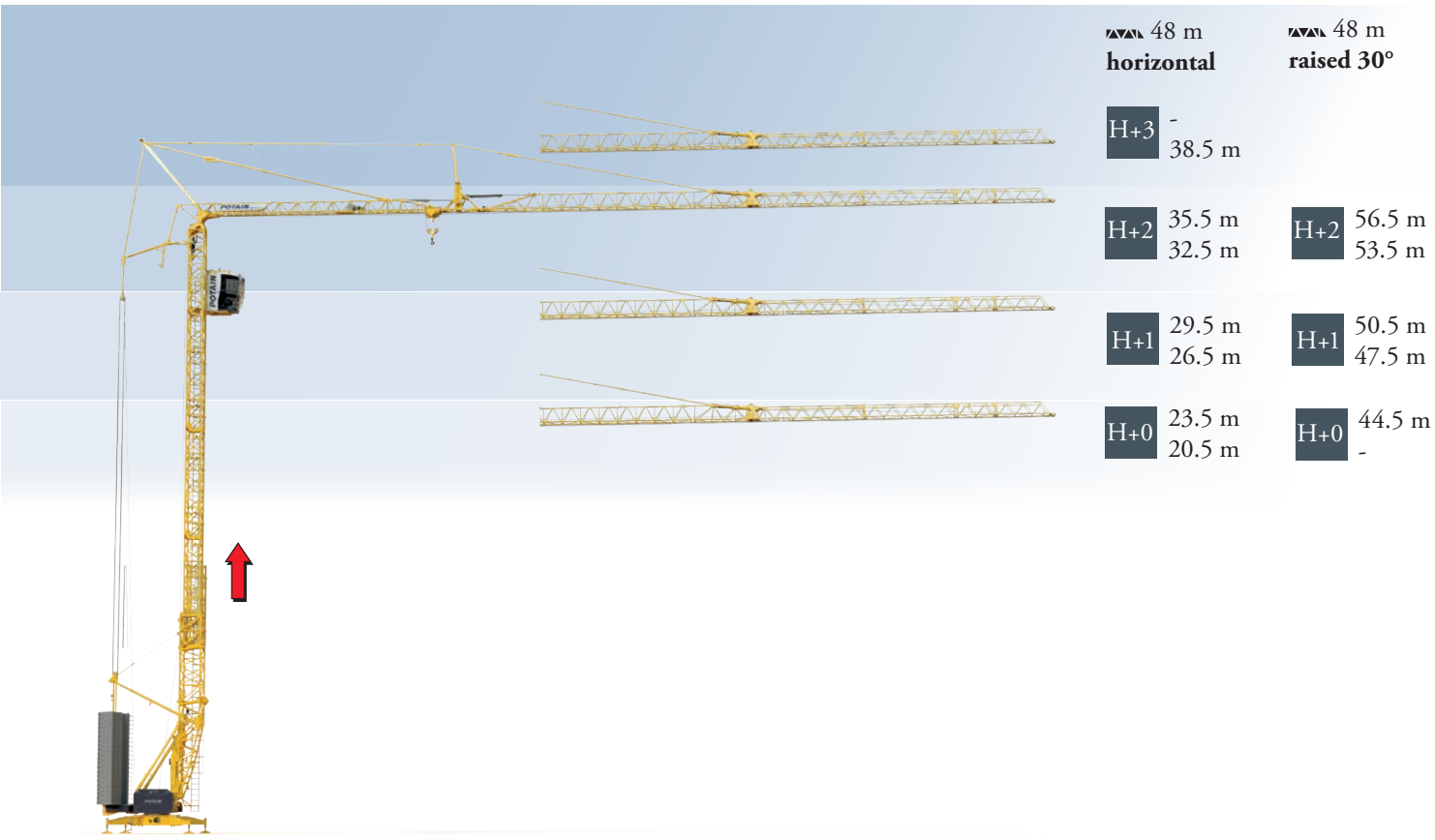
Ladder to access the slewing platform:

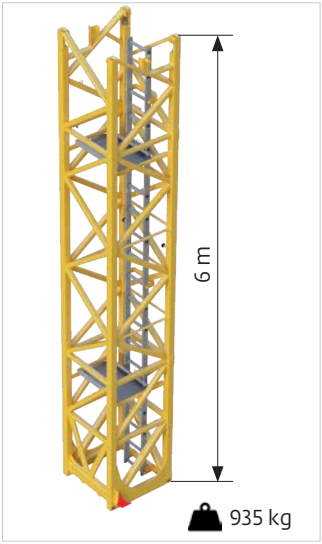
- **Can be positioned on the 4 chassis legs**
- Stored on the crane when transporting (no loss)

Also used during the insertion operations of an extension mast to access the fishplating screws

Hook height

- Possibility of inserting 6 m extension masts to adapt the height of the crane to the needs of the site (construction, overflight, monitoring of site evolution). Height:
  - standard: 20.5 m and 23.5 m
  - with 3 extension masts: 38.5 m
  - in raised 30° jib position: 56.5 m
- 12 different working heights
- Working at very high heights

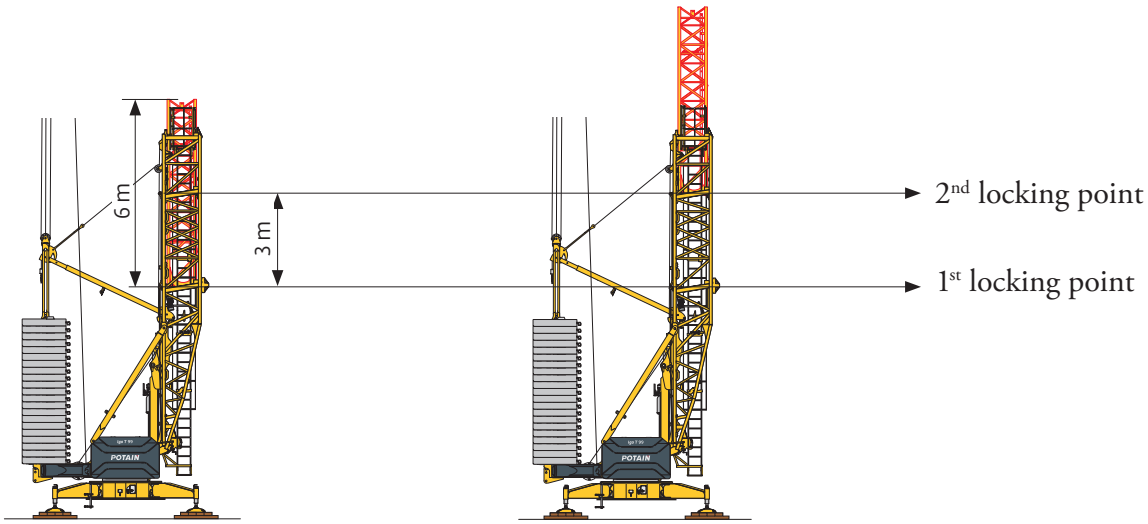




INCREASE OF THE HOOK height by adding **1, 2 OR 3 EXTENSION MASTS** of 6 m (Price code MR084):

- Placing by the crane itself autonomously and quickly (without additional means)
- 2 locking positions on the outer mast for possible height adjustment every 3 m
- Extension masts specific to Igo T 99

The extension masts of the Igo T 70 A / Igo T 85 A / Igo T 130 do not stand on Igo T 99 and vice versa.



CONDITIONS OF USE OF THE 3rd EXTENSION MAST

- Full use of the load curves (no downgrading)
- "American" fitting/dismantling kinematics, jib against the mast possible (not possible on the Igo T 85 A)
- 3rd extension mast that can be used on the 1st lock only, half the height of the mast
- 3rd extension mast not allowed in 30° raised jib configuration
- Maintenance position authorized (not possible on the Igo T 85 A)
- Use of the authorized cab (for more information, refer to page 26) (not possible on the Igo T 85 A)

N.B.:

The useful hook height, which takes into account the adjustment of the limit switch, is calculated by deducting 0.6 m from the theoretical hook height.

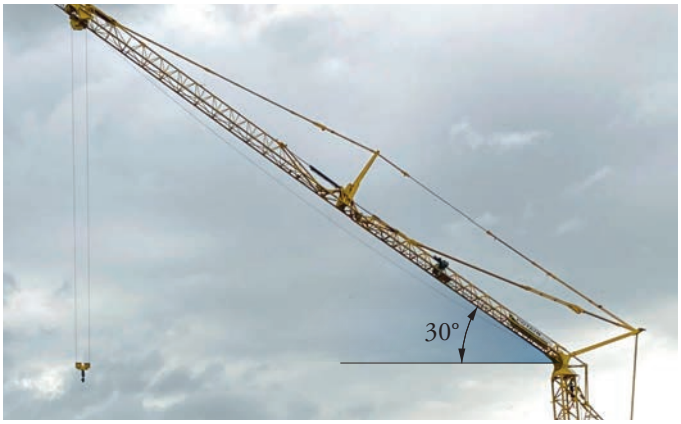
The effective hook height with a 48 m horizontal jib with H + 3 is: 38.5 m - 0.6 m = 37.9 m

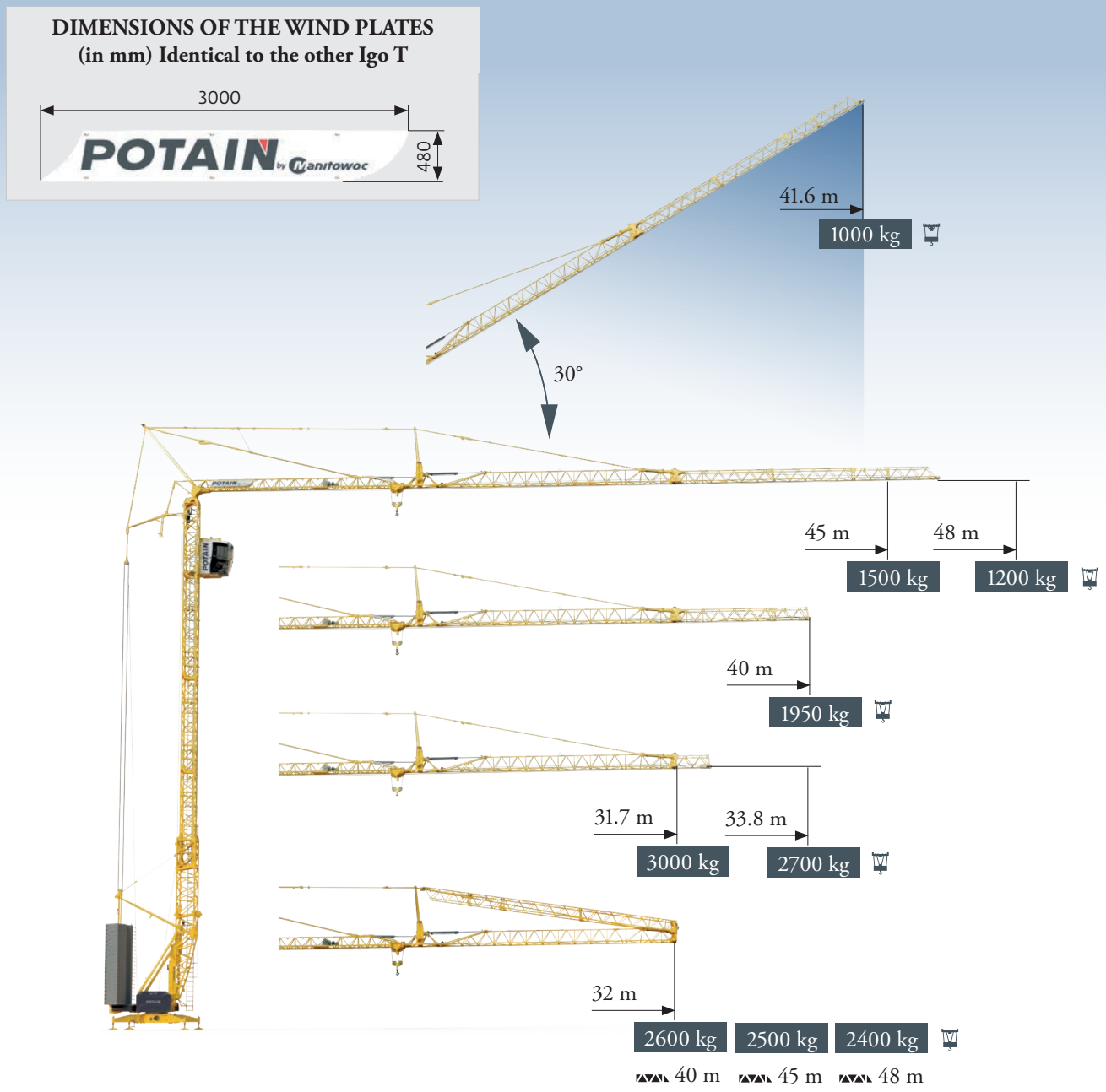
NEW Permanent 4-fall rope reeving with horizontal jib.

Jib

- Several jib lengths provide the flexibility needed for different sized job sites
- 5 horizontal jib configurations:
  - **45 m jib is standard,** allowing the short versions **40 m, 33.8 m, and 31.7 m to be used**
  - **48 m jib, optional,** obtained by adding a 3 m extension (Price code FL648)
- **30° raised jib** with load curves (Price code EF030)
- **Folded up jib** authorized with 40 m, 45 m and 48 m jibs to reduce the range to 32 m without any shortening intervention, and optimize the load at the tip

  NEW **Optimized load curve at each folded jib length**





Trolley/Rope reeving

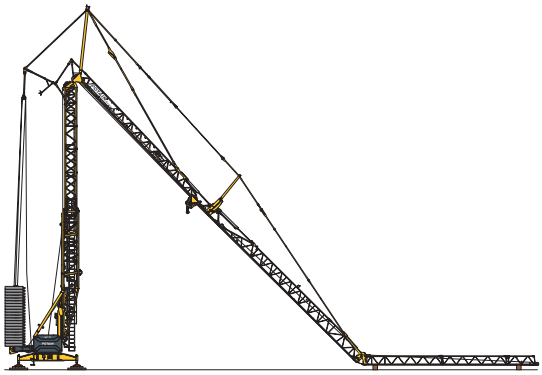
The Igo T 99 is available with **4-fall rope reeving**

- No need to change the rope reeving to be done with a horizontal jib, working in permanent 4-fall rope reeving
- Working with 2-fall rope reeving in 30° raised jib configuration

Changing the jib configuration

Changing the configuration of the jib can be easily done from maintenance position:
- Change to 48 m jib (addition of 3 m jib extension)
- Shortening the jib
- Changing to jib raised to 30°

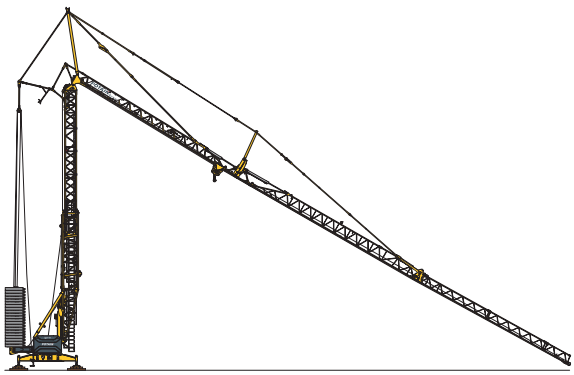
MAINTENANCE POSITION WITH THE JIB NOSE ON THE GROUND



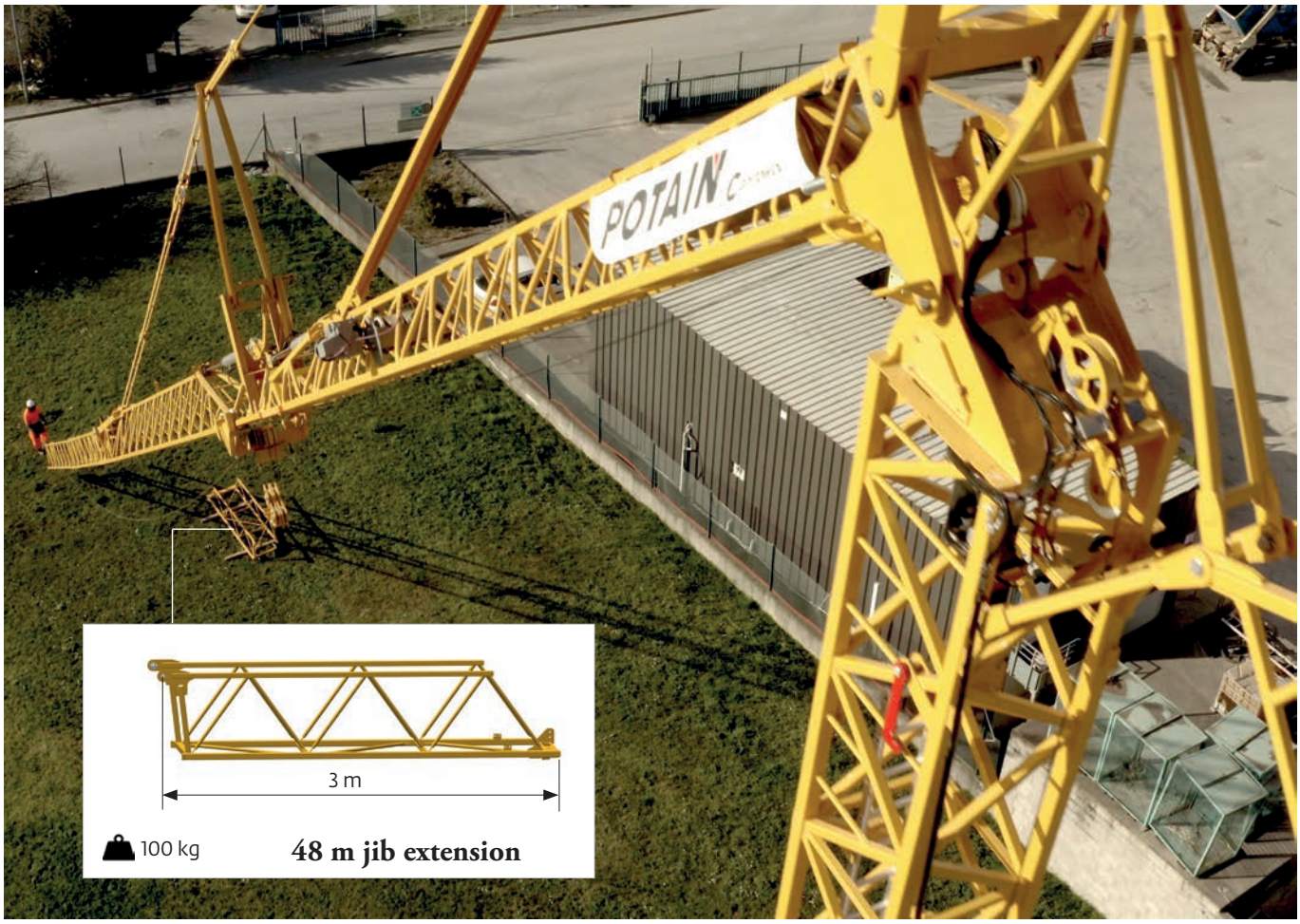
Working height (horizontal jib)		
H+3	-	
	38.5 m	⊘
H+2	35.5 m	⊘
	32.5 m	⊘
H+1	29.5 m	✓
	26.5 m	✓
H+0	23.5 m	✓
	20.5 m	✓

- Quick addition or removal of jib sections
- NEW Facilitated jib shortening: the **3rd JIB CYLINDER REMAINS IN PLACE for changing to a short** 31.7 m and 33.8 m jib (no long and complicated operations for the mounts, dismantling the cylinder and modifying the hydraulic wiring)

HIGH MAINTENANCE POSITION



Working height (horizontal jib)		31.7 m	33.8 m	40 m	45 m	48 m
H+3	-					
	38.5 m	⊘	⊘	✓	✓	✓
H+2	35.5 m	⊘	⊘	✓	✓	✓
	32.5 m	⊘	⊘	✓	✓	✓
H+1	29.5 m	✓	✓	✓	✓	✓
	26.5 m	✓	✓	✓	✓	✓
H+0	23.5 m	✓	✓	✓	✓	✓
	20.5 m	✓	✓	✓	✓	✓



Switching to a 48 m jib

- Optional 3 m element positioned at the jib nose: easy to set up and remove
- Operations performed at ground level
- 48 m jib return through simple teach-in programming

N.B.:

Telescoping prohibited with 48 m jib

Crane operation

Different solutions according to the site requirements and the desires of the crane operator. He can work from EITHER:

- of the remote control, on the ground
- of the remote control, from the Ultra View Light cab
- from the operator's cab Ultra View

REMOTE CONTROL

CONTROL

BASIC CRANE ----------Remote control + Auxiliary control unit

Operating + Fitting

OPTION ---------- PRC 300 ("V3") transmitter (Price code RC049)

Operating only

Possibility of pairing two transmitters for the same crane.
Whichever of the transmitters is used first to start the crane retains control while the crane is in service. The commands from the other remote control are not taken into account.

CAB

CONTROL

OPTION ----------Ultra View Cab (Price code CB110)

OPTION ---------- Ultra View Light Cab (Price code CB111)

Remote control operating only

Cab wiring included in the cab option.
Possibility to anticipate installation of a cab with the option of:
Pre-fitting of UV, UV Light cable (Price code PI023)

UNIFORM CABS, 2 FINISHING AND EQUIPMENT LEVELS POSSIBLE

ULTRA VIEW CAB

Interior paddling

1. Adjustable ergonomic seat with headrest
2. Inclined arm rests with flexible joysticks: quick access to all controls
3. 7-inch color CCS display
4. Cap for lateral water flow
5. Roof window with sliding flap: good visibility on the trolley
6. Tinted glass and sunshades (front and side): glare and heat reduction
7. Sliding windows: natural ventilation
8. Lower window with protective grid
9. Windscreen wipers (front, side, top)
10. Air conditioning/Heating
11. Side console: quick access to the most important comfort functions
12. Shelf, 3 outlets
13. Storage space

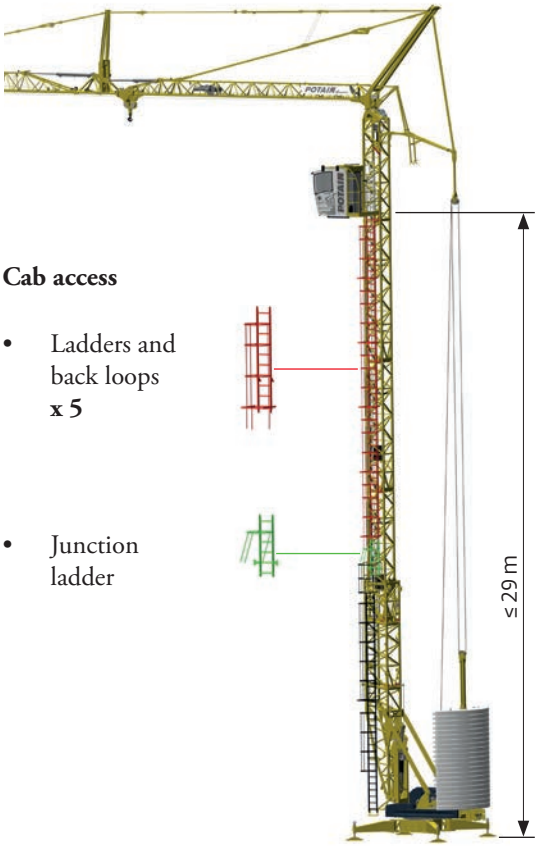
ULTRA VIEW LIGHT CAB > Remote control operating

1. Adjustable seat
2. Cap for lateral water flow
3. Tinted glass and sunshades (front and side): glare and heat reduction
4. Sliding windows: natural ventilation
5. Lower window with protective grid
6. Windshield wiper with windscreen washer
7. Set up for mono-block or split mobile air-conditioning unit (not supplied)
8. 2 kW-power heating/ventilation
9. 1 230 V socket

Ultra View Light cab not UL/CSA compatible

CAB, 2 POSITIONS

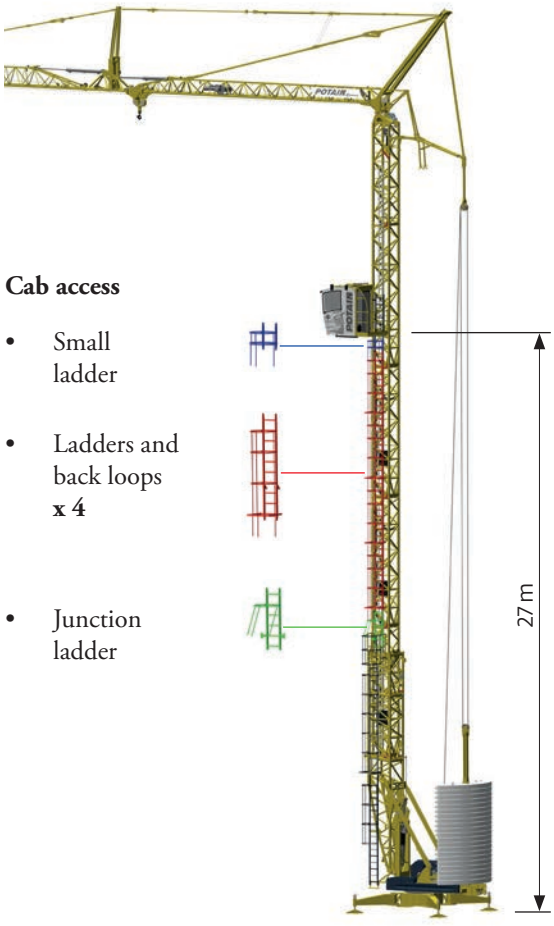
1. HIGH POSITION on the inner mast section
(with 2 extension masts max)



Cab access

- Ladders and back loops **x 5**
- Junction ladder

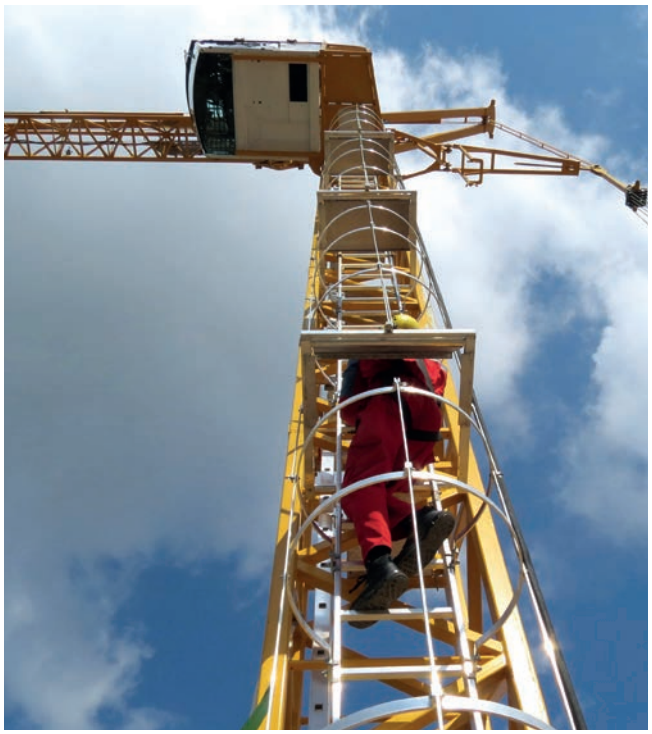
2. LOW POSITION on the inner mast section
(with the 3rd extension mast)



Cab access

- Small ladder
- Ladders and back loops **x 4**
- Junction ladder

Cab accesses, in all use configurations combined, are systematically delivered with Ultra View and Ultra View Light cabs.



Cab access (ladders + rungs) entirely positioned outside the mast and in compliance with the latest regulations.

NEW

CAB ACCESS POSITION FUNCTION
(activated by teach-in programming)

It is possible for the crane operator to electronically assure from the cab that the accesses are positioned above one chassis leg.

Facilitated cab descent

Icon on the CCS display indicating that the accesses are in the correct position

Fitting the cab
By the crane itself (without additional equipment)

Assembling the ground accesses

- Easy pinning of ladders with axes
- Operations performed at ground level

Ergonomic remote control (Hup type)

MORE FUNCTIONALITY, CUSTOMIZATION AND ERGONOMICS

For the technician:

- **SMART SET-UP SOFTWARE** simplifying the fitting of the crane
- Accessing key information about machine conditions
- Maintenance support (fault and notification messages)

For the crane operator:

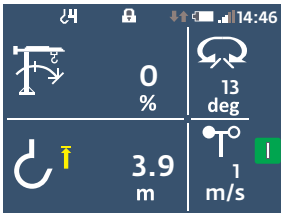
- **Quick reading of the operating indicators**
- Simple procedure for unfolding/folding the jib nose, allowing the crane operator to easily adapt to the job site configuration
- Selection of **3 operating profiles** (without intervention by a technician)

Plus:

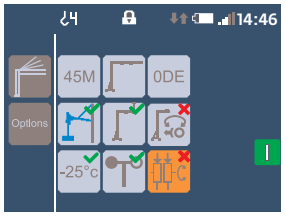
- **Ergonomic interface**
- Clear and logical menu tree structure, easy navigation
- Secure remote link mode available to protect the communication between the transmitter and its receiver against hacking

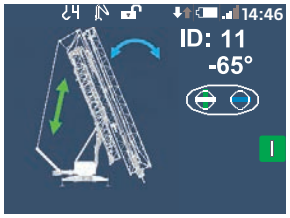
Operating indicators:
- The current load and radius
- The maximum radius for the current load
- The maximum load for the current radius

Moment, height, angle indicators (with Top Site option) and wind indicators

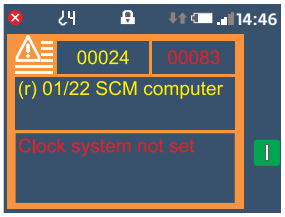


Machine configuration + quick access to options





SMART SET-UP
Help with fitting/erecting



Maintenance assistance

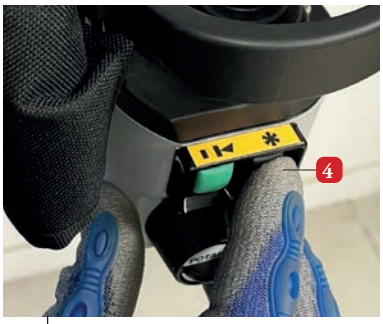
2.4-INCH SCREEN

1 OPERATING PROFILE SWITCH (slewing)
1. High-precision operating
2. Standard operating
3. Dynamic operating

2 WORKING/LIFTING POSITION SWITCH
A - Work
B - Fitting

3 MICRO-SPEED FUNCTION BUTTON
(precise positioning when hoisting)

+ AUTOMATIC RESET BUTTON OF THE TROLLEY ROPE AND RESETTING OF THE TROLLEY LIMIT SWITCHES
---> that the crane is autonomous, the intervention of a technician is not necessary.



4 WEATHERVANING BUTTON

Complete equipment

RECEIVER
installed in the control panel

BATTERY CHARGER
+ a spare battery for continuous operation

ANTENNA
moved to the masts for better reception

AUXILIARY CONTROL UNIT
Auxiliary remote control used only to secure the crane in case of failure of the main remote control.
(delivered with 10 m of rope)

Remote control code

Designation	Spare parts code
Europe remote control	84110304
US remote control	84110305
China remote control	84110306
Japan remote control	84110307
Kora remote control	84110308

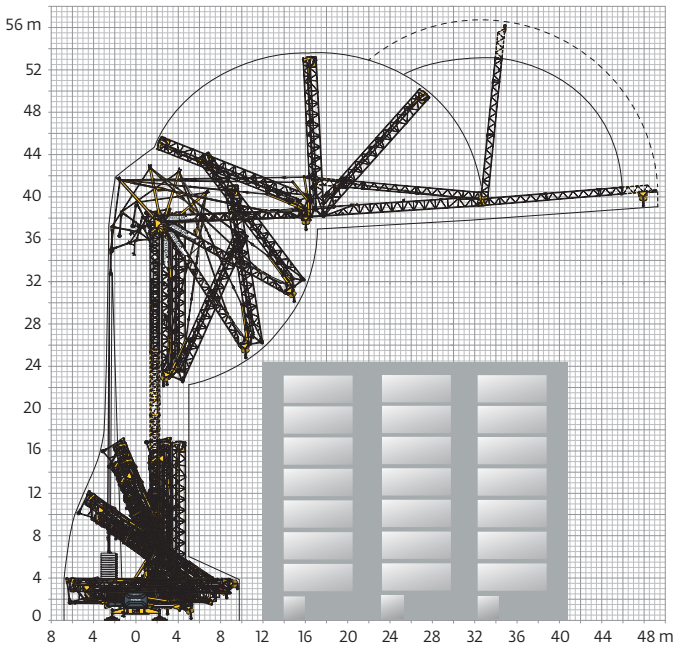
Fitting kinematics

2 SOLUTIONS

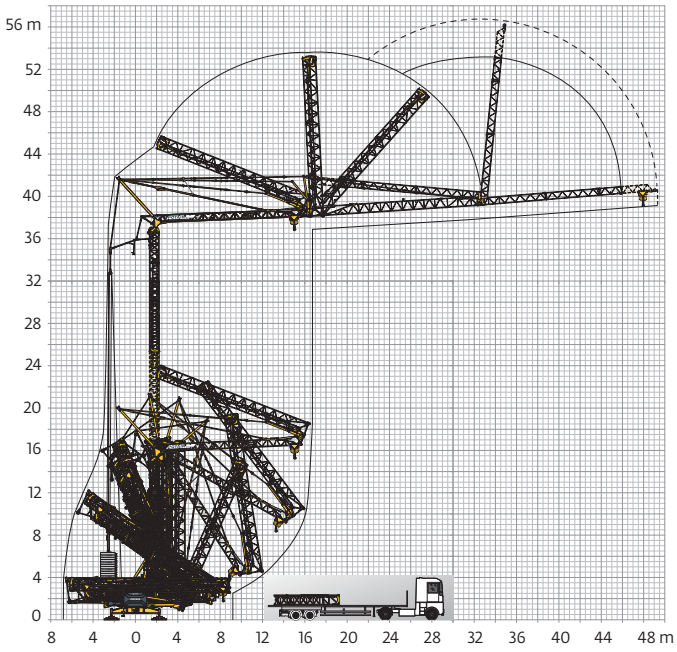
15 kVA

≤ 50 km/h

1. JIB SUPPORTED ALONG THE "AMERICAN TELESCOPING" MAST
Allows easy folding of the crane at the end of a job site in a cluttered environment



2. "EUROPEAN-STYLE TELESCOPING" FOLDED HORIZONTAL JIB
allowing the jib extensions to be picked up from the truck with the trolley

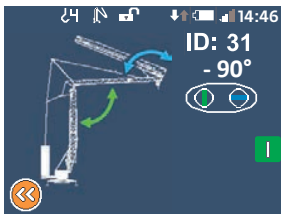


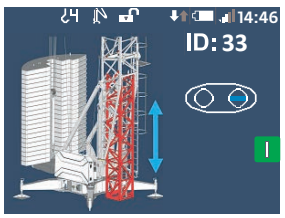
NEW

SMART SET-UP SOFTWARE SIMPLIFYING FITTING OF THE CRANE

FIRST IGO T EQUIPPED WITH SMART SET-UP

- Fitting assistance
- User-friendly
- Validation of each fitting phase, possibility to go back easily

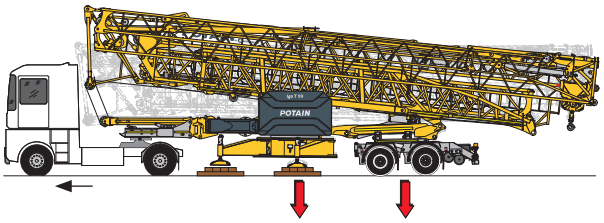




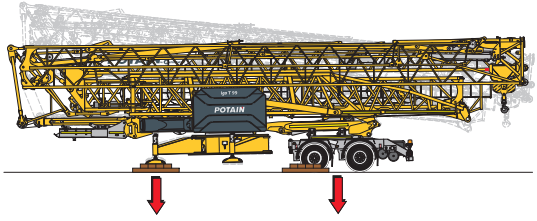
- Protected access, accessible with code only A A A 0 0 0 0 0.
  "Customer" access code, 8 characters, specific to each machine and communicated with the technical manual, or "technician" access code (authorization after training)

1 **SETTING UP,** ensured by the tilting of the crane obtained by unfolding/folding the mast:

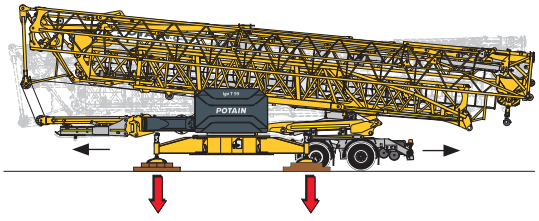
- Chassis legs partially unfolded to allow the crane to be tilted by unfolding the mast.
  Unhook the tractor as soon as the crane has swung onto its transport axle.



- Place the chassis legs in their final position.



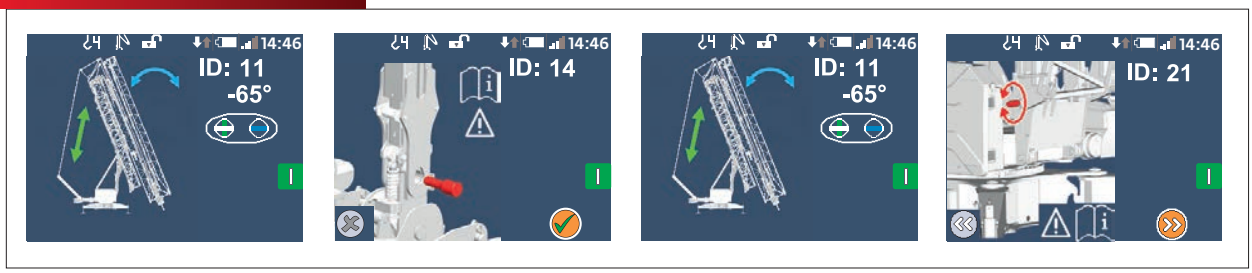
- Place the crane to rest on the chassis.
  Checking the horizontality with the integrated bubble level.
  Remove the fifth-wheel and remove the transport axle.



2 **UNFOLDING THE MAST,** with hydraulic cylinder which provides power and flexibility

- Unlock the retaining tie bar to unfold the mast
- Once the mast has been completely unfolded, lock the strut with bracing screws

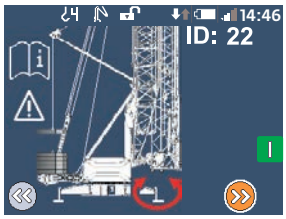
SMART SET-UP

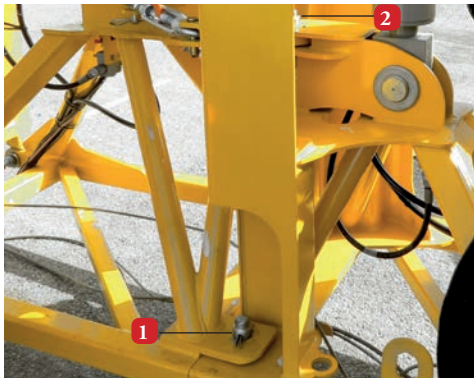


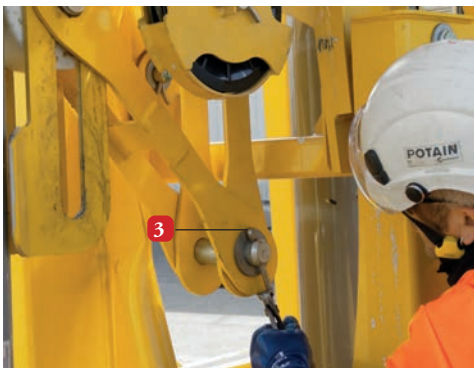
3 **OPENING THE JIB,** done easily at ground level (effortless)

- Locking of the 2 jib elements using the 3 pins (1 2 3)

SMART SET-UP







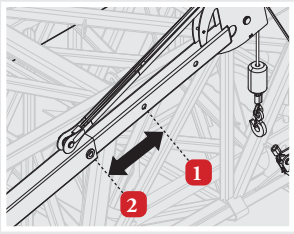
4 BALLASTING

WITH AUXILIARY EQUIPMENT or

WITH THE HYDRAULIC DERRICK, optional (Price code PL051)

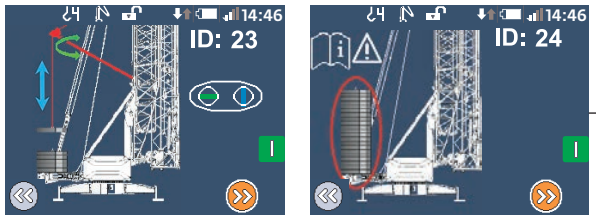
- Derrick capacity: 2200 kg
- Adjustable derrick, two positions to adjust the reach to the rear slewing radius
- Hydraulic orientation of the derrick, controlled by the remote control
- Place the slabs independently
- Easy, precise and fast installation or removal of 2200 kg ballast slabs
- Derrick folded on the crane during transport (in the transport size of the convoy)

ADJUSTMENT OF THE DERRICK RANGE



Pinning points
1 R = 3 m
2 R = 3.3 m

SMART SET-UP



Validation of the correct ballast arrangement according to tables on pages 58/59

Hydraulic ballasting derrick specific for Igo T 99

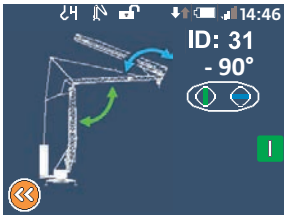
Ballasting catwalk (standard)

Access platform to the ballast slabs (standard)

5 **RAISE THE JIB,** ensured by the jib retaining winch

- Partial opening of the jib using a hydraulic cylinder
- Horizontal position of the jib obtained without interruption or manual intervention
- Safe operation sequences, automatic movement cut-off

SMART SET-UP

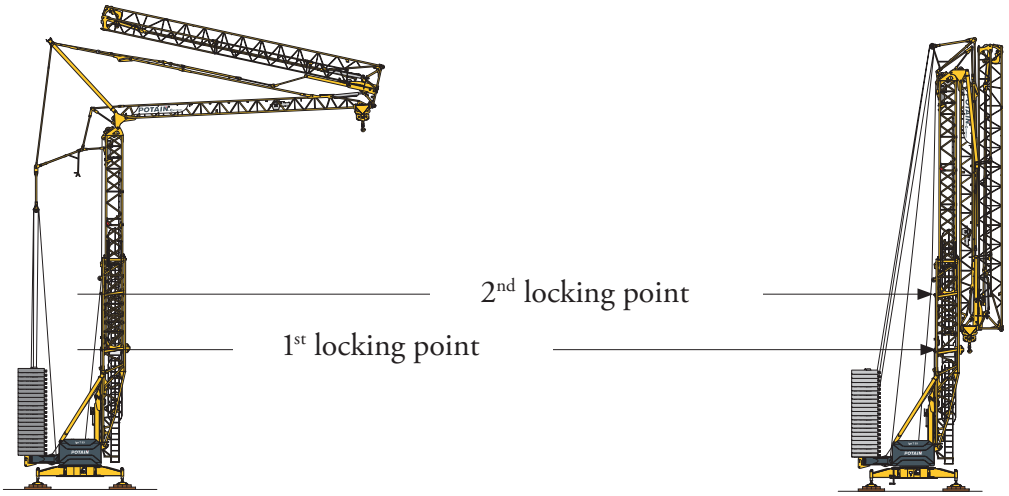


6 TELESCOPING

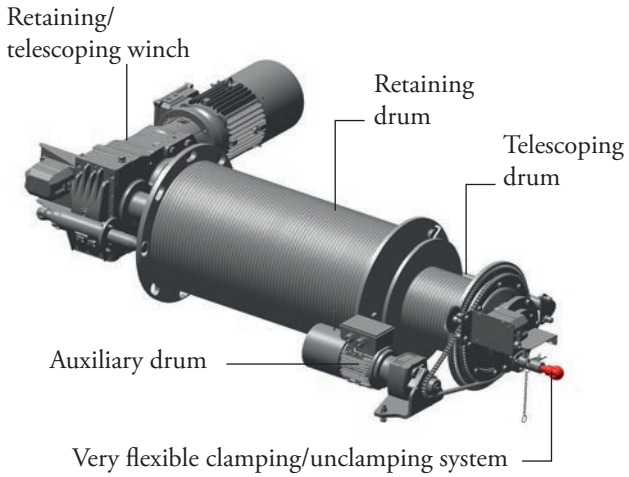
2 SOLUTIONS

1. **"EUROPEAN-STYLE TELESCOPING" FOLDED HORIZONTAL JIB**

2. **JIB SUPPORTED ALONG THE "AMERICAN TELESCOPING" MAST**

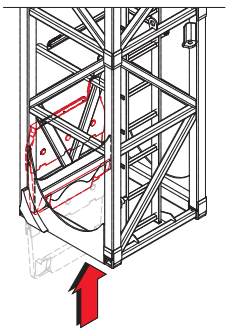


TELESCOPING SYSTEM



Telescoping operation performed by:

- The retaining winch. The telescoping drum is interlocked with the retaining winch (the retaining and telescoping drums are coupled, the rotation of the drums is ensured by the retaining winch)
- The telescoping yoke, which will be positioned under the inner mast (or extension mast), driven by the retaining winch

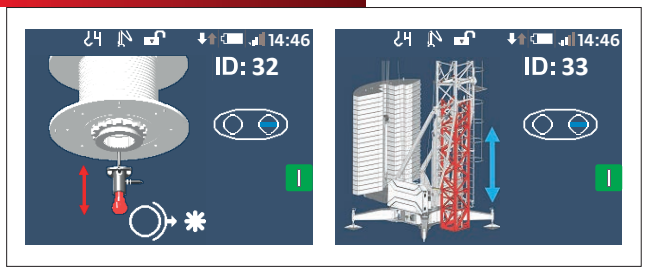


6 TELESCOPING

INSERTION OF AN EXTENSION MAST

- Very simple insertion of an extension mast using the crane
- Use of the crane hook to lift and insert the extension mast inside the mast
- Use of the auxiliary winch alone (disconnected) for the insertion phase only

SMART SET-UP



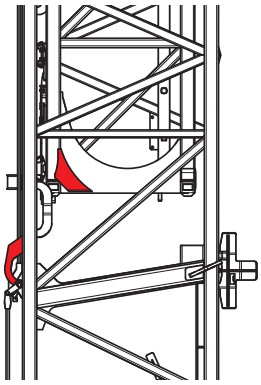
FIXING AN EXTENSION MAST

Easy to access with minimum stress

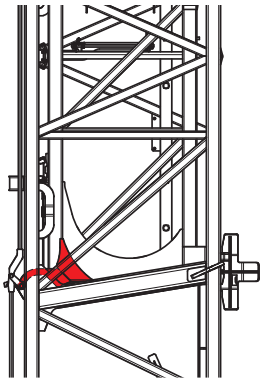
- Access to the fishplating screws by the ladder integrated inside the mast
- Intervention inside the mast and at breast height
- Screws and nuts connected to the mast preventing the loss of parts

TELESCOPING AN EXTENSION MAST

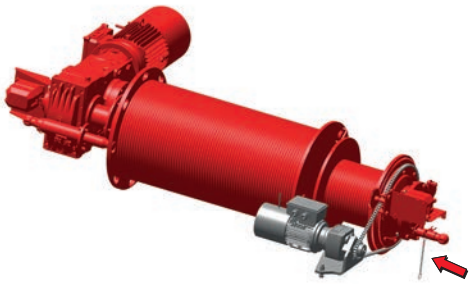
- Use of the retaining winch coupled with the telescopic drum



Telescoping of the extension mast, open locks



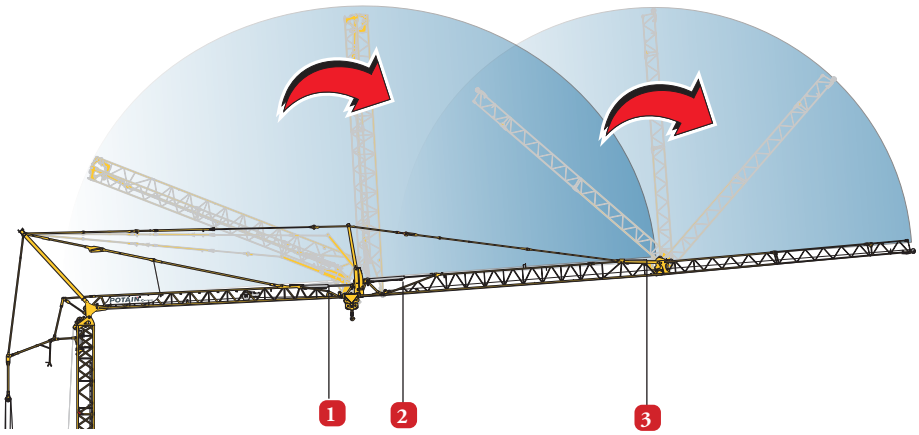
Locking:
Telescoping lugs of the extension mast (or the inner mast) on the locks



7 UNFOLDING THE JIB

Hydraulic technology simplifying the unfolding of the jib

- Hydraulic unfolding of the jib through 3 cylinders wired at the factory and a hydraulic unit located on the head of the mast
- Continuous unfolding movement, passing the controls of the various cylinders automatic during unfolding or folding of the jib



Hydraulic Jacks

SMART SET-UP

NEW

- Sensor controlled working positions
- Safe folding of the jib nose accessible by the crane operator


POTAIN

Power supply

Electrical network		Winch	Required power	Nominal intensity	Starting current intensity
400 V - 50 Hz		25 HPL™ 15	29 -- > 21 kVA	61 A	71 A
480 V - 60 Hz				51 A	59 A
400 V - 50 Hz		25 HPL™ 15	34 -- > 24 kVA	61 A	71 A
480 V - 60 Hz				51 A	59 A

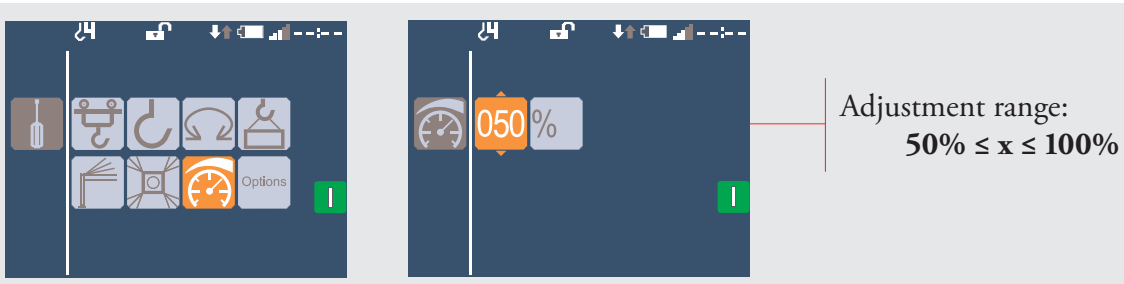
Power Control

POWER LIMITATION

This features allows the power required by the crane to be adapted to the power available on the power supply network.

ADJUSTMENT FROM THE REMOTE CONTROL

Entering the power limitation value directly from the remote control, without intervention on the computer located in the control panel.



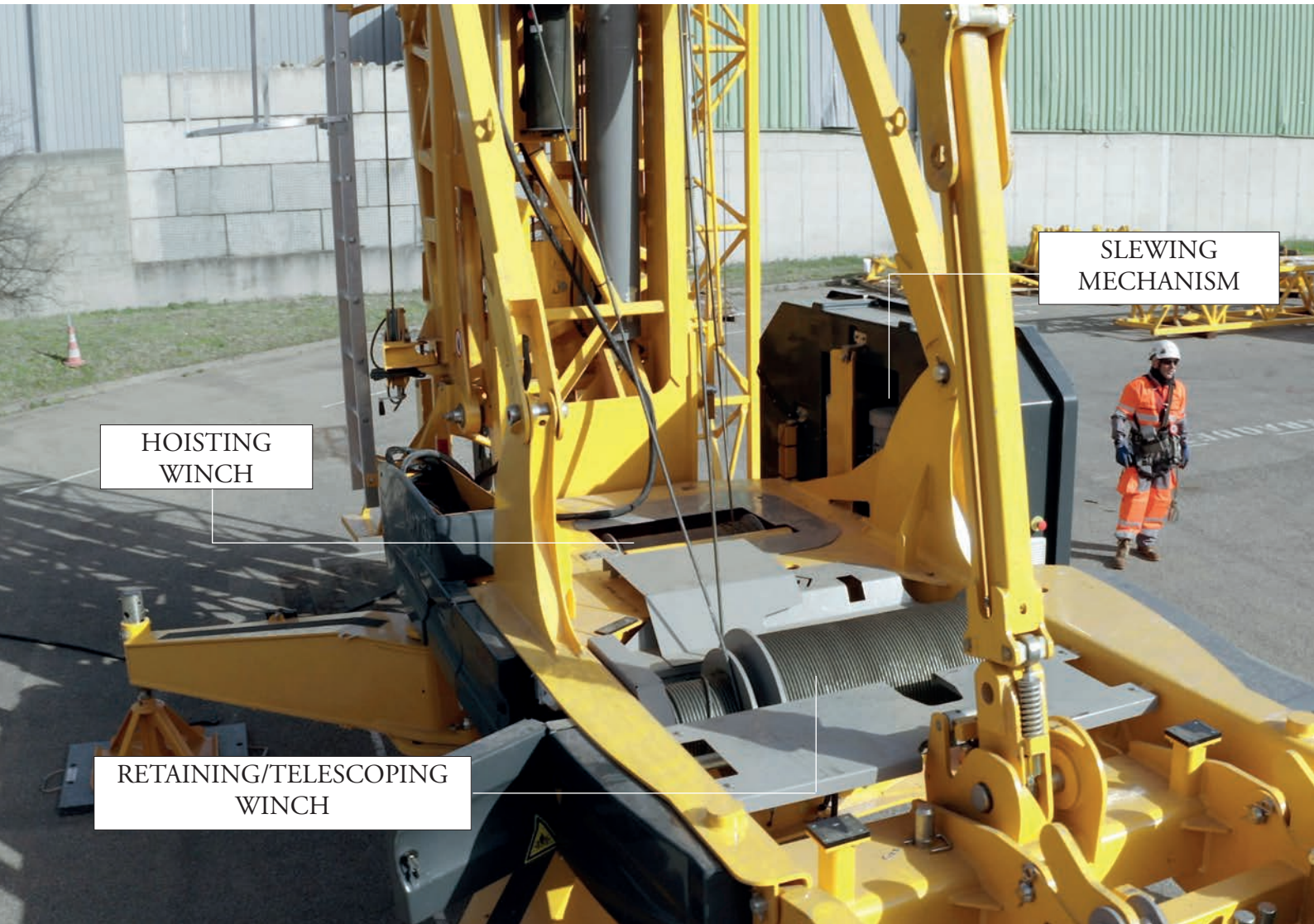
- 29/34 kVA: operation with maximum performance
- 21/24 kVA: operation with adapted speeds
- Limits are activated only when hoisting; other movements always perform at 100%.
- Reduced on-site operating costs with a cheaper subscription

(Power required for installation: 15 kVA)

400 V - 50 Hz 480 V - 60 Hz								hp	kW
	25 HPL ™ 15	m/min	2.1	16	30	46	54	25	19
		kg	6000	6000	3000	1500	1200		
	5 DVF 5 Optima	m/min	14.7	39	55	70		5.5	4
		kg	6000	6000	2000	200			
	HPS 152	rpm	0 → 0.8					2 x 5.5	2 x 4

FLEXIBILITY, PRECISION AND SMOOTHNESS OF MOVEMENTS, CUSTOMIZATION OF THE OPERATING MODE

- **Optimization of hoisting and trolleying speeds** based on the load
- **Sway limitation**
- **Three operating profiles** for a choice of slewing settings
- **Micro-speed function** for precise load positioning



Hoisting - HPL™ (High Performance Lifting)

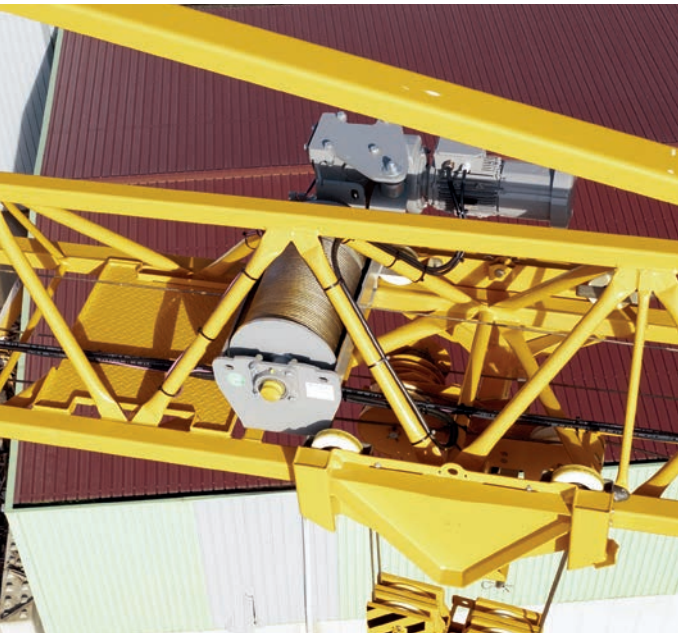
NEW

25 HPL™ 15, power 19 kW

- Optimization of the speed according to the lifted load
- Permanent 4-fall rope reeving with horizontal jib / 3 extension masts
- Gradual change of speed, following the acceleration and deceleration ramps
- Micro-speed function directly activated from the remote control: hoisting speeds adapted for lifting phases requiring high precision
- Ditch is possible for all machine configurations: Example: ditch depth - 6 m in double rope reeving, horizontal jib 45 m with 2 extension masts

- New “limited speed” operating mode activated at the factory, to reduce the hoisting speed “up” at no-load and low-load and to maintain correct hoist rope winding during an emergency stop:
  - Example: hoisting with no load ---> maximum speed = 39 m/min

Trolleying movement - DVF Optima



5 DVF 5 Optima, 4 kW power

- Optimization of the speed according to the lifted load using full engine power for maximum productivity
- Smooth control: control of trolley movements without jolts
- Short acceleration and deceleration ramps, controlled by the variable frequency drive to eliminate swinging

Slewing - HPS (High Performance Slewing)

NEW

HPS 152, 2 motors x 4 kW

New slewing mechanism with continuous speed variation, flexibility in operating

- Automatic wind compensation for jib stabilization
- Sway limitation
- Counter-slewing
- Possibility for the crane operator to choose between three operating profiles (Drive Control) to adapt the responsiveness of the crane to his/her usual practices

Collector as option - Price code CL050

- Removes the right and left slewing limit switches
- Number of slewing turns no longer limited (free slewing)

Several weathervaning possibilities:

REMOTE CONTROL WEATHERVANING

OR

ELECTRIC WEATHERVANING FROM THE CRANE

MANUAL WEATHERVANING FROM THE MECHANISM

Retaining/telescoping winch - auxiliary mechanism

- The retaining/telescoping winch, consisting of a gear motor (similar to the Igo T 130) and two drums (retaining and telescoping drum) allows the jib to be raised and the mast to be telescoped.
- The auxiliary mechanism, which only drives the telescoping drum, is only used for the installation of extension masts.

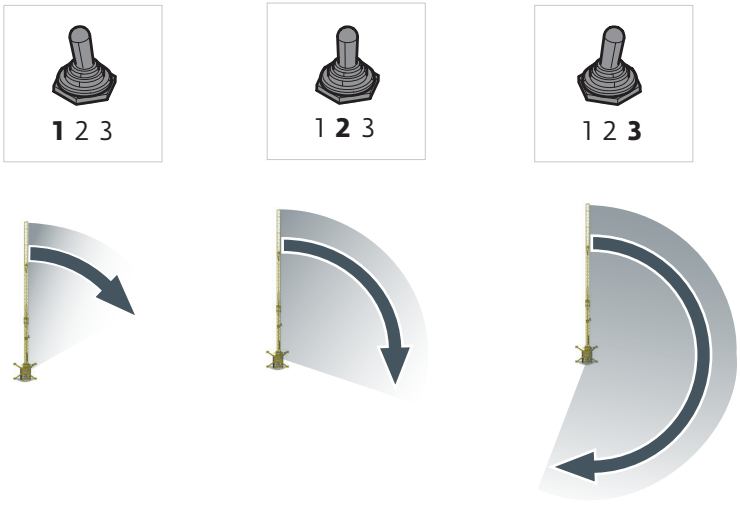
Drive Control

This function, designed entirely for the crane operator, allows the crane movements to be adapted to the maneuver required on the job site.

EASY TO PERFORM, PROVIDES PRECISE AND EFFICIENT WORK

It includes:

- **Micro-speed function (when hoisting)**
  The crane operator activates or deactivates this function through a simple button push on the remote control, the crane can be loaded or empty. **It allows reduction of the hoisting speed** to obtain the high precision needed for tricky hoisting operations: the positioning of the load, for example.
- **3 operating profiles for slewing**
  The crane operator selects the desired slewing profile using the remote control selector to achieve a more or less responsive and precise movement.



1. High-precision operating
2. Standard operating
3. Dynamic operating

High-precision operating

- This allows small-amplitude movements under low speeds for higher precision during maneuvers.

Standard operating

- It enables moderate amplitude movements to be performed at medium speed.

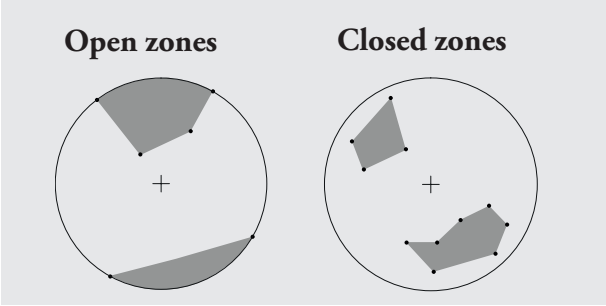
Dynamic operating

- This allows large-amplitude movements at high speeds for rapid execution during maneuvers.

Top Site - **OPTION** (Price code OI151)

MANAGEMENT OF PROHIBITED ZONES ➡ In compliance with standard En 17076 - safety level PL=c

Zone where overflight is prohibited; crane in service. This zone can exist in the presence of:
- public places
- areas where people are staying, such as living quarters on the job sites
- railroad tracks
- roads, etc.



- **Management of 1 to 2 prohibited zones with maximum 8 points** each (closed and opened)
- **Zone limitation with load and height (optional parameters)**
  Prohibited zones may incorporate a limitation due to the load lifted and the height of the crane hook:
  - If a zone is created with an entered and confirmed load value, the crane cannot enter that zone if the hoisted load is equal to or greater than the load indicated.
  - If a zone is created with an entered and confirmed height value, the crane cannot enter that zone if the hook is below the height value indicated.

  (It is not possible to set the height setting if the crane is in raised jib configuration)
- **Quick and easy zone calibration**, performed from the remote control
- With no intervention from the crane operator, as the crane approaches the prohibited zone, the movement or movements in question are slowed and then interrupted at the edge of the zone

Management of Top Site shunting and flashlight

In compliance with the new standard EN 17076, the Top Site system can be shunted with a flashlight serving to alert the job site.

Shunt mode can be activated for 60 minutes via the computer through the entry of a password: the job site manager is able to deactivate it before it finishes.

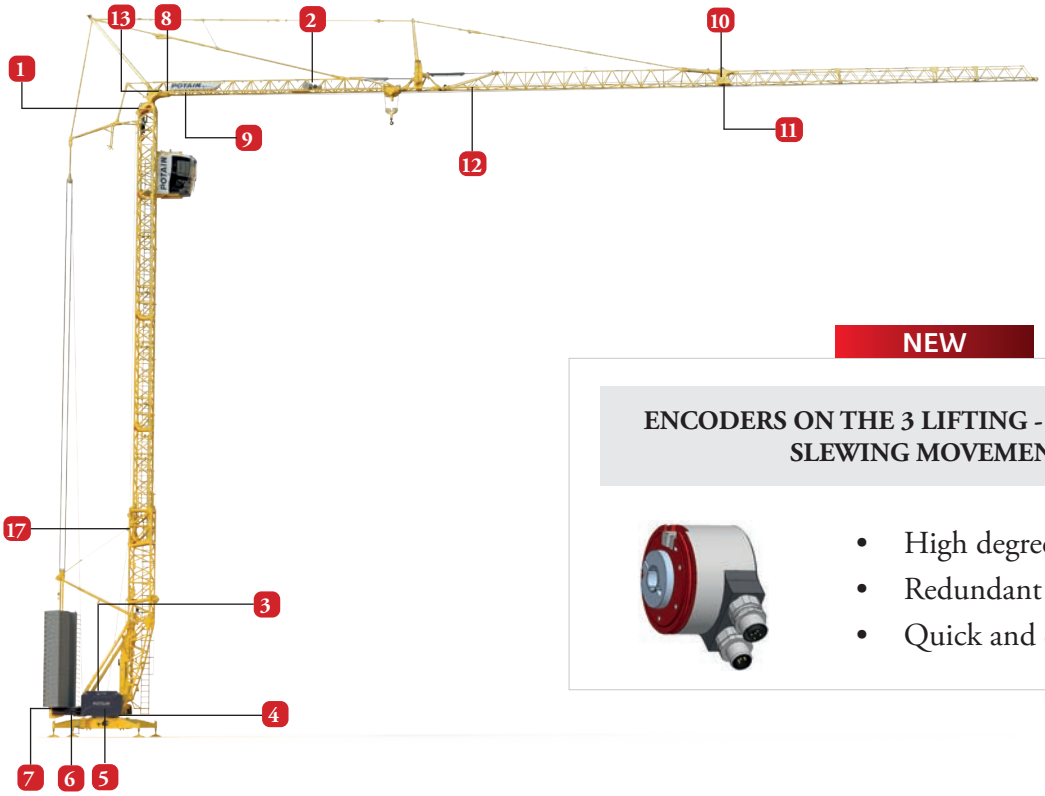
After 60 minutes of inactivity, shunt mode is automatically deactivated.

Date and time of last recorded shunt mode activations.

Top Tracing 3 - OPTION (Price code OI163)

MANAGEMENT OF PROHIBITED ZONES + INTERFERENCE MANAGEMENT

Crane safety devices

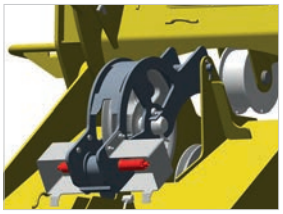


NEW

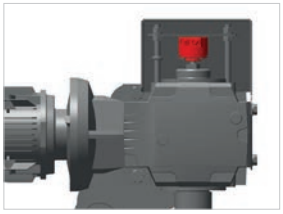
ENCODERS ON THE 3 LIFTING - TROLLEYING - SLEWING MOVEMENTS

- High degree of reliability
- Redundant sensors
- Quick and easy calibration

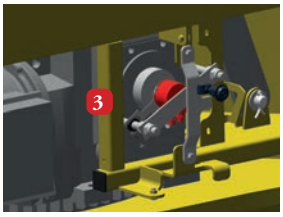
CRANE OPERATION



1 Load sensor
Control of "upward" lifting movement + load measurement



2 Trolleying sensor
"Forward and backward" movement cutoff control + trolley position measurement



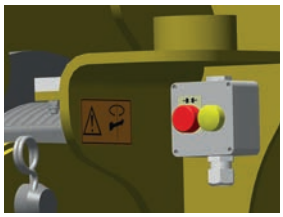
3 "Up and down" movement cut-off control + hook position measurement

4 Orientation angle sensor: limits the movement to 1.5 turns left and right (encoder used for Top Site and Top Tracing 3 options)

5 CCS computer (+ load/capacity sensors for ---> moment safety)
"Hoisting" movement and "trolley out" cut-off control

PUTTING OUT OF SERVICE

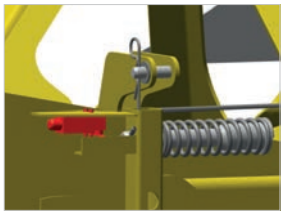
6 Emergency stop



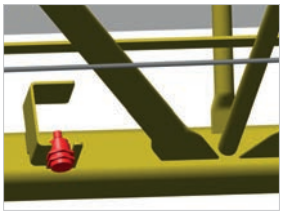
7 Electric weathervaning control

NEW

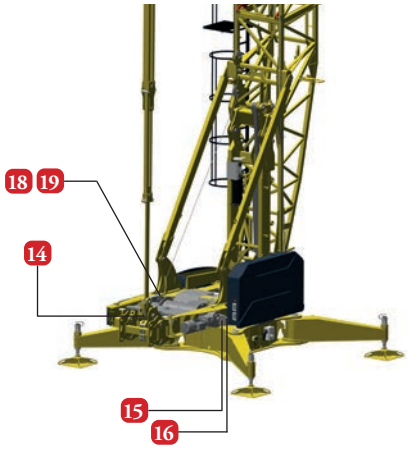
AUTOMATIC RE-TENSIONING OF TROLLEY ROPE - RADIUS RE-CALIBRATION



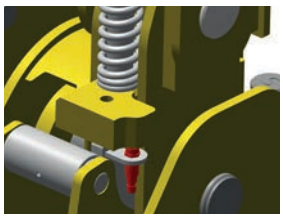
8 Sensor
Checking the tension of the trolley rope



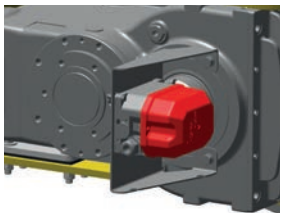
9 Inductive sensor
Check the trolley position



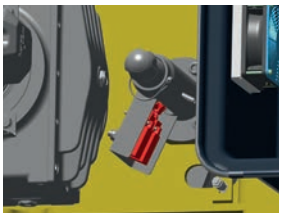
RETAINING



14 Inductive detector
Check retaining rope relaxed



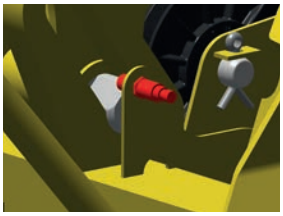
15 Retained limit switch
Check the end of the unwinding of the retaining rope

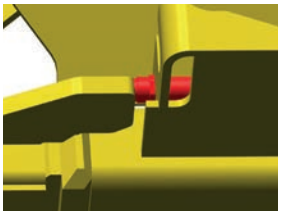


16 Retaining winch lock/ unlock sensor

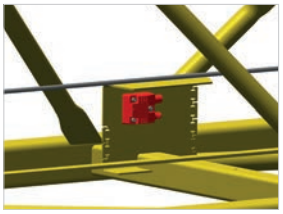
NEW

UNFOLDING / FOLDING OF THE JIB





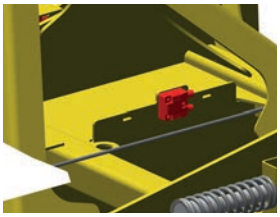
10 11 Inductive sensors
Check the positions of the folded and aligned jib nose



12 Inclinometer
Check the completely folded up jib position (for weathervaning)

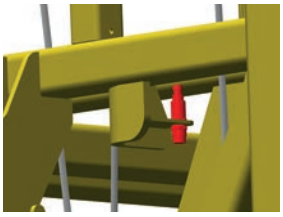
NEW

RAISING THE JIB

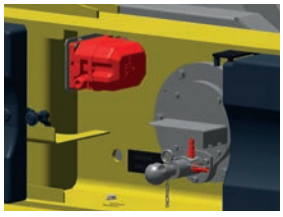


13 Inclinometer
Check the horizontal and raised jib positions

TELESCOPING



17 Telescoping upper limit switch



18 Telescoping lower limit switch

19 Inductive detector
Check clutching and unclutching

Maintenance positions

☞ Maintenance positions, refer to page 22

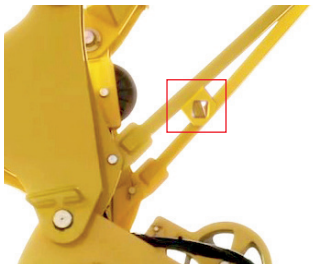
Access to the crane

Several anchor points on the crane allow the technician to easily attach the safety cable.
Visual identification code identical to the GME

5 ANCHOR POINTS
on the jib up to the trolley winch

6 FOOT REST

4 ANCHOR POINTS / FOOTBOARD
on the mast tip



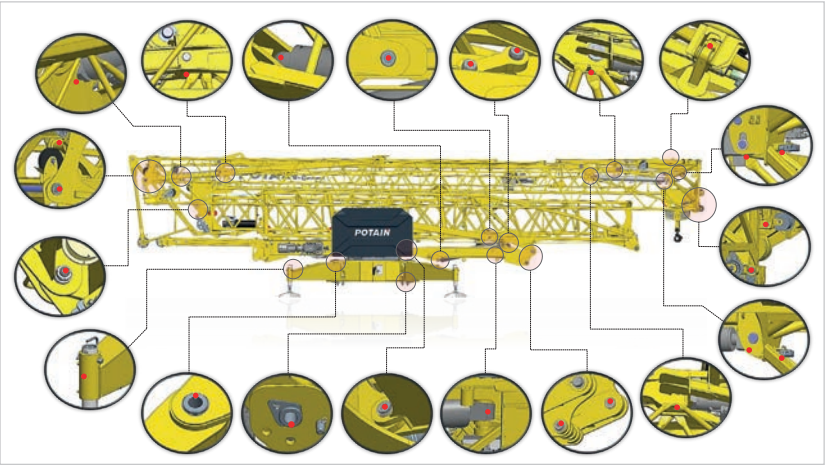
3 ANCHOR POINTS
on the beam

1 ANCHOR POINTS
on the rear chassis struts

2 ANCHOR POINTS
on the footboard

Greasing points

Multiple greasing points are provided on the articulations, easily accessible and identifiable on the crane (red plugs).



Greasing the slewing ring

Good lubrication protects and extends the life of the ring.
Two options:

Automatic internal greasing using cartridges
STANDARD

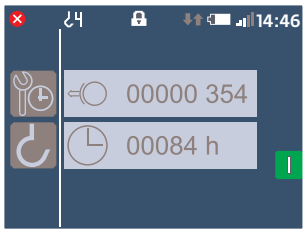
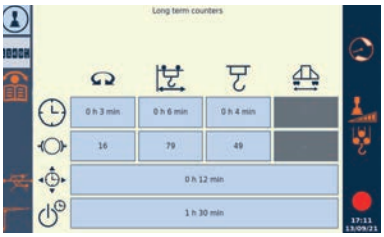
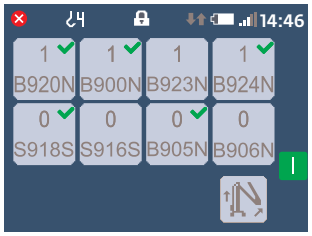
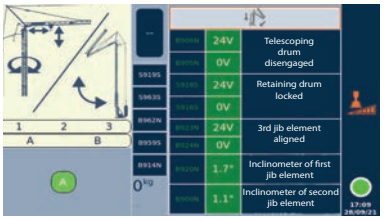
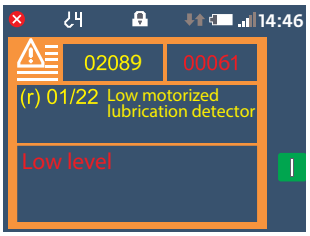
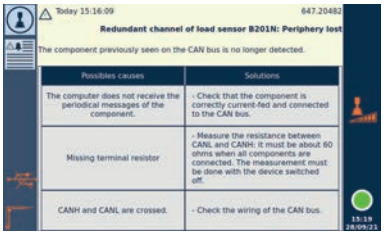
Motorized lubrication, internal and external lubrication with the same type of grease
OPTION (Price code CG020)

Efficient diagnostic solutions

OPTIMIZATION OF THE CRANE AVAILABILITY

The remote control interface and the CCS display provide access to key information on the machine conditions. They assist the technician in troubleshooting and maintenance operations:

- **Operating counters** (power-on time, operating hours and number of brake strokes for each movement)
- **Machine conditions**: check that the control station and safety devices are working properly
- **Display of fault messages and notifications** (fault codes, part identification, description of the fault)

	REMOTE CONTROL	CCS DISPLAY
OPERATION COUNTERS		
SENSORS AND LIMITERS CONDITIONS allowing the passage from one fitting or dismantling stage to the next		
DEFAULT MESSAGES		The CCS display provides access to fault codes and their origins and the actions to be taken to reduce downtime. 

CraneSTAR Diag

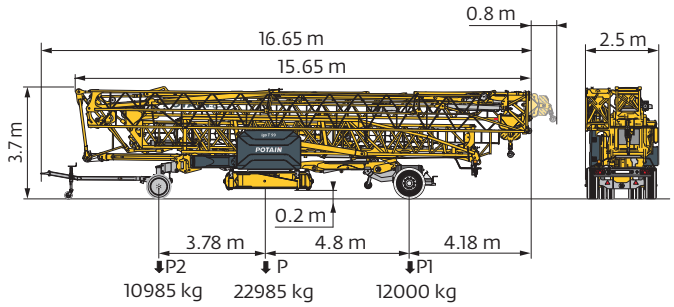
Thanks to the CraneSTAR Diag telematics solution, it is possible to access this information remotely to establish an efficient diagnosis (provided that the crane is equipped with a modem)

CraneSTAR Diag hardware (Price code OI175)
CraneSTAR Diag activation per year (Price code OI176)

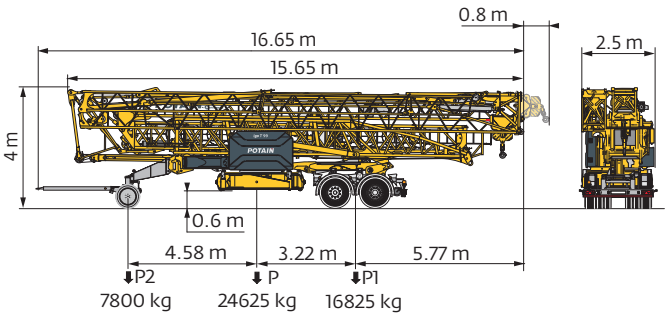
Transport axles

ON-ROAD TRAILER TRANSPORT

25 DJ126M/S125

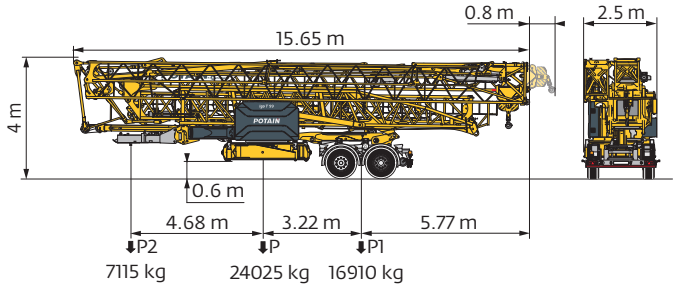


25 DJ126M/S215M

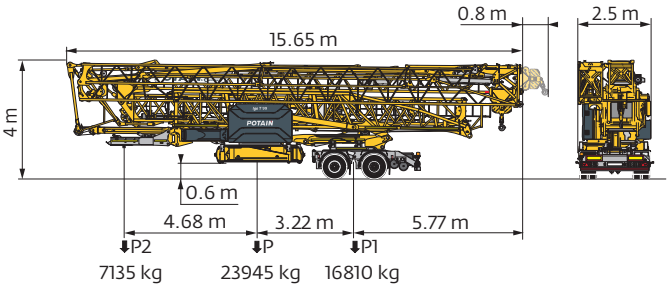


SEMI-TRAILER ROAD TRANSPORT

25 SL121/S215M



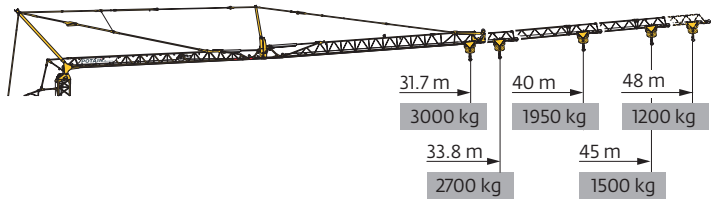
80 SL122/J215M (EBS)

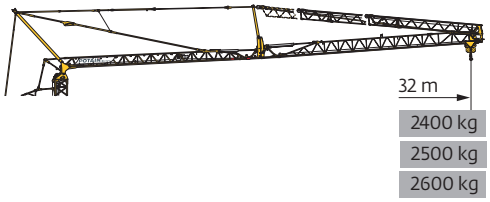


J215M : RCE e2*2007/46*0493*02
WVTA e2*2007/46*0493*02

2 TROLLEY POSITIONS DURING TRANSPORT according to telescoping kinematics
- Trolley stored at the jib foot ---> European telescoping
- Trolley stored on the 1st jib joint ---> American style telescoping

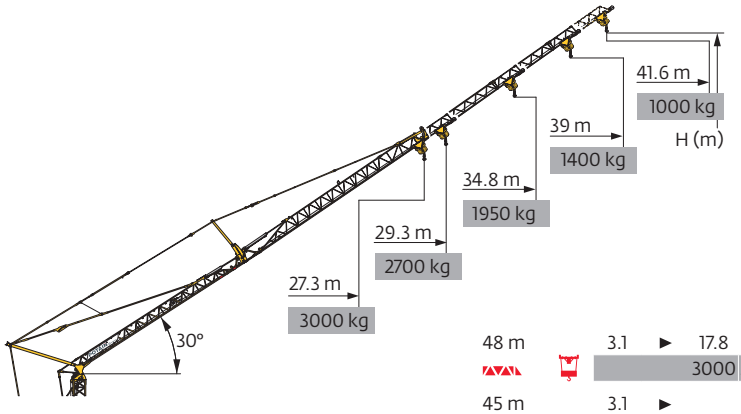
Load curves





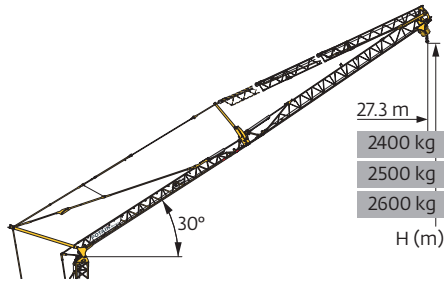
48 m	3.1 ►	13.3	14	16	18	20	22	24	26	28	30	32	34	36	38	40	42	44	46	48	m
	6000	5600	4800	4100	3600	3200	2900	2650	2400	2200	2050	1900	1750	1650	1550	1450	1350	1250	1200	kg
45 m	3.1 ►		15	16	18	20	22	24	26	28	30	32	34	36	38	40	42	44	45	m
		6000	5500	4800	4200	3700	3300	3000	2750	2500	2300	2150	2000	1850	1750	1650	1550	1500	kg
40 m	3.1 ►		15.8	16	18	20	22	24	26	28	30	32	34	36	38	40	m			
		6000	5900	5100	4500	4000	3600	3300	3000	2800	2550	2400	2200	2100	1950	kg				
33.8 m	3.1 ►			17.3	18	20	22	24	26	28	30	32	33.8	m						
		6000	5700	5100	4500	4100	3700	3400	3100	2900	2700	kg								
31.7 m	3.1 ►			17.7	18	20	22	24	26	28	30	31.7	m							
		6000	5900	5200	4600	4200	3800	3500	3200	3000	kg									

48 m	3.1 ►	15.1	16	18	20	22	24	26	28	30	32	m
	6000	5600	4800	4200	3800	3400	3100	2850	2600	2400	kg
45 m	3.1 ►	15.5	16	18	20	22	24	26	28	30	32	m
	6000	5800	5000	4400	3900	3500	3200	2950	2700	2500	kg
40 m	3.1 ►		16	18	20	22	24	26	28	30	32	m
	6000	5200	4600	4100	3700	3300	3100	2800	2600	kg



H (m)	48 m	45 m	40 m	33.8 m	31.7 m
H+2	56.5	55	52.5	-	-
	53.5	52	49.5	-	-
H+1	50.5	49	46.5	43.4	42.2
	47.5	46	43.5	40.4	39.2
H+0	44.5	43	40.5	37.4	36.2
	-	-	-	-	-

48 m	3.1 ►	17.8	20	22	24	26	28	30	32	34	36	38	40	41.6	m
	3000	2600	2300	2050	1850	1700	1550	1450	1300	1200	1150	1050	1000	kg
45 m	3.1 ►	21.2	22	24	26	28	30	32	34	36	38	39	m		
	3000	2850	2600	2350	2150	1950	1800	1650	1550	1450	1400	kg			
40 m	3.1 ►	24.5	26	28	30	32	34.8	m							
	3000	2800	2550	2350	2150	1950	kg								
33.8 m	3.1 ►	27	28	29.3	m										
	3000	2850	2700	kg											
31.7 m	3.1 ►	27.3	m												
	3000	kg													



48 m	3.1 ►	22.7	24	26	27.3	m
	3000	2800	2550	2400	kg
45 m	3.1 ►	23.5	24	26	27.3	m
	3000	2900	2650	2500	kg
40 m	3.1 ►	24.3	26	27.3	m
	3000	2750	2600	kg

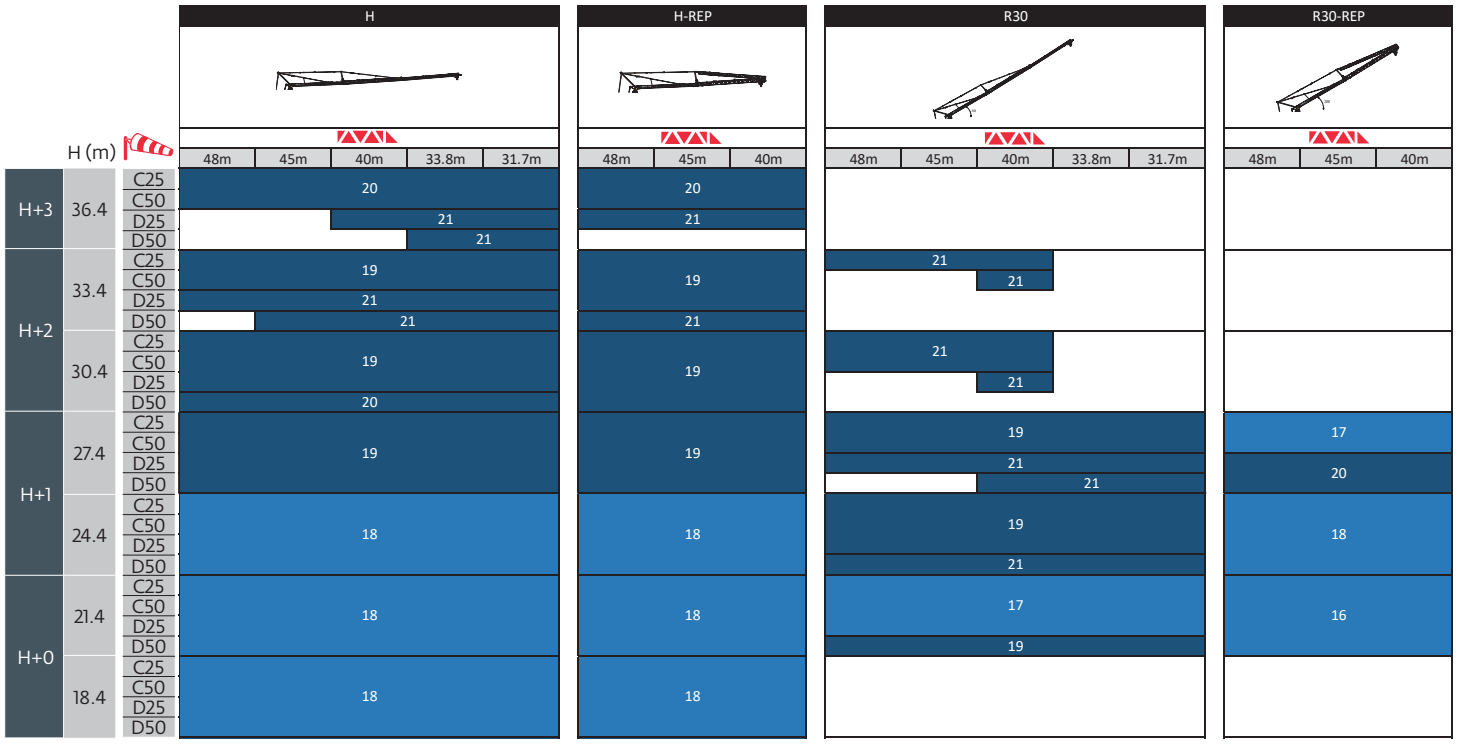
H (m)	48 m	45 m	40 m
H+1	42.2		
	39.2		
H+0	36.2		
	-		

Ballast composition

C25 = FEM = ASME

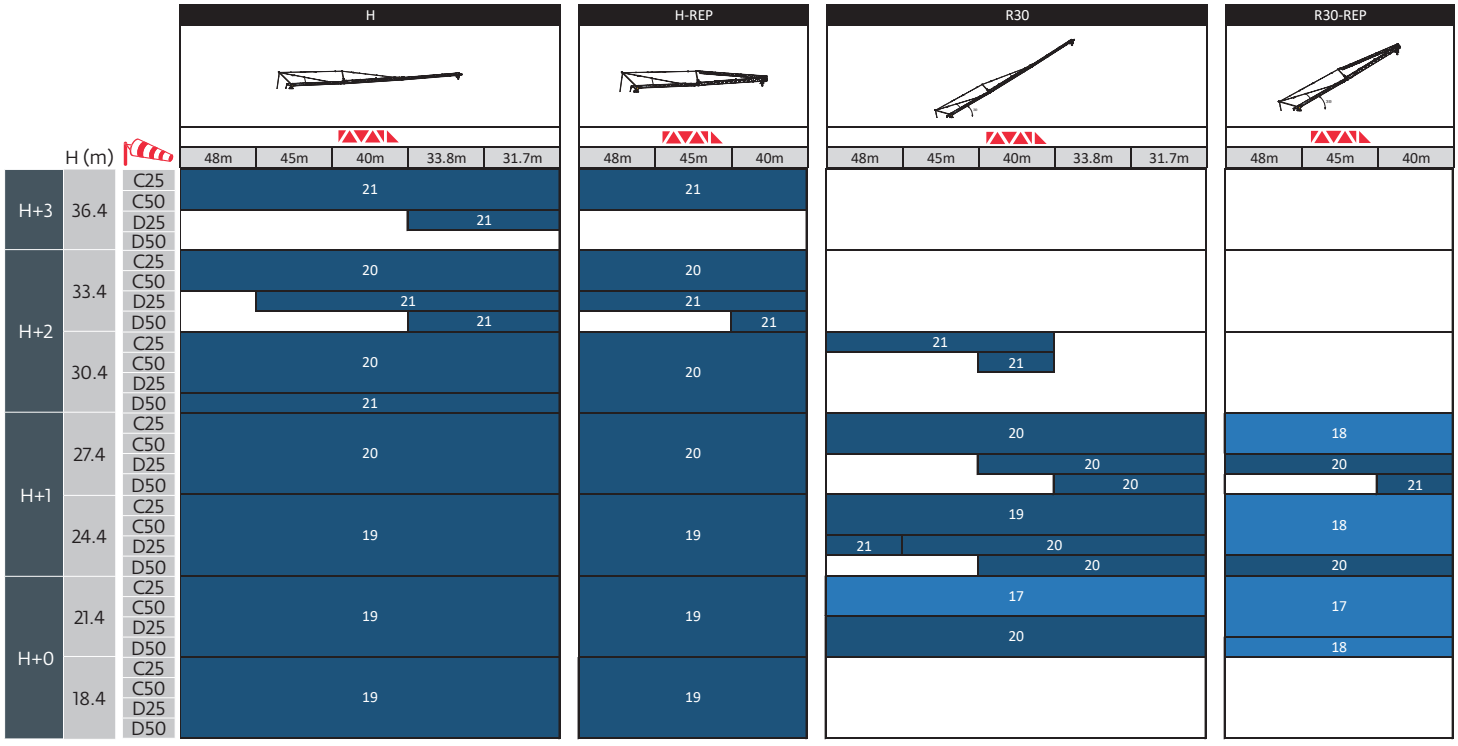
WITHOUT CAB

R = 3.3 m



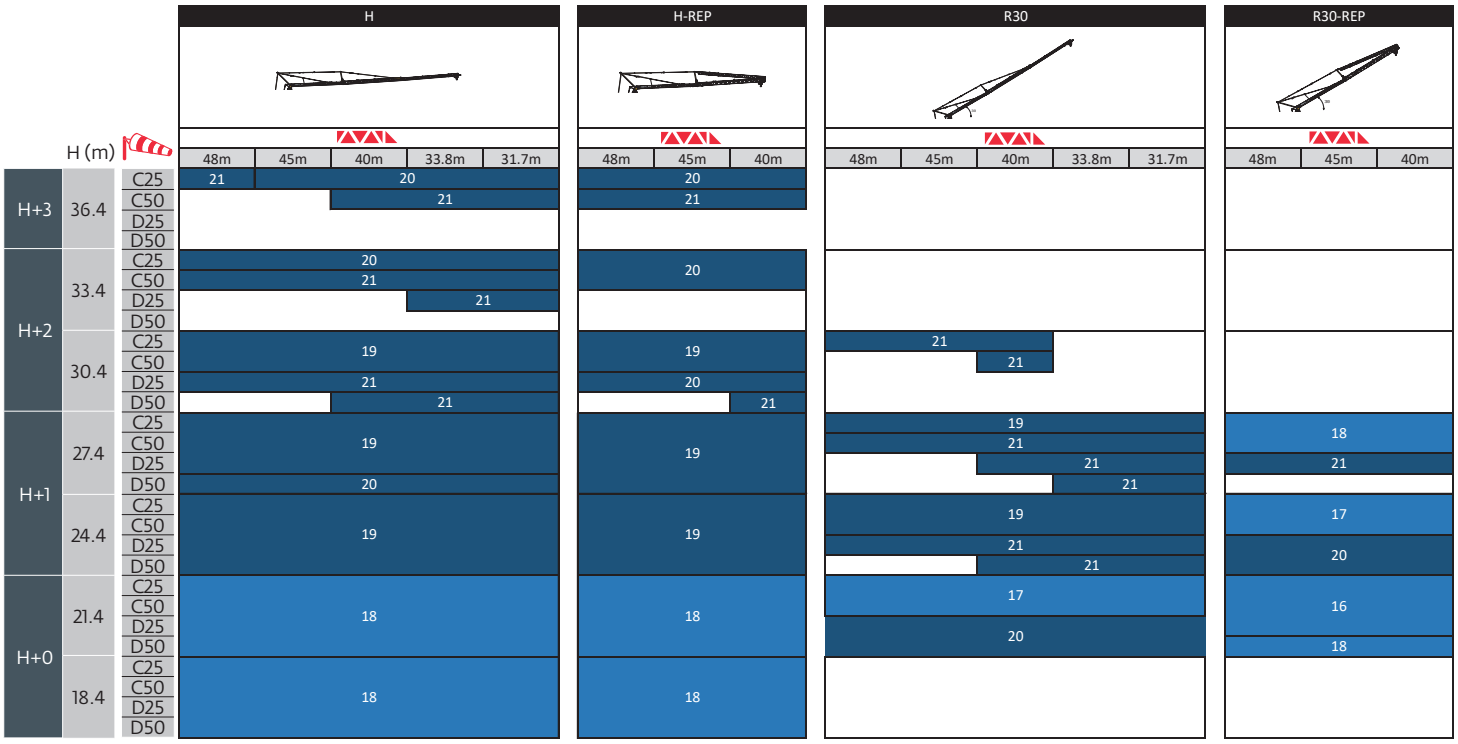
H (m): Hook height at the jib foot

R = 3 m

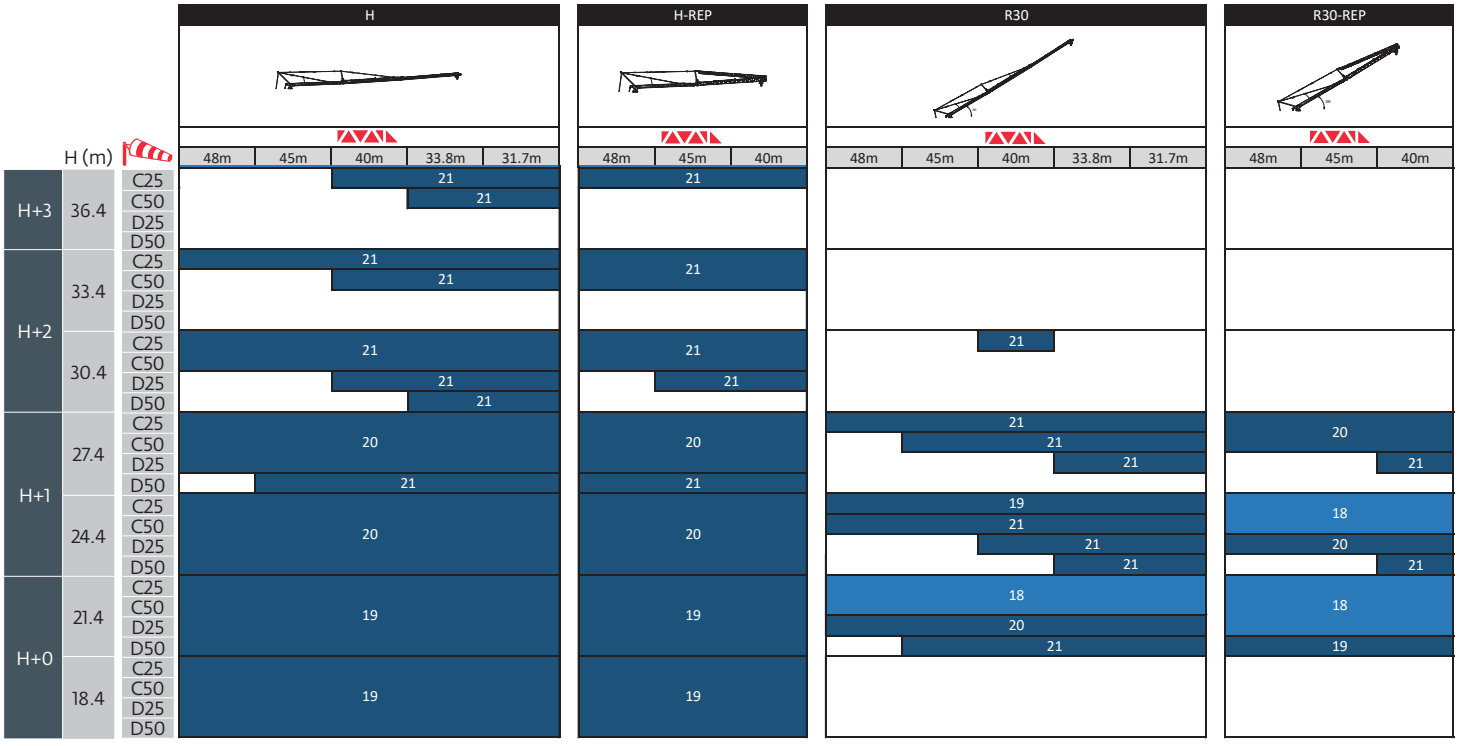


WITH CAB

R = 3.3 m



R = 3 m



Standard and optional equipment

Standard equipment	
Radius	45 m
Hook height	20 - 23 m
Maximum load	6000 kg
Hoisting winch	25 HPL™ 15
Trolleying	5 DVF 5 Optima
Slewing	HPS 152
Rope reeving	4 fall
Slewing ring lubrication	Cartridges
Remote control	Included
Auxiliary control unit	Included
Anemometer	Included
Power supply	400 V - 50 Hz or 480 V - 60 Hz
Guarantee	Standard 1 year
Main optional equipment	
Jib	48 m range
	Jib raised to 30°
Cab	Ultra View cab
	Ultra View Light cab
Additions	375 mm high support plates
	Extension mast
	Ballasting derrick
	Collector
Zone limiter system	Top Site
Interference system	Top Tracing 3
Remote diagnostics system	CraneSTAR Diag
Transport axles	Solutions 25 km/h - 80 km/h and associated kits

Notes

Notes

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