

Technical Service Bulletin no. 23-329-B

√ PIP - Action required

The documents published in POTAIN e-Tech were written by POTAIN for a specific crane model. They cannot be duplicated, transferred or applied to any other crane model (unless otherwise specified in the documents). The most recent document is the one with the latest index, available in POTAIN e-Tech. We remind you that the crane's instruction manual and any updates are the reference documents for all crane users.

Recipients

POTAIN service network and representatives, all regions.

Subject

Improvement of the wind settings.

Tower crane models

MDT248 – MDT249 – MDT259 – MDT268 – MDT268A – MDT269 – MDT289 – MDT308 – MDT308A – MDT319 – MDT349 – MDT368 – MDT368A – MDT389 produced before the end of February 2023, and in some jib lengths.

B	Technical Support	Feb. 6 th , 2023	Chapter 2 amendment
A	Technical Support	Jan. 30 th , 2023	Creation
Index	Written by	Date	Comment



The composition and layout of the wind-sail plates have been updated

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1. Origin/subject:

1.1- Origin:

We are observing a climate change where periods of strong wind occur more frequently and are less predictable. The regulatory requirements and the professional standards limit the risk of tower cranes tipping over in case of exceptional weather events. However, the professional standards need to be reconsidered in the light of these climate events and their consequences.

Potain tower cranes designed and manufactured by Manitowoc comply with the safety requirements of Machinery Directive 2006/42/EC and meet the requirements of the latest versions of wind stability standards and regulations, in particular applicable European standards EN14439: 2006+A2: 2009 and FEM1005. Potain cranes therefore strictly comply with regulatory requirements and professional standards.

As part of our continuous improvement approach, laboratory studies have recently been conducted on our initiative. They have led to provisions enabling us to further improve the behavior our cranes when they are subjected to strong winds.

1.2- Subject:

As part of the improvements described above, new wind-sail plates will be affixed to the jib of the tower crane models listed above and **produced in series from February 2023**.

These new provisions concerning new cranes also apply to cranes MDT248 to MDT389 in service, provided that the crane is configured in one of the jib lengths concerned. Potain recommends that the new settings should be made on the ground, the next time the crane is dismantled/erected.

This service bulletin,

- Details the configurations concerned and implemented in order of priority,
- Defines the new instructions for positioning the wind-sail plates in the jib,
- Provides additional information concerning the authorizations of advertising panels on the counter-jib.

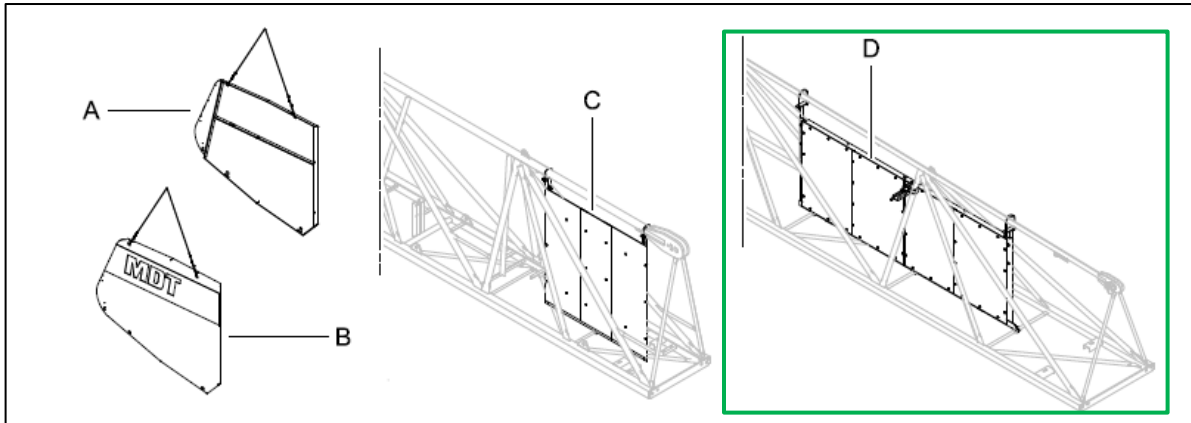
2. Improvement of the wind settings:

2.1- New identifications of the wind-sail plates

The wind-sail plates A, B, and C as described in the crane technical manuals are still used.

A new plate "D" must be fitted according to the new provisions.

Example: new plate D required ▼

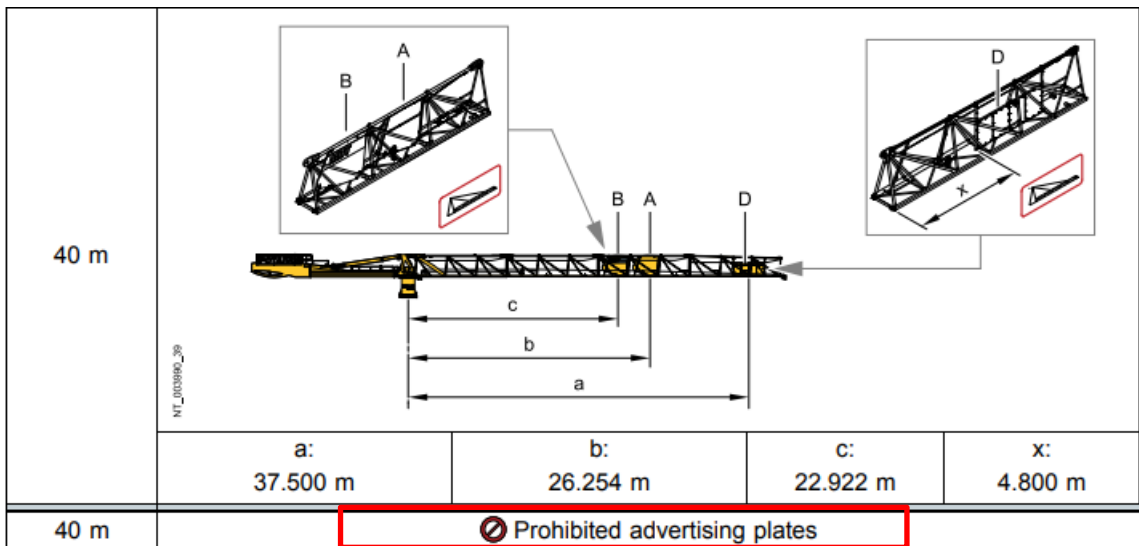


2.2 - New positions:

Refer to the technical manual concerning:

- Positions of the wind-sail plates **A, B, C, D**, when these are mandatory,
- Authorization or prohibition of the customer advertising panel on the counter-jib depending on the jib length.

Example: new Wind provisions - diagrams in the technical manual ▼



2.3- Conditions for the advertising panels on the counter-jib:

The presence of customer advertising panels creates an additional area exposed to the wind that can modify the crane behavior.

- **Customer advertising panel ON the counter-jib:**

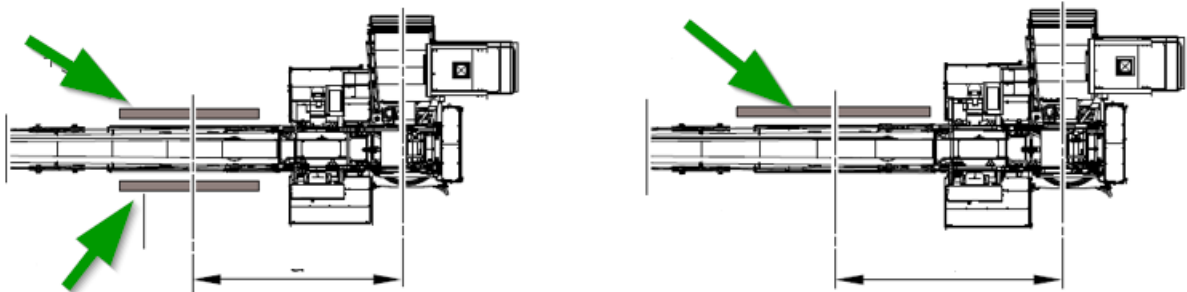
- ▶ A advertising panel on the counter-jib may be prohibited on some jib lengths.
 - ⇒ It is essential to check the updated crane technical manual.



 Advertising plates prohibited

- ▶ Some configurations of the slewing crane part allow two advertising panels to be installed opposite each other at the locations planned on the counter-jib.
 - ⇒ It is essential to check the authorized panel areas in the updated crane technical manual.

Example in the chapter "Customer's advertising plates":



▲ 2 advertising panels

▲ 1 advertising panel

- ▶ The maximum authorized area for 1 or 2 advertising panels, the dimensions and their positions are defined in the updated manual: the maximum height of a customer advertising panel is 1.40 meters.

- **Advertising panel suspended UNDER the counter-jib:**



Panels suspended under a counter-jib are prohibited on models MDT248 to MDT389.

On other tower crane models, if a panel has to be suspended under the counter-jib, prior written authorization from Potain must be obtained.

3. Order of priority:

3.1- Locations of the cranes concerned

The cranes have been registered in GWX with the location identified during the initial order. The service and distribution network must validate and correct, if necessary, the list of cranes present on its territory.

Once the crane has been located, the network must identify the customer and inform them of the problem addressed by this service bulletin.

3.2- Order of priority for the cranes concerned

New settings on the cranes in service must be planned on the ground, in the following order of priority:

Key:

Jib length **not** concerned by a new setting of the wind-sail plates on the crane ⇒ caution, the authorization or not, of the **advertising panel** on the counter-jib may have changed in the updated manual depending on the jib length. This point must be checked by the crane owner.

Jib length **concerned** by a new setting of the wind-sail plates.

PRIORITY	Jib length (meters) ▶					45	50	55	60	65	70	75
1	MDT349/MDT368/MDT368A/MDT389					X	X	X	X	X		

PRIORITY	Jib length (meters) ▶	25			40	45	50	55	60	65	70
2	MDT289/308/308A/319				X	X	X	X	X		

PRIORITY	Jib length (meters) ▶				40	45	50	55	60	65
3	MDT248/249/259/268/268A/269				X	X	X	X		

PRIORITY	Jib length (meters) ▶		30	35	40						70	75
4	MDT349/ MDT368/MDT368A/389		X	X	X							

PRIORITY	Jib length (meters) ▶	25	30	35						65	70
5	MDT289/308/308A/319		X	X							

PRIORITY	Jib length (meters) ▶	25	30	35						60	65
6	MDT248/249/259/268/268A/269	X	X	X							

4. Additional wind-sail plate D:

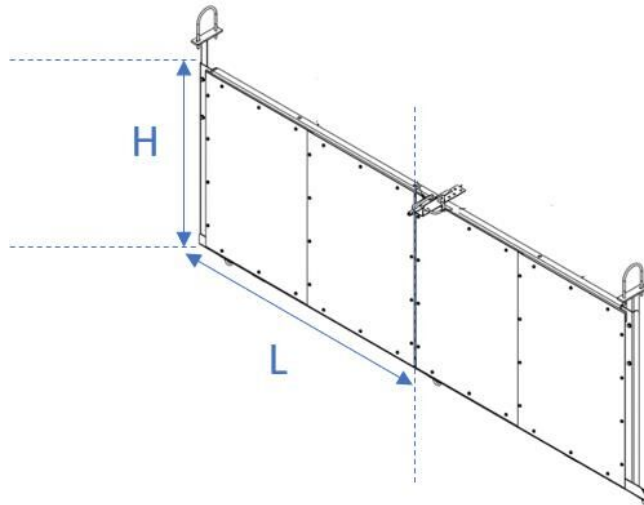
4.1- Definition of the need:

If an additional plate D is required, it will be installed with the jib on the ground, the next time the crane is dismantled/erected.

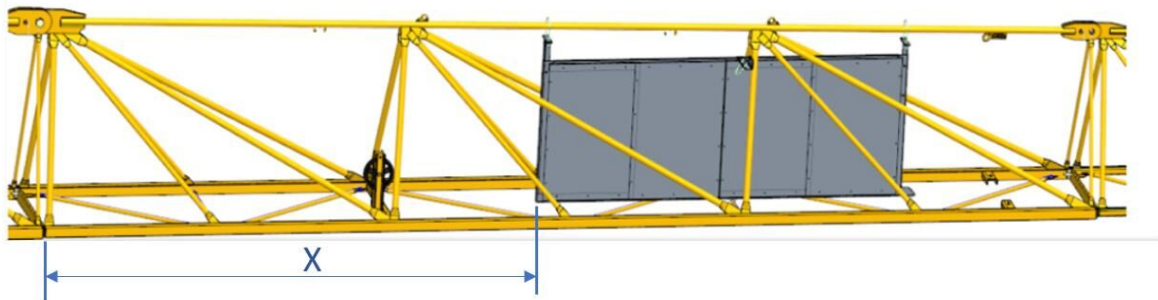
If, for exceptional reasons, the plate has to fitted in the air, consult your usual Customer Support or Product Support.

4.2- Description of plate D:

- Area: 4.3 m²
- Dimensions: Height H = 1.255 meters
Length 2xL = 2x1.795 = 3.590 meters
- Weight: 105 kg



- Position of the wind-sail plate D in the jib section defined, depending on the jib length. Example:



The positioning of the wind-sail plate **D** when fitting it on the ground in the jib section is given by the dimension **X**. This dimension is measured from the edge of the half-bearer of the jib section to the edge of the wind-sail plate assembly.

4.3. Procurement:

Plate with fixings for 1 crane:

DESCRIPTION	QUANTITY	CODE
COMPLETE WIND-SAIL PLATE 4.3 M2	1	84129821

No spare part orders, no warranty claims in GWX are required in the specific case of this PIP.

Send your request for parts directly by email to: PIP23-329@manitowoc.com specifying

- The number of plates required,
- The delivery address,
- The required delivery deadline depending on the refitting schedule for the crane(s).

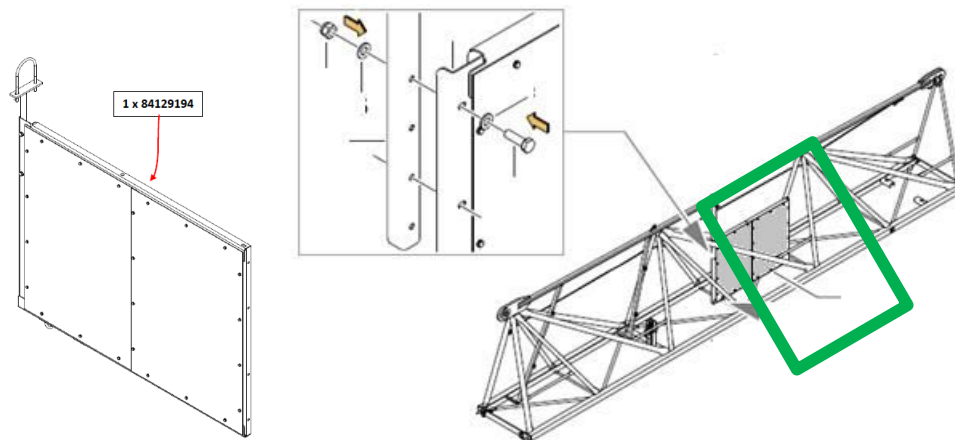
The plate is delivered by Potain, free of charge, in a wooden crate.

Due to difficulties in the procurement of certain components, please order the parts required for the short-term scheduled operations, and then as required.

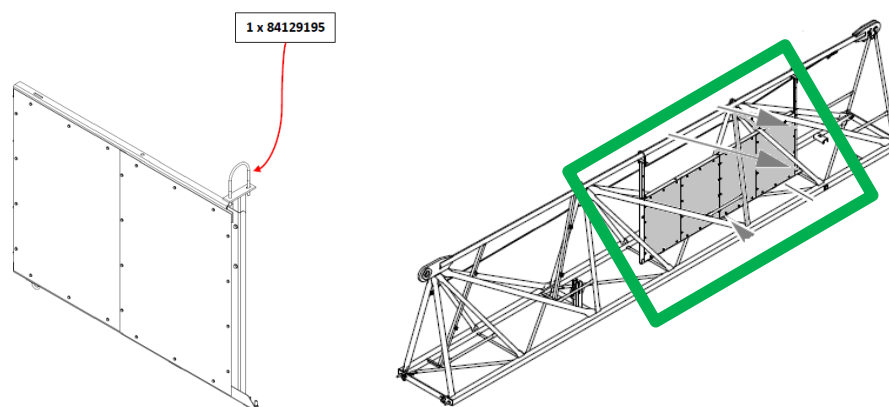
4.4 Assembly procedure:

The wind-sail plate **D** consists of two sub-assemblies to facilitate fitting one after the other.

Fitting the first sub-assembly ▼



Fitting the second sub-assembly ▼



5.2- Updating the slinging points of the jibs:

The slinging points of the jib have changed and are updated in the same additions and technical manual documents, mentioned above.

5.3- Setting of slewing motion at commissioning:

Reminder: The settings for the slewing motion to be carried out at commissioning, depending on crane's configuration, can be found in the crane's technical manual.

6. Proof of completion (Form):

Please return the PIP proof of completion within 24 months after receiving this service bulletin, and no later than **February 6th, 2025**.

7. Reminder of obligations:

In accordance with the terms of the distribution contract signed with POTAIN, the Representative must perform, at the Company's request and within the time limits indicated, all PIP operations on the cranes in the distribution territory which it has been assigned.

Change of owner: As soon as the service and distribution network has been informed that a crane has been sold, it must provide Potain with the contact details of the old and new owners. Read service bulletin BST20-244.

For further information, please contact your usual "Potain customer support" agent or Tower Crane "Potain Product Support".