

Technical Service Bulletin No. 10-026-C

√ Information only

The documents published in POTAIN e-Tech were written 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. 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

Update of the instructions for paint touch-ups

Models

All tower crane models.

С	Technical Support	Sept. 3 rd , 2024	Update of lacquer codes
В	Technical Support	February 3 rd , 2022	Modification of methods
Α	Technical Support	January, 2018	Update of product codes
-	Contact center	2010	Creation
Index	Written by	Date	Comment

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Update of the instructions and products recommended for touching up paint on Potain tower cranes.



1 - PAINT TOUCH-UP SCOPE ON TOWER CRANES

This service bulletin updates tower crane paint touch-up instructions for the service network and representatives, in line with the improvements made in recent years on new cranes.

During the crane's lifetime, paint touch-ups are required following:

- the **preventive maintenance** checks detailed in the technical manual in the chapter *Checking the condition* of the paint and checking for corrosion at 2000 hours or 1 year / whichever occurs first,
- and which were reported with the distribution of service bulletin BST21-281.
- damage regardless of its origin (transport, mechanical or chemical damage)
- a **repair** to the structure.

2 - OBJECTIVE

The instructions described in this document concern touch-ups to the anticorrosion protection of steel parts on Potain tower cranes.

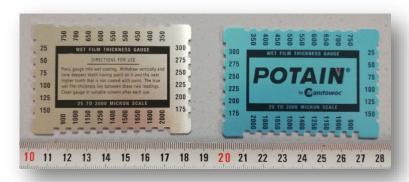
These paint touch-ups are essential for the durability of the paint over time. If not carried out, this may affect the integrity of the part directly, causing irreversible damage.

These instructions allow paint touch-ups to be made outdoors on fitted cranes, but it is recommended that the touch-ups are made under cover in a well ventilated workshop.

3 - PROCUREMENT OF CONSUMABLES

Order the consumables from the Spare Parts service.

Wet film thickness gauge, code 84117048, for areas > 10 cm2 (spray painted)



- Products:
- For small quantities



GLYCERO RANGE	DESIGNATION	CODE
PRIMER	1 kg	P-65034-24
PTN yellow paint	1 kg	K-65034-66
RAL 3020 red paint	1 kg	K-65034-69
MTW red paint	1 kg	K-67034-74
RAL 7037 gray paint	1 kg	L-66034-71
RAL 9016 white paint	1 kg	R-65034-95
THINNER	5 liters	F-11034-99

For the Standard range:

STANDARD RANGE	DESIGNATION	QUANTITY	CODE
EPOXY PRIMER	253617101 F1 C-POX ZP360 PRIMER	23.7 kg	84062805
PRIMER HARDENER	253629999 C5 C-POX ZP360 HARDENER	3.7 kg	84062806
PRIMER LIGHT THINNER	S6057 0000 SDI9027AX EPOXY THINNER	25 L	B-68034-24
PRIMER HEAVY THINNER	S6063 0000 SDI HEAVY EPOXY THINNER	25 L	84077708
POTAIN YELLOW PU PAINT	S5610 0P00 SPU FIN HES YELLOW PTN	13.5 kg	84061724
MANITOWOC RED PU PAINT	S5610 13P5 SPU FIN HES RED MANITOWOC	13.5 kg	84061416
RAL 3020 RED PU PAINT	S5610 3020 SPU FIN THES RED RAL 3020	13.5 kg	84061399
RAL 7037 GRAY PU PAINT	S5610 7037 SPU FIN THES GRAY RAL 7037	13.5 kg	84061420
RAL 9016 WHITE PU PAINT	S5610 9016 FIN THES GRAY RAL 9016	13.5 kg	84061397
PU PAINT HARDENER	S6602 PU HARDENER SDU	5 kg	84012719
PU PAINT LIGHT THINNER	S6047 0000 PU THINNER SDI	25 L	84077707
PU PAINT HEAVY THINNER	S6063 0000 SDI5938BX HEAVY THINNER	25 L	84010035
CONNECTION THINNER	SDI2048C CONNECTION PR THINNER	5 L	82023327

For the PREMIUM range:

PREMIUM RANGE COMPLEMENT	DESIGNATION	QUANTITY	CODE
ZINC EPOXY PRIMER	S2006 1P86 SEP 8303AX	15 kg	84062558
ZINC EPOXY HARDENER	S6522 9999	1 kg	84062555
PRIMER LIGHT THINNER	S6057 0000 SDI9027AX EPOXY THINNER	25 L	B-68034-24

For PRIMER LIGHT THINNER THINNER 25 L B-68034-24 other colors not shown in these tables, consult the Spare Parts service and allow a longer delivery time since these products with expiry date are not held in stock.



4 - PRODUCT GENERAL STORAGE CONDITIONS

Do not use expired products (see date on packaging).

Do not freeze.

Do not store products at an ambient temperature lower than 5°C.

Do not store products at an ambient temperature higher than 40°C.

5 - CONDITIONS FOR PAINT TOUCH-UPS

 Read the Safety Data Sheets of the products used and implement appropriate collective/individual prevention measures.



- **Avoid all contact with water**. The substrate to be touched up must be dry. Weather conditions must be favorable, with no rain, fog or dew (condensation) for the duration of the application and drying time.
- Avoid exposing the substrate to excessive heat during application and in the early stages of drying. Carry
 out the application when the metal is at ambient temperature, if possible in the evening after the hot spell,
 not in the morning.
- Avoid the presence of dust during application and until the product is touch dry.
- Carry out the application in light winds to prevent dust and product dispersion outside the area to be painted.
- Do **NOT** touch up the paint if the ambient temperature drops below 10°C for application and 5°C for drying.
- In the workshop, in cold weather, allow the substrate to reach room temperature before starting the touchups.
- Do **NOT** touch up the paint if the ambient temperature rises above 35°C for application.

For best results during application, POTAIN draws your attention to the following points:

- Use tins of paint rather than spray cans.
- This service bulletin defines above the codes for paints in the Standard and Premium ranges, but <u>touch-up</u> with products from the Standard range is permitted on a Premium painted part.
- Do not confuse or replace the hardener planned for mixing with the primer with the hardener planned for mixing with the lacquer.
- If there is an error, the mixture should be repeated (the hardeners are different).
- The touch-up steps must be <u>strictly applied in the correct order</u>.
- The mixtures must correspond strictly to the proportions defined in the instruction: <u>each product must be measured accurately and incorporated in the order indicated</u>.
- Prepare the mixtures just before application, otherwise observe the duration of use of the mixture (pot life).
 The more time that passes, and the more the viscosity of the mixture increases, the more difficult it will be to apply.
- Two thinners are offered: a "light" thinner and a "heavy" thinner. The heavy thinner should be used under outside temperature conditions of 30 to 35 degrees to prevent the preparation from drying too fast.
- The mixtures must be correctly homogenized before use.



6 - APPLICATION EQUIPMENT

- Broad brush for small surfaces (<10 cm²)
- Pneumatic spray gun for large surfaces (>10 cm²)
- Very fine paintbrush for very small surfaces

7 - PROCEDURE: Standard range - Premium range

7.1- Paint preparation:

For the Standard range:

- Epoxy primer:
 - o Reference: C-POX ZP 360
 - Hardener: C-POX ZP 360 HARDENER
 - o Mixing ratio by volume: 4 parts base + 1 part hardener
 - o Mixing ratio by weight: 100 g of base + 16 g of hardener
 - o Thinners: S6057 0000 and/or S6063 0000
 - o No thinning for application with a broad brush, up to 10% for pneumatic spray gun application
- Polyurethane finish:
 - o Reference: S5607 SPU FIN THES V2 Base: S5607
 - o Hardener: S6578 9999
 - Mixing ratio by volume: 2 parts base + 1 part hardener
 - o Mixing ratio by weight: 100 g of base + 37 g of hardener
 - o Thinners: S6047 0000 and/or S6067 0000
 - o No thinning for application with a brush, up to 5% for pneumatic spray gun application

For the Premium range:

The preparations for the epoxy primer and polyurethane finish described previously remain the same; only one layer that is to be applied <u>first</u> is added according to the preparation below:

- Zinc-rich primer:
 - o Reference: S2006 1P86 SEP 8303AX Zinc Epoxy Primer
 - o Hardener: S6522 9999
 - o Mixing ratio by volume: 4.4 parts base + 1 part hardener
 - o Mixing ratio by weight: 100 g of base + 7 g of hardener
 - o Thinner: S6057 0000
 - o No thinning for application with a brush, up to 5% for pneumatic spray gun application

7.2- Preparing the surfaces:

- Stripping of the degraded zone by rotating sanding with P120 (fine grain) sanding paper and up to the metal (P40 sanding paper on steel)
- Light sanding on 5 cm around the area stripped previously (with P120)
- Thorough cleaning of the stripped and sanded areas with a cloth (with isopropyl alcohol (IPA), or
- dry as a minimum)

Warning: paint touch-ups must be carried out within one hour of this surface treatment.

7.3- Procedure for Standard range touch-up over the entire pre-prepared area:



Area <10 cm²	Area >10 cm²
Application of C-POX primer ZP360 with broad brush ▼	Application of C-POX primer ZP360 with spray gun ▼
	For large areas touched-up using a spray gun, immediately after application check using a wet film set of shims that the thickness is at least 140 µm wet (70 µm dry). Wet film "comb" or set of shims 6
	25 WET PILK THICKNESS CAUGE 100 WET PILK THICKNESS CAUGE 275 PILS gauge this careful with A wide by a wide of the A wide to the A wide to the A wide by a wide of the A wide by a wide to the A wide a wide to the A wide by a wide to the A wide a wide to the A wide by a wide to the A wide a wide wide to the A wide a wide to the A wide by a wide to the A wide a wide a wide wide a wi
•	50 minutes (dry to the touch), or dry in oven under the e (optimum 20 minutes at 70°C)
Application of the S5607 SPU FIN THES V2 finish with a broad brush.	Application of the S5607 SPU FIN THES V2 finish with a spray gun
	Afterwards, if necessary, apply thinner to the periphery of the touch-up with a spray gun to conceal the transition.
· · · · · · · · · · · · · · · · · · ·	ilm set of shims that the thickness is at least 120 µm tions the same as above).
	imum of 24 hours before outdoor exposure, or s of the site (optimum 20 minutes at 90°C)
	On areas > 10 cm2, after complete hardening, and whenever possible, measure the total dry thickness of the touch-up performed using a measuring instrument $(100 \mu < primer + lacquer < 300 \mu)$

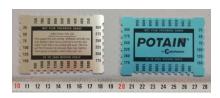
7.4- Procedure for **Premium range touch-up over the entire pre-prepared area.**

Area <10 cm ²	Area >10 cm²
Application of S2006 1P86 SEP 8303AX primer with	Application of S2006 1P86 SEP 8303AX primer with
a broad brush ▼	a spray gun ▼
1 st layer	1 st layer



For large areas touched-up using a spray gun, immediately after application check using a wet film set of shims that the thickness is at least 100 µm wet (50 µm dry).

Wet film "comb" or set of shims 6



Application of C-POX ZP360 primer with a broad brush. 2 nd layer	Application of C-POX ZP360 primer with a spray gun 2 nd layer
	0 minutes (dry to the touch), or dry in oven under the (optimum 20 minutes at 70°C)
Application of the S5607 SPU FIN THES V2 finish with a broad brush	Application of the S5607 SPU FIN THES V2 finish with a spray gun
	Afterwards, if necessary, apply thinner to the periphery of the touch-up with a spray gun to conceal the transition.
	On areas > 10 cm2, after complete hardening, and whenever possible, measure the total dry thickness of the touch-up performed using a measuring instrument. (220 µ < Zinc primer+primer+lacquer < 300 µ)
Air drying in the workshop minimum 24 hours befor under the specific conditions of the site (optimum 2	e outdoor exposure (dry to the touch), or dry in oven 20 minutes at 90°C)



7.5- Specific touch-ups (inside screw bolts or equivalent)

For these areas that cannot be touched up using the methods described above:

- Clean as thoroughly as possible to remove all traces of dust, grease or corrosion
- Using a very fine paintbrush, apply a thin layer of the epoxy primer
- Let it dry for one hour at ambient temperature
- Using a very fine paintbrush, apply a thin layer of the polyurethane finish
- Allow to dry for 24 hours at ambient temperature before outdoor exposure (dry in oven if possible)

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