Potain T85/T85A Self-Erecting Tower Crane Site Preparation

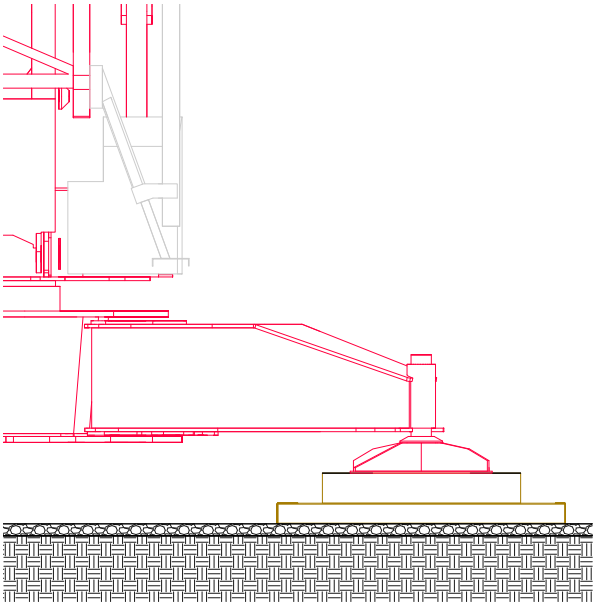
1. Determine if FAA notice to airmen is required and if flag or light is required per FAA guidlines.

2. Determine underground utilities or other obstacles impacting grounding of crane and/or generator.

3. Ensure adequate ingress/egress for crane, ballasting and erection envelope of crane (see specification sheet for erection envelop).

4. Provide space for generator or power pedestal if contractor is providing power.

5. Ensure adequate egress/ingress to fuel generator if applicable



6. Prepare Flat, level, compacted and well-drained crane surface that can support the maximum corner force of the crane. (See attached crane reaction data) Supplier will provide crane pads.

7. Ensure that erected crane has adequate clearance and separation from any existing or anticipated power lines or obstructions

8. Construct adequate barrier to keep unauthorized persons from entering the crane area.

COMPASS EQUIPMENT

We Invest in Your Success!

Igo T85

Date: 09/21/09

F.E.M. 1.001

Jib Configuration: Worst Case

Mast Height: Worst Case

Chassis: 4.50 m x 4.50 m

In-Service Reactions

A ------ B I O I X X X C ------ D	X X X A ------ B I O I C ------ D	X X X A ------ B I O I C ------ D
Corner Reactions	Corner Reactions	Corner Reactions
R_A = 28 kips	R_A = 45 kips	R_A = 32 kips
R_B = 74 kips	R_B = 74 kips	R_B = 83 kips
R_C = 0 kips	R_C = 0 kips	R_C = 0 kips
R_D = 45 kips	R_D = 28 kips	R_D = 32 kips

Maximum Torsional Moment	=	102 ft-kips	Maximum Corner Load	=	83 kips
Maximum Horizontal Force	=	5 kips	Maximum Shear Per Corner	=	4 kips

Out of Service Reactions

A ------ B I O I X X X C ------ D	X X X A ------ B I O I C ------ D	X X X A ------ B I O I C ------ D
Corner Reactions	Corner Reactions	Corner Reactions
R_A = 8 kips	R_A = 59 kips	R_A = 30 kips
R_B = 59 kips	R_B = 59 kips	R_B = 72 kips
R_C = 8 kips	R_C = 8 kips	R_C = 0 kips
R_D = 59 kips	R_D = 8 kips	R_D = 30 kips

Maximum Torsional Moment	=	0 ft-kips	Maximum Corner Load	=	72 kips
Maximum Horizontal Force	=	15 kips	Maximum Shear Per Corner	=	4 kips

Maximum Corner Load = 83,000 lb

Note:

The crane reaction forces were calculated in accordance with the F.E.M. rules for the design of hoisting appliances. The approximate wind speed used for "out of service" calculations is 42 m/s (94 mph).

POWER AND INTENSITY OF CURRENT

DEFINITION

Required power

This is the product of the coefficient of the simultaneity of the movements (equal to 0,8) and the sum of the nominal powers (operating powers consumed simultaneously by the three movements) of:

- hoisting winch
- trolley winch
- slewing mechanism

The value of the required power allows to determine the mains supply for a normal crane use.

Nominal or rated current intensity

This is the sum of the nominal current intensities (working current intensities consumed simultaneously by the three movements) of the following winches:

- hoisting winch
- trolley winch
- slewing mechanism

The nominal intensity value allows to dimension the cross–section of the crane supply cable.

Starting current intensity

This is the sum of the current intensities consumed temporarily by these same three movements under the following conditions:

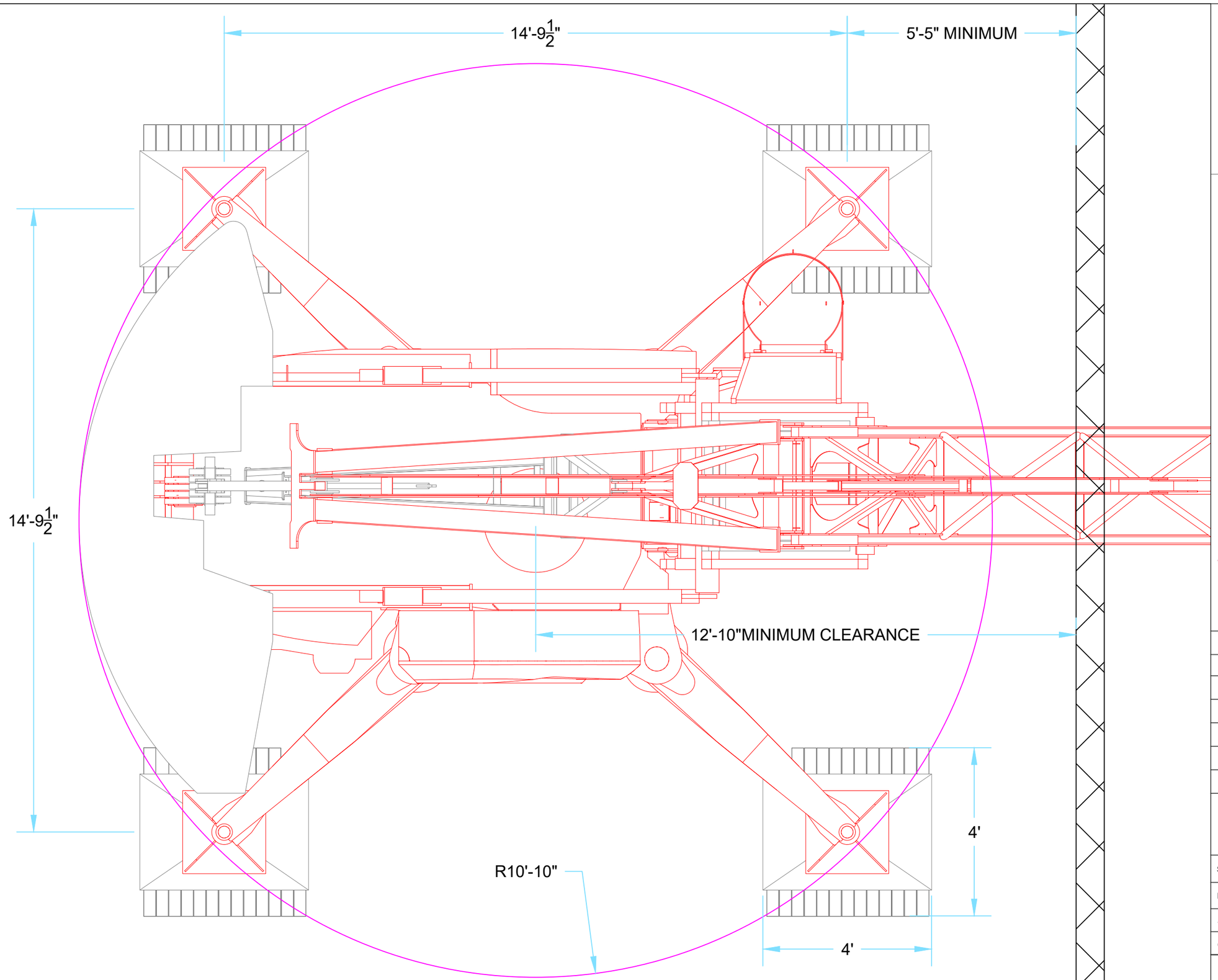
- starting current intensities of the mechanism with the highest current consumption (in general: the hoisting winch)
- nominal current intensity of the two other mechanisms

The starting current intensity value allows to calculate the crane supply cable length.

Type of winch (400 V – 50 Hz)	Required nominal power (kVA)		Nominal current intensity (A)	Starting current intensity (A)
	Without cab	With cab		
20LVF	22	25	45	53

Type of winch (480 V – 60 Hz)	Required nominal power (kVA)		Nominal current intensity (A)	Starting current intensity (A)
	Without cab	With cab		
20LVF	22	25	37	45

In case of cranes equipped with frequency converter the differential circuit breaker must be compatible with this equipment according to the rules in force at the locating place.



COMPASS EQUIPMENT

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FOR REFERENCE ONLY

Revisions

Issue	Issue Date	Initials
1		
2		
3		
4		

T85/T85A TYPICAL CRANE PAD

Status	GENERIC
Date	9/16/2021
Author	LRP
Checker	

NOT TO SCALE

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