

SERVICE INSTRUKTION MS 2/08 E

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Utfärdare Issued by Aussteller Bertil Nyström	Datum Date Datum 2008-03-04	Produkt Product Produkt Sc 650, SE and Scando hoists
Från maskin nr. From machine No. - Von Maschine Nr.	Till To - Zu	Berör/Concerns/Betrifft A50 mast sections

Service and maintenance recommendations for mast sections type A50 manufactured since year 2002**Valid for mast section with part No. 9092000-SUB**

The mast section can be equipped with an excentricly located rack 60*40 mm module 8 or with a centricly located rack 40*40 mm module 5. Boltable counterweight guide rail can also be applied .

General:

This mast section is designed to give an optimal strength and stiffness in relation to the deadweight. High tensile steel material has been used. All mast sections are hot-dip galvanized to get a good corrosion protection.

The mast section is a vital load-carrying- and guiding steel structure for hoists.

To ensure that both these functions are achieved we recommend that recurrent inspection of the mast section is done every 8 years after the manufacturing year.

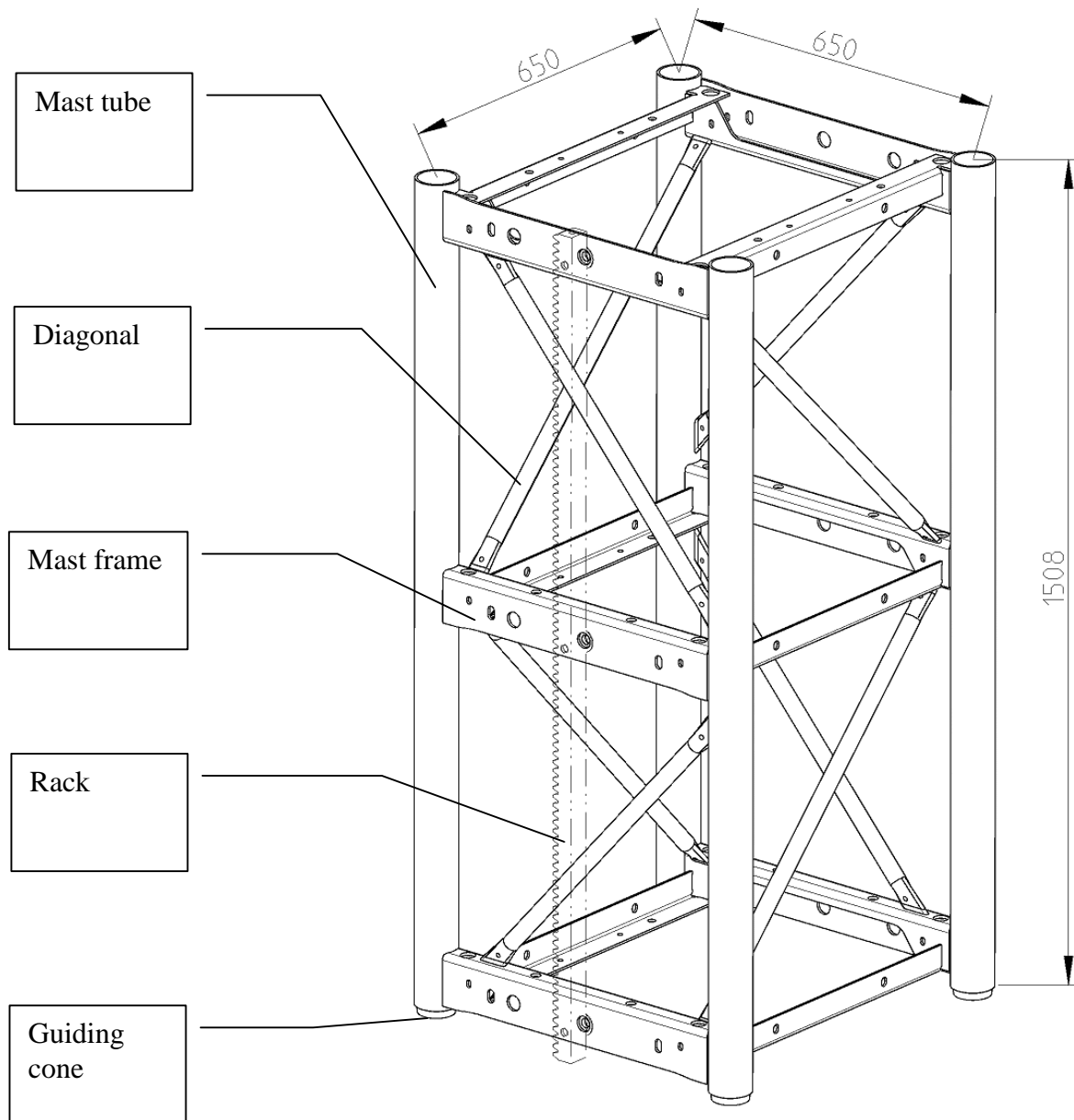
In case of more severe damage, such as **great deformations and cracked welds**, our recommendation is that the mast section shall be scrapped. This is due to the fact that hard demands are put on dimension tolerances, material and demands of licensed welding procedures and quality control.

Acceptable deviations are described later in this Instruction.

Please forward this instruction to all people concerned before inserting it in your Service Manual under index 2, Service Instructions!

Form approved by Anders Nilsson, After Sales Manager. Date: 2005-02-28

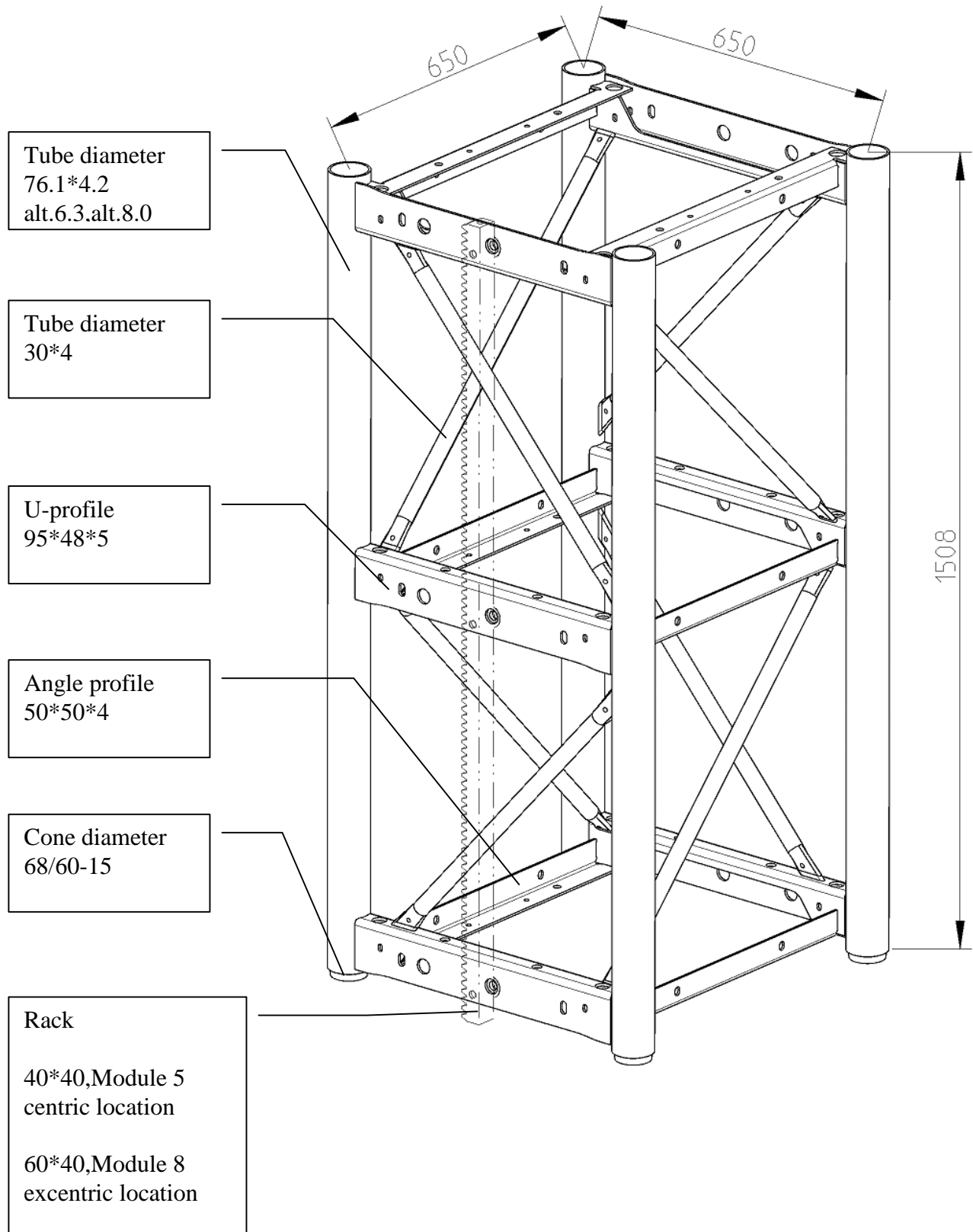
Denominations



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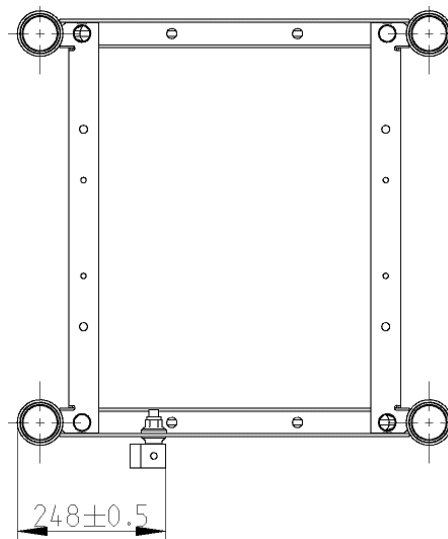
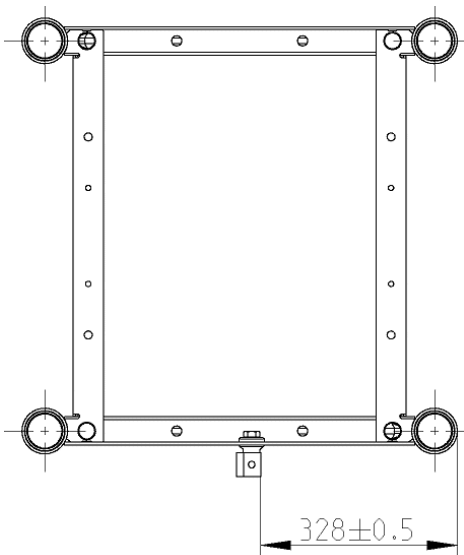
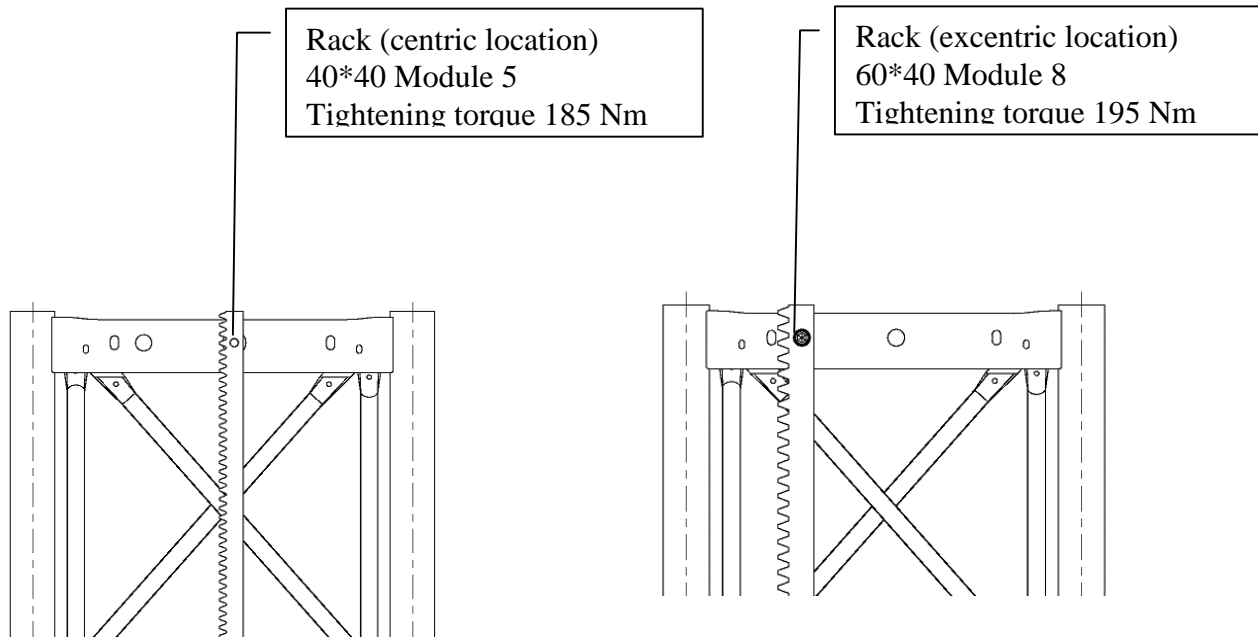
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Main dimensions (in mm)



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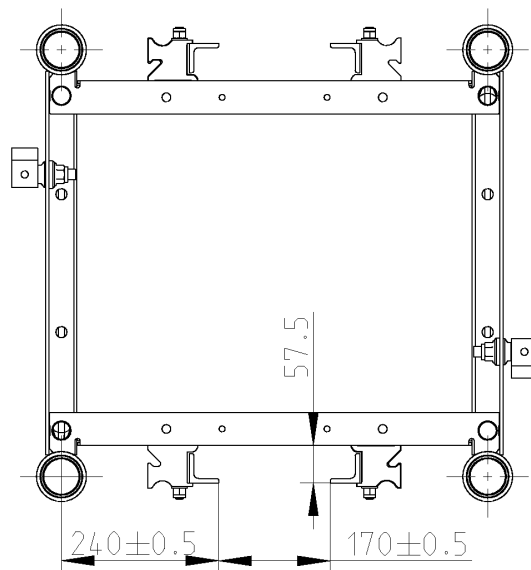
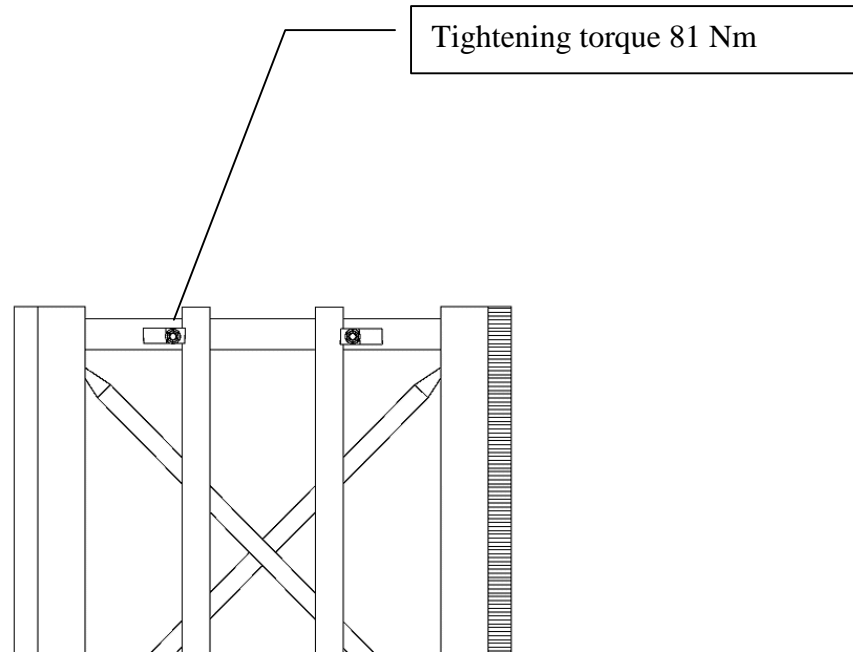
Alternative design of rack and location



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Boltable counterweight guide rail



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Check:

Acceptance criteria:

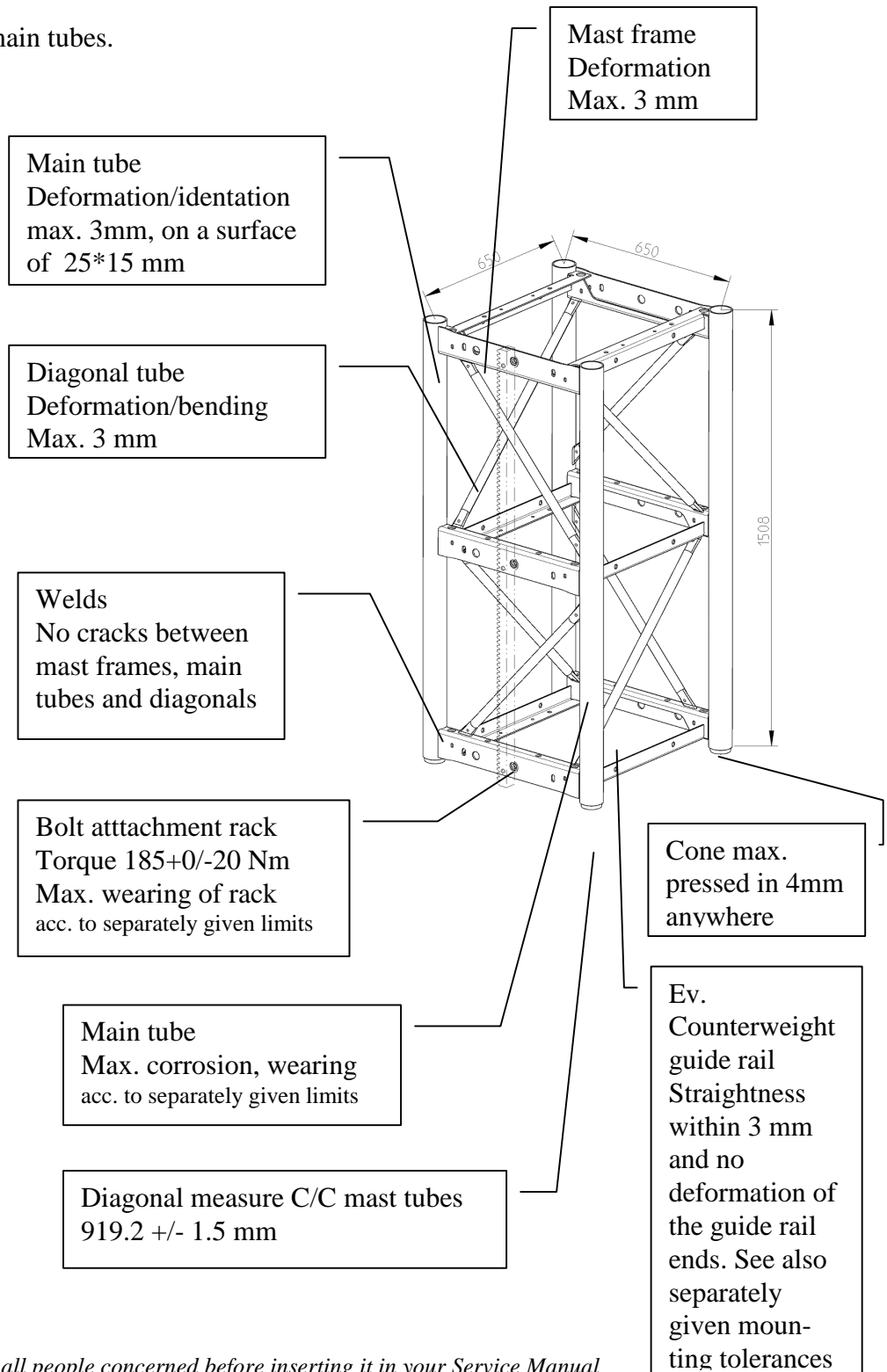
-Deformation of diagonals, mast frames, main tubes, guiding cones and, where applicable, counterweight guide rails.

-Corrosion and wearing of main tubes.

-Cracks in welds.

-Wearing of rack.

-Attachment of rack.



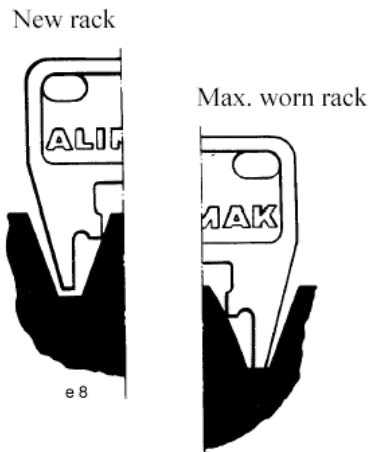
Necessary tools:

- Ruler
- Sliding caliper
- Measuring tape
- Ultra sound test
- Magnet powder test
- Rack gauge
- Torque key

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Acceptance criteria for rack wearing:

Rack 60 x 40 mm, Module 8

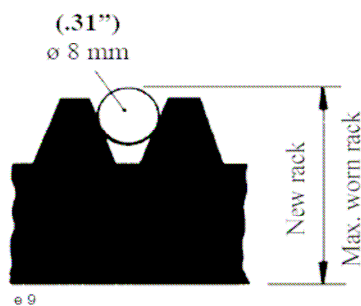


Rack

Measure the wear with the ALIMAK rack gauge part No. 9019 645. If the gauge reaches the bottom, the rack must be replaced.

Note: Only for racks manufactured since Jan. 1987.

Rack 40 x 40 mm, Module 5



Gauge Part No. 9103819-000

Rack

Measure with a dia. 8 mm (.31 in.) gauge rod and sliding caliper.

New rack = 39.9 mm (1.57 in.)

Max worn rack = 38.2 mm (1.50 in.)

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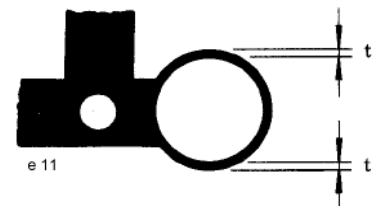
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Acceptance criteria for wearing and corrosion of mast tubes:

Mast tubes

Checking of wear and corrosion on mast sections is carried out by means of an Alimak ultrasonic tester Part No. 3001 991-301. The bottom mast section must be thoroughly checked.

New mast tubes t mm (inches)	Max. worn out mast tubes t mm (inches)
4.2 (.165 in.)	3.1 (.122 in.)
6.3 (.248 in.)	4.7 (.185 in.)
8.0 (.315 in.)	6.0 (.236 in.)
	approx. 25% reduction of wall thickness



Note that wear/corrosion on the mast sections have an effect on maximum overhang (free top) and maximum allowed mast height as follows:

Reduction of original wall thickness in %	Reduction of overhang of the hoist mast in %	Reduction of mast height in %
10%	15%	20%
15%	20%	30%
20%	20%	40%
25%	25%	50%
more than 25%	Mast section should be scrapped	

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