

# Rejection criteria truss parts



# EUROTRUSS

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All truss is to be discarded and taken out of service when any of the criteria, mentioned below, are found to be present:

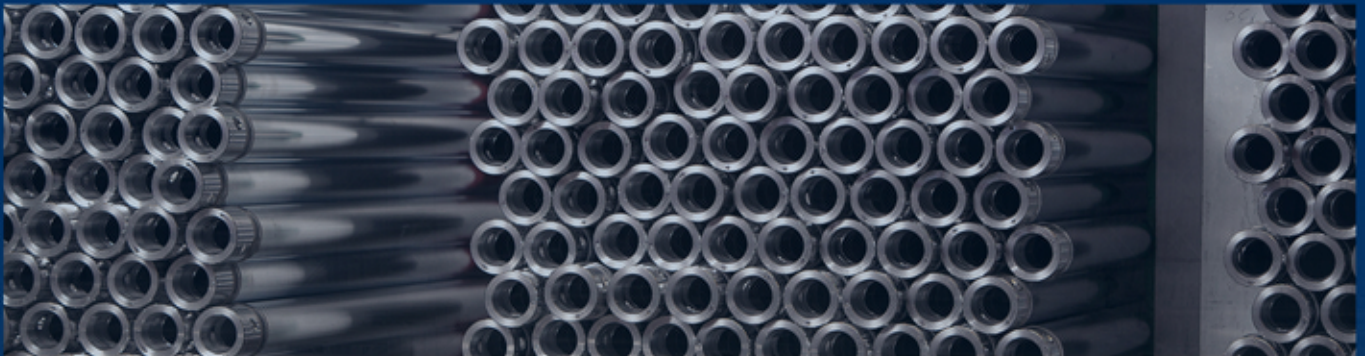
## General:

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Absence of any identification showing: manufacturer, truss type and date of production. Permanent (plastic) distortion of the module by rotation, bending, torsion or any other deformation from the original design.

Welds showing cracks or sudden discontinuities. The open heel in the bracing welds is normal and accepted in the TUV approval and certification. Any incomplete welds – apart from those in the heel area of the diagonal bracings. Reductions of welded areas through wear or tear by more than 10%. Excessive corrosion, reducing the total truss-cross-section area by more than 10%. Although corrosion of aluminium is very much less than any compared non-coated steel tubing there are still environments that have corrosive effects even on the EN AW 6082T6 alloy that is used.

With this in mind extra attention needs to be given to long- standing or (semi-) permanent installed truss-structures in the vicinity of chemical plants, or industrial polluted areas in general. Also salt-water coastal area's and indoor as well as outdoor swimming pools are to be considered as area's where truss structures can only be built with extra careful consideration about the corrosive hazards.



## Maintube (Chords):

Any of the chords being broken, torn or partially absent. Any of the chords being bent out of the centre line by more than 5 degree. Any bending of the chords-ends next to the coupler, resulting in the use of force when connection two modules. Scratches, cuts or wear on the chords surface reducing the chords section area by more than 10%.

Any scratch, cut or local dent on the chord deeper than 1 mm and longer than 10 mm no matter in what direction. Any smooth round hole reducing the chord's section area by more than 5%. Permanent (plastic) deformation by dents or an oval shape of the round tube diameter by more than 10%.



## Braces (diagonals, end-braces):

Any of the diagonals or end-braces being broken or partially absent.

Any of the braces being bent out of the centre line by more than 10%. Scratches, cuts or wear on the braces reducing the braces section area by more than 10%.

Any scratch or cut on the braces deeper than 0,5 mm and longer than 10 mm no matter in what direction. Any round hole reducing the brace's section area by more than 5%. Permanent (plastic) deformation by dents or an oval shape of the round tube diameter by more than 10%.



## Conical coupling system:

Cracked or partly broken welds between chord and receiver fitting. Any oval-shaped wear on the holes by more than 10%. Out of line rotation of the spigot-pin holes within a coupler or between to adjoining couplers by more than 2 degrees.

Bending of the chord ends with the coupler receiver parts by more than 5 degree, resulting in difficulties in joining two truss-modules during assembly. Wear on the coupler or receiver parts resulting in cross section area loss of more than 10%. Deformation or distortion in the chord area next to the weld of the receiver part.

Overload in compression leads to outward buckling effects, overload in tension parts leads to constriction in the chord tube next to the welds. Any scratch, cut or hammer blow on the receiver deeper than 2 mm and longer than 10 mm no matter in what direction. Excessive corrosion in the connection. In systems having stayed assembled of longer periods it is advised to use only new and freshly galvanised spigot pins, to prevent hazard from galvanic corrosion.

## Conical spigot pins:

These steel pins are, effectively, "consumables", this means these parts are the most susceptible to wear by the use of hammer etc. Also they are indicators of excessive overload showing bending.

Reduction in diameter by more than 10%.

Cuts, dents, scratches and other damage to the smooth surface of the pin. Burrs, 'mushrooms' and other extending sharp edges on the narrow end of the pin. Deformation by hammering, leading to closure of the safety-clip hole, or screw thread. Loss of zinc coating on any part of the spigot pin, causing it to corrode. No self-locking nuts shall be used which show clear loss of the nylon-locking mechanism by wear.