Measuring Instruction
PERI Work Instruction

Valid for	
Label	Art.-No.
All PERI Products	

Changes made		
Date	Changes	Page

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Measuring of bent | rusty articles

Category according to general work instruction | **Mechanic**

Qualifications Instructed by foreman

Labor law instructions

These work instructions are a recommended course of action. The implementation is subject to the subsidiaries' national provisions concerning labor legislation and safety.
Please also see the "Repair guideline - work instructions" for this, which you can find on the Intranet presence of the Logistics Excellence.

Safety Instructions

Required tools

- Straight edge
- 90° square
- Carpenter´s hammer (300 g)
- Sliding Caliper
- Measuring tape
- Folding ruler
- Measuring tape

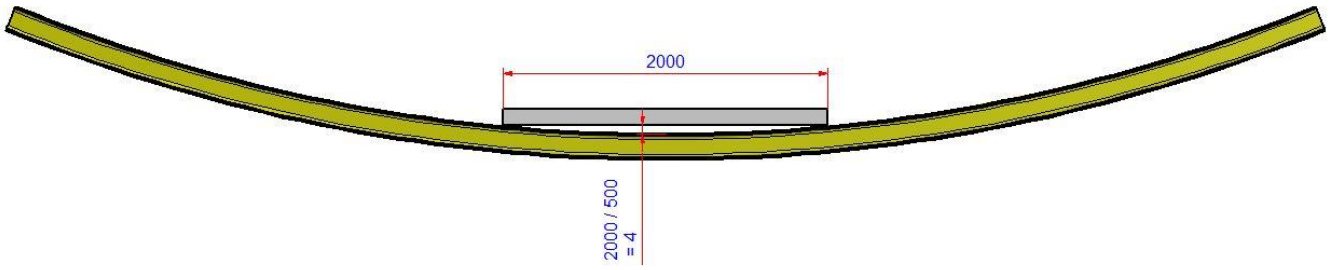
Content

1. Bend article

1. In the Rental Criteria there is a formula to calculate the maximum permitted bending of the articles. These formula is always the length of the article divided through a defined divisor (e.g. L/500). This means you always have to divide the length of the article through the divisor. If you have a longer article and your straight edge is smaller than the article you have to divide the length of the straight edge through the divisor.

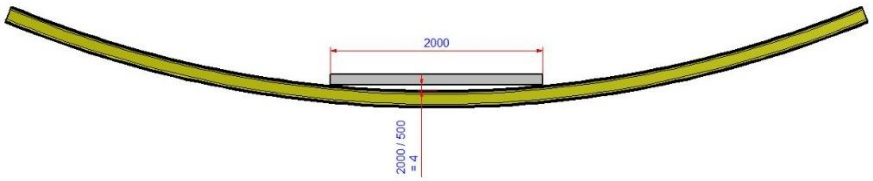
Example:

- Length of Article 8 m
- Length of straight edge 2 m
- Formula L/500
- Maximum permitted bending of the whole length: 16 mm
- Maximum permitted bending of 2 m: 4 mm



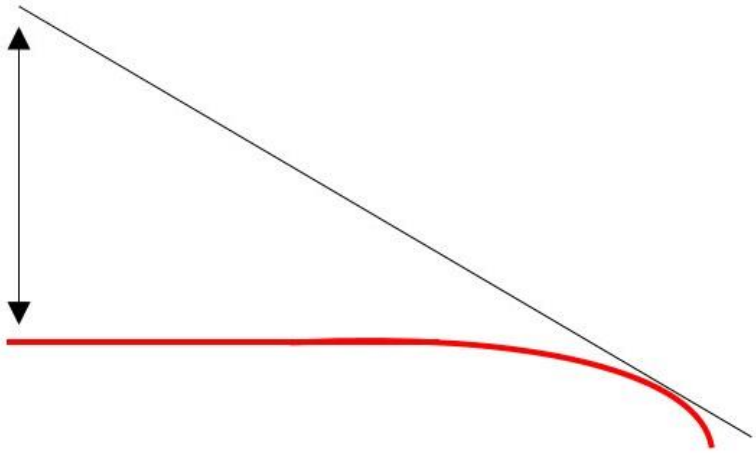
2. Correct and incorrect measuring for bent elements

2.1 Correct



If the above method is not possible

2.2 Incorrect



3. Example Standard UVH

Place a straight edge on the element and take the measure at the deepest point.

4. Example Frame

5. Dents: Place a square on two straight areas and measure the deepest point

2. Rust

Degrees of rust according to DIN EN ISO 8501

4 different degrees of rust (A; B; C; D) are existing according to the DIN EN ISO 8501. The definition is made by descriptions.

1. Degree of rust A

Steel surface which is mainly covered with paint zinc or tinder. Smooth rust which can be removed with a cleaning agent.

2. Degree of rust B

Steel surface starts to rust. Rust can be removed with steel brush.

remove the rust and renew the surface

3. Degree of rust C

Article with stronger rust which already affect the base material. Painting or zinc layer can be removed easily. Corrosion pits can be hardly identified with the bare eye. Rust and corrosion pits can be removed with steel brush or angel grinder. Material loss of base material ≤ 10%
Test method: Impact test with hammer peen and 300g hammer. Peen don´t break through the material. Thicker elements can be checked with a material thickness measuring device (Please contact Logistics Ecxellence before purchase)

remove the rust and renew the zinc or paint layer

4. Degree of rust D

Articles which are heavily affected from rust. Paint or zinc layer can be easily removed. Corrosion pits can be identified easy with the bare eye. Material loss of base material > 10 %
Test method: Impact test with hammer peen and 300g hammer. Peen break through the material. Thicker elements can be checked with a material thickness measuring device (Please contact Logistics Ecxellence before purchase)

Scrap the article or replace the affected part

5. Rusted through elements

6. Test method rusted elements

Take a 300 g Carpenters hammer and hit the surface with the peen. If you break through the material than scrap it.

Especially the edges of the plywood support area are affected.

7. Test method with material thickness device

Place the material thickness device on a straight surface and take the measure. This test method is not suitable for frames. Please just use this method at thicker elements. The workers which uses this test device should be instructed in using this.

Please contact Logistics Excellence before purchase a material thickness device.