



KTH Hållfasthetslära

Multibrackets AB
John-Sebastian Persson
P.O. Box 7320
SE-103 90 Stockholm

Rapport *Multibrackets0701*

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Testing of wall mounts

Testing of wall mounts has been performed. Testing procedure and results are presented below.

Testing specimen

Three brackets were handed by Multibrackets. They were of the same model but in different lengths. They had EAN-number 7350022730052, 7350022730014 and 7350022730045. For better traceability internal numbers (12408, 12409 and 12410) was given to each specimen.

Testing equipment

All testing was performed in the departments servo hydraulic testing machine MTS 160 kN / 1100 Nm with control unit Instron 8580. The machines internal position gauge and load gauge was used. The machines load gauge is regularly calibrated by SP.

Testing procedure

A large beam was mounted on the machines piston. On top of the beam two L-shaped beams were clamped with four heavy duty clamps. Horizontally, a steel plank connected the L-beams with screws. The specimens were screwed onto the steel plank and the screws that fitted in the wall mounts slot was mounted on an aluminium plank. Onto the aluminium plank the load was applied via a steel ball (see Figure 1-5). The specimens were loaded in manual controll to approximately 1 kN and then unloaded to zero load. That procedure was done thereafter to both 4 kN and 5 kN.

Results

The load/position charts shows that all three wall mounts manage the 5 kN load (Figure 7-9). The remaining deformation is less than 1 mm, and that is the remaining deformation of the hole setup, not just in the tested wall mounts. The wall mounts shows no visible deformation after testing (see Figure 6).

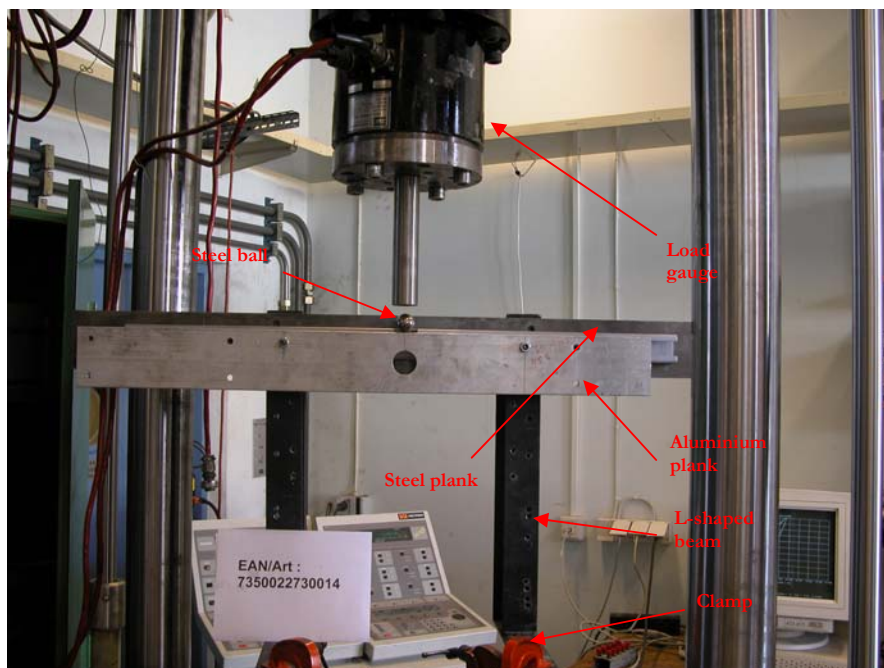


Figure 1. Testing setup.

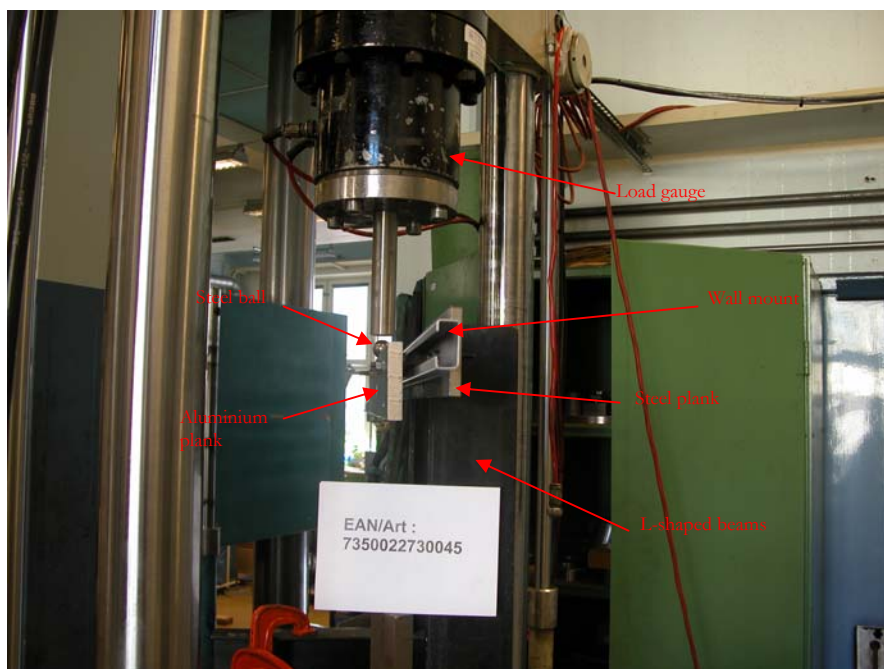


Figure 2. Testing setup, from side.

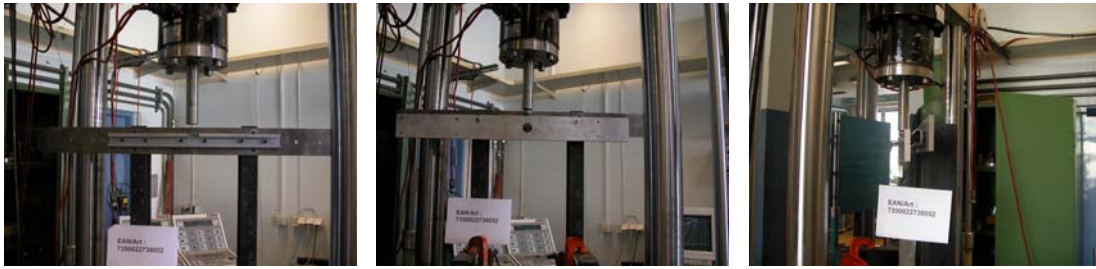


Figure 3. Specimen 7350022730052 mounted in machine.



Figure 4. Specimen 7350022730014 mounted in machine.

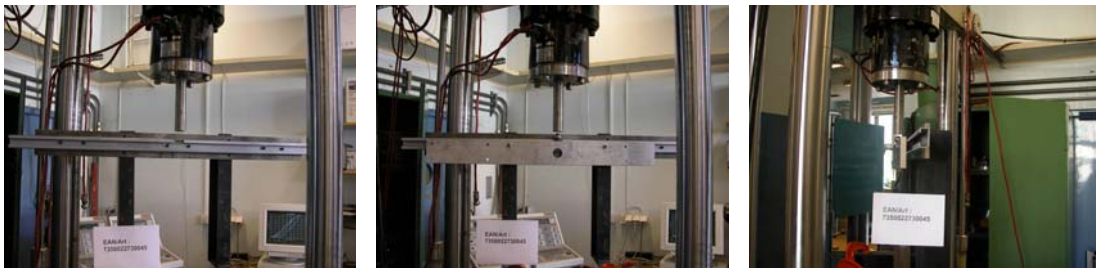


Figure 5. Specimen 7350022730045 mounted in machine.

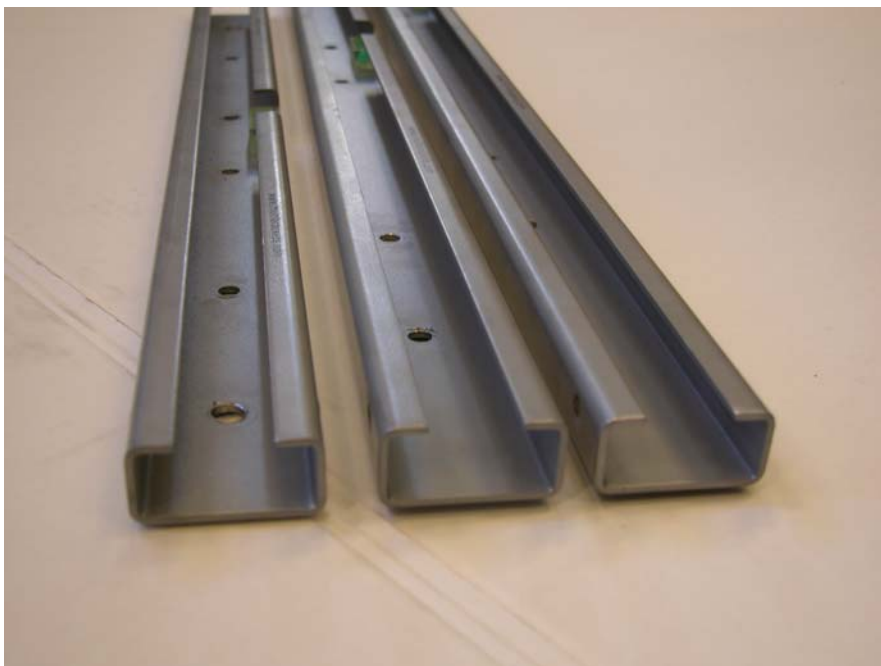
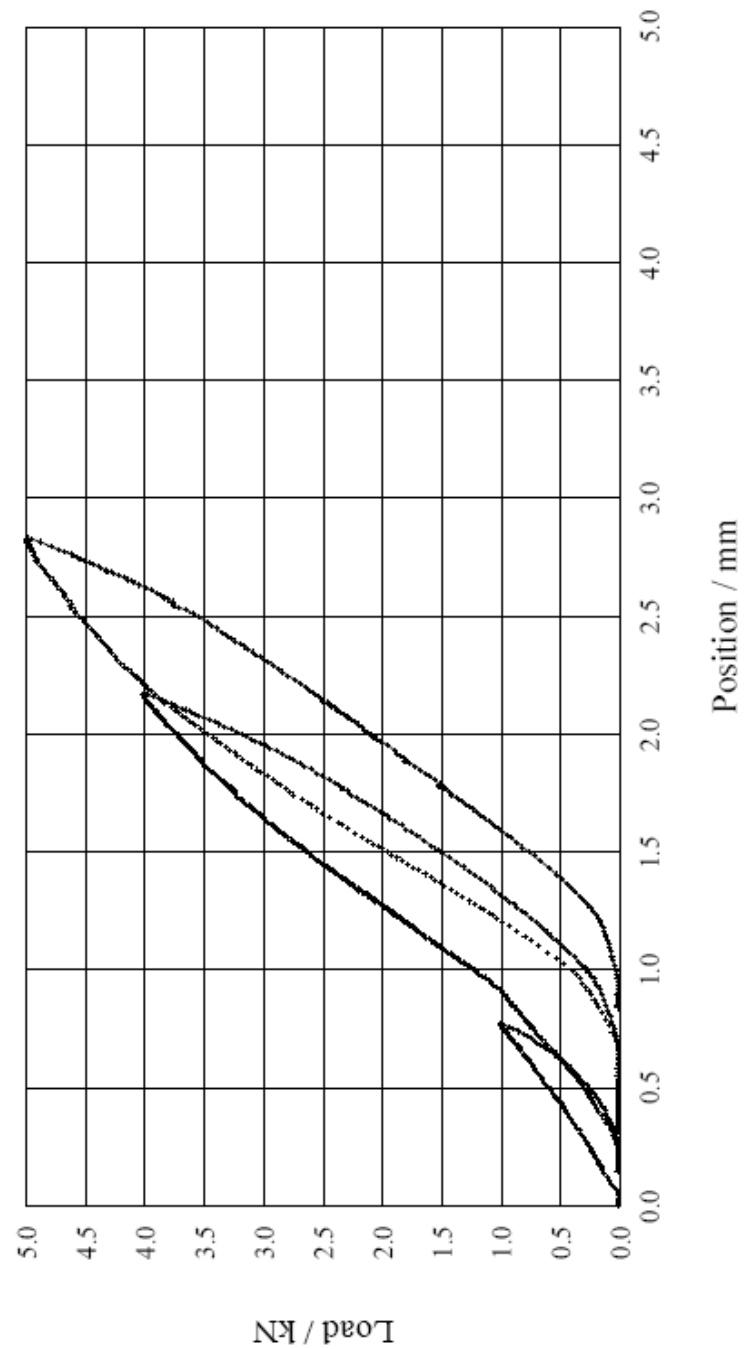


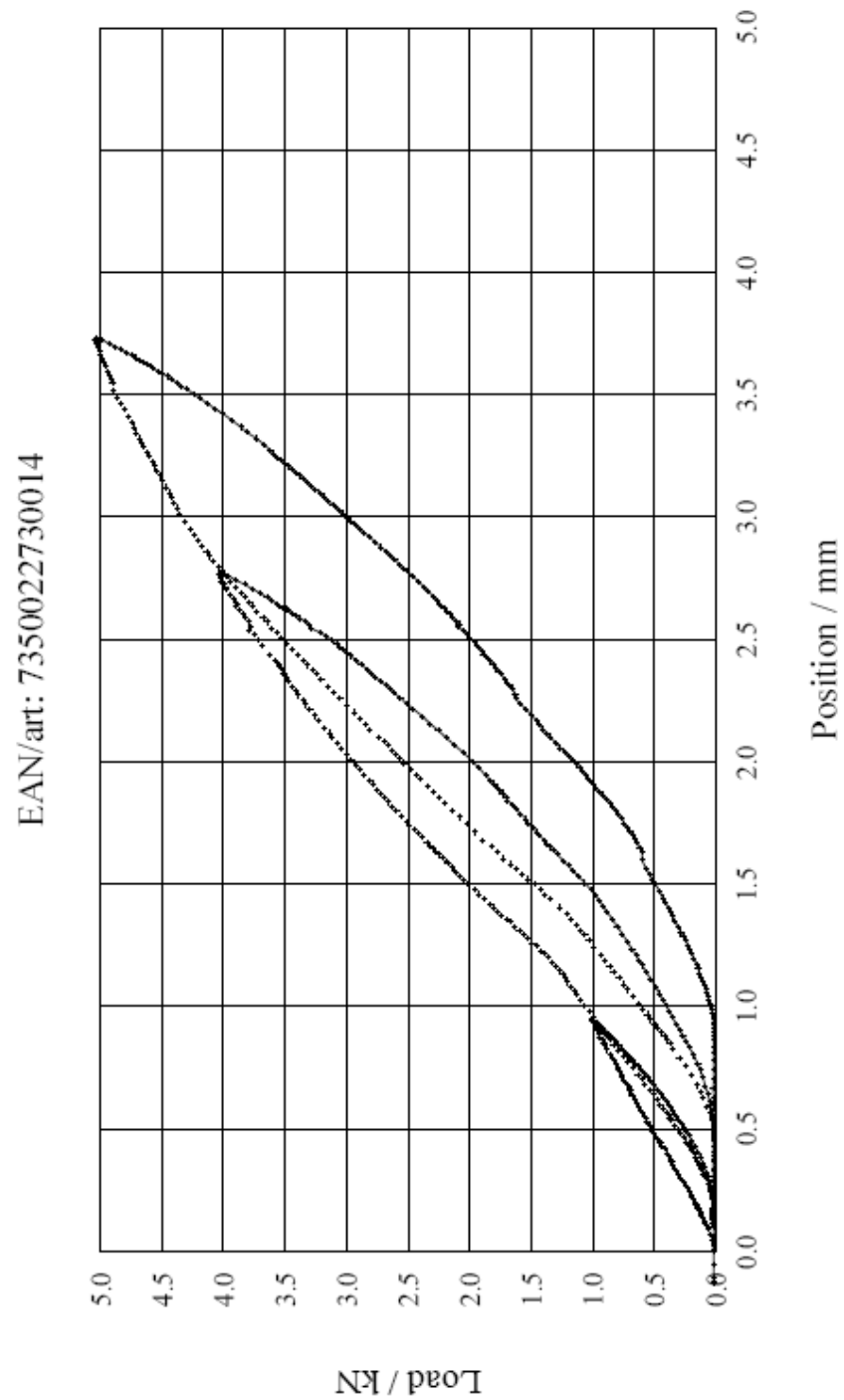
Figure 6. No visible deformation in wall mounts after testing.

EAN/art: 7350022730052



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Figure 7. Loading characteristics of specimen 7350022730052.



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Figure 8. Loading characteristics of specimen 7350022730014.

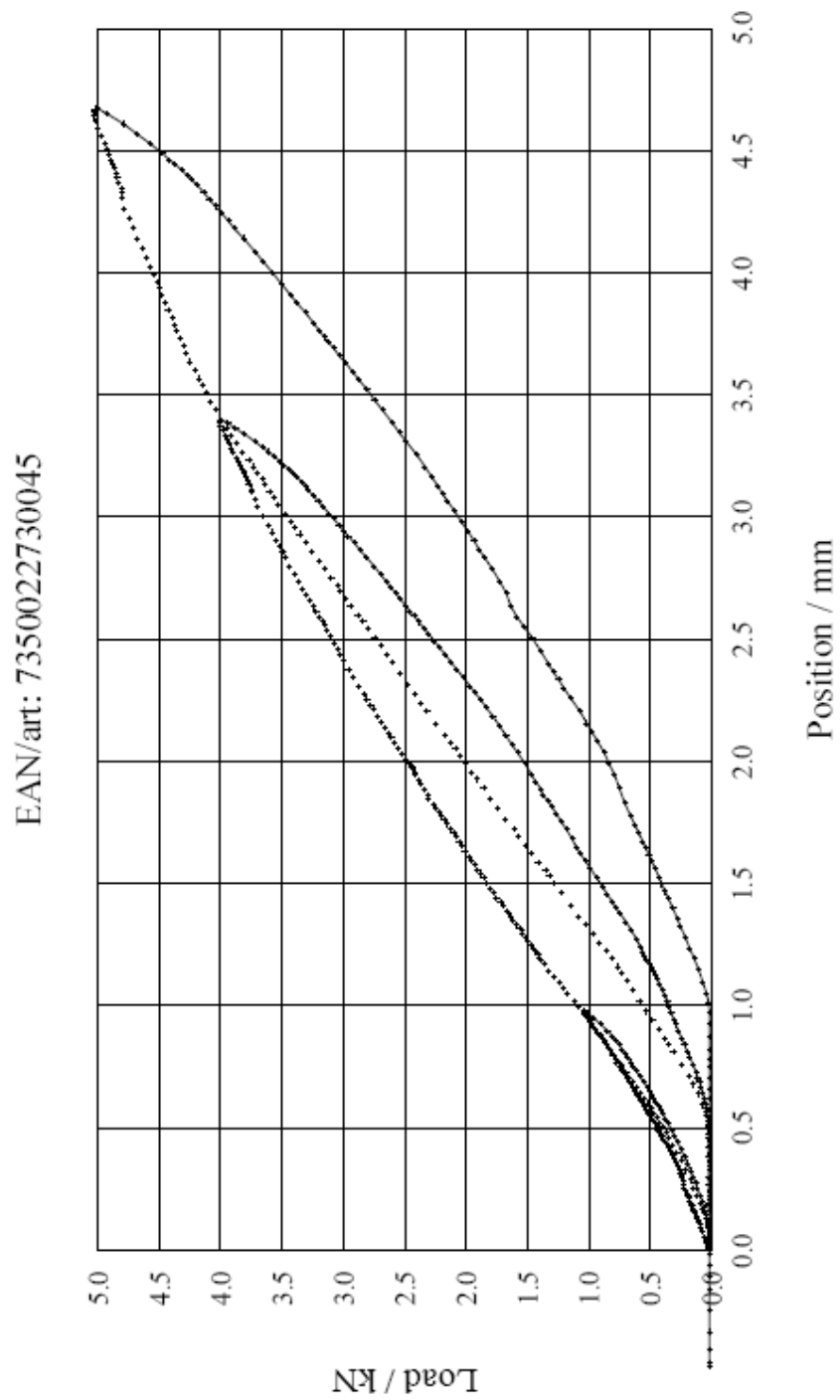


Figure 9. Loading characteristics of specimen 7350022730045.

Martin Öberg
Research engineer