

Coromant Capto bending a stiffness and torque stability - independent comparative data

RWTH Aachen University in Germany carried out a study of Coromant Capto and comparable holding systems.

A test series carried out by the University's machine tool laboratory compared bend-ing stiffness and torque resistance of Coromant Capto with comparable sizes of other standardized couplings.

And the results were striking - none of the competing toolholding systems could achieve even close to the same results as the Coromant Capto coupling.

The study showed that the larger wall thickness of Coromant Capto in comparison to HSK allows for higher clamping forces. These higher clamping forces translate into increased bending stiffness.

By using a tapered polygon rather than drive keys, Coromant Capto provides unrivalled torsional resistance with no 'click-clack' -a vital factor for turning operations which makes Coromant Capto the optimum spindle solution for multi-task machines.



Conventional 7/24 taper



HSK-A



Coromant Capto

Bending characteristics

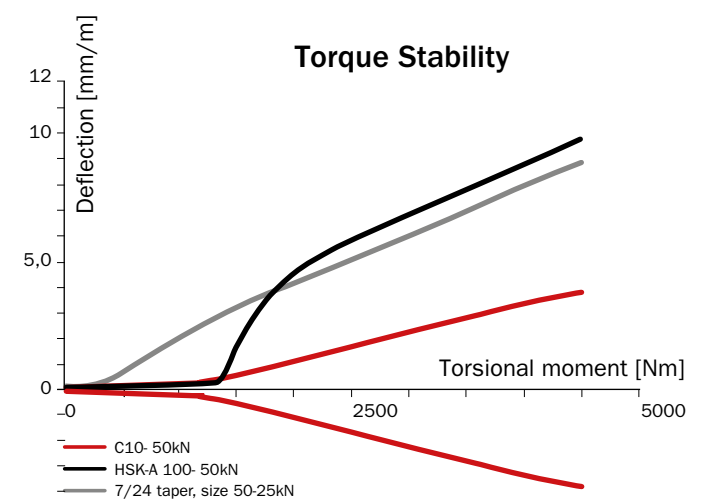
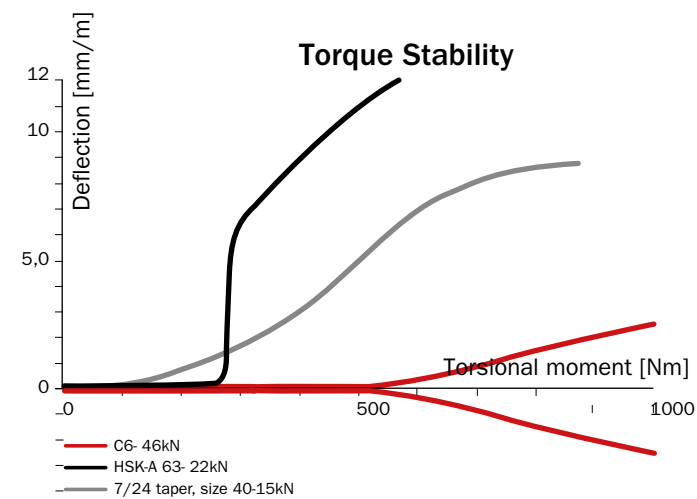
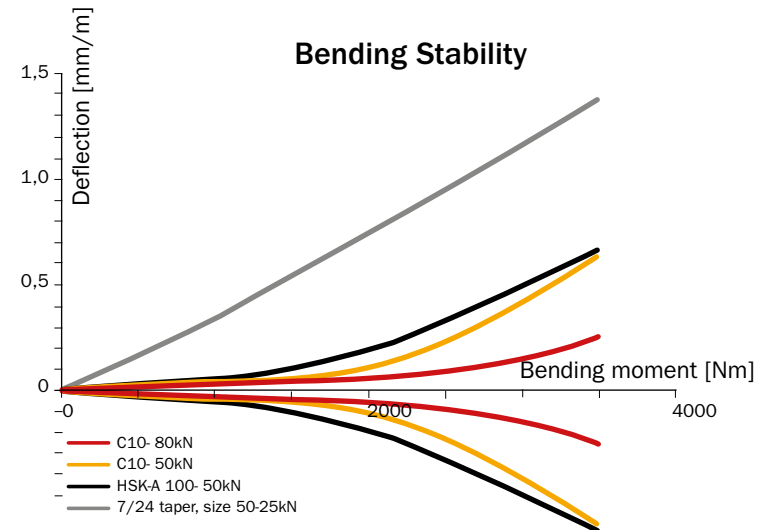
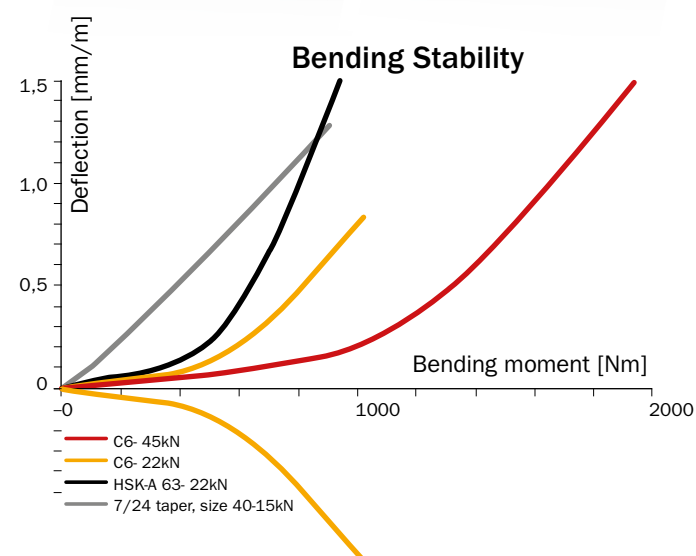
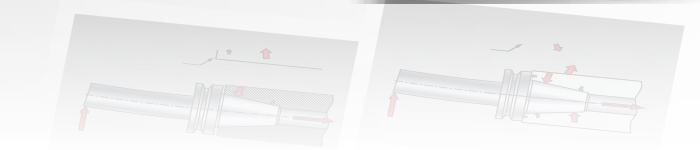
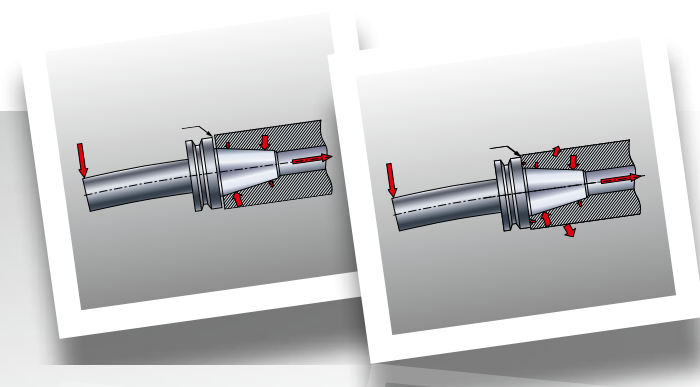
The left graph shows that Coromant Capto C6 has 1.65 times better interface stiffness than HSK-A 63. The toppling of the face contact was 2.88 times better.

Corresponding figures for Coromant Capto C10 were 1.51 for the interface stiffness and 2.15 for the top-pling of the face contact compared to HSK-A 100.

Torsion characteristics

The left graph shows that Coromant Capto C6 has 2.29 times better torque resistance than HSK-A 63. The twisting angle was 7.1 times better.

Corresponding figures for Coromant Capto C10 were 1.85 for the torque resistance and 4.0 for the twisting angle compared to HSK-A 100.



Sources: © WZL/Fraunhofer IPT