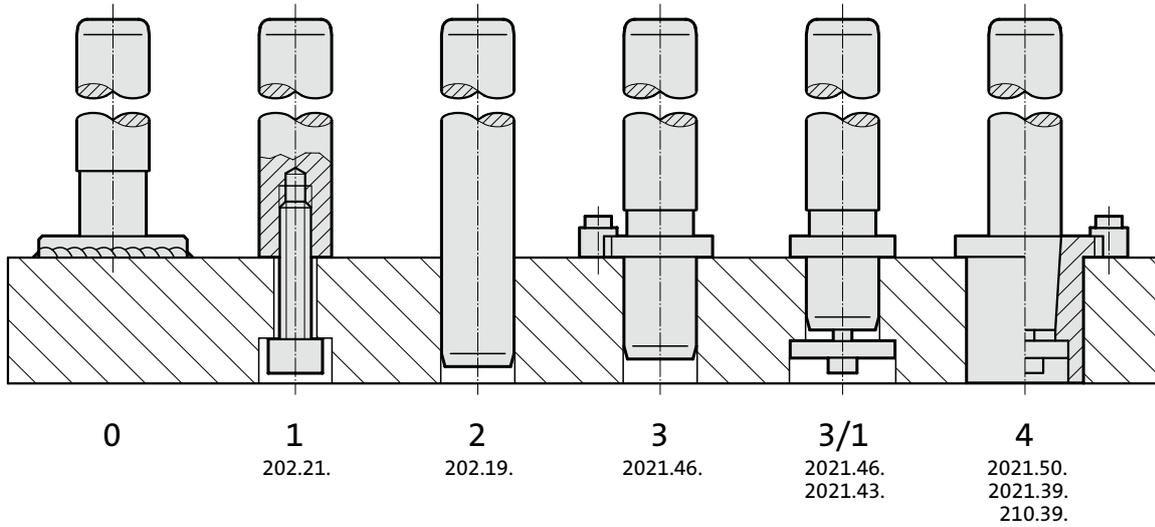


DEFLECTION OF PILLARS AND BENDING EQUATION

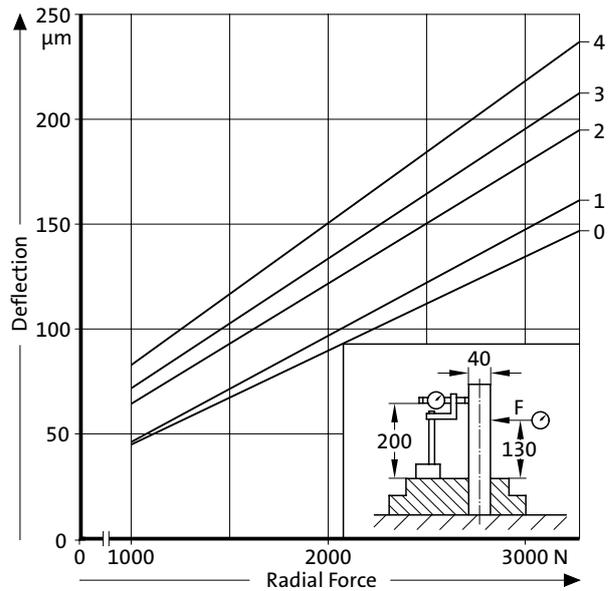


Deflection of Pillars

The practical use of this type of screw-on column with the technical advantages of bending stiffness shown requires a rethink in the design of the tool.

Mounting Instructions:

The friction surfaces of the screw connections (bearing surface and thread) must be lubricated with Molykote paste. To compensate for the setting of the screws, the connection should be loosened at least twice and tightened again with a torque wrench (see tightening torque in table).



Bending equation

The transverse load resistance to tool guides is greatly influenced by the position of the guide pillar fixing.

For a tool with a spring-mounted die guide plate and pillar fixing at the top or bottom of the tool, the deflection and pillar bending values do not differ when the load is applied at the side since the distance (L) from the point of application of the force is the same.

Significantly better pillar bending values can be achieved by fixing the guide pillars in the guide plate, i.e. in the centre of the pillar.

Since the distance (L/2) between the point of application of the force and the fixing surface is thus halved, the load-bearing capacity is increased by eight times.

At stroke rates > 500 strokes/min., increased mass acceleration values arise due to the larger plate weight of the stamp guide plate (incl. weight of the guide pillars). To counteract this negative effect, these guide pillars are designed as hollow pillars.

