High Precision in Plunger Lock Action

Hydraulic pressure of 7Mpa gives an even force to all external surfaces of outer sleeve (material resin), and it displaces the outer sleeve as well as inner sleeve (material bronze). The inner sleeve with slits has a large displacement so that lifted plunger is evenly locked all around the contacting surface. Along with sleeve's lock action, plunger slightly moves upward, but its amount is minimized (about $2-3 \mu m$). Plunger is designed not to cause any downward motion.

