

→ KTI Project Report No.2

SPRING MOUNTING OF A HYDRAULIC DROP HAMMER

Customer	→ Flükiger & Co AG
Location	→ Oberburg, Switzerland
Year	→ 2003
KTI product	→ 12 spring supports
Special features	→ Viscose safety damping

During the summer of 2003, the industrial forging company Flükiger & Co. AG in Oberburg, Switzerland, commenced operations in the hitherto largest hydraulic drop forging hammer, manufactured by Lasco, with impact energy of 125 kJ. During planning of this large forging hammer with a gross weight of 220 tons, the main focus was on the maximum possible vibration insulation.

To meet these tough requirements, KTI first positioned under the forging hammer a steel support plate measuring 3.80 x 2.85 x 0.15 m, under which were installed 12 spring supports. All spring supports were developed, manufactured and supplied by KTI. The spring supports are held in position at the top by special fixing elements and are bolted at the bottom onto the base plate.

Static and dynamic loads are absorbed during the forging process by compression springs located between the rigid upper plate and the substructure of the spring support. To cushion movements, a viscose safety damping in two tanks, arranged on the sides beside the springs, were also provided.



KTI spring supports with viscose safety damping



Perfectly insulated, hydraulic forging hammer