

➔ KTI Project Report No.3

SUSPENSION OF A MÜLLER WEINGARTEN SCREW PRESS

- Customer** ➔ Schöneweiss & Co. GmbH
- Location** ➔ Hagen, Germany
- Year** ➔ 2008
- KTI product** ➔ 24 spring supports
- Special feature** ➔ Steel frame, under which spring supports with viscose safety damping are positioned

Schöneweiss & Co. GmbH, a drop forging company in Hagen, Germany, has since spring of 2008 been working with the hitherto largest screw press in Germany. With a rotation energy of 3,150 kJ and a gross weight of 1,020 tons, wide-ranging activities had to be taken out to protect from vibrations. However, with a novel elastic support set-up, KTI achieved an extremely compact foundation construction, while at the same time fulfilling the DIN 4150 environment protection requirements (structural vibrations).

For this purpose, a heavy steel frame with dimensions of 9.60 x 6.52 m was positioned underneath the forging press, instead of the otherwise usual concrete foundation. Beneath this, 24 KTI spring supports were installed. The picture above shows the arrangement of the spring supports below the steel frame. The pressure springs absorb both the high vertical load and the rotary impacts arising during forging operations.

To cushion additional movements, a viscose safety damping is also provided in a container arranged centrally between the springs. For secure fastening and for absorbing the rotary impacts, the spring supports are safely bolted on the top to the steel frame and, at the underside, to the base plate.



KTI spring supports for convincing emission protection



Ideal insulation for a screw press with a weight of 1,020 t