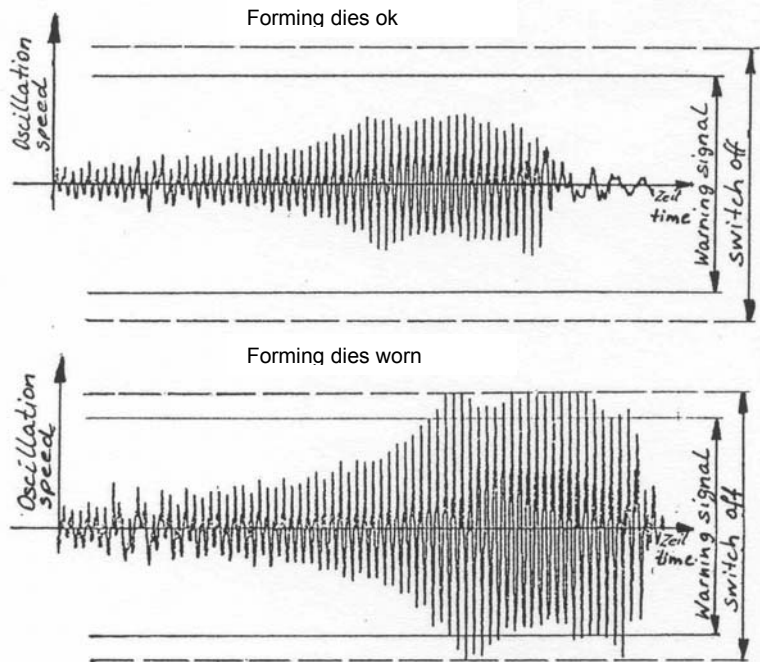


Components produced by Precision Rotary Swaging /
New technical Developments:

Indirect Wear Monitoring of Forming Dies by measuring Swaging Head Oscillation



Problem:

The forming dies are subject to natural wear during rotary swaging operation. The decision that wear has reached the permissible limit and the dies require reconditioning depends on the experience and reliability of the operation personnel.

Solution:

To measure indirectly the degree of wear on the forming dies by means of permanently installed oscillation measuring equipment on each rotary swaging head.

Application:

System suitable for all rotary swaging heads from size 16 upward.

Can be retro-fitted.

Advantages:

- Monitoring of die wear is automated and scrap avoided.
- Avoidance of excessive loading of the machine
- Increase in forming die life by reconditioning at the correct time.
- Reduction of machine down-time.

Operating principle:

With increasing wear of the forming dies, the oscillations on the rotary swaging head increase.

The oscillation monitor is interconnected with the machine control system and when a certain level of oscillation is reached a warning signal is given.

If, at this stage, the forming dies are not replaced, the oscillations will increase further and when a higher limiting value is then reached the machine is switched off.

The limiting values are set individually by our trained personnel.