BRANKAMP

X1 | X3S

PROCESS MONITORING

RAM HEIGHT ADJUSTMENT FOR HIGH-SPEED PRESSES

MARPOSS

For a full list of address locations, please consult the Marposs official website

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Marposs has an integrated system for Company quality, environmental and safety management, with ISO 9001, ISO 14001 and OHSAS 18001 certification. Marposs has further been qualified EAQF 94 and has obtained the Q1-Award.

www.marposs.com

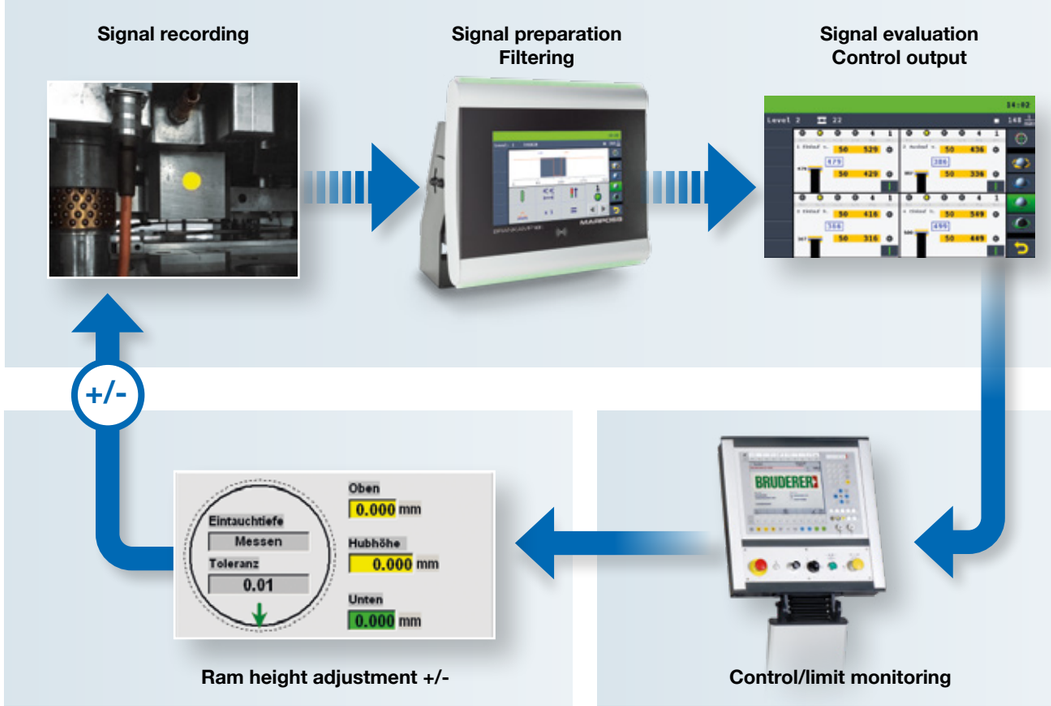
www.brankamp.com

RAM HEIGHT ADJUSTMENT FOR HIGH-SPEED PRESSES

Your benefits

- **Increased part precision**
- **Avoidance of part variations**
- **Automatic adaptation to temperature influence, material variations and coil change**
- **Reduction of inspection efforts**
- **Set-up aid during tool change**
- **Increased productivity**
- **Energy consumption saving due reduction of stop block forces**

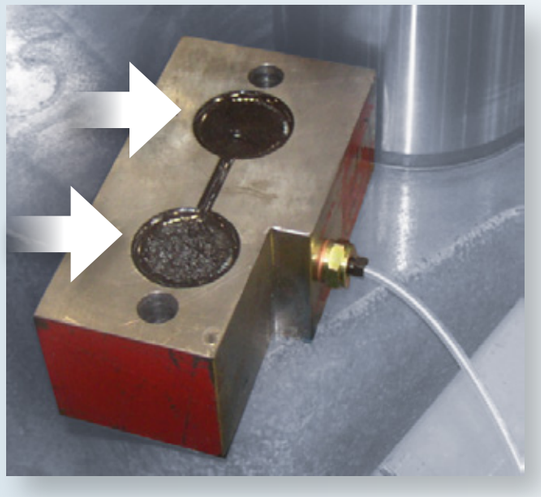
Ram height adjustment with BRANKAMP



Cockpit mask for display the adjustment and stop block forces

Functional principle

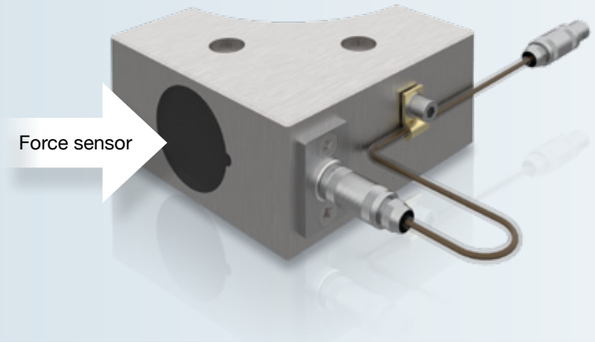
The respective peak forces are recorded and evaluated by precise force measurement in the stop blocks. If one or more stop block forces exceed lower or upper control limits, the system sends a corresponding control pulse to the machine controller. The machine control changes during ongoing operation the ram height adjustment, dynamical correction occurs due to changed process forces.



Force sensors in stop block

Sensor mounting in stop blocks

Piezoelectric force sensors are glued into corresponding pockets to measure the stop block forces. This ensures reliable evaluation of the stop block signals.
The display of the stop block load is calibrated, i.e. in tons or kNewton.



Your benefits with automatic ram height adjustment

- Adjustment of stop blocks after tool change or after tool rework is quicker
- Improved repeat accuracy of stop block tuning
- Avoid excessive or incorrectly adjusted stop block forces
- Consistent product quality, especially in coining and bending operations is achieved
- Vibration wear of the piercing and blanking punches is reduced, early contact with the stop blocks can be avoided.
- Independent adjustment of ram height prevents scrap production, increases productivity and reduces tool wear
- Energy consumption savings due to production with minimum stop block forces required