

Soph, Inc.
Magnetic Clamping

- Die clamping with Magbo electro perm magnets does not require die modification for quick die change system
- Die clamping with a Magbo electro perm magnet is safer than mechanical or hydraulic systems since the clamping force can be monitored and will be consistent over the operational life of the system
- Magbo Electro permanent magnets have no moving / wearable parts
- The Magbo magnetic field is not generated by electricity so loss of power does not result in loss of holding force
- Magbo Electro perm magnets cannot magnetize the entire die
- Magbo Electro perm magnetic die clamps can hold dies larger than the press bed
- Magbo Electro perm die clamping systems hold the die flatter than peripheral mechanical systems resulting in better parts
- Magbo Electro perm systems can be built to replace existing bolsters reducing or eliminating the impact on shut height
- Magbo Electro perm systems can be designed to hold dies on parallels
- Magbo Electro perm systems are easy to add locating devices to
- With the Magbo user friendly software it is easy to reset the system if any problem occurs

The Magbo electro perm system for stamping presses incorporate a multi layered safety sensor system consisting of the following:

1. Proximity sensor to stop the press if a problem occurs and prevent the mag cycle with no die present
2. Magnetic saturation sensor (MSD) to prevent the chance of trying to run a die with low magnetic qualities or with too high of an air gap (double checking the proximity sensor)
3. The current sensor system (CSS) prevents the operation of the system if any unseen damage to the electrical components has occurred or the incoming power supply is not sufficient to energize the magnets correctly
4. A spring key switch to prevent unauthorized mag or de-mag cycle
5. A bottom dead sensor input requirement which prevents the Demag cycle if the press is open