
Die Lifters

SELECTION GUIDELINES

- 1). What is the existing SLOT SIZE?
 - Rectangular Slot to be cut as required
 - ASA (inch) or DIN (metric) T-slot.
- 2). What is the maximum DIE WEIGHT?
 - Is the weight including the subplate?
 - is the load evenly distributed?
- 3). Is a BALL OR ROLLER type lifter needed? (see next page)
- 4). Are MECHANICAL OR HYDRAULIC Lifters preferred? (see next page)
- 5). What is the LENGTH of rollblock required? This is determined by several factors.
 - Die or subplate size(s)
 - Bolster size
 - Length of travel required
 - Cutouts in bolster
 - Direction of movement
 - Load and unload from the same side or in one side and out the other.
- 6). The QUANTITY of die lifters required, is also determined by several factors
 - Lift capacity of the individual die lifters, (dependent on ball or roller type, size and operating pressure).
 - Footprint of the die or subplate dependent on size FB or LR and any cutout in the die subplate.
 - Large dies may require several rollblocks not only to provide the proper lift capacity but proper spacing to minimize die (subplate) deflection while it's supported on the rollers.
 - If die or subplates are of different sizes- extra rollblocks may be required to cover the range of die sizes.
- 7). SPECIAL APPLICATIONS (call Hilma)
 - High Temperature
 - High Speed Stamping
 - Extra Lifting Stroke

LIFTERS FOR FORGING AND HIGH TEMPERATURE APPLICATIONS

The severe environment of a forging operation requires special considerations for die lifters. Mechanical roller lifters are the most tolerant to the heat, spray and scale seen in forging presses. Rollers are preferred over ball lifters since the bearings are sealed. Call Hilma engineering for further information.

If hydraulic die lifters are used, the lifters should be removed after the die change unless the rollers are covered during the forging process and the maximum temperature is not exceeded. Hydraulic rollblocks should be ordered as the (HT) high temperature version. High temperature hydraulic fluid should be used for these applications.

HILMA DIE LIFTER HYDRAULIC SAFETY CIRCUITS

All HILMA die lifter valve packages or pumps include a circuit relief valve to protect press personnel and equipment in case the rollblocks are overloaded.

Depending on the die lifter style, the Hilma air/hydraulic pumps may also include a special valve to relieve all of the pressure in the die lifter circuit except 65 psi. This back pressure keeps the balls or rollers not under the die, up during stamping, reducing the chances of slugs interfering with the lifter operation.