



MAGBLOX

Magnesium Safety Blocks

MAGBLOX Magnesium Safety Blocks are fabricated from the highest strength extruded Magnesium alloy commercially available; the lightest & strongest material for this application.

Magnesium Safety Blocks are engineered to support the ram and upper die of a stamping press whenever dies are being repaired or adjusted.

Advantages - With a high strength to weight ratio, MAGBLOX are the lightest weight block that will support the static load requirement of the ram and upper die.

MAGBLOX are light enough to allow the block to be maneuvered easily by an operator or setup person.

Rather than bend, MAGBLOX will shear off at a 45 degree angle if overloaded, especially if subjected to an accelerated or impact load condition. This shearing action helps minimize stresses to die components and equipment.

- ✚ -shaped blocks can be used for applications where two opposite flat surfaces are available.

- J -shaped blocks are designed to fit around a post or pin on the die set.

THESE PROFILES HAVE BEEN TESTED TO FAILURE, VERIFYING THE CAPACITY LIMITS AND GIVING YOUR OPERATORS CONFIDENCE OF THEIR STRENGTH.

BLEE Lightweight Technologies, Inc.
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Features & Benefits

- Lightweight and easy to use
- Durable, robust construction
- Large handles for easily moving blocks
- Three styles of safety block to fit your specific application
- End plates are available to protect the blocks from damage during normal use
- Optional electrical interlock plugs and receptacles provide additional safety for operators and equipment
- All blocks are painted safety yellow to make them easy to see and find
- MAGBLOX Magnesium Safety Blocks are supplied with a length tolerance of $\pm 1/16"$. Specify the total overall length to the nearest $1/16"$.

Selecting the Proper Safety Block

Proper selection of the style and size of the safety block is based on three criteria:

- Determine the static load requirement for each block.
- Measure the opening available for the safety block.
- Choose options or accessories that will contribute to safer operations.



Determining Static Load Requirement

- MAGBLOX Magnesium Safety Blocks are designed to support a direct static load (a non-moving or resting load).
- The most accurate method for determining the combined weight of the ram and upper die is to calculate the weight of the upper ram, the slide assembly including adjustment device, the pitman arms of the press, and maximum weight of the upper die. Multiply the total calculated weight by a minimum safety factor of **2** to establish the static load requirement.
- Safety blocks should always be used in pairs. Each individual block should be sized to support the static load requirement.

Determining Proper Length

- The proper safety block length is determined by measuring the opening where safety block will sit.
- To determine the correct length for the block, measure the available opening with stroke up, adjustment up and subtract 0-to-2" for variations in stopping at the maximum opening.
- The space between the upper and lower die halves or the space between the slide face and bolster at the point where the block would be inserted, are typical locations for safety blocks.

Selection

MAGBLOX Magnesium Safety Blocks are available in 3 styles. From the SAFETY BLOCK SELECTION CHART on the next page, select the closest length to your opening. Read across to the right the static load capacity in TONS per block. Select the block which meets or exceeds your static load requirement.

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Safe Operating Guidelines

All die handling and maintenance procedures should be available in writing and reviewed prior to any work beginning. Safety blocks are to be used in a vertical position with the upper ram and die resting on the top of the safety block.

Safety blocks should be always be used in PAIRS. When two or more safety blocks are used, the blocks should be positioned diagonally opposite each other in the die area.

If the machine has a mechanical energy source, such as a flywheel, it must come to rest before the die block is moved into place.

Magnesium die blocks are used to comply with OSHA Subpart O, 1910.217 (d)(9)(iv) that states "The employer shall provide and enforce the use of safety blocks for use whenever dies are being adjusted or repaired in the press".

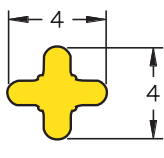
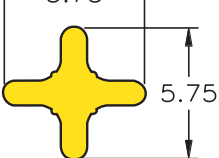
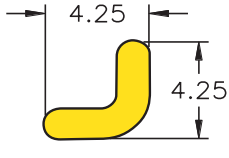
They also satisfy the lockout/tagout requirements for isolating mechanical energy. Die blocks are not required during die setting unless they are included in your die setting procedure.

SAFETY BLOCK SELECTION CHART (STATIC LOAD CAPACITY IN TONS PER BLOCK)



MAGBLOX
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N
G
T
H

			
Profile No.	1	2	4
Lbs/Inch	0.44	0.71	0.52
4"	105	n/a	n/a
6"	105	170	46
8"	105	169	46
10"	104	168	45
12"	104	168	45
14"	103	167	45
16"	103	166	44
18"	102	164	44
20"	101	163	44
22"	100	161	43
24"	99	160	43
26"	98	158	42
28"	97	157	41
30"	96	155	41
32"	95	153	40
34"	93	150	39
36"	92	148	38
38"	90	146	n/a
40"	89	143	n/a
42"	87	140	n/a
44"	85	137	n/a
46"	83	134	n/a
48"	81	131	n/a

Options and Accessories

Handles

- Large steel handles can be mounted on blocks longer than 12".

End Plates

- Aluminum end plates can be added to help prevent the ends of the blocks from being damaged during normal use.

Electrical Interlock Plugs and Receptacles

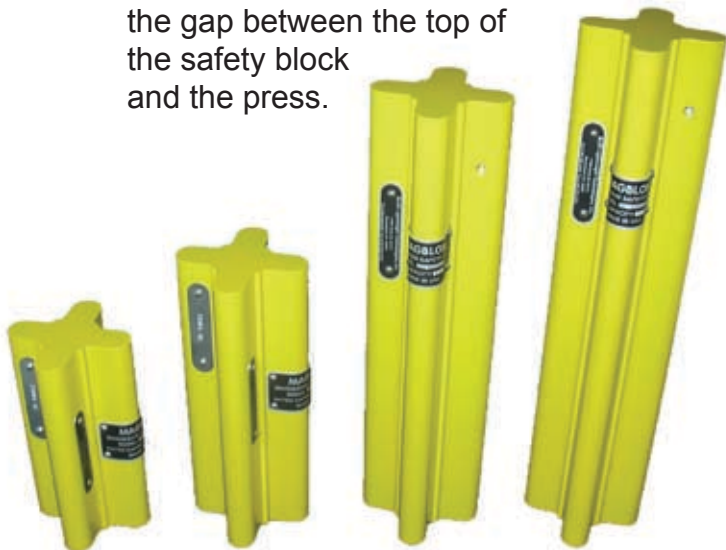
- Electrical interlocks can provide additional safety during die maintenance procedures for operators and equipment.
- The interlock system prevents a block from being left in the press, which if restarted could cause damage to the press or injury to the operator.

Steel Hanging Rings

- A 4" diameter steel hanging ring is available for all blocks.

Hardwood Safety Wedges

- Hardwood wedges are used to close the gap between the top of the safety block and the press.



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