Each Insignia machine is produced completely in the USA and utilizes a register system similar to that of an offset press for superior sheet-to-sheet accuracy.

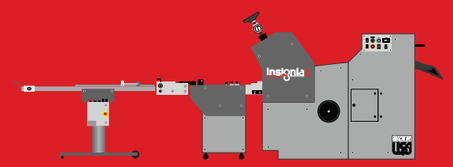
Able to run inline to many folding/gluing systems, the Insignia can become a production driven solution for both short and long run work.

Capable of producing an extremely wide range of products; door hangers, presentation folders, unique direct mail pieces, folding cartons, hang tags, ID cards and so much more.

The Insignia can help eliminate sending out profitable work and allow for more control over production and turnaround times. Let the Insignia die cutting system change the shape of your business!

MADE IN USA

Make sending out work a thing of the past with the Insignia



Contact Rollem:

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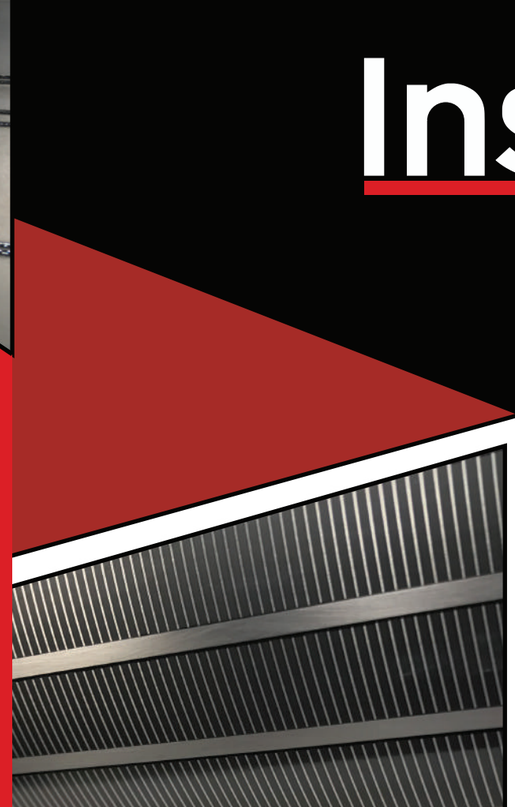
Insignia DIE CUTTING

Die Cutting Systems, Information & Specifications



Rollem INTERNATIONAL

Single & Dual Magnetic Cylinder Configurations

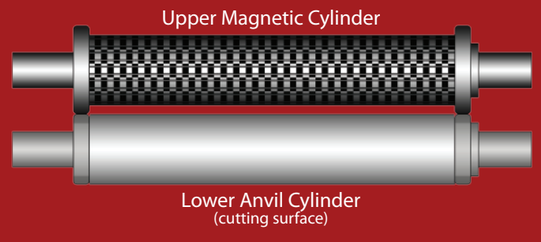
Each Insignia machine contains two cylinders; an upper and a lower. The upper cylinder is always magnetic and houses a flexible die, however a choice is offered with the lower cylinder between a matching magnetic cylinder or a hardened, solid anvil cylinder.

The difference between these two systems is that a dual magnetic machine will always require a paired set of "male/female" dies to cut with, whereas a single magnetic machine will utilize a single die tool and cut against a lower anvil cylinder.

A single magnetic system is recommended to produce flat shaped products, or pressure sensitive kiss-cut work. A dual magnetic system is commonly utilized when running packaging products or folding carton work. Products such as folding cartons or presentation folders can be run in-line with a folding/gluing unit for single-pass production utilizing a single operator.

The illustration below highlights a single vs. dual magnetic cylinder configuration. The primary difference between the two is utilizing a single flexible die or a paired set to channel score or emboss with no makeready. There are ways to create folds on a single magnetic system, however to emboss it requires a paired set of dies and dual magnetic machine.

Single Magnetic



Dual Magnetic

Single & Paired sets of Flexible Dies

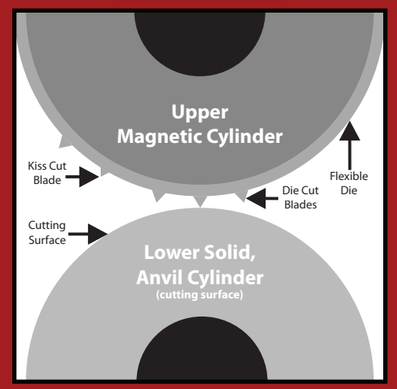
A single magnetic machine will utilize one flexible die and cut against a lower, hardened anvil cylinder. A dual magnetic machine utilizes two flexible dies running as a 'male/female' paired setup to channel score or emboss substrates, or to kiss cut. A channel score can be achieved from either the top or bottom die tool. A single magnetic configuration is ideal when straight die cutting, or when kiss cutting to an adhesive liner. Dual magnetic cylinders enable zero makeready when producing pocket folders or folding cartons as well as enable embossing or debossing of substrates in a single pass.

The Insignia can run in-line with most folder/gluer systems enabling single-pass production from printed sheet to folded, glued product utilizing a single operator.

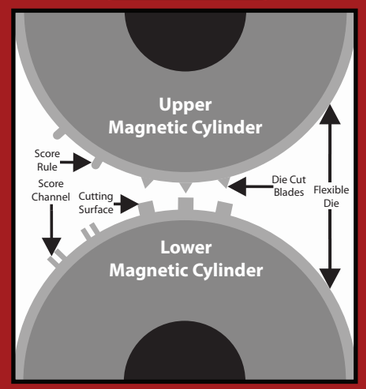
A paired set of flexible dies is mounted onto the cylinders via a pin mounting system as alignment is crucial with a paired set. The Insignia machine utilizes micro adjustments of the upper magnetic cylinder to ensure optimal alignment of the flexible dies to one another.

Single magnetic machines utilize a recessed scrible line to mount flexible dies, enabling an operator the ablility to adjust the die tool on the cylinder if needed.

Single Magnetic



Dual Magnetic



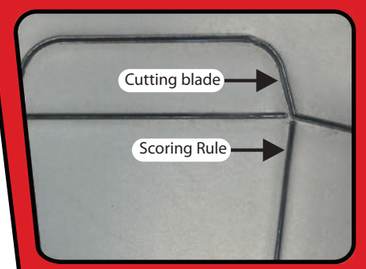
Common applications for single magnetic machines include (but are not limited to); shaped greeting cards, packaging inserts, decals and pressure sensitive applications cutting to a liner, garment tags, event passes, invitations, door hangers, bottle neckers, ID card carriers and much more.

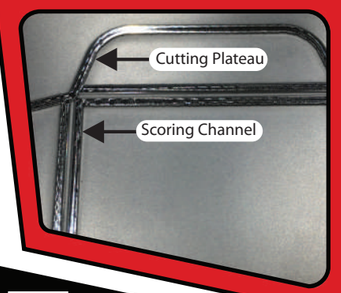
Applications commonly produced requiring a dual magnetic machine could consist of; channel scored folding cartons, presentation folders, embossed envelopes, uniquely shaped direct mailing pieces, POP displays and fold over greeting cards.

With a single magnetic die cutting station it is possible to apply a matrix or counter to the anvil cylinder to channel score.

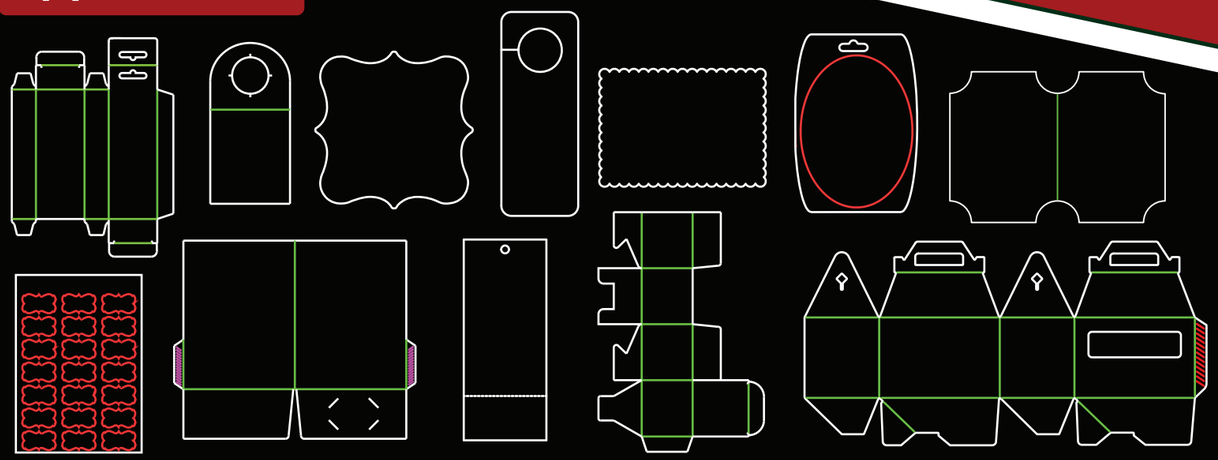
With a dual magnetic die cutting station a set of die tools can be made with cutting blades on both upper and lower tool at the same time, as long as they are in varying locations. Embossing elements can also be inverted as desired.

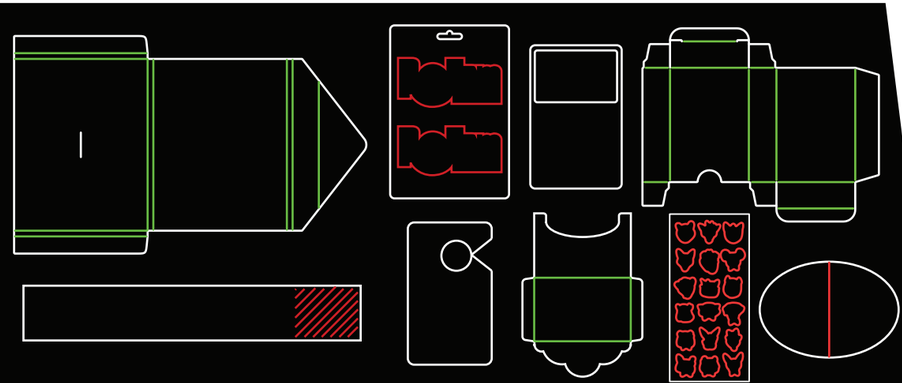
Paired set of die tools





Common Applications:





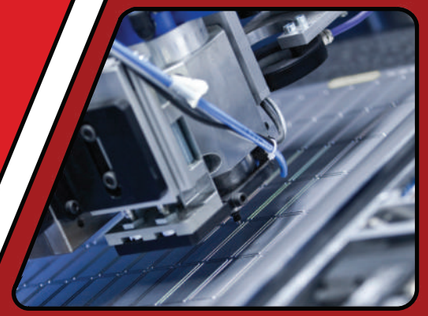
Flexible Dies vs. Steel Rule Dies

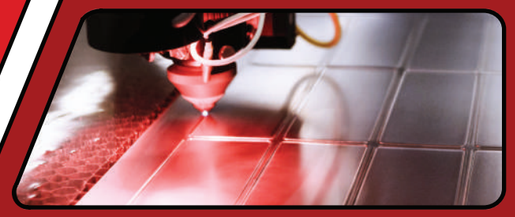
Flexible dies have been in use for 30+ years on converted Web printing presses to kiss cut adhesive materials. In years since, flexible die technology has advanced much further into die cutting of substrates as thick as 0.030" / 0.76mm.

Some advantages to utilizing flexible die technology over steel rule / platen technologies are;

Because flexible dies are produced via CNC machine, the tolerances they are held to are far tighter than that of a steel rule die. Intricate die cutting patterns, multiple heights of blade to die cut and kiss cut, perforation blades, scoring elements and embossing patterns can all be placed on a single flexible die.

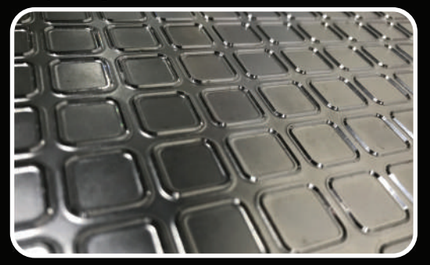
After flexible dies are engraved via these CNC machines, they can be either laser hardened for extended die life, or coated for various adhesive cutting applications to prevent substrates from adhering to the die tools. Lifespan of the dies will depend on the substrate being cut.





Produced to tolerances of less than 0.001" / 0.02mm - flexible dies are extremely precise and thus allow for maximum accuracy when kiss cutting to an adhesive liner. Extended die life is achieved cutting **against** an anvil cylinder rather than **into** an anvil blanket. Flexible die blades can be as close as 0.055" / 1.4mm and obtain radius' as tight as 0.125" / 3.1mm. Non-standard perforation TPI as well as shaped perforation blades, and multi-height blades within the same die tool are all possible.

Upper: Steel Rule dies produced by metal cutting blades being inserted into notches cut into wooden bases.
Lower: Flexible dies produced via CNC engraving machines that are capable of intricate patterns and multiple height of blade.

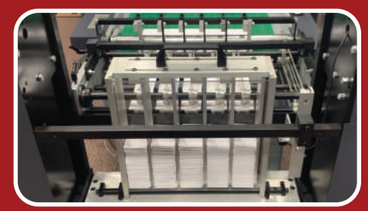


Delivery Systems

The Insignia machines are capable of delivering either a full sheet of die cut or kiss cut product, or it can strip the die cut pieces from the matrix or skeleton of the sheet and deliver them onto a slow moving shingle delivery table.

Product delivered onto a shingle table can vary from a single lane of product up to 6-8 lanes depending on size of piece being cut. Interior holes within the die cut product can be removed when delivering onto a shingle delivery table with the Insignia Air Blast Kit.

Another option for delivering stripped out product is into a vertically receding piece stacker capable of receding up to 11.5" / 29cm deep. Product is delivered into a removable cassette for minimal downtime.



Insignia machines can be ran in-line to folding and gluing equipment for continuous production of products like pocket folders, folding cartons, mailing pieces and much more.

An In-line gluing configuration is able to be reconfigured to run as two independant sections with minimal changeover to either machine.

The receding stacker is available with interchangable cassettes for various size of product. This delivery is ideal for products with order sensitive print or variable data in sort order.

Flexible Die Pricing Quotation

For flexible die pricing quotations please email;

Insigniadieline@rollemusa.com

Please include in this email;

- **Insignia machine die would be ran on (IS5, IS6, IS7, ISX3)**
- **Material information (sheet size, material thickness)**
- **Desire to strip out die cut pieces OR leave inside sheet**

Machine Specifications

	Insignia5	Insignia6	Insignia7	InsigniaX
Material Thickness	Minimum: 60lb Cover / 50gsm **Maximum: 0.024" / 400gsm**	Minimum: 60lb Cover / 50gsm **Maximum: 0.024" / 400gsm**	Minimum: 60lb Cover / 50gsm **Maximum: 0.024" / 400gsm**	Minimum: 60lb Cover / 50gsm **Maximum: 0.030" / 550gsm**
Sheet Size	8x8" Minimum (20x20cm) 20x15" Maximum (51x38cm)	8x8" Minimum (20x20cm) 20x20" Maximum (51x51cm)	8x8" Minimum (20x20cm) 30x24" Maximum (76x61cm)	8x8" Minimum (20x20cm) 24x24" Maximum (61x61cm)
Speed	Variable up to 5,000 sheets per hour	Variable up to 5,000 sheets per hour	Variable up to 5,000 sheets per hour	Variable up to 5,000 sheets per hour
Register	4 Adjustable front head stops Side guide; pull left or right Gripper finger spring system	4 Adjustable front head stops Side guide; pull left or right Gripper finger spring system	8 Adjustable front head stops Side guide; pull left or right Gripper finger cam system	6 Adjustable front head stops Side guide; pull left or right Gripper finger cam system
Feed	Top suction air feed w/ 3 movable sucker heads. Front & side air separation. Feed capacity of ~36"	Top suction air feed w/ 3 movable sucker heads. Front & side air separation. Feed capacity of ~36"	Top suction air feed w/ 4 movable sucker heads. Front & side air separation. Feed capacity of ~40"	Top suction air feed w/ 4 movable sucker heads. Front & side air separation. Feed capacity of ~40"
Cylinder Options	Upper: magnetic, ceramic & steel Lower: Hard anvil no lower jacket required	Upper: magnetic, ceramic & steel Lower: Hard anvil, no jacket required Optional dual magnetic system	Upper: magnetic, ceramic & steel Lower: Hard anvil, no jacket required Optional dual magnetic system	Upper: magnetic, ceramic & steel Lower: Hard anvil no lower jacket required
Air Supply	Becker feed pump built in. Compressed house air or air compressor required for stripping unit air knives.	Becker feed pump built in. Compressed house air or air compressor required for stripping unit air knives.	Becker feed pump built in. Compressed house air or air compressor required for stripping unit air knives.	Becker feed pump built in. Compressed house air or air compressor required for stripping unit air knives.
Electrical Rqt.	230v - 60Hz - 3-phase - 12amp 110v 1-phase line *Other voltages available	230v - 60Hz - 3-phase - 12amp 110v 1-phase line *Other voltages available	230v - 60Hz - 3-phase - 15amp 110v 1-phase line *Other voltages available	230v - 60Hz - 3-phase - 15amp 110v 1-phase line *Other voltages available
Footprint	156"L x 48"T x 40"W 396cm L x 122cm T x 101cm W	164"L x 51"T x 40"W 417cm L x 129cm T x 101cm W	181"L x 59" T x 59" W 460cm L x 147cm T x 140cm W	181"L x 53"T x 55" W 460cm L x 135cm T x 140cm W
Weight (die cutter only)	2,900lbs 1,315kgs	3,600lbs 1,630kgs	4,800lbs 2,200kgs	4,200lbs 1,905kgs

Flexible Die Suppliers

Atlas Die, LLC

Representative:
Jason Warren - (574) 849-6633
jwarren@atlasdie.com

RotoMetrics

Representative:
Steve Smith - (636) 587-3600
Steve.Smith@RotoMetrics.com

Die Storage

To the right are steel rule dies stored on large shelving racks requiring large amounts of space and can often take up valuable room for equipment or work space.

To the left are flexible dies stored in various methods; neithor of which require large physical space to store or file through.