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!

Contact Rollem:

WEB:
WWW.INSIGNIADIECUTTING.COM
WWW.ROLLEMLUSA.COM/DIECUT
WWW.YOUTUBE.COM/INSIGNIADIECUTTING
TOLL FREE (800) 272-4381

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dsherwood@rollemusa.com

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LATIN AMERICA: Diego Marulanda
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dmarulanda@rollemusa.com

Die Cutting Systems, Information & Specifications
**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 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.

**Common Applications:**

- Lower Anvil Cylinder (cutting surface)
- Lower Magnetic Cylinder
- Upper Magnetic Cylinder

**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 ability to adjust the die tool on the cylinder if needed.
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 recent years, 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. Flexible dies are produced via CNC engraving machines that are capable of intricate patterns and multiple height of blade.

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.

- 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.

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

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

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.

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

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.

- 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.
# Machine Specifications

<table>
<thead>
<tr>
<th>Insignia5</th>
<th>Insignia6</th>
<th>Insignia7</th>
<th>InsigniaX</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Material</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Thickness</td>
<td>Minimum: 60lb Cover / 10gsm</td>
<td>Minimum: 60lb Cover / 10gsm</td>
<td>Minimum: 60lb Cover / 10gsm</td>
</tr>
<tr>
<td>Maximum: 0.024” / 400gsm</td>
<td>Maximum: 0.024” / 400gsm</td>
<td>Maximum: 0.030” / 550gsm</td>
<td>Maximum: 0.030” / 550gsm</td>
</tr>
<tr>
<td><strong>Sheet Size</strong></td>
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<tr>
<td>8x8” Minimum (20x20cm) 20x15” Maximum (51x38cm)</td>
<td>8x8” Minimum (20x20cm) 20x20” Maximum (51x51cm)</td>
<td>8x8” Minimum (20x20cm) 30x24” Maximum (76x61cm)</td>
<td>8x8” Minimum (20x20cm) 24x24” Maximum (61x61cm)</td>
</tr>
<tr>
<td><strong>Speed</strong></td>
<td></td>
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<tr>
<td>Variable up to 5,000 sheets per hour</td>
<td>Variable up to 5,000 sheets per hour</td>
<td>Variable up to 5,000 sheets per hour</td>
<td>Variable up to 5,000 sheets per hour</td>
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<tr>
<td><strong>Register</strong></td>
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<tr>
<td>4 Adjustable front head stops Side guide; pull left or right Gripper finger spring system</td>
<td>4 Adjustable front head stops Side guide; pull left or right Gripper finger spring system</td>
<td>8 Adjustable front head stops Side guide; pull left or right Gripper finger cam system</td>
<td>6 Adjustable front head stops Side guide; pull left or right Gripper finger cam system</td>
</tr>
<tr>
<td><strong>Feed</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Top suction air feed w/ 3 movable sucker heads Front &amp; side air separation Feed capacity of ~36”</td>
<td>Top suction air feed w/ 3 movable sucker heads Front &amp; side air separation Feed capacity of ~36”</td>
<td>Top suction air feed w/ 4 movable sucker heads Front &amp; side air separation Feed capacity of ~40”</td>
<td>Top suction air feed w/ 4 movable sucker heads Front &amp; side air separation Feed capacity of ~40”</td>
</tr>
<tr>
<td><strong>Cylinder Options</strong></td>
<td></td>
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<td></td>
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<tr>
<td>Upper: magnetic, ceramic &amp; steel Lower: Hard anvil, no jacket required</td>
<td>Upper: magnetic, ceramic &amp; steel Lower: Hard anvil, no jacket required</td>
<td>Optional dual magnetic system</td>
<td>Upper: magnetic, ceramic &amp; steel Lower: Hard anvil, no jacket required</td>
</tr>
<tr>
<td><strong>Air Supply</strong></td>
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<tr>
<td>Becker feed pump built in. Compressed house air or air compressor required for stripping unit air knives.</td>
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<tr>
<td><strong>Electrical Rqt.</strong></td>
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<tr>
<td>230v - 60Hz - 3-phase - 12amp 110v 1-phase line</td>
<td>230v - 60Hz - 3-phase - 12amp 110v 1-phase line</td>
<td>230v - 60Hz - 3-phase - 15amp 110v 1-phase line</td>
<td>230v - 60Hz - 3-phase - 15amp 110v 1-phase line</td>
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<tr>
<td>Other voltages available</td>
<td>Other voltages available</td>
<td>Other voltages available</td>
<td>Other voltages available</td>
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<td><strong>Footprint</strong></td>
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<tr>
<td>75.6”L x 48”T x 40”W 396cm L x 122cm T x 101cm W</td>
<td>164”L x 51”T x 40”W 417cm L x 137cm T x 101cm W</td>
<td>181”L x 59”T x 59”W 460cm L x 147cm T x 140cm W</td>
<td>181”L x 53”T x 55”W 460cm L x 135cm T x 140cm W</td>
</tr>
<tr>
<td><strong>Weight</strong></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>(die cutter only) 2,900lbs 1,315kgs</td>
<td>5,000lbs 1,630kgs</td>
<td>4,800lbs 2,200kgs</td>
<td>4,200lbs 1,905kgs</td>
</tr>
</tbody>
</table>

# Flexible Die Suppliers

| Representative: Steve Smith - (636) 587-3600 Steve.Smith@RotoMetrics.com |
| Representative: Jason Warren - (574) 849-6633 jwarren@atlasdie.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; neither of which require large physical space to store or file through.