

Technology












Increasing Productivity With Precision Circular Sawing

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Productivity is top of mind for many manufacturers and Lenox has responded with an alternative to traditional band saws. CIRCTECH, also known as thin kerf or industrial circular sawing, is a growing market and many band saw customers are now switching to this technology due to its many cutting benefits, such as fast cutting rates, long blade life, high accuracy and surface finish. Customers are also reporting a lower total cost of operations with a reduction in scrap, less noise and less saw maintenance over band saws.

| PRECISION CIRCULAR SAW VS. BAND SAW | |
|--|--|
| Band Saws | Precision Circular Saws |
| <p><u>Performance</u></p> <ul style="list-style-type: none"> • Speed: 20 sec / Tube • Life: 4 – 4.5 m² p / Blade • Accuracy: Produced burr <p><u>Tool Usage</u></p> <ul style="list-style-type: none"> • 26 Band Saws • 250 2" Blades Per Week | <p><u>Performance</u></p> <ul style="list-style-type: none"> • Speed: 8 sec / Tube • Life: 7 – 8 m² p / Blade • Accuracy: No burr <p><u>Tool Usage</u></p> <ul style="list-style-type: none"> • 4 Precision Circular Saws |


The CircTech CM100 provides optimum performance when cutting a mix of carbon steels, alloy steels and tool steels, but should not be used in Stainless Steel operations. The CM100 features a Cermet tooth tip that helps withstand heat and offers increased wear resistance. The honed tooth edge and a radius chip breaker reduce tip fractures, enabling better durability and longer blade life. Additionally, the unique tooth geometry maximizes cutting efficiency and provides straight cuts with mirror-like finish. Improved grinding and a bore manufactured to high tolerances have a significant effect on the surface finish. CM100 is manufactured to very consistent, tight tolerances, including Run out and Flatness, allowing for consistent performance every blade.

| Customer Benefits | Industry | End Parts |
|--|--|---|
| <p>Fast Cutting Rates</p> <ul style="list-style-type: none"> • Very High Cutting Rates | <p>Automotive</p>  |   |
| <p>Long Blade Life</p> <ul style="list-style-type: none"> • Long Blade Life | <p>Aerospace</p>  |   |
| <p>Surface Finish</p> <ul style="list-style-type: none"> • Highly Accurate • High Level Of Surface Finish | <p>Agriculture</p>  |   |
| <p>Consistency</p> <ul style="list-style-type: none"> • Repeatable Performance | <p>Steel Service Centers</p>  |  |


One of the keys to consistent, great performance centers around the bore. Manufacturing this bore to very high tolerances has a big impact on the blade's overall performance. The bore on CM100 utilizes an advanced manufacturing process to ensure it is very accurate on every blade. This is vitally important because the bore is one of the first production processes and every other manufacturing step hinges on the precise measurements of the blade bore.

This process allows for high accuracy and precise brazing, enabling accurate placement of each cermet tip.


Brazing Improvement




Grinding Improvement



Tighter Fit





Finished Bore Benefits

- » Better Blade Fit
- » Limits Vibration
- » Longer Blade Life
- » Improved Consistent Performance
- » Improved Surface Finish on Cut Pieces
- » Improved Straightness of Cut

Check out the video below for proper mounting of the CircTech CM100.

For the complete offering from Lenox Tools, please visit MSCDirect.com.

