

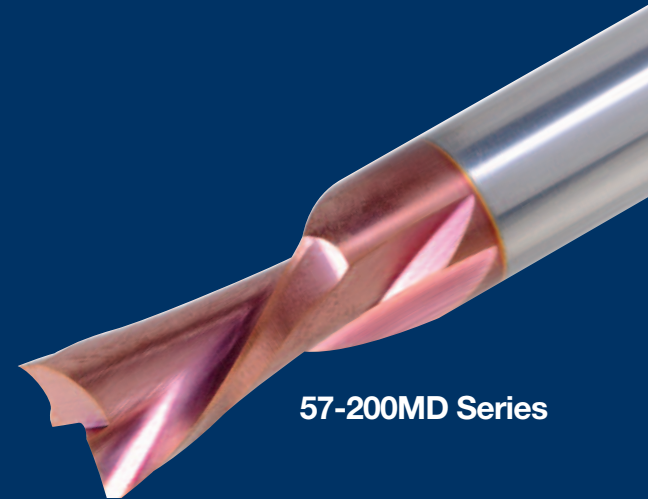
SEPTEMBER 2011
**CATALOG
 SUPPLEMENT**



**57-200MD SERIES
 Marathon Spiral Downcut**

The longest running downcut in the industry due to the advancements in geometry and the addition of a unique Onsrud coating.

PART #	CED	FLUTE LGTH	SHANK	OAL	FLUTES	LIST PRICE
57-278MD	1/4	3/8	1/4	2-1/2	2	\$42.00
57-279MD	1/4	5/8	1/4	2-1/2	2	\$54.50
57-317MD	3/8	7/8	3/8	3	2	\$67.00
57-359MD	1/2	7/8	1/2	3	2	\$96.00



57-200MD Series

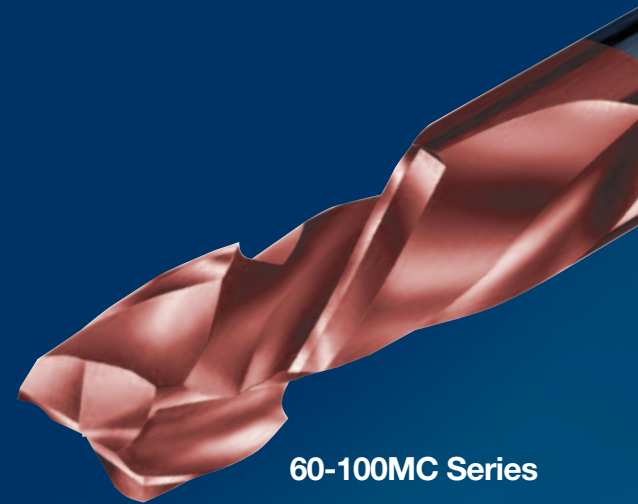
**60-100MC SERIES
 Marathon Compression**

The LMT Onsrud Marathon is the **longest running** compression tool due to advancements in cutting geometry and the addition of a **unique Onsrud coating**. The coating is formulated to protect the cutting edge from the high temperatures generated when routing laminated and composite wood products.

PART #	CED	FLUTE LGTH	UPCUT	SHANK	OAL	FLUTES	LIST PRICE
60-123MC*	3/8	7/8	0.200	3/8	3	2	\$90.25
60-124MC	3/8	1-1/8	0.406	3/8	3	2	\$96.00
60-163MC*	1/2	7/8	0.200	1/2	3	2	\$112.05
60-169MC	1/2	1-1/8	0.562	1/2	3	2	\$113.95
60-171MC	1/2	1-3/8	0.625	1/2	3	2	\$121.50
60-173MC*	1/2	1-3/8	0.200	1/2	3-1/2	2	\$125.20
60-172MC	1/2	1-5/8	0.750	1/2	4	2	\$134.00
60-126MC*	3/8	7/8	0.200	3/8	3	3	\$126.55
60-177MC*	1/2	1-3/8	0.200	1/2	3-1/2	3	\$148.95

BOLD = NEW PRODUCT

*MORTISE COMPRESSION



60-100MC Series

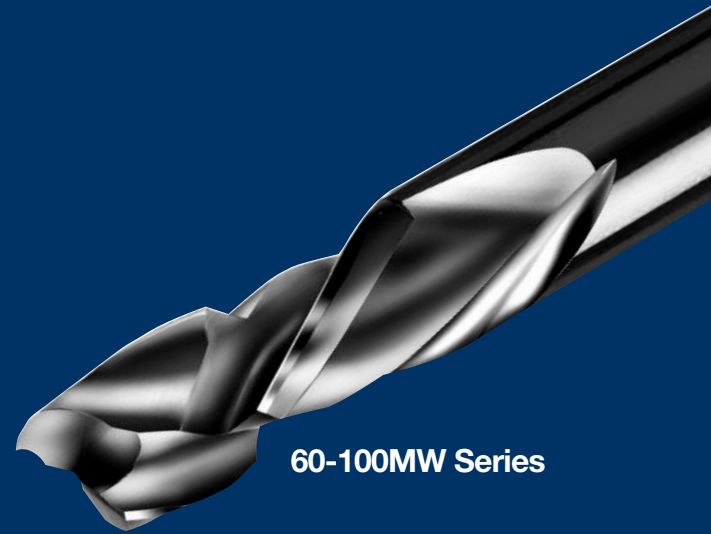
www.onsrud.com

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60-100MW SERIES

Single, Double and Three Flute - Solid Carbide *Max Life* Compression Spiral

Designed for **maximum life** when cutting in high-wear applications. Unique geometries and carbides **improve the wear** characteristics of the tool under abrasive applications with **superior** part finish.



60-100MW Series

PART #	CED	FLUTE LGTH	UPCUT LGTH	SHANK	OAL	LIST PRICE
SINGLE FLUTE						
60-102MW	1/8	3/8	.205	1/4	2-1/2	\$48.15
60-106MW	3/16	5/8	.300	1/4	2-1/2	\$54.90
60-111MW*	1/4	7/8	.175	1/4	2-1/2	\$60.50
60-120MW*	3/8	1-1/8	.200	3/8	3	\$67.20
60-167MW*	1/2	1-1/8	.200	1/2	3	\$86.30

HELIX ANGLE ≈ 30°

*MORTISE COMPRESSION

DOUBLE FLUTE						
60-113MW*	1/4	7/8	.188	1/4	2-1/2	\$62.70
60-123MW*	3/8	7/8	.188	3/8	3	\$73.30
60-124MW	3/8	1-1/8	.406	3/8	3	\$82.25
60-127MW*	3/8	1-1/8	.188	3/8	3	\$82.25
60-163MW*	1/2	7/8	.200	1/2	3	\$91.80
60-169MW	1/2	1-1/8	.562	1/2	3	\$92.50
60-171MW	1/2	1-3/8	.625	1/2	3-1/2	\$98.65
60-172MW	1/2	1-5/8	.750	1/2	4	\$105.55
60-173MW*	1/2	1-3/8	.200	1/2	3-1/2	\$101.65
60-181MW	1/2	2-1/8	1	1/2	5	\$156.50
60-186MW	5/8	2-1/4	1	5/8	5	\$266.55
60-196MW	3/4	1-7/8	.750	3/4	4	\$239.85
60-194MW	3/4	2-1/4	1	3/4	5	\$274.00

HELIX ANGLE ≈ 30°

*MORTISE COMPRESSION

THREE FLUTE						
60-126MW*	3/8	7/8	.200	3/8	3	\$102.75
60-125MW	3/8	1-1/8	.500	3/8	3	\$85.10
60-176MW*	1/2	7/8	.200	1/2	3	\$100.80
60-177MW*	1/2	1-3/8	.200	1/2	3-1/2	\$112.00

HELIX ANGLE ≈ 30°

*MORTISE COMPRESSION

BOLD = NEW PRODUCT

65-200B/65-300B SERIES

High Finish Ballnose for Plastics

Typically, when a ball nose tool is used to machine contours in plastic, the surface finish is slightly irregular with evident tool marks. While this finish is acceptable in most applications, it is not satisfactory in many medical components, such as a knee replacement part. To achieve the surface finish required for the plastic insert, LMT Onsrud, developed an **innovative** solid carbide ball nose tool. The new tool's unique geometry, **specially designed point**, and **highly polished** primary clearance and flute give the tool the ability to attain a surface finish of 28 Ra in mechanical plastic.

PART #	CED	FLUTE LGTH	SHANK	OAL	FLUTES	LIST PRICE
TWO FLUTE						
65-205B	1/16	1/4	1/8	2	2	\$73.65
65-210B	1/8	1/2	1/8	2-1/2	2	\$64.70
65-215B	3/16	1/2	1/4	2-1/2	2	\$83.15
65-220B	1/4	1/2	1/4	2-1/2	2	\$83.05
65-225B	1/4	1-1/8	1/4	3	2	\$86.85
65-235B	5/16	1/2	5/16	3	2	\$100.35
65-240B	5/16	1-1/8	5/16	3	2	\$104.05
65-250B	3/8	1-1/8	3/8	3	2	\$104.05
65-260B	1/2	1-1/8	1/2	3	2	\$126.10

METRIC						
65-280B	3mm	12mm	3mm	64mm	2	\$67.75
65-285B	6mm	20mm	6mm	76mm	2	\$90.65
65-290B	8mm	25mm	8mm	76mm	2	\$99.00
65-295B	10mm	30mm	10mm	76mm	2	\$128.80

FOUR FLUTE						
65-310B	1/4	1/2	1/4	3	4	\$86.90
65-315B	5/16	1/2	5/16	3	4	\$104.15
65-320B	3/8	5/8	3/8	3	4	\$112.00
65-325B	1/2	3/4	1/2	3	4	\$150.10

54-200 SERIES

Three and Four Flute - Solid Carbide Spiral for Glass-Reinforced Plastic (Coated)

Updated line of three and four flute tools for machining glass-reinforced plastic. Geometry has been **optimized** to shear the glass fibers while creating a chip which removes heat from the cut to avoid melting of the material. Tools are coated to withstand the abrasive characteristics inherent to glass-reinforced plastic (GRP).

PART #	CED	FLUTE LGTH	SHANK	OAL	FLUTES	UP/DOWN	LIST PRICE
54-205	1/8	1/2	1/4	2	3	Upcut	\$69.45
54-206	1/8	1/2	1/4	2	3	Downcut	\$69.45
54-210	3/16	5/8	1/4	2	3	Upcut	\$71.70
54-211	3/16	5/8	1/4	2	3	Downcut	\$71.70
54-220	1/4	3/4	1/4	2-1/2	4	Upcut	\$78.40
54-221	1/4	3/4	1/4	2-1/2	4	Downcut	\$78.40
54-230	3/8	1-1/8	3/8	3	4	Upcut	\$112.00
54-231	3/8	1-1/8	3/8	3	4	Downcut	\$112.00
54-240	1/2	1-1/8	1/2	3-1/2	4	Upcut	\$145.60
54-241	1/2	1-1/8	1/2	3-1/2	4	Downcut	\$145.60



65-200B Series



65-300B Series



54-200 Series

66-800 SERIES

DFC Compression for Composites

The diamond film coated solid carbide compression routers **unique** geometry prevents delamination on top and the bottom edges of the composites. The open flute geometry dissipates heat to prevent resin flow.



PART #	CED	UPCUT LGTH	FLUTE LGTH	SHANK	OAL	FLUTES	LIST PRICE
66-802DFC	1/4	.750	.325	1/4	3-1/2	4	\$205.25
66-811DFC*	3/8	1	.100	3/8	4	4	\$312.25
66-814DFC	3/8	1	.340	3/8	4	6	\$321.15
66-817DFC*	1/2	1.125	.100	1/2	4	6	\$372.60
66-823DFC	1/2	1.125	.350	1/2	4	6	\$388.75

*Downcut edge to within .050" of tool end

METRIC

66-852DFC	6mm	20mm	7.75mm	6mm	90mm	4	\$216.70
66-858DFC	8mm	25mm	8mm	8mm	100mm	4	\$315.20
66-864DFC	10mm	25mm	8.5mm	10mm	100mm	6	\$367.15
66-870DFC	12mm	25mm	9mm	12mm	100mm	6	\$413.05



66-800 Series

67-220 SERIES

PCD Progressive Chipbreaker for Composites

The Progressive Chipbreaker is designed to provide **superior chip control** and increased tool life when cutting dense and abrasive materials. The new chipbreaker incorporates a **unique** geometry with a PCD cutting edge to support a wide range of feed rates and depth of cut combinations while **extending** the life of the tool. This is accomplished by utilizing a **distinct** Hi-Low asymmetrical chipbreaker profile which reduces vibration and chatter, caused by harmonic imbalance, resulting in **improved** surface finishes, while reducing noise levels and wear on the tool.



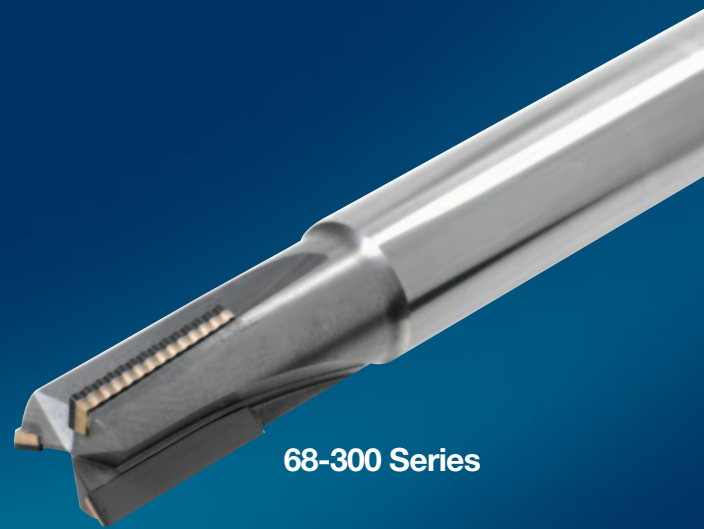
67-220 Series

PART #	CED	FLUTE LGTH	SHANK	OAL	FLUTES	LIST PRICE
67-221	3/8	3/8	3/8	3	3	\$391.00
67-225	1/2	5/8	1/2	3	3	\$600.82
67-227	1/2	1-1/8	1/2	3	3	\$860.08

68-300 SERIES

Three Flute - PCD SERF™ Cutter for Composites

Three-Flute tool with two roughing edges that have geometry to **reduce cutting forces** and shear fibers in high-strength composite and other fiber reinforced plastic materials. The finishing edge cleans up after roughing cuts to create a **smooth edge** on material.



68-300 Series

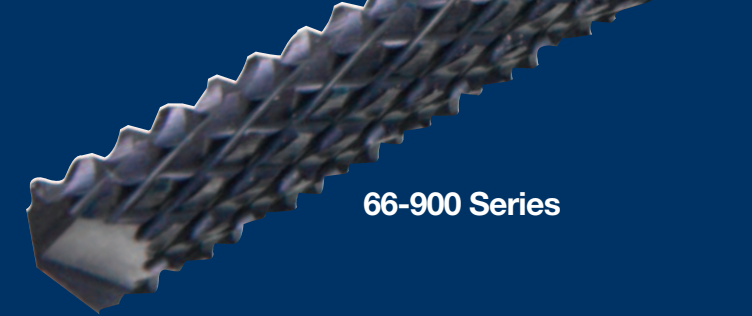
PART #	CED	FLUTE LGTH	SHANK	OAL	FLUTES	LIST PRICE
68-315	3/8	1/2	3/8	4	3	\$641.75
68-320	3/8	7/8	3/8	4	3	\$795.75
68-340	1/2	5/8	1/2	4	3	\$803.25
68-345	1/2	1	1/2	4	3	\$1,094.15
68-350	1/2	1-1/4	1/2	4	3	\$1,273.05
68-360	3/4	1-3/8	3/4	5	3	\$1,749.25

METRIC

68-310	8mm	10mm	8mm	76mm	3	\$530.95
68-325	10mm	14mm	10mm	100mm	3	\$679.15
68-330	12mm	14mm	12mm	100mm	3	\$733.00
68-335	12mm	26mm	12mm	100mm	3	\$1,082.40
68-355	16mm	26mm	16mm	100mm	3	\$1,289.75

66-900 SERIES High Performance Composite Router

The new High Performance Composite Router is designed for **more efficient routing** of composite materials, in both hand-fed and in CNC applications. Conventional composite routing tools, commonly referred to as “burrs” have a diamond tooth pattern that produces a grinding action more than a cutting action. Therefore, the conventional tools generate large amounts of heat resulting in premature tool failure. The new High Performance Composite Router is a **true cutting tool**. It cuts the material into distinct chips which **remove heat from the cut**. Deep cutting flutes increase the chip flow and aids in dissipating heat resulting in longer tool life. The geometry produces a **smooth edge** on the material, eliminating secondary operations. In a hand router application, the geometry **reduces the cutting force** required by the operator. In a CNC router application, higher speeds and feeds can be achieved, increasing productivity and lowering costs.



66-900 Series

PART #	POINT STYLE	CED	FLUTE LGTH	SHANK	OAL	LIST PRICE
66-901ALTIN	No	1/8	1/2	1/8	1 1/2	\$37.35
66-902ALTIN	BURR	1/8	1/2	1/8	1 1/2	\$54.15
66-903ALTIN	Endmill	1/8	1/2	1/8	1 1/2	\$42.95
66-904ALTIN	Drill	1/8	1/2	1/8	1 1/2	\$50.75
66-905ALTIN	No	3/16	5/8	1/4	2	\$59.15
66-906ALTIN	BURR	3/16	5/8	1/4	2	\$75.95
66-907ALTIN	Endmill	3/16	5/8	1/4	2	\$64.75
66-908ALTIN	Drill	3/16	5/8	1/4	2	\$72.60
66-909ALTIN	No	1/4	1	1/4	3	\$57.35
66-910ALTIN	BURR	1/4	1	1/4	3	\$74.15
66-911ALTIN	Endmill	1/4	1	1/4	3	\$62.95
66-912ALTIN	Drill	1/4	1	1/4	3	\$70.80
66-913ALTIN	No	1/4	1-1/2	1/4	3-1/2	\$61.00
66-914ALTIN	BURR	1/4	1-1/2	1/4	3-1/2	\$77.80
66-915ALTIN	Endmill	1/4	1-1/2	1/4	3-1/2	\$66.60
66-916ALTIN	Drill	1/4	1-1/2	1/4	3-1/2	\$74.45
66-917ALTIN	No	1/4	2-1/8	1/4	4	\$68.50
66-918ALTIN	BURR	1/4	2-1/8	1/4	4	\$85.30
66-919ALTIN	Endmill	1/4	2-1/8	1/4	4	\$74.10
66-920ALTIN	Drill	1/4	2-1/8	1/4	4	\$81.95
66-921ALTIN	No	3/8	1	3/8	3	\$81.60
66-922ALTIN	BURR	3/8	1	3/8	3	\$98.40
66-923ALTIN	Endmill	3/8	1	3/8	3	\$87.20
66-924ALTIN	Drill	3/8	1	3/8	3	\$95.05
66-925ALTIN	No	3/8	1-5/8	3/8	3-1/2	\$97.55
66-926ALTIN	BURR	3/8	1-5/8	3/8	3-1/2	\$114.35
66-927ALTIN	Endmill	3/8	1-5/8	3/8	3-1/2	\$97.55
66-928ALTIN	Drill	3/8	1-5/8	3/8	3-1/2	\$111.00
66-929ALTIN	No	3/8	2-1/8	3/8	4	\$99.45
66-930ALTIN	BURR	3/8	2-1/8	3/8	4	\$116.25
66-931ALTIN	Endmill	3/8	2-1/8	3/8	4	\$105.05
66-932ALTIN	Drill	3/8	2-1/8	3/8	4	\$112.90
66-933ALTIN	No	1/2	1-1/8	1/2	3	\$108.25
66-934ALTIN	BURR	1/2	1-1/8	1/2	3	\$125.05
66-935ALTIN	Endmill	1/2	1-1/8	1/2	3	\$113.85
66-936ALTIN	Drill	1/2	1-1/8	1/2	3	\$121.65
66-937ALTIN	No	1/2	1-5/8	1/2	4	\$125.90
66-938ALTIN	BURR	1/2	1-5/8	1/2	4	\$142.70
66-939ALTIN	Endmill	1/2	1-5/8	1/2	4	\$131.50

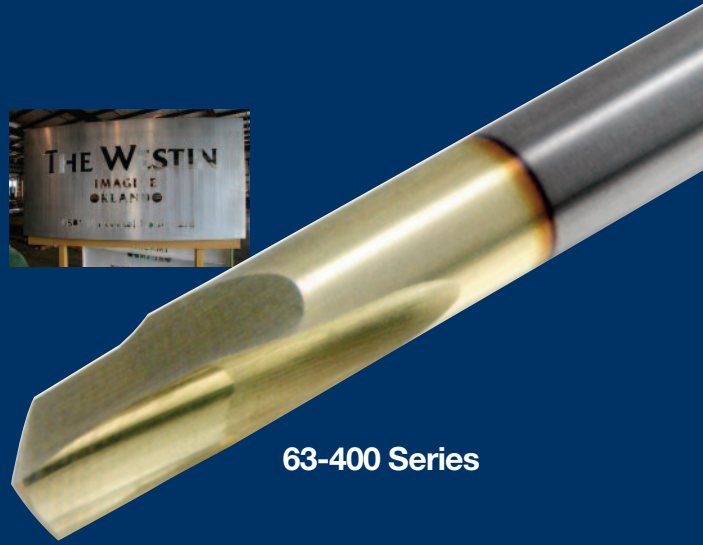
PART #	POINT STYLE	CED	FLUTE LGTH	SHANK	OAL	LIST PRICE
66-940ALTIN	Drill	1/2	1-5/8	1/2	4	\$139.35
66-941ALTIN	No	1/2	2-1/8	1/2	4	\$127.50
66-942ALTIN	BURR	1/2	2-1/8	1/2	4	\$144.30
66-943ALTIN	Endmill	1/2	2-1/8	1/2	4	\$133.10
66-944ALTIN	Drill	1/2	2-1/8	1/2	4	\$140.95
66-945ALTIN	No	1/2	3-1/8	1/2	5	\$146.70
66-946ALTIN	BURR	1/2	3-1/8	1/2	5	\$163.50
66-947ALTIN	Endmill	1/2	3-1/8	1/2	5	\$155.45
66-948ALTIN	Drill	1/2	3-1/8	1/2	5	\$160.15
66-949ALTIN	No	1/2	4-1/8	1/2	6	\$166.15
66-950ALTIN	BURR	1/2	4-1/8	1/2	6	\$182.95
66-951ALTIN	Endmill	1/2	4-1/8	1/2	6	\$171.75
66-952ALTIN	Drill	1/2	4-1/8	1/2	6	\$179.60

METRIC

66-971ALTIN	No	4mm	16mm	6mm	50mm	\$71.20
66-972ALTIN	BURR	4mm	16mm	6mm	50mm	\$88.00
66-973ALTIN	Endmill	4mm	16mm	6mm	50mm	\$76.80
66-974ALTIN	Drill	4mm	16mm	6mm	50mm	\$84.65
66-975ALTIN	No	6mm	19mm	6mm	75mm	\$66.20
66-976ALTIN	BURR	6mm	19mm	6mm	75mm	\$83.00
66-977ALTIN	Endmill	6mm	19mm	6mm	75mm	\$71.80
66-978ALTIN	Drill	6mm	19mm	6mm	75mm	\$79.65
66-979ALTIN	No	6mm	25mm	6mm	75mm	\$72.75
66-980ALTIN	BURR	6mm	25mm	6mm	75mm	\$89.55
66-981ALTIN	Endmill	6mm	25mm	6mm	75mm	\$78.35
66-982ALTIN	Drill	6mm	25mm	6mm	75mm	\$86.20
66-983ALTIN	No	8mm	25mm	8mm	63mm	\$88.60
66-984ALTIN	BURR	8mm	25mm	8mm	63mm	\$105.40
66-985ALTIN	Endmill	8mm	25mm	8mm	63mm	\$94.20
66-986ALTIN	Drill	8mm	25mm	8mm	63mm	\$102.05
66-987ALTIN	No	10mm	25mm	10mm	75mm	\$111.80
66-988ALTIN	BURR	10mm	25mm	10mm	75mm	\$128.60
66-989ALTIN	Endmill	10mm	25mm	10mm	75mm	\$117.40
66-990ALTIN	Drill	10mm	25mm	10mm	75mm	\$125.20
66-991ALTIN	No	12mm	25mm	12mm	75mm	\$150.65
66-992ALTIN	BURR	12mm	25mm	12mm	75mm	\$167.45
66-993ALTIN	Endmill	12mm	25mm	12mm	75mm	\$156.25
66-994ALTIN	Drill	12mm	25mm	12mm	75mm	\$164.10

63-400 SERIES Soft Aluminum

The new series of solid carbide, single edge, O-flutes address the issues with machining very soft aluminum alloys, such as 3003. The product has a more **open flute design** to increase chip evacuation and is coated with ZrN (Zirconium-Nitride). There are many advantages of the ZrN coating; it **reduces the amount of heat** on the carbide substrate, it's very low coefficient of friction allows the chip to easily slide up the flute, and it **prevents aluminum build** up on the cutting edge.



63-400 Series

PART #	CED	FLUTE LGTH	SHANK	OAL	COATING	LIST PRICE
63-420	3/16	1/4	1/4	2	ZRN	\$68.10
63-430	1/4	1/4	1/4	2	ZRN	\$53.65

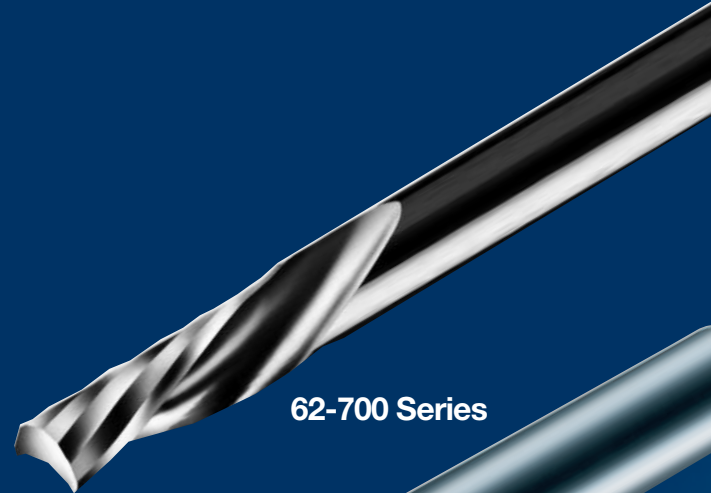
METRIC

63-450	5mm	6mm	6mm	64mm	ZRN	\$83.05
63-460	6mm	6mm	6mm	64mm	ZRN	\$61.15

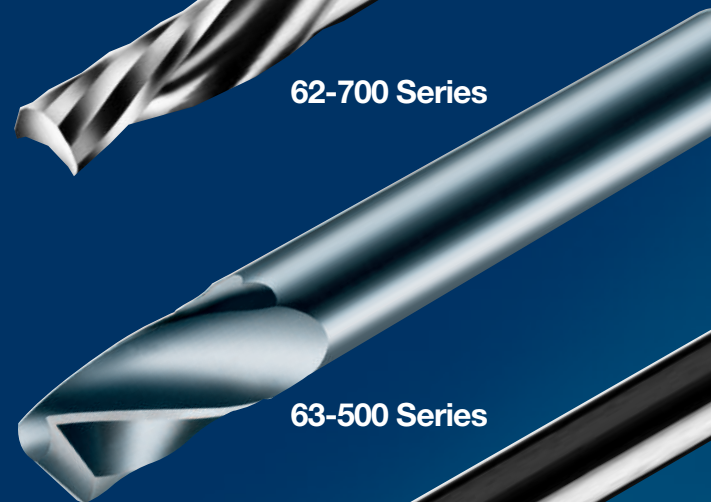
60,000 RPM Spindle Speeds

The following part numbers have been balanced by design to run at spindle speeds up to 60,000 RPM.

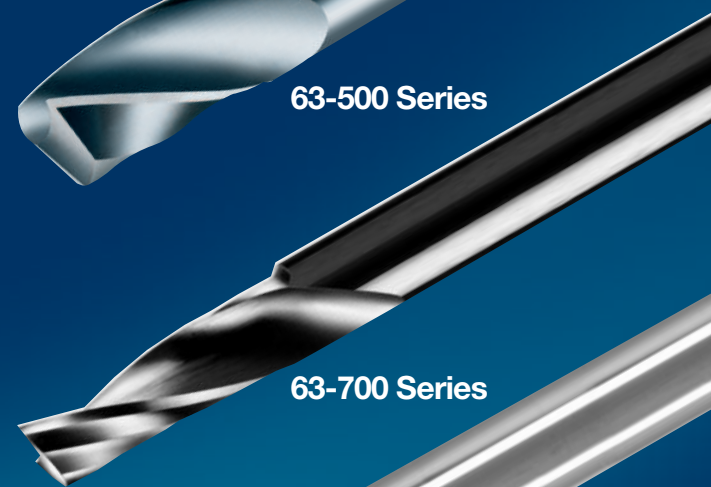
62-606	63-505	63-717	63-769	63-842	65-000
62-712	63-510	63-718	63-793	63-854	65-010
62-713	63-515	63-719	63-804	63-860	65-012
62-715	63-520	63-727	63-808	63-862	65-013
62-719	63-700	63-743	63-810	63-864	65-018
62-727	63-701	63-750	63-812	63-866	65-019
62-762	63-706	63-751	63-814	63-870	65-020
62-763	63-707	63-760	63-816	63-874	65-021
62-769	63-710	63-761	63-818	63-878	65-027
62-816	63-711	63-762	63-820	63-892	
62-824	63-712	63-763	63-822	63-924	
62-842	63-713	63-766	63-824	64-000	
62-866	63-715	63-767	63-826	64-012	
62-874	63-716	63-768	63-832	64-016	



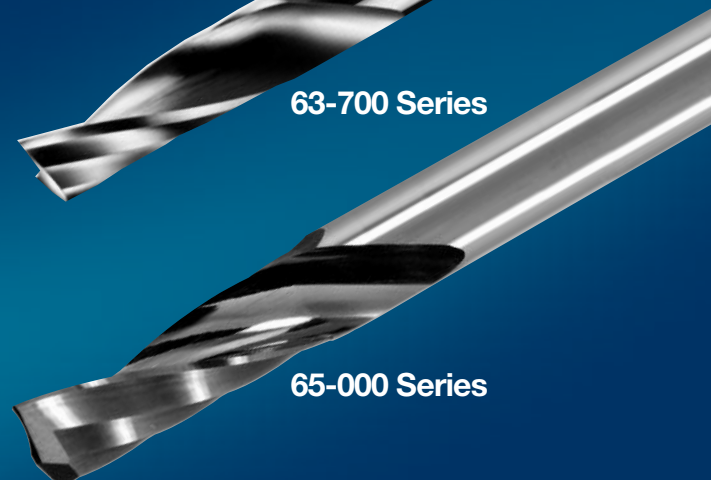
62-700 Series



63-500 Series



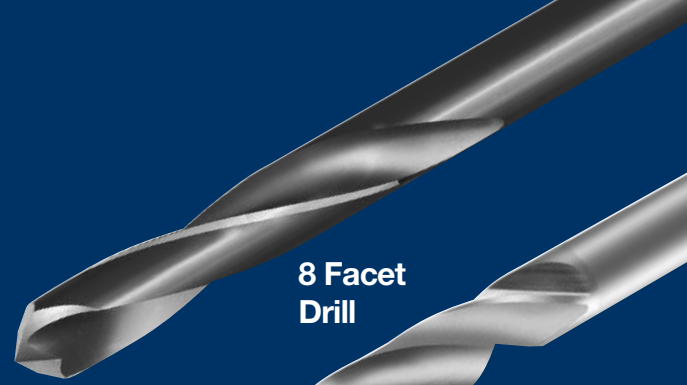
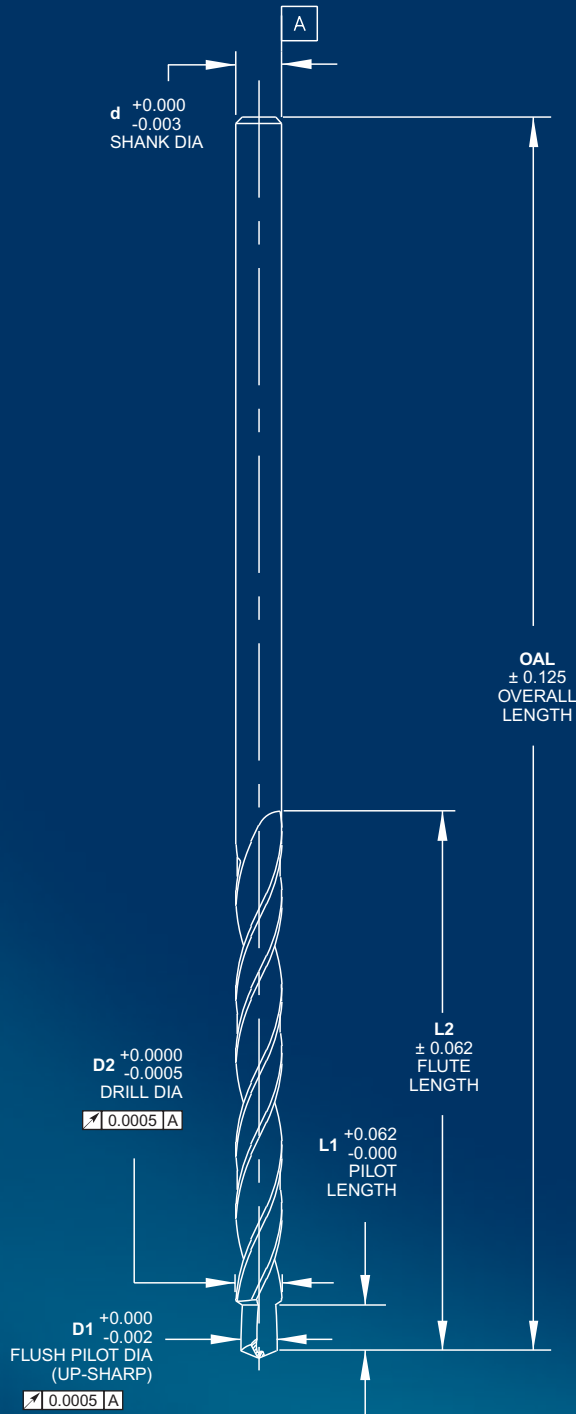
63-700 Series



65-000 Series

LMT Onsrud Drilling

Solid Carbide, Coated Solid Carbide and PCD Tipped Drills designed to drill Plastic, Composite, Titanium, Aluminum and Other Non-Ferrous materials.



Let LMT Onsrud Design
A Drill for Your
Challenging Application

One Shot Drill Reamer



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