



VORTAKT

BARREL • WORKS

Technical drawing of a mechanical part with various dimensions and callouts. The drawing includes a top view, a side view, and a cross-section view. Dimensions are given in inches, with some values in parentheses indicating tolerances. Callouts are numbered 1 through 19. The background is a solid brown color.

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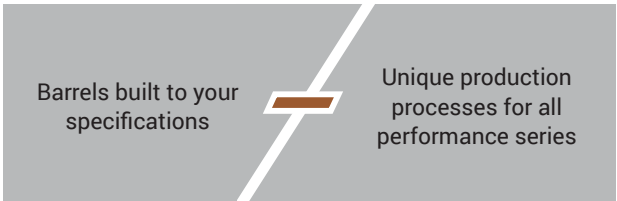


WE MAKE YOUR BARRELS

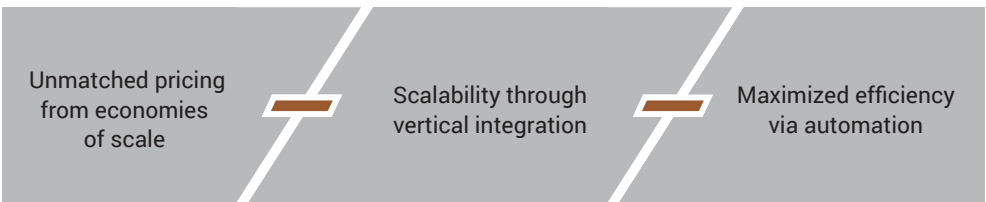
Price. Performance. Delivery. That’s what you want to see from your OEM suppliers. In today’s demanding, fast-paced market, it’s more important than ever to find a partner who can deliver high-performance barrels that arrive on time and on budget.

By incorporating an unprecedented level of automation in the barrel manufacturing process, Vortakt is able to eliminate unnecessary material handling, minimize setups, and reduce cycle times. This results in lower barrel pricing while consistently exceeding your well-defined tolerance requirements.

ENGINEERING EXCELLENCE



MANUFACTURING TECHNOLOGY



BUSINESS PARTNERSHIP



THE VORTAKT OEM PROMISE

We Make Your Barrels - Vortakt Barrel Works provides OEM rifle and pistol barrel manufacturing services to top brands across the firearm industry. By effectively harnessing automation technology and adhering to engineering best practices, our team provides innovative partnership solutions based on your unique needs.



BLANKET ORDER

Effectively manage your inventory levels for up to six months.

- Schedule delivery and payments
- Avoid lead times on future orders
- Improved liquidity and cash flow

AIR DROP

High volume discounts in smaller batch orders.

- Most popular barrel blanks available
- Enjoy our maximum price break
- Inventory available on-demand

QUICK SHIP

Barrel blank inventory available for immediate fulfillment.

- Streamline production planning
- Popular configurations available
- Eliminate lead times

CUSTOM SOLUTIONS

Vortakt expands its capabilities based on the needs of its clientele.

- Custom tooling options available
- Unique machining capabilities
- Manufacturing process modifications



IT'S NOT BLACK MAGIC

IT'S MANUFACTURING TECHNOLOGY

Firearm manufacturers rely on Vortakt Barrel Works to consistently produce quality barrels designed to exact specifications with world-class manufacturing technology. Whether this involves using state-of-the-art robotics in automated rifling cells, or delivering single setup solutions for contouring, chambering, and external machining operations, Vortakt is on the bleeding edge of technological innovation.

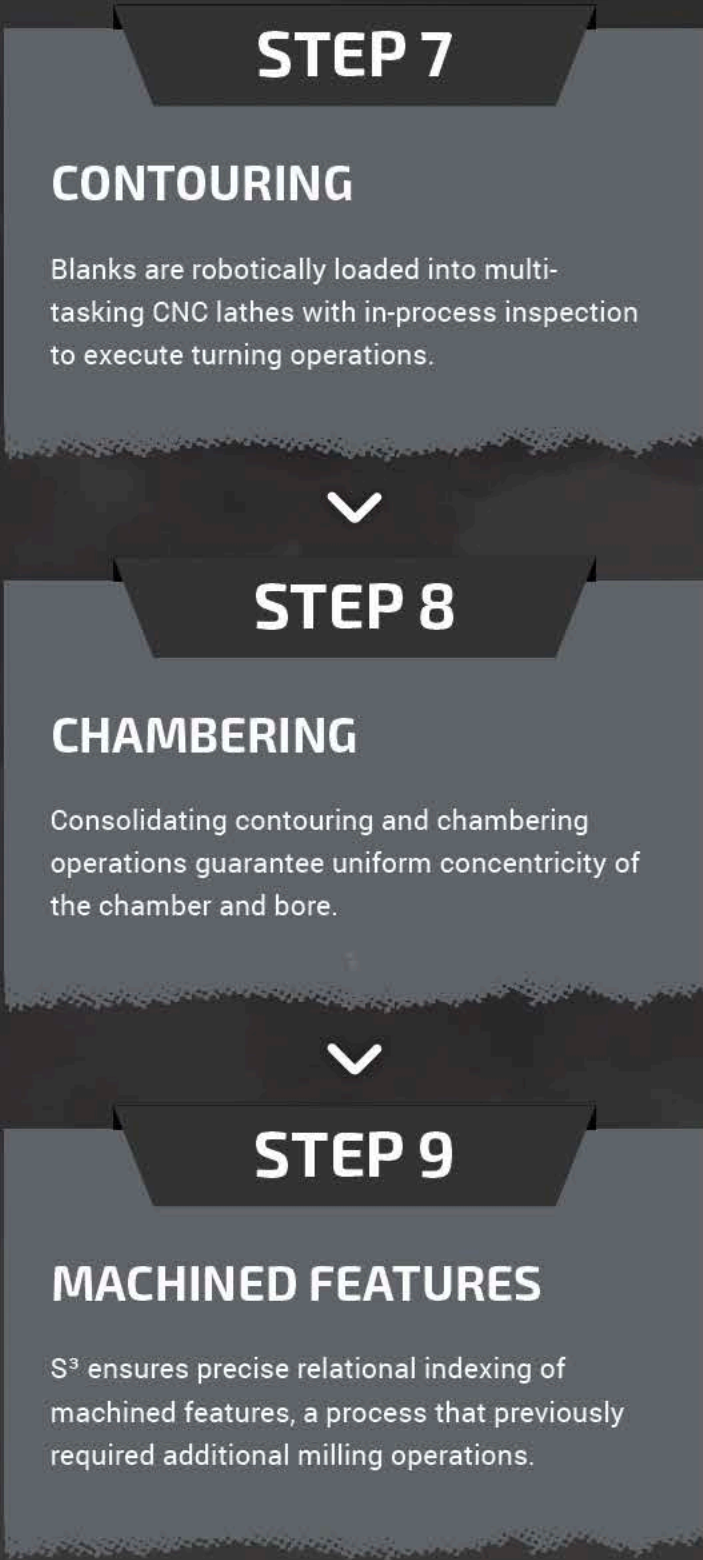
BARREL BLANK MANUFACTURING

Vortakt's barrel blank production process is efficiently managed by consolidating all operations within a single manned or automated CNC machining cell.



FINISHING OPERATIONS

Vortakt's S³ (Single Setup Solution) technology allows for the consolidation of contouring, chambering, and finish machining operations based on unique dimensional requirements.



BARREL BLANKS



Vortakt produces barrel blanks to accommodate all budgets, designs, and performance requirements. Vortakt supplies barrel blanks to both large and small OEMs, from 50-piece batches of 500 Series cut rifled barrels to 10,000+ piece blanket orders of 200 Series button rifled barrels.

BARREL BLANK OPTIONS:

- Define your material specifications
- Gain twist available
- Button or single-point cut rifling
- Flexible finishing capabilities
- Standard or custom rifling profiles
- In-stock quick ship inventory

BARREL PERFORMANCE SERIES

The following series options are engineered and manufactured at defined quality levels to best suit the unique precision and economic requirements of our OEM clients:

100 SERIES

100 SERIES BARRELS are gundrilled and reamed faster with fewer tool changes, leading to cost-effective production. Maintaining Vortakt’s rigorous standards and SAAMI specifications, Series 100 barrels yield consistent quality at production quantities.



200 SERIES

200 SERIES BARRELS are our most popular – balance affordability without sacrificing performance. These barrels are manufactured and tested above industry standards, meeting the needs of most firearm OEMs.



300 SERIES

300 SERIES BARRELS are match-grade quality. Gundrilled and reamed at slower feeds and lapped to remove tooling marks, Series 300 barrels adhere to improved tolerance standards with straighter bores, a superior finish, and improved accuracy, even at high production levels.



400 SERIES

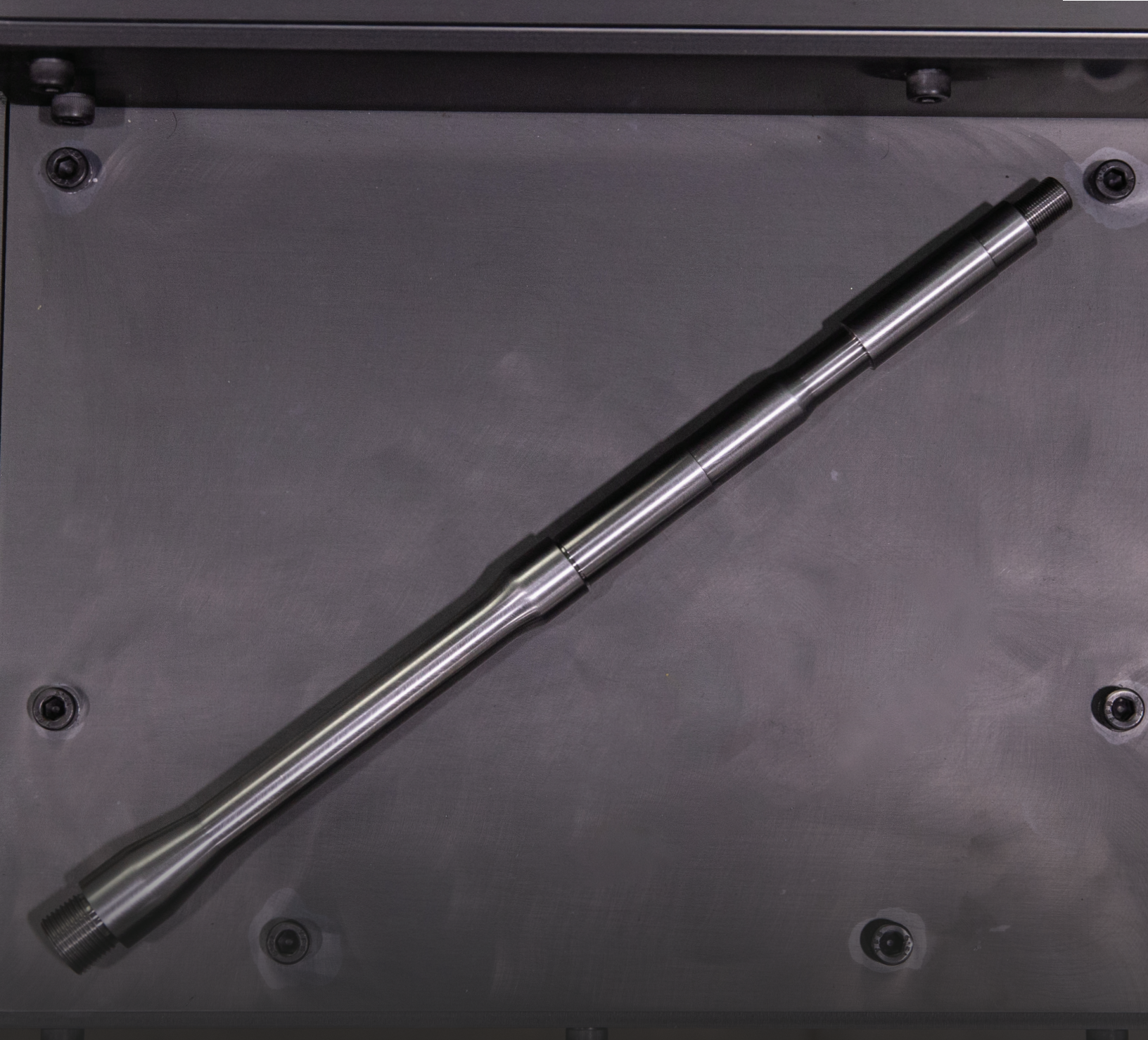
400 SERIES BARRELS offer the same match-grade quality as Series 300 barrels with the added process of lead lapping. This removes nearly all tooling marks, resulting in a premium surface finish and consistent bore and groove diameters.



500 SERIES

500 SERIES BARRELS offer the ultimate in performance and accuracy. Every barrel is pre-lapped, single-point cut rifled, and finish lapped. The end result is a stress-free barrel made with the tightest bore and groove diameter tolerances and uniformity.





AR BARRELS

An industry-leading OEM barrel source for “America’s Rifle,” Vortakt has established itself as a reliable supplier for some of the industry’s most well-known AR rifle manufacturers. The unparalleled use of manufacturing technology and flexibility in barrel performance series options sets Vortakt apart.



INDUSTRY-WIDE MANUFACTURING SUPPORT

CHAMBERING – Vortakt supports a wide selection of SAAMI and custom chamber options.

CUSTOM CONTOURING – AR barrels are profiled to match your desired specifications.



LAPPING – 300 and 400 Series AR barrels feature a match-grade rifling finish.

FINISH PREP – Barrels can be prepared for chrome-lining, salt bath nitriding, or other finish treatments.

	MORE COMMON	LESS COMMON
SERIES	200	100 300 400
MATERIAL	4150 CrMoV, 416R SS	4140 GBQ
CHAMBER	.223 Wylde, 5.56 NATO, .308 Win, .300 Blackout, 9mm Luger, .350 Legend	.223 Rem, .224 Valkyrie, 5.7x28, 6mm ARC, 6mm Creedmoor, 6.5 Creedmor, 6.8 SPC, 7.62x39, 8.6 Blackout, .40 S&W, 10mm, .45 ACP, 450 Bushmaster, .458 SOCOM

**Additional custom options are available upon request*



AK BARRELS

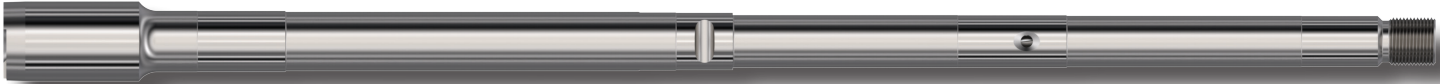
Like any major platform design, the Kalashnikov family of barrels has its fair share of unique production requirements with the added caveat of price sensitivity. Vortakt can accommodate AK designs with tight dimensional tolerances on precision-finished surfaces, chamfered gas ports, and unique milling operations.



THE NATION'S LEADING AK BARREL MANUFACTURER

PRECISION MACHINING – In-process gauging with closed-loop feedback eliminates secondary operations like grinding with press-fit surfaces.

S3 TECHNOLOGY – Chamfered gas ports and unique milling operations are supported through Vortakt's single setup solutions.



CUSTOM DESIGN – All Vortakt AK barrels are machined to match your desired specifications.

VARIANT SUPPORT – Vortakt can provide OEM support for any number of AK patterns and designs.

	MORE COMMON	LESS COMMON
SERIES	100	200
MATERIAL	4150 CrMoV	4140 GBQ
CHAMBER	7.62x39, 7.62x54R	.308 Win, 5.56 NATO, 9x39mm

**Additional custom options are available upon request*



BOLT BARRELS

Whether your rifles are designed for plinking, hunting, competition, or military/government applications, Vortakt Barrel Works can produce finished button and single-point cut barrels in volume. From carbon fiber-wrapped contours to profiles with unique machined features, Vortakt can support your OEM production needs.



REPEATABLE AND SCALABLE PRECISION

PRE-FIT DESIGNS – Precise tolerancing allows Vortakt to deliver shouldered pre-fit barrels to match receiver specifications.

MATCH-GRADE PERFORMANCE – 300, 400, and 500 Series bolt action barrels feature incremental enhancement through finish lapping operations.



RIFLING METHODS – Bolt action barrels can be produced with button or single-point cut rifling methods.

REPEATABILITY – Vortakt’s prowess in leveraging automation technology delivers dimensional consistency in volume production.

	MORE COMMON	LESS COMMON
SERIES	300 400	200 500
MATERIAL	416R SS	4150 CrMoV
CHAMBER	.22 LR, .223 Rem, .243 Win, 6 Creedmoor, 6.5 Creedmoor, 6.5 PRC, .270 Win, 7mm PRC, 7mm Rem Mag, 7mm WSM, .308 Win, .30-06, .300 Win Mag, .338 Lapua Mag, .50 BMG	.22-250, 6 Dasher, 6BR, 6GT, .257 Weatherby, .260 Rem, .270 WSM, 6.8 Western, .300 PRC, .338 Federal, 8.6 Blackout

**Additional custom options are available upon request*



PISTOL BARRELS

Pistol manufacturers understand that efficiency in barrel production has a discernible impact on the bottom line. Vortakt serves as a partner in the manufacturing process, delivering barrel blanks and semi-finished “lollipops” sized to accommodate finishing operations for most popular pistol barrel designs.



WE MAKE YOUR PISTOL BARRELS

SERVICING ALL MODELS – Vortakt provides OEM support solutions for a wide range of pistol designs.

STREAMLINED DELIVERY – Vortakt pistol barrels can be packaged to allow for seamless integration with your automation workflow.

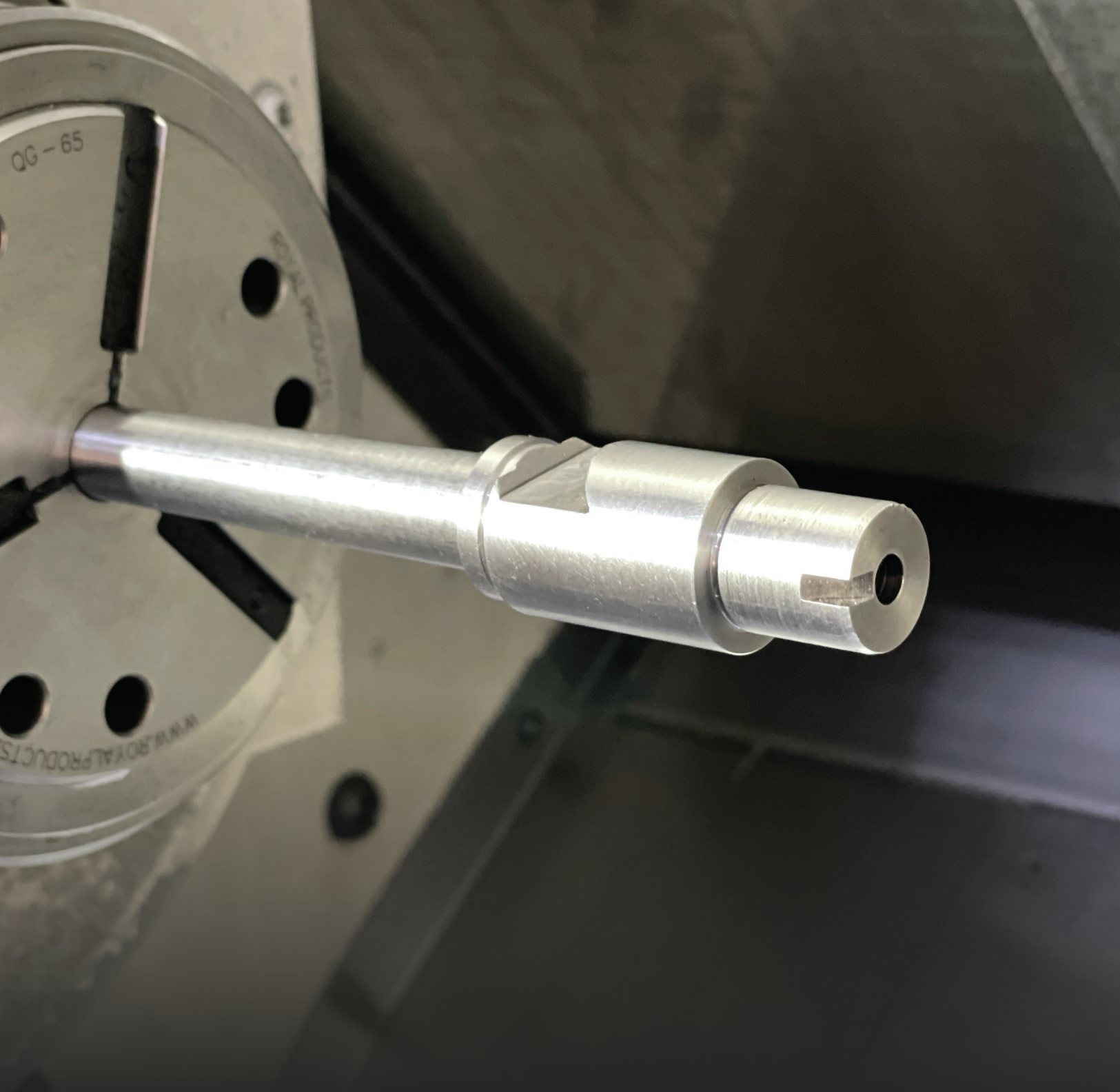


LOLLIPOPS – Semi-finished “Lollipop” barrels are delivered to manufacturers prepped for lug machining.

SECONDARY MACHINING – Vortakt’s mill-turn machines allow for additional machining or threading in a single set-up.

	MORE COMMON	LESS COMMON
SERIES	200	100 300
MATERIAL	416R SS	4150 CrMoV
CHAMBER	.22LR, 9mm Luger, .45 ACP	.357 Magnum, 40 S&W, 10mm Auto, 5.7x28, .32 ACP

**Additional custom options are available upon request*



RIMFIRE BARRELS

Firearms chambered for rimfire cartridges stand apart in a world of their own. With unique rifling, twist rates, chamber specifications, and exterior profiles, Vortakt has the experience needed to accommodate the nuances required to produce a high-quality rimfire barrel.



SMALLBORE MANUFACTURING SOLUTIONS

RELIABLE FEEDING – Chamber designs like the “.22 Bentz” may be leveraged for repeatable feeding from semi-automatic designs.

PLATFORM FLEXIBILITY – Vortakt builds rimfire barrels to match your design requirements.

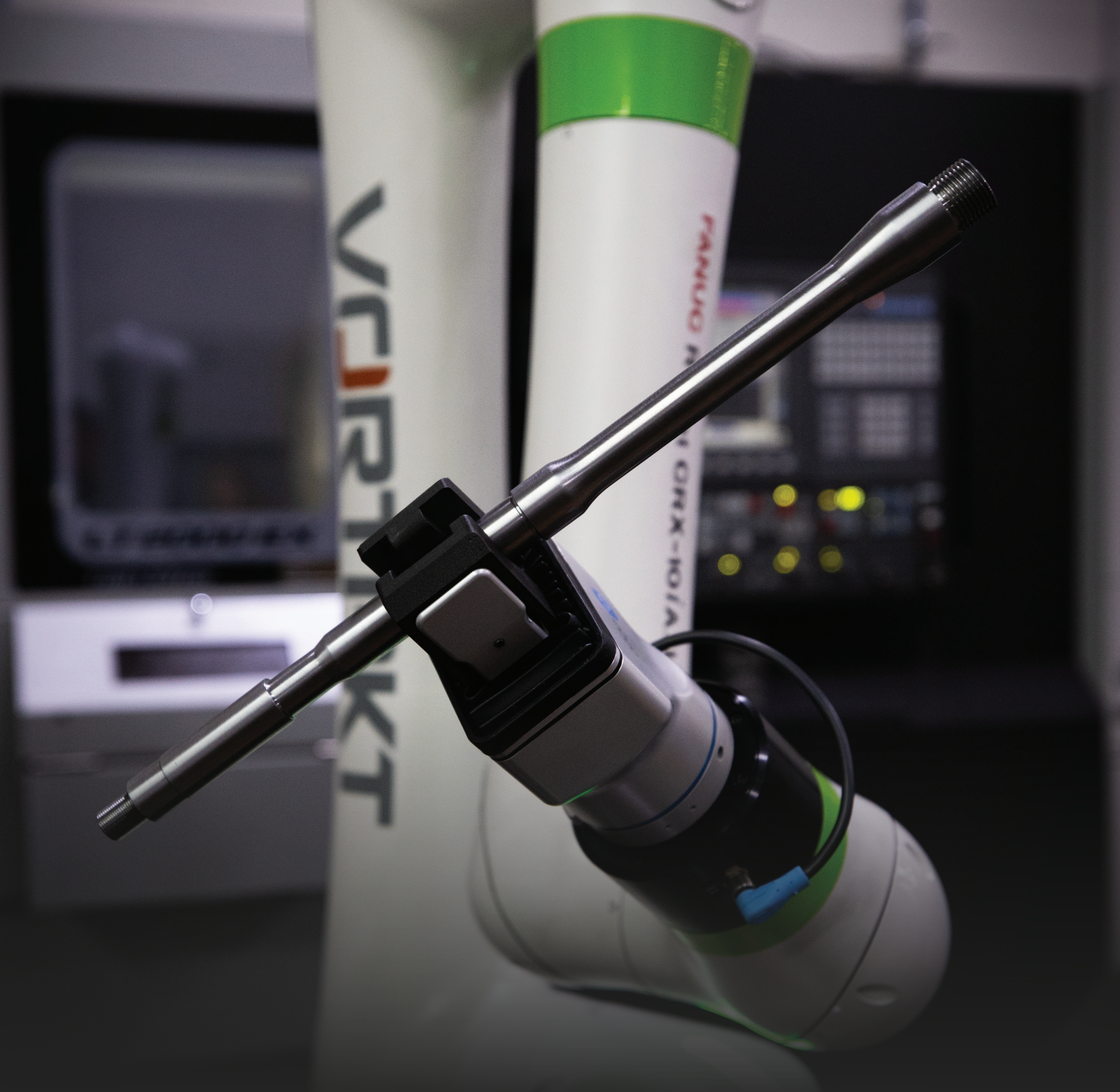


INDEXED FEATURES – Extractor grooves and machined features are aligned through Vortakt’s “S3” Single Setup Solution.

RIFLING OPTIONS – Vortakt can provide rimfire barrels with both SAAMI and custom polygonal rifling patterns.

	MORE COMMON	LESS COMMON
SERIES	200	100 300
MATERIAL	4150 CrMoV	4140 GBQ, 416R SS
CHAMBER	.17 HMR, .22 LR	.17 Mach 2, .17 WSM, .22 Bentz

**Additional custom options are available upon request*



MIL-SPEC BARRELS

Vertical integration capabilities and enhanced scalability ensure Vortakt can support certified military or government contract opportunities relating to infantry small arms and crew-served platforms. Vortakt also offers the capability of producing larger bore barrels for aircraft or vehicle-mounted armaments.



TRUE MIL-SPEC BARRELS FOR GOVERNMENT CONTRACTS

PRECISE TOLERANCES – Nearly all bore, groove, profile, and chamber tolerances on mil-spec barrels are held to around half of the industry standard.

COMPLIANCE SPECIALISTS – Vortakt accommodates unique drawings, quality clauses, processing, and shipping requirements.



MATERIAL SELECTION – Materials used for US military contracts meet all MIL-B-11595 key requirements.

BORE FINISH – Features like rifling leading/trailing edge surface finishes are held to better than 16 Ra.

	MORE COMMON	LESS COMMON
SERIES	300	400
MATERIAL	4150 CrMoV	SPECIALTY MATERIALS
CHAMBER	5.56 NATO, 7.62 NATO	7.62x54R, 7.62x39, 9mm Luger, .50 BMG

**Additional custom options are available upon request*



PRE-FIT BARRELS

Vortakt delivers shouldered or barrel nut pre-fit barrels to custom action manufacturers and bolt-action rifle brands. Find out how our pre-fit barrel production capabilities will save you valuable time and labor in head spacing, finish machining, and barrel installation.



DELIVERING CUSTOM PRE-FIT SOLUTIONS

CUSTOM SHANK DESIGNS – Share your engineering drawing and Vortakt will deliver a pre-fit barrel line that meets your breech design specifications.

INDEXED FEATURES – S3 (Single Setup Solutions) Technology allows for unmatched consistency in thread, shoulder, and machined feature alignment.



TURNKEY HEADSPACING – The pre-fit machining process enables precise relational tolerances with your receiver face and threads, eliminating the need for finish reaming.

CARTRIDGE FEEDING – Chamfers, feed ramps, and precise breech machining aids in reliable cartridge cycling.

	MORE COMMON	LESS COMMON
SERIES	200 300	400 500
MATERIAL	416R SS	4150 CrMoV
CHAMBER	6mm Creedmoor, 6.5 Creedmoor, 6.5 PRC, .270 Win, 7mm PRC, 7mm Rem Mag, .308 Win, .300 PRC, .338 Lapua Magnum	6.8 Western, 7mm WSM, .30-06, .300 Win Mag, .50 BMG

**Additional custom options are available upon request*



.50 CALIBER BARRELS

When you need to stretch the limits of the .50 BMG cartridge, Vortakt is the barrel manufacturer to call. With the ability to handle very large workpieces up to 47" long and 3" in diameter, Vortakt is ready to support all .50 BMG barrel needs intended for civilian or military use.



GEARED FOR HEAVY METAL BARREL PRODUCTION

VOLUME PRODUCTION – Robotics and CNC technology reduce cycle time, minimize labor costs, and optimize setup across the entire production batch.

MATERIAL HANDLING – Our gantry crane system is set up for the heaviest .50 caliber barrels, accommodating lengths of up to 47" and diameters of 3 inches.



CONTRACT SUPPORT – A commitment to engineering best practices, automation technology, and close adherence to tolerance ensure performance in-line with government standards.

CUSTOM BORE DIMENSIONS – Production of .50 BMG barrels can include a counterbore for Stellite liners or oversized bore/groove dimensions to allow for chrome lining.

	MORE COMMON	LESS COMMON
SERIES	300	200 400
MATERIAL	4150 CrMoV, 4140 GBQ	416R SS
CHAMBER	.50 BMG	.50 AE, .50 Beowulf

**Additional custom options are available upon request*



PCC BARRELS

Every pistol caliber carbine model is unique. Vortakt provides OEM barrel production for direct blowback, roller delayed, radial delayed, short-stroke gas piston, and proprietary PCC designs. It's your platform, and we're looking forward to supporting it!



DELIVERING YOUR PISTOL CALIBER CARBINE BARRELS

DIVERSE PLATFORMS – Share your engineering drawing and Vortakt will deliver finished or semi-finished barrels for all PCC designs and configurations.

MACHINED FEATURES – Porting. Threading. Lug machining. S3 (Single Setup Solutions) Technology allows for unmatched alignment and consistency.



CHAMBER GEOMETRY – PCC barrels are susceptible to stuck cases due to variances in ammunition. Vortakt's purpose-built reamer designs ensure case extraction.

CARTRIDGE FEEDING – Chamfers, feed ramps, and precise breech machining aid in reliable cartridge cycling.

	MORE COMMON	LESS COMMON
SERIES	100 200	300
MATERIAL	4150 CRMV	416R SS
CHAMBER	9mm Luger, .45 ACP	.40 S&W, 10mm Auto, 5.7x28, .357 SIG

**Additional custom options are available upon request*

THE FUTURE OF OEM BARRELS

By leveraging automation technology and engineering best practices, Vortakt manufactures top-of-the-line cut and button-rifled barrels for firearm OEMs. Vortakt engineers strive to use the latest in machining and materials technology to produce a more concentric bore/chamber to OD contour relationship. These advances yield unmatched long-range accuracy never before seen in volume barrel manufacturing.



CALIBER & ORDERING INFORMATION

Common calibers and chambering options are available with an express lead time. Please request a quote for additional configuration options.

CALIBER	COMMON CHAMBERING OPTIONS	GROOVES	TWIST RATES
.17	.17 HMR, .17 Mach 2, .17 WSM	6	1:9
4.6mm	4.6x30	6	1:6
.22 RF	.22 LR	6 6R	1:16 1:9
.223	.223 Rem, .223 Wylde, 5.56 NATO, .22 WMR .224 Valkyrie, .22 TCM, .22-250 Rem	5R 6	1:5 1:6 1:6.5 1:7 1:8 1:9 1:12 1:14 1:16
5.7mm	5.7x28	8	1:9
6mm (.243)	6mm ARC, .243 Win, 6mm Dasher, 6mm Creedmoor	4 5R 6	1:7 1:7.5 1:8
.257	.25-06, .257 Weatherby	5R 6	1:7.5 1:10
6.5mm (.264)	6.5 Creedmoor, 6.5 PRC, 6.5 Grendel, .260 Rem	4 5R 6	1:7.5 1:8
6.8mm (.270)	.270 Win, .270 WSM, 6.8 SPC, 6.8 Western	4 6R	1:7.5 1:8 1:10
7mm (.284)	7mm-08, 7mm PRC, 7mm Rem Mag, 7mm WSM	4 5R 6	1:8 1:8.5 1:9 1:9.5 1:10
7.62mm	7.62x39, 7.62x54R	4R	1:10
.30	.308 Win, 7.62 NATO, .30-06, .300 Win Mag, .300 PRC, .30-30	4 5R 6	1:7 1:8 1:9 1:10 1:11.25 1:12
.300	.300 Blackout	5R	1:5 1:6 1:7 1:8 1:10
.32	.32 ACP	6	1:16
.338	.338 Lapua Magnum, .338 Federal, 8.6 Blackout	5R 6	1:3 1:5 1:9.3 1:10
.35	35 Whelen, 35 Remington, 350 Buckhammer	5R	1:12
9mm	9mm Luger, .350 Legend, .357 Magnum	6R	1:10 1:14 1:16 1:10 LH 1:16 LH
.40	.40 S&W, 10mm	6R	1:10 1:16
.44	.44 Rem Mag, .444 Marlin	8	1:20
.45	.45 ACP, .450 Bushmaster, .45 Raptor	6R	1:10 1:16 1:24
.458	.458 SOCOM, .45-70 Gov	6	1:14 1:18 1:24
.50	.50 BMG	8	1:15 1:22 1:28

Export laws may restrict the sale of products. Please contact us for more information and to obtain a quote for barrel blanks, finished barrels, and related services.

BARRELS MADE IN THE USA

VORTAKT BARREL WORKS

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