

# VORTAKT

BARREL • WORKS



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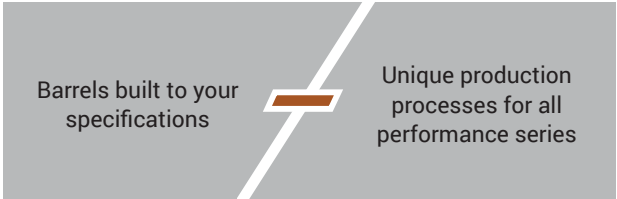


# WE MAKE YOUR BARRELS

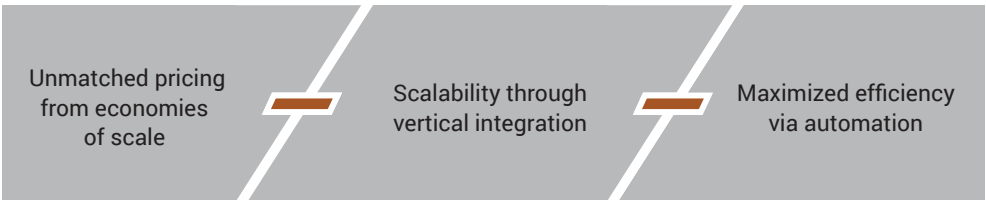
Price. Performance. Delivery. That’s what you want to see from your OEM suppliers. In today’s demanding, fast-paced market, it’s more important than ever to find a partner who can deliver high-performance barrels that arrive on-time and on-budget.

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 FUTURE OF OEM BARRELS

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

## QUICK SHIP

Barrel blank inventory available for immediate fulfillment.

- Streamlines production planning
- Popular configurations available
- Eliminates lead times

## AIR DROP

High volume discounts in smaller batch orders.

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

## 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 the use of 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.



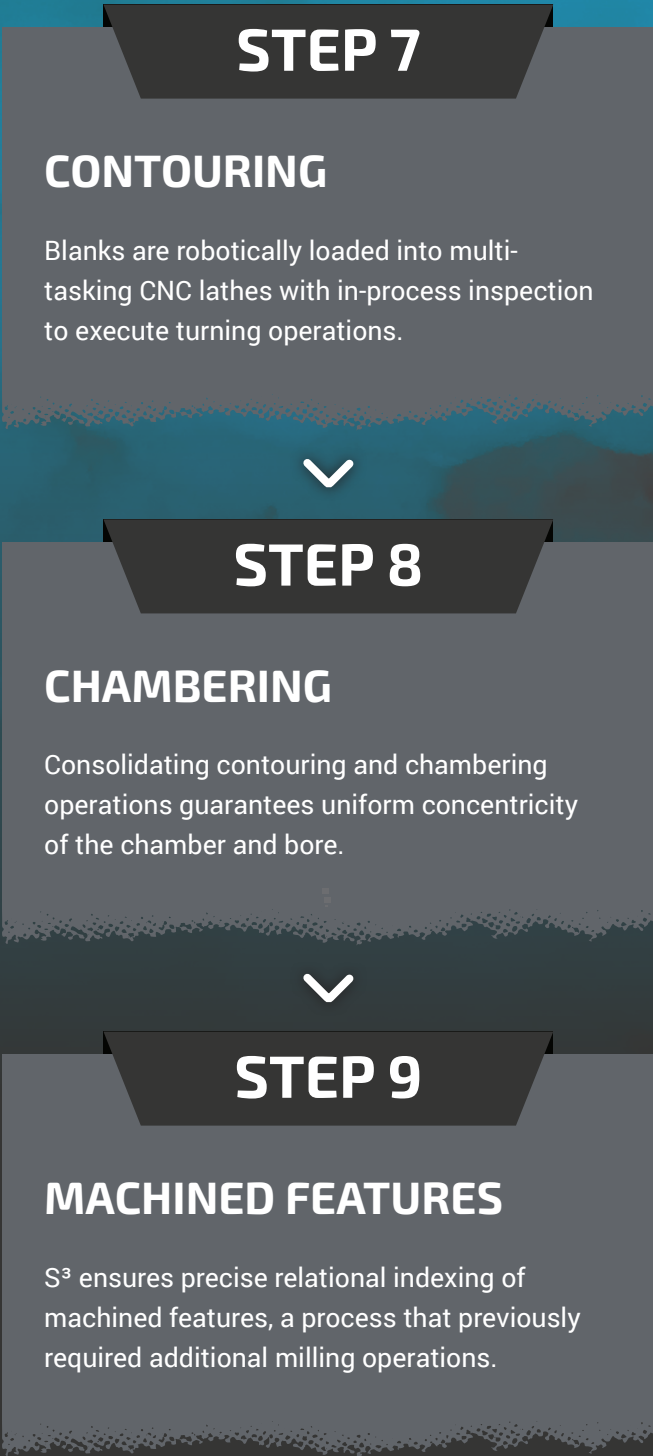
# BARREL BLANK MANUFACTURING

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 S<sup>3</sup> (Single Setup Solution) technology allows for 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
- Button or single-point cut rifling
- Standard or custom rifling profiles
- Gain twist available
- Flexible finishing capabilities
- 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.

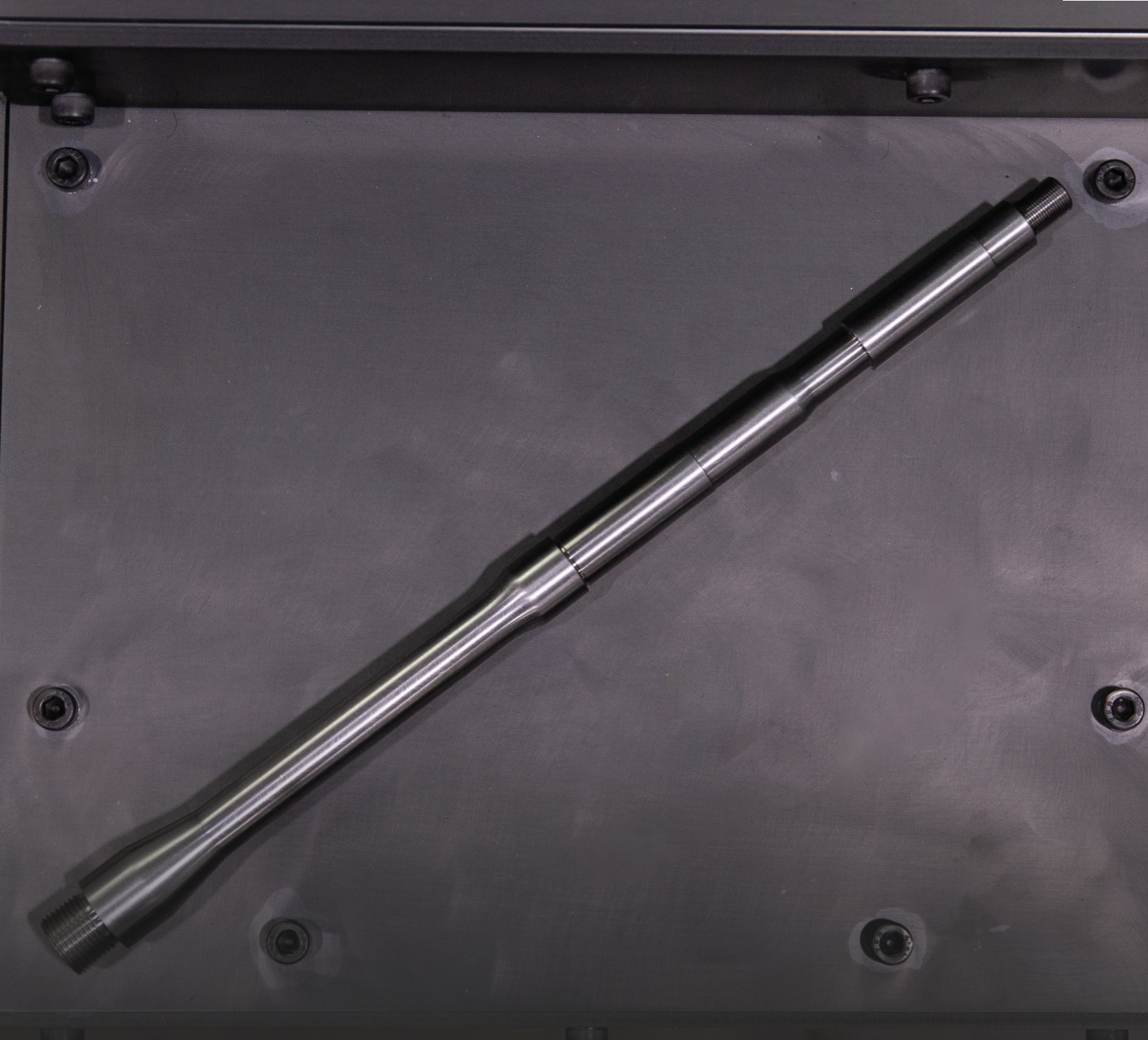


## 500 SERIES

**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. 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 Creedmoor, 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

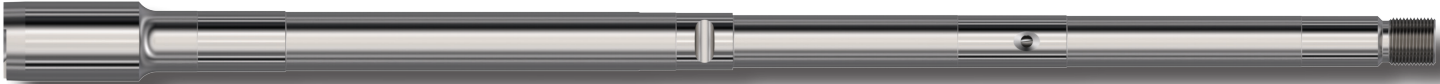
Like any major platform design, the Kalashnikov family of barrels has its fair share of unique production requirements with the added caveat of price sensitivity. Vortakt can accommodate AK designs with tight dimensional tolerances on precision-finished surfaces, chamfered gas ports, and unique milling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



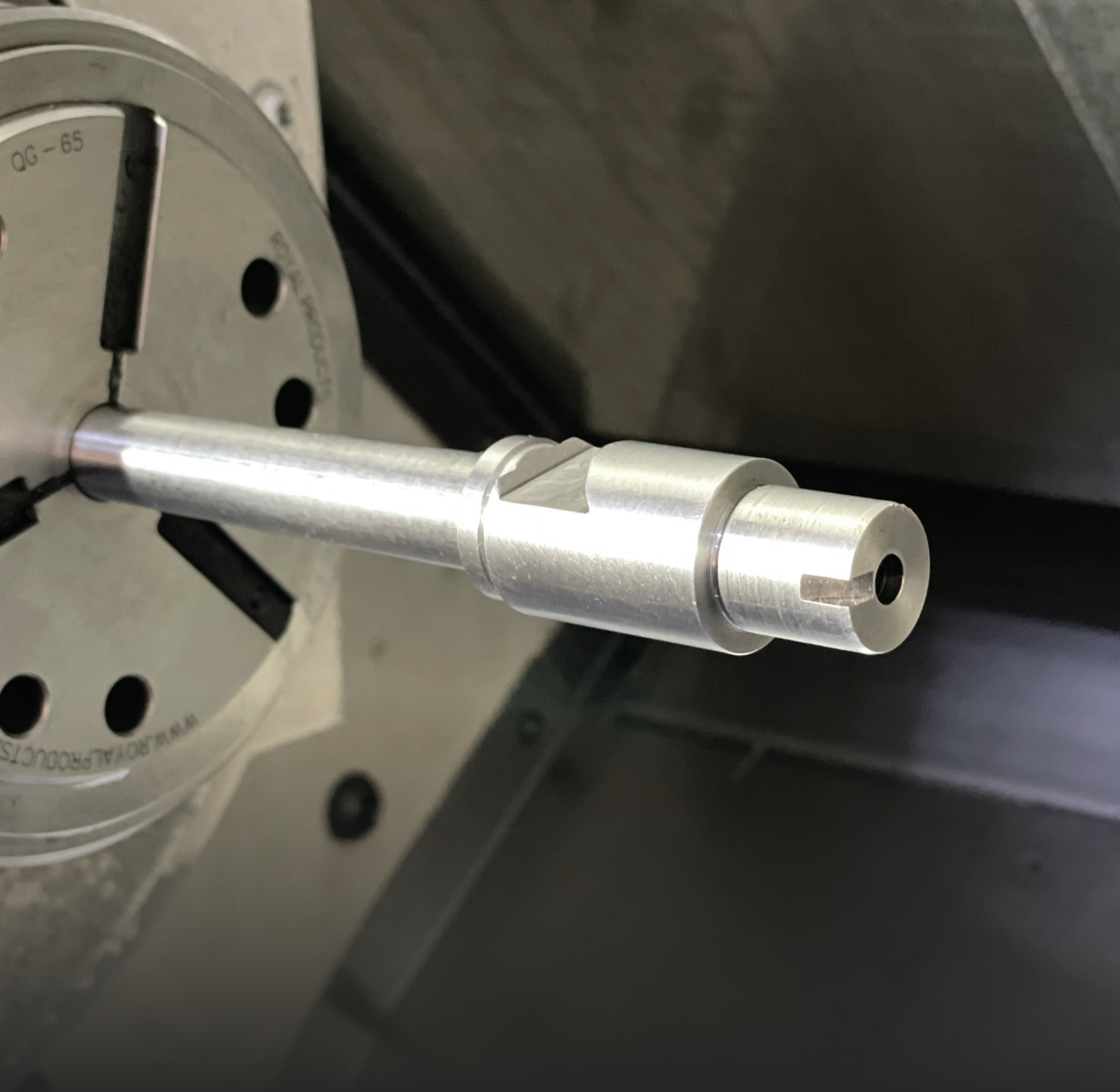
**LOLLIPOPS** – Semi-finished “Lollipop” barrels are delivered to manufacturers prepped for lug machining.

**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

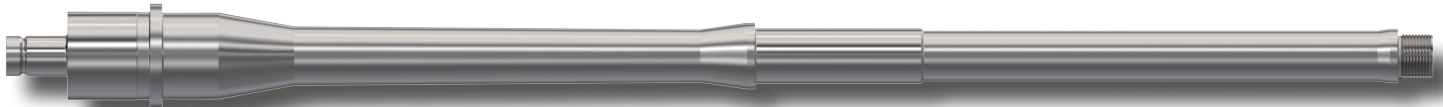
Firearms chambered for rimfire cartridges stand apart in a world of their own. With unique rifling, twist rates, chamber specifications, and exterior profiles, Vortakt has the experience needed to accommodate the nuances required to produce a high-quality rimfire barrel.



# 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.



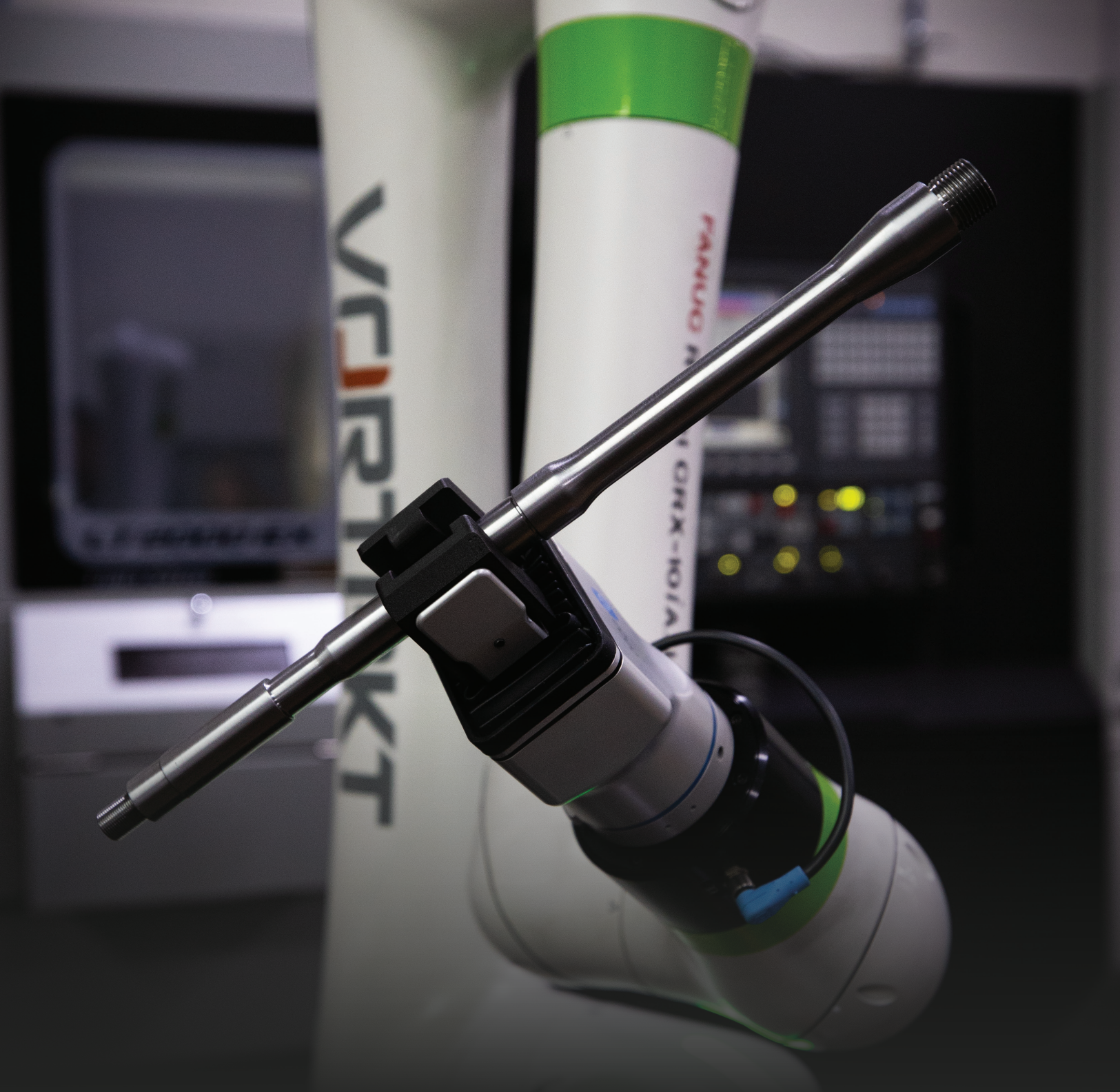
**INDEXED FEATURES** – Extractor grooves and machined features are aligned through Vortakt’s “S3” Single Setup Solution.

**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.

**ROUGHNESS AVERAGE** – Features like rifling leading/trailing edge surface finish are held to a very low Roughness Average.

|          | 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*



# 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  |
| .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<br>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   | 6          | 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   1:9.3   1:10  |
| 9mm          | 9mm Luger, .350 Legend, .357 Magnum  | 6R         | 1:10   1:16   1:10 LH   1:16 LH                           |
| .40          | .40 S&W, 10mm  | 6R         | 1:10   1:16   |
| .45          | .45 ACP, .450 Bushmaster, .45 Raptor   | 6R         | 1:10   1:16   1:24  |
| .458         | .458 SOCOM, .45-70 Gov   | 6          | 1:14   1:24   |
| .50          | .50 BMG  | 8          | 1:15   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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