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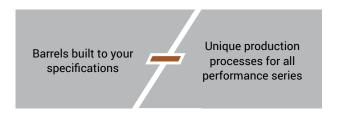


WE MAKE YOUR BARRELS

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





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.

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

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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.

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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.

STEP 1

MATERIAL SELECTION

Strong business relationships with steel mills ensure consistent availability, pricing, and well-defined material specifications.

STEP 2

GUN DRILLING

Drilling is carried out on dual-spindle CNC gundrilling machines that allow for hole diameters as large as 25mm.

STEP 3

REAMING

CNC reaming machines with high pressure chip flushing oil guarantee a smooth bore for the rifling operation.

STEP 4

RIFLING

Vortakt offers both button or single-point cut rifling options based on finish preferences and volume requirements.

STEP 5

STRESS RELIEVING

Each barrel is heat treated with a rigidly controlled process to ensure bore uniformity throughout all finishing operations.

STEP 6

LAPPING

Various lapping options are available for 300, 400, and 500 Series barrel blanks based on internal finish requirements.

FINISHING OPERATIONS

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

STEP 7

CONTOURING

Blanks are robotically loaded into multitasking CNC lathes with in-process inspection to execute turning operations.

STEP 8

CHAMBERING

Consolidating contouring and chambering operations guarantees uniform concentricity of the chamber and bore.

STEP 9

MACHINED FEATURES

S³ ensures precise relational indexing of machined features, a process that previously required additional milling operations.



07

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:

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.

PRECISION POTENTIAL PRODUCTION TIME COST

200

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

PRECISION POTENTIAL PRODUCTION TIME COST

SERIES 300

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.

PRECISION POTENTIAL PRODUCTION TIME COST

\$ ERIES 400

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.

PRECISION POTENTIAL PRODUCTION TIME COST

500

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.

PRECISION POTENTIAL PRODUCTION TIME COST

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.



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.

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 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 BLK		

AK BARRELS



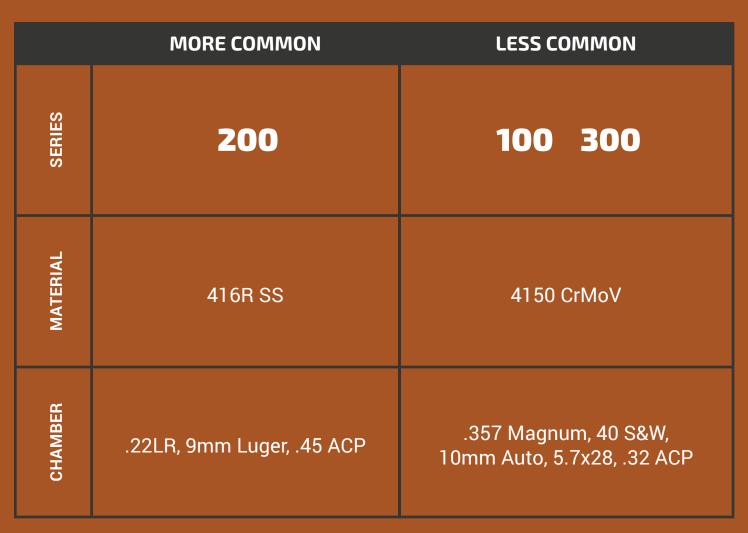
Like any major platform design, the Kalashnikov family of barrels has its fair share of unique production requirements with the added caveat of price sensitivity. Vortakt can accommodate AK designs with tight dimensional tolerances on precision-finished surfaces, chamfered gas ports, and unique milling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

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

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.





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.

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	

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.

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	



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	1:16
.223	.223 Rem, .223 Wylde, 5.56 NATO, .22 WMR .224 Valkyrie, .22 TCM, .22-250 Rem	5R 6	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	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	1:10
7mm (.284)	7mm-08, 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
.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
.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.

