

TECHNICAL DATA SHEET

MTB 365 — Hydraulic Breaker Cylinder

MERIT Construction Machinery Industry
LLC

1. PRODUCT OVERVIEW

Manufacturer	MERIT Construction Machinery Industry LLC
Product Name	MTB 365 Hydraulic Breaker Cylinder
Compatible With	MTB 365 Hydraulic Rock Breaker
Product Type	Hydraulic Breaker Cylinder — Precision Forged
Manufacturing Method	Hot Die Forging — EAF + LF + VD Process
Bore Diameter	Ø 280 mm
Total Length	750 mm
Surface Hardness	293 HB (Measured & Certified)
Dimensional Tolerance	±0.01 mm on all critical dimensions
Lead Time	21 Working Days from Order Confirmation
Warranty	12 Months Manufacturer Warranty
Origin	Turkiye
Availability	Available to Order — Custom Production

2. PRODUCT DESCRIPTION

The MTB 365 Cylinder is a precision-forged hydraulic breaker cylinder manufactured by MERIT Construction Machinery Industry LLC. Designed for the most demanding percussion applications in construction, demolition, and mining, the MTB 365 is engineered from the material stage upward — with a three-stage metallurgical refining process, controlled hot forging, CNC precision machining, and 100% volumetric quality verification on every unit produced.

Unlike cast alternatives, the MTB 365 is hammered into shape through controlled hot forging — a process that aligns the grain structure of the steel along the component geometry, dramatically improving fatigue life, crack resistance, and long-term durability under cyclic high-impact loading.

3. TECHNICAL SPECIFICATIONS

Parameter	Value	Standard / Note
Bore Diameter	Ø 280 mm	Held to ±0.01 mm
Total Length	750 mm	Held to ±0.01 mm
Surface Hardness	293 HB	Measured & certified per unit
Dimensional Tolerance	±0.01 mm	All critical dimensions

Manufacturing Method	Hot Die Forging	EAF + LF + VD triple-stage process
CNC Machining	Full profile	Precision CNC — all surfaces
Lead Time	21 Working Days	From order confirmation
Warranty	12 Months	Manufacturer warranty — material & workmanship

4. MATERIAL & METALLURGICAL PROCESS

Every MTB 365 billet is processed through a three-stage metallurgical refining sequence before forging begins:

Stage 1 — Electric Arc Furnace (EAF)	Primary melting and base chemistry establishment. Removes gross impurities and establishes the
Stage 2 — Ladle Furnace (LF)	Secondary refining for precise chemical adjustment. Fine-tunes alloy content and removes sulphur
Stage 3 — Vacuum Degassing (VD)	Eliminates dissolved hydrogen and oxygen from the melt. Prevents internal porosity, hydrogen embrittlement

5. CHEMICAL COMPOSITION — LADLE ANALYSIS

Element	Symbol	Content (Ladle Analysis)	Function
Carbon	C	0.18%	Base hardness and strength foundation
Chromium	Cr	1.60%	Surface hardness, wear resistance, corrosion resistance
Nickel	Ni	1.52%	Toughness, impact resistance, low-temperature ductility
Molybdenum	Mo	0.27%	High-temperature strength, creep resistance, hardenability

6. QUALITY CONTROL & INSPECTION

Test / Inspection	Method / Standard	Coverage	Result
Surface Hardness Measurement	Brinell Hardness Test	100% — every unit	293 HB certified
Ultrasonic Testing (UT)	Volumetric UT inspection	100% — every unit	Full volume scanned
Radiation Testing	Radcomm RC 4069-2 device	100% — every unit	Passed
Surface Crack Inspection	DIN 7527 Part 6 (Feb 1975)	Post-machining	Crack-free certified
Material Traceability	Ladle analysis certificate	Per production batch	Full documentation
Dimensional Verification	CNC CMM measurement	100% — every unit	±0.01 mm confirmed

Every MTB 365 cylinder ships with a complete documentation package including: ladle analysis certificate, hardness test report, UT inspection report, radiation test record, surface crack inspection certificate, and dimensional verification report.

Full material traceability is maintained from billet to finished product.

7. APPLICATIONS & TARGET MARKETS

- ✓ OEM cylinder integration for new hydraulic breaker production lines
- ✓ Field replacement for worn or damaged MTB 365 breaker cylinders
- ✓ Heavy demolition — concrete, reinforced structures, road breaking
- ✓ Mining and quarrying operations — hard rock fragmentation
- ✓ Tunnelling and underground excavation projects
- ✓ Infrastructure and foundation breaking

8. LOGISTICS & SHIPPING

Air Freight	GCC & Europe — 24 to 72 hours
Sea Freight	FCL / LCL via Mersin, Istanbul, Izmir
Road Freight	Iraq, Iran, Georgia, Bulgaria, Russia, Ukraine, Syria & beyond
Courier	DHL · FedEx · Turkish Cargo for urgent orders
Lead Time	21 working days from order confirmation
Packaging	Industrial protective packaging with full documentation included

9. CONTACT & ORDERING

Company	MERIT Construction Machinery Industry LLC
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WhatsApp / Telegram	+90 530 043 29 25
Website	www.meritautomotive.com
Export Desk	Monday – Friday, 06:00 AM – 02:00 PM GMT
Bulk Orders	Custom configurations and volume pricing available on request

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