

KOMATSU



MC51 Continuous Hard Rock Miner

SANCOT SYMPOSIUM - April 2026

Agenda



- What is the MC51
- Why Komatsu MC51
- Video presentation of the machine
- Min/Max application & profile
- Pictures of operating sites
- Discussion / Questions

Why Komatsu MC51

Safety

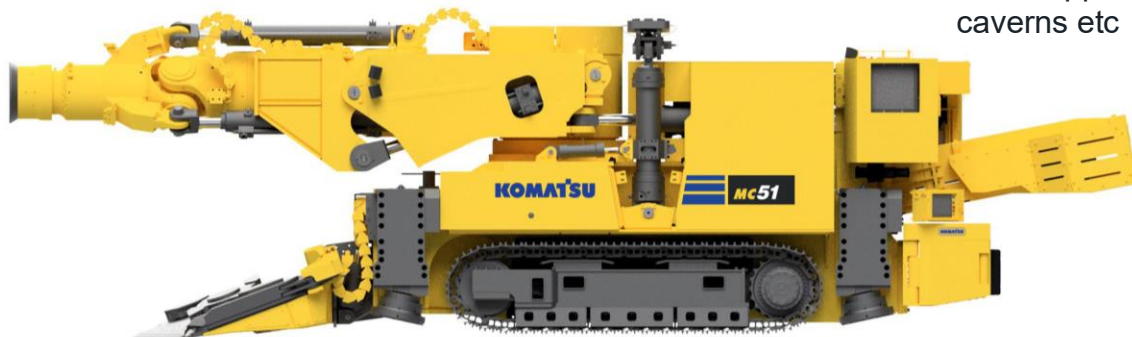
- People removed from harms way through Automation and Remote Operation.
- Electrical – No diesel fumes, No Blast fumes

Cost

- Quicker ground support
- Reduced ventilation - load and operation
- Reduction in people

Production

- Continuous process - Leading towards 24/7 operation
- Accurate Profile
- Quicker ground support
- Less down stream crushing



Quality

- Controlled and well-defined entries – zero overmining
- Less rehab, increased tunnel life
- Cut floor – no fill
- Niche applications: Cubbies, caverns etc

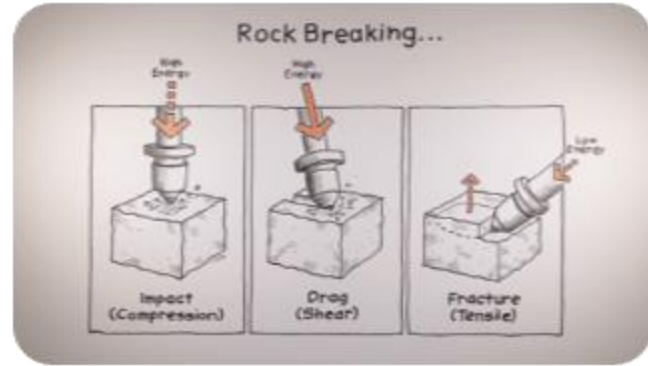
Adaptable / Compact

- Can cut varying profiles
- Fit in existing mining method and mine infrastructure

What is the Komatsu Mechanical Cutter (MC51)



Animation of Mechanical Mining Process



But how do you break rock



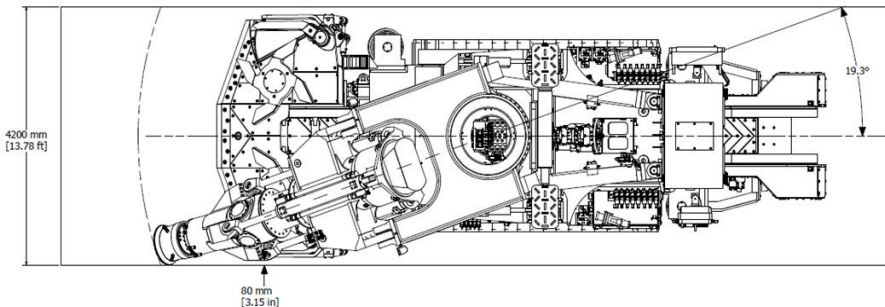
Factory Acceptance Testing Before Deployment



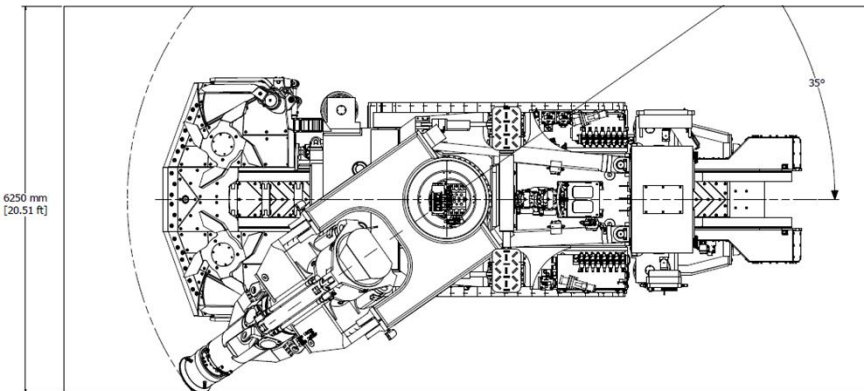
Dynamic Rock Breaking in action

Min/Max Cutting Widths and Heights - Theoretical

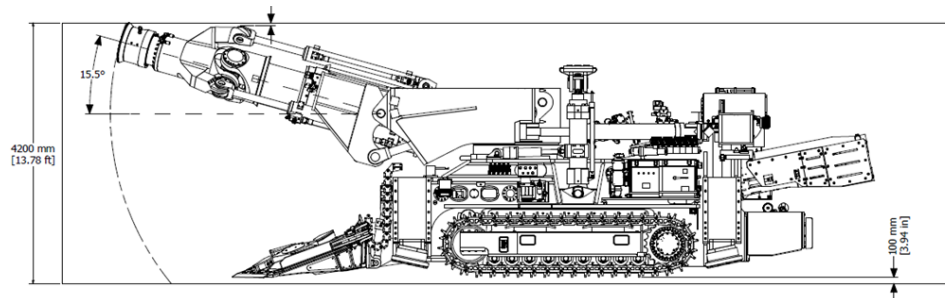
MINIMUM CUT WIDTH – BOOM TELESCOPE EXTENDED – WRIST CUT LEFT 10°
4.2 Meters (13.78 Feet)



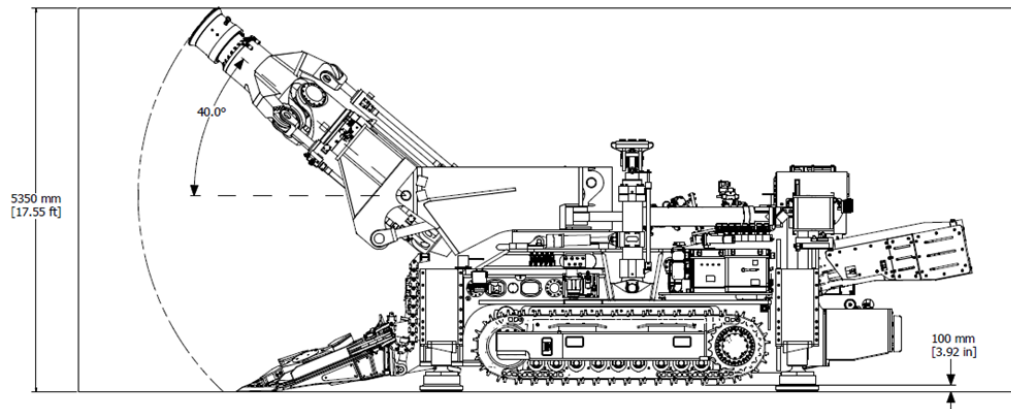
MAXIMUM CUT WIDTH – BOOM TELESCOPE RETRACTED – WRIST CUT DOWN 10°
6.25 Meters (20.51 Feet)



MINIMUM CUT HEIGHT – BOOM TELESCOPE EXTENDED – WRIST CUT LEFT 10°
4.2 Meters (13.78 Feet).

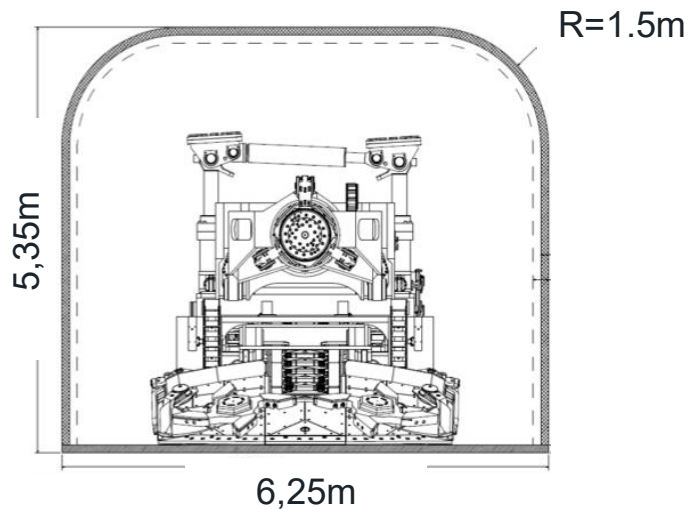


MAXIMUM CUT HEIGHT – BOOM TELESCOPE RETRACTED – WRIST CUT LEFT 10°
5.35 Meters (17.55 Feet)

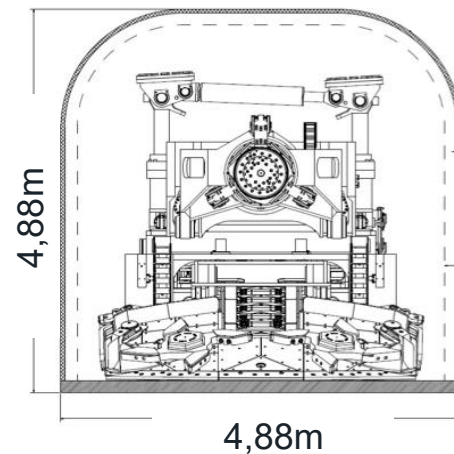


Komatsu MC51 – Shown in Various Profiles

Maximum Cut Profile



Development Profile



Niobec Mine Canada



Niobec Mine Canada



Niobec Canada
Exploration Drift

5x5m tunnel

Trial Photos



MC51 Underground – Cut Tunnel with Ground Support



MC51 Underground – Cutting Face



Primary material handling with MC51

Progress photos



Trial Photos cont.

