



Grinding Machine and Grinding Cups

 **KEMAICO**  **MAXDRILL**

- **Sharp Bit**

The percussive energy transferred into the rock is optimized, large rock chips are produced and the penetration rate is maximized.

- **Flats Developing**

The energy utilization is less effective after flats develop. Button penetration is decreased, more material is pulverized and smaller rock chips are produced. Less percussive energy is transferred into the rock and the unused energy is reflected back up the drill string, dissipating as heat and vibration. Bits should be sharpened before the wear flat widths reach $\frac{1}{3}$ of the button diameter. Drilling with the wear flat wider than $\frac{1}{3}$ of the button diameter increases the risk of shattering the carbide.

- **Flats Developing**

At this point button penetration is typically at its lowest. Much of the material in contact with the buttons is pulverized beneath the wear flats. The steel bit face is making contact with the hole bottom. Fewer and smaller rock chips are produced and much of the energy is reflected back up the drill string. This sacrifices the life of the drill string components and increases the wear and tear on your drill rig components. Additional crushing and pulverizing of the drill cuttings trapped between the bit matrix and the hole bottom occurs, further reducing penetration.



● Gauge Wear

In some materials such as hard sand stone and quartzite, the wear tends to be greater on the bit circumference. Thus, when the buttons are sharpened, the diameter across the gauge buttons will be less than the diameter of the bit shoulders and the bit will tend to bind in the hole. Consider bit replacement.

● Body Wash

When drilling in non-abrasive materials, where carbide wear is minimal, extended drilling intervals are possible. This allows for prolonged chip removal around the bits and will wear away the bit body to a greater extent than the buttons. Similar wear occurs in fractured and loose materials where excessive agitation and grinding of the materials is required for hole cleaning and to keep the hole open during retraction. To prevent tearing out buttons and button shear under these conditions, the protrusion should be reduced by scheduling grinding intervals to grind down the buttons.



● Over Drilling

The detrimental effects of over drilling bits may not be immediately apparent. However, running dull bits not only slows down the drilling rates but escalates drilling costs by reducing life on the drilling tool components, the rock drills and the drill rig components. Premature button bit insert failures are reduced substantially when over drilling is eliminated and proper sharpening is performed.





MAXDRILL

PRODUCT SERVICING

Grinding Machine and cups

Chisel Reshaping

Button Reshaping

Grinding Cups

Chisel Reshaping

-Pneumatic integral rod/chisel bits grinder



◆ This pneumatic machine is designed for grinding the chisel bits and integral drill rods. Your worn bit or rod can be reused after being grinded by our grinding machine, to prolong their service life and save your money. It's hand-held using, very convenient.



Model No.	MPCG1.0
Rotation speed	3500RPM max
Motor Power	2Hp
Sharpening angle	110°
Sharpening radius	125mm
Working air pressure	5-7 bar (100 psi)
Air consumption at 6 bar	1.5m ³ /min
Abrasive grinding wheel	125*63*32mm
Transport dimensions	650*450*300mm
Anchor hole diameter	32mm
Weight	27kg

Button Reshaping

-Pneumatic integral rod/chisel bits grinder Packing



Button Reshaping

-Hand-Held Pneumatic Bit Regrinding Machine



Model No.	MPHG1.0
Max gear grinding size of button bit	<200mm
Working air pressure	7bar(100psi)
Air consumption	2m ³ /min
Motor power	1.5Kw
Rotation speed	22,000 r.p.m
Max. water pressure	4bar(60psi)
Internal diameter of trachea	12mm
Water hose diameter	4mm
Weight excl. packaging	3.6Kg
Sound level	90dB
Transport dimensions	34.5*34.5*15C M
Transport dimensions	40*20*20CM



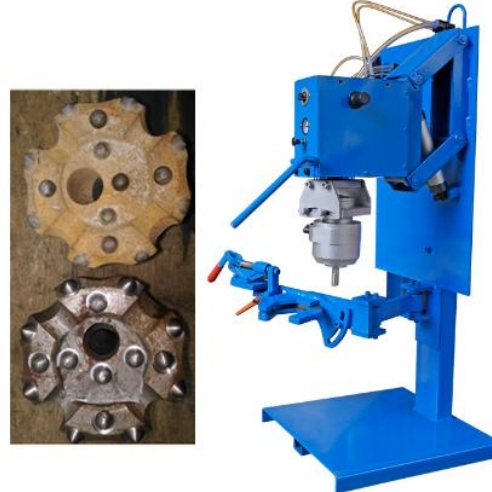
Button Reshaping

-Hand-Held Pneumatic Bit Regrinding Machine Packing



Button Reshaping

-Light Weight Pneumatic Bit Regrinding Machine



Model No.	MSRG1.0
Type	semi-automatic
Max gear grinding size of button bit	<200mm
Working air pressure	5-7bar(100psi)
Air consumption	2.2m3/min (80ft3/min)
Motor power	1.5Kw
Aax.water pressure	4bar(60psi)
Internal diameter of trachea	19mm
Water hose diameter	4mm
Weight excl. packaging	120Kg
Sound level	92dB
Transport dimensions	122*62*69cm

Button Reshaping

-Light Weight Pneumatic Bit Regrinding Machine Packing



Button Reshaping

-Electric Robot Arm Button Bits Grinder



Model No.	MRG100
Type	Automatic-Electric
Max gear grinding size of button bit	≤300mm(standard)
Max gear grinding size of button bit	300mm-400mm(big size one)
Rotation speed	20000 rpm
Motor power	1.5 KW
Working air pressure	5-7 bar (100 psi)
Air consumption	2.2 m3 / min (80ft3/min)
Max. water pressure	4 bar (60 psi)
Air hose diameter	19 mm
Water hose diameter	6 mm
Weight excl. packaging	600 Kg
Weight incl. packaging	720 Kg
Transport dimensions	1200*1200*1850mm
Sound level	92 dB(A)



Button Reshaping

-Pneumatic Robot Arm Button Bits Grinder Packing



Button Reshaping

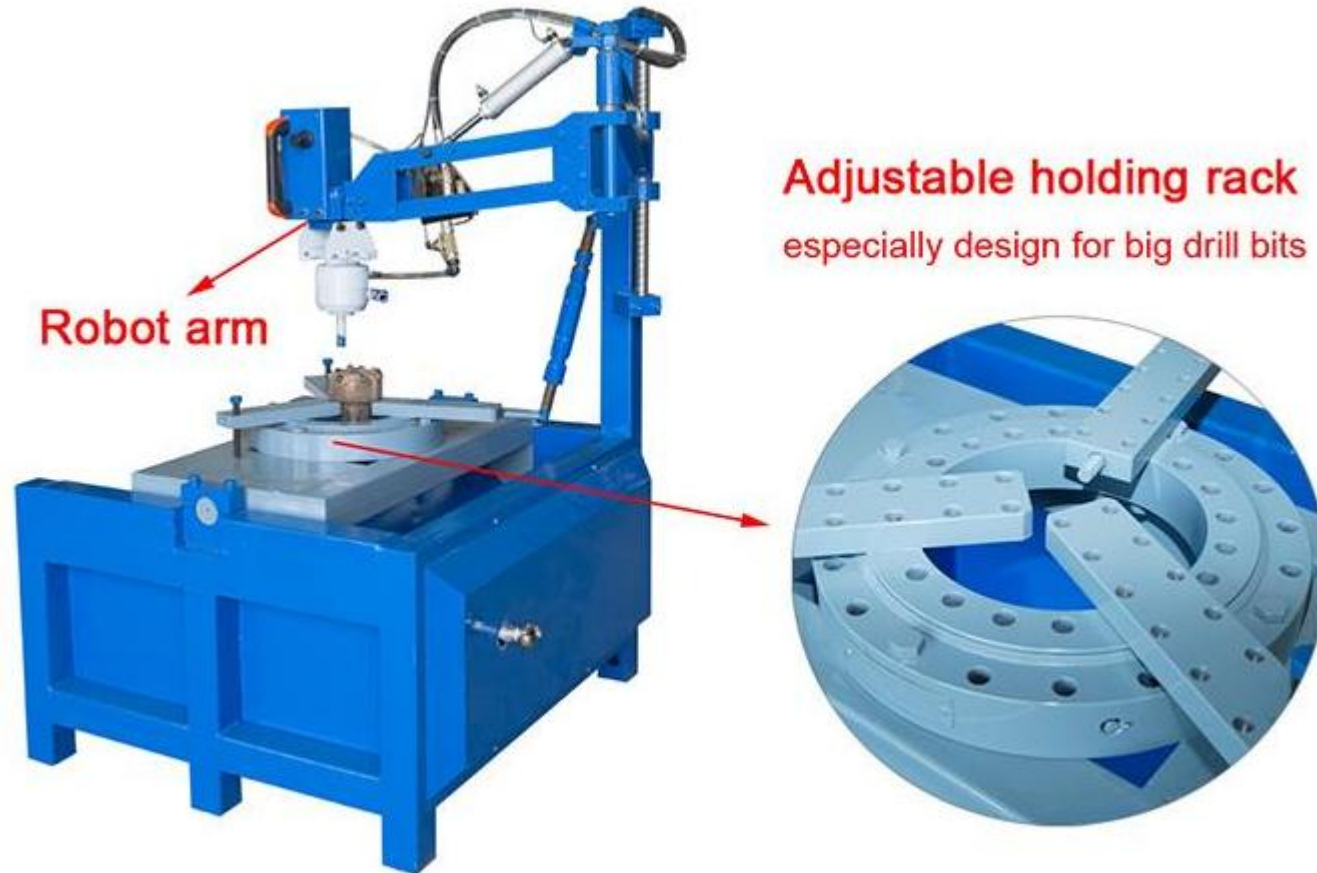
-Pneumatic button bits grinder



Model No.	MRPG100
Type	Automatic-Pneumatic
Max gear grinding size of button bit	≤300mm(standard)
Max gear grinding size of button bit	300mm-400mm(big size one)
Rotation speed	20000 rpm
Motor power	1.5 KW
Working air pressure	5-7 bar (100 psi)
Air consumption	2.2 m3 / min (80ft3/min)
Max. water pressure	4 bar (60 psi)
Air hose diameter	19 mm
Water hose diameter	6 mm
Weight excl. packaging	600 Kg
Weight incl. packaging	720 Kg
Transport dimensions	1200*1200*1850mm
Sound level	92 dB(A)

Button Reshaping

-Pneumatic button bits grinder



Grinding Cups for grinding machines

-CME Grinding Cups



Grinding Cups for grinding machines

-KING Grinding Cups



Grinding Cups for grinding machines

-ATLAS COPCO Grinding Cups



Grinding Cups for grinding machines

-SANDVIK Grinding Cups



Guide of Product Code

i.e. G08K-07-66

G08	K	-	07	-	66
G08 : Grinding cups	C : CME K : King A : Atlas S : Sandvik		07 : button bit size 7mm 08 : button bit size 8mm 09 : button bit size 9mm		66 : Spherical 65 : Ballistic

Grinding Cups for grinding machines

Button Bits Size	CME	KING	ATLAS	SANDVIK
7mm	G08C-07-66	G08K-07-66	G08A-07-66	G08S-07-66
	G08C-07-65	G08K-07-65	G08A-07-65	G08S-07-65
8mm	G08C-08-66	G08K-08-66	G08A-08-66	G08S-08-66
	G08C-08-65	G08K-08-65	G08A-08-65	G08S-08-65
9mm	G08C-09-66	G08K-09-66	G08A-09-66	G08S-09-66
	G08C-09-65	G08K-09-65	G08A-09-65	G08S-09-65
10mm	G08C-10-66	G08K-10-66	G08A-10-66	G08S-10-66
	G08C-10-65	G08K-10-65	G08A-10-65	G08S-10-65
11mm	G08C-11-66	G08K-11-66	G08A-11-66	G08S-11-66
	G08C-11-65	G08K-11-65	G08A-11-65	G08S-11-65
12mm	G08C-12-66	G08K-12-66	G08A-12-66	G08S-12-66
	G08C-12-65	G08K-12-65	G08A-12-65	G08S-12-65
13mm	G08C-13-66	G08K-13-66	G08A-13-66	G08S-13-66
	G08C-13-65	G08K-13-65	G08A-13-65	G08S-13-65
14mm	G08C-14-66	G08K-14-66	G08A-14-66	G08S-14-66
	G08C-14-65	G08K-14-65	G08A-14-65	G08S-14-65
15mm	G08C-15-66	G08K-15-66	G08A-15-66	G08S-15-66
	G08C-15-65	G08K-15-65	G08A-15-65	G08S-15-65
16mm	G08C-16-66	G08K-16-66	G08A-16-66	G08S-16-66
	G08C-16-65	G08K-16-65	G08A-16-65	G08S-16-65
17mm	G08C-17-66	G08K-17-66	G08A-17-66	G08S-17-66
	G08C-17-65	G08K-17-65	G08A-17-65	G08S-17-65
18mm	G08C-18-66	G08K-18-66	G08A-18-66	G08S-18-66
	G08C-18-65	G08K-18-65	G08A-18-65	G08S-18-65
19mm	G08C-19-66	G08K-19-66	G08A-19-66	G08S-19-66
	G08C-19-65	G08K-19-65	G08A-19-65	G08S-19-65
20mm	G08C-20-66	G08K-20-66	G08A-20-66	G08S-20-66
	G08C-20-65	G08K-20-65	G08A-20-65	G08S-20-65
21mm	G08C-21-66	G08K-21-66	G08A-21-66	G08S-21-66
	G08C-21-65	G08K-21-65	G08A-21-65	G08S-21-65
22mm	G08C-22-66	G08K-22-66	G08A-22-66	G08S-22-66
	G08C-22-65	G08K-22-65	G08A-22-65	G08S-22-65
23mm	G08C-23-66	G08K-23-66	G08A-23-66	G08S-23-66
	G08C-23-65	G08K-23-65	G08A-23-65	G08S-23-65
24mm	G08C-24-66	G08K-24-66	G08A-24-66	G08S-24-66
	G08C-24-65	G08K-24-65	G08A-24-65	G08S-24-65



Our factory



Our Office



Our Sales Team

- Professional
- Accurate
- Timely



Our QC Team

- ● Material Analysis
- ● Process Inspection
- ● Product Inspection



Our Technical Team



Committed to developing drilling tools which can meet different customers' requirements



2022

THANKS !

