# No breaking, No cracking, No chipping

XEBEC Ceramic Stone uses the unique abrasive ceramic fiber instead of abrasive grains.

# XEBEC® MADE IN JAPAN

### **Features**

# <Stick type>

- The original ceramic fibers are aligned from two directions
- Efficient polishing performance and strength
- High polishing capability on the tip

# <Rod type>

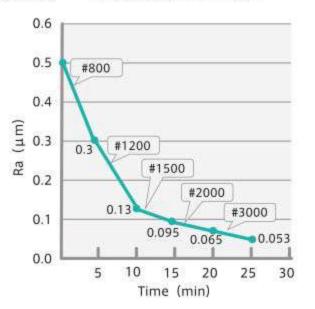
- Braided structure developed by the unique technology
- Cutting edges are exposed over the entire surface
- •Both the tip and sides have high grinding power

### How to select

Product name	Target material	Features					
XEBEC Ceramic Stone™ Meister Finish Stick type and Rod type		For mold polishing and deburring     Best solution for removing EDM scales					
XEBEC Ceramic Stone™ Pencil	Materials up to HRC57	· For deburring and polishing of the narrow parts of molds and small parts					
XEBEC Ceramic Stone™ Heat-Resistant	(e.g. plastic mold steel, carbon steel)	<ul> <li>Heat resistant up to 200°C</li> <li>Ideal for continuous use with an ultrasonic polisher</li> <li>Can be used to polish deep slits of ribs</li> </ul>					
XEBEC Ceramic Stone™ Diamond	Materials harder than HRC57 (e.g. cemented carbide, hardened steel)	Efficiently polishes hard materials     Both the tip and sides can be used     Can be used with a vibratory tool for greater polishing efficiency					
XEBEC Ceramic Stone™ Soft	Nonferrous materials (e.g. aluminum, copper)	Rubber binder allows soft contact with workpiece     Resistant to scratches and makes a shiney appearance					

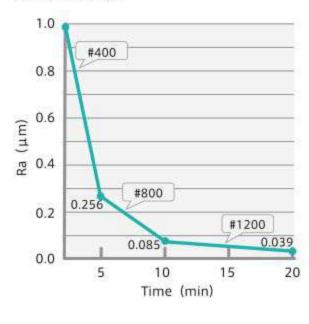
### Finishing data

### XEBEC Ceramic Stone™ Meister Finish



Material: NAK55 (HRC:40)
Polishing area: 30mm×15mm
Polishing method: Manual polishing with lubricant

### XEBEC Ceramic Stone™ Diamond



Material: D20 after wire cutting (HRA: 90)
Polishing area: 30mm×15mm
Polishing method: Pneumatic tool with lubricant

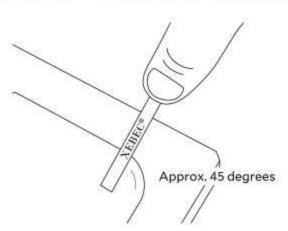
### For effective use

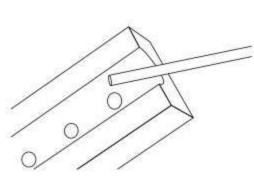
The use of metal polish liquid prevents clogging and increases polishing efficiency.

Stick type: Press the tip against the surface at angle of approximately 45 degrees.

Rod type: The entire surface (tip and sides) has grinding power.

XEBEC Ceramic Stone™ Diamond: Contains diamond entirely, the side can be also used for polishing.





# Usage of an option tool, a rotary tool, a vibratory tool

The tools can be used by directly holding in your hand, or can be used with the optional stick holder to improve work efficiency.

Stick type: Using with a vibratory tool (electric, ultrasonic and pneumatic) improves work efficiency.

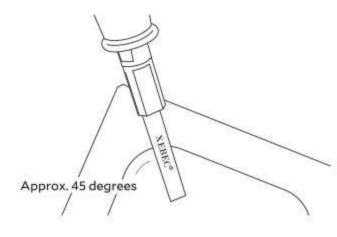
Rod type: Using with a rotary tool (electric and pneumatic) improves work efficiency.

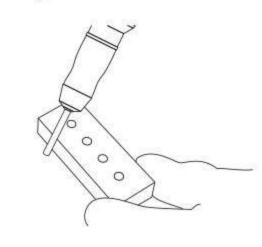
When using with a rotary tool, make a tool length less than 50mm and mount it on the rotary tool.

The recommended rotational speed: 7000min<sup>-1</sup>

The maximum rotational speed: 30000min<sup>-1</sup>

XEBEC Ceramic Stone™ Heat-Resistant: Can be used with an ultrasonic vibratory tool.





# How to shape or form the tool tip

If the tip is worn out, form it with a diamond disk blade or grinder.

You can also customize the shape depending on the application or workpiece shape.

To shape the tip of the rod type finer, mount the tool on a rotary tool and rotate it for forming. To cut off the tool, make a cut in both sides of the tool using a diamond disk blade etc.

### Precautions for Use

- ■When using a vibratory tool or a rotary tool, please carefully read the instruction manuals and precautions for use attached to tools.
- ■When using rod type (\$\phi 2.34\$, \$\phi 3\$) with a rotary tool, use at less than the maximum rotational speed of 30000min<sup>-1</sup> and make a tool length less than 50mm.
- ■When using with an ultrasonic polisher;
- ·Check the appropriate output. Tools may break or generate heat when the output is too large.
- ·Check the appropriate length. If the length is inappropriate, tools may not vibrate or concentrated output may result in generating heat.
  ·Clamp the tool securely. Poor clamping may concentrate output, resulting
- in excessive heat generation.

  ·Carefully read the instruction manual of an ultrasonic polisher because
- polishing performance differs depending on clamping method.

  ■XEBEC Ceramic Stone Soft cannot be used with either rotary or ultrasonic

# **Operation Safety Measures**

### [Wear protective equipment]

- Always wear protective goggles, gloves and masks when using the tool. Wear long sleeves, tight cuffs, and clothing to minimize skin exposure. [Pre-operation inspection]
- When mounting on machines, insert the shank end all the way to the bottom of the chuck and secure it tightly. Stop the tool immediately if you find anything unusual. Shaft breakage, deformation or even tool breakdown may occur.
- [ Beware of cutting particles]
- Cutting particles and burrs may scatter within the work area as the tools revolve. Please stay clear of the area.
- [ Caution to your surroundings]
- The work area is hazardous in case flying pieces of fiber rods from the tools and cutting particles may scatter. Enclose the work area to prevent other people entering or have people wear protective equipment as well.

### Warning

- Follow the precautions for use and operation safety measures without fail. If you fail to observe them, there are following risks.
- •A tool or a part of a tool may crack, drop off, distort or break.
- Broken pieces of a tool or cutting particles may stick into your skin, or at worst stick into your eyes, causing loss of sight.
   Dust generated by processing may bring up skin irritancy or allergy.

Please visit our website for details.



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# XEBEC Ceramic Stone<sup>TM</sup>





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www.xebec-tech.com

# **XEBEC Ceramic Stone™ Meister Finish**

Excellent for mold polishing and deburring



# Stick type

Equivalent grit								T×W×	(mm)							
(color)	0.3× 4×100	0.4×4×100	0.5×4×100	0.5×4×150	0.5×6×100	0.5×6×150	0.5×10×100	0.5×10×150	0.8×4×100	0.8×4×150	0.8×6×100	0.8×6×150	0.8×10×100	0.8×10×150	1.0×1×100	1.0×2×10
#3000 (Pink)	78	=	55 S	278	_ <del>==</del>	-	. 555		877	=		100	54	870	AS-1001M	AS-1002M
#2000 (Cream)		1783		<del> </del>	(S <del>S</del>	- <del></del>	. =	<b>5</b> 3	1000	= .	==	. 570		477	AC-1001M	AC-1002N
#1500 (Yellow)	-	-	-	=	-	=	2	-	-		-		3	-	AY-1001M	AY-1002M
#1200 (Red)	AR-0304M	AR-0404M	AR-0504M	AR-0504L	AR-0506M	AR-0506L	AR-0510M	AR-0510L	AR-0804M	AR-0804L	AR-0806M	AR-0806L	AR-0810M	AR-0810L	AR-1001M	AR-1002M
#1000 (White)	AW-0304M	AW-0404M	AW-0504M	AW-0504L	AW-0506M	AW-0506L	AW-0510M	AW-0510L	AW-0804M	AW-0804L	AW-0806M	AW-0806L	AW-0810M	AW-0810L	AW-1001M	AW-1002
#800 (Blue)	AB-0304M	AB-0404M	AB-0504M	AB-0504L	AB-0506M	AB-0506L	AB-0510M	AB-0510L	AB-0804M	AB-0804L	AB-0806M	AB-0806L	AB-0810M	AB-0810L	AB-1001M	AB-1002M
#600 (Black)	AP-0304M	AP-0404M	AP-0504M	AP-0504L	AP-0506M	AP-0506L	AP-0510M	AP-0510L	AP-0804M	AP-0804L	AP-0806M	AP-0806L	AP-0810M	AP-0810L	AP-1001M	AP-1002M
#400 (Orange)	AO-0304M	AO-0404M	AO-0504M	AO-0504L	AO-0506M	AO-0506L	AO-0510M	AO-0510L	AO-0804M	AO-0804L	AO-0806M	AO-0806L	AO-0810M	AO-0810L	AO-1001M	AO-1002N
#300 (Light Brown)	AL-0304M	AL-0404M	AL-0504M	AL-0504L	AL-0506M	AL-0506L	AL-0510M	AL-0510L	AL-0804M	AL-0804L	AL-0806M	AL-0806L	AL-0810M	AL-0810L	AL-1001M	AL-1002M
#220 (Dark Brown)	AD-0304M	AD-0404M	AD-0504M	AD-0504L	AD-0506M	AD-0506L	AD-0510M	AD-0510L	AD-0804M	AD-0804L	AD-0806M	AD-0806L	AD-0810M	AD-0810L	AD-1001M	AD-1002N
#120 (Violet)	CTA C	2.70	550	573	0.59	1770	25	57.8	1771	=	1770	0.75	(FI.6	2.75	77.0	AV-1002N

Equivalent grit								T×W×	L (mm)							
(color)	1.0×4×100	1.0×4×150	1.0×6×100	1.0×6×150	1.0×8×100	1.0×8×150	1.0×10×100	1.0×10×150	1.5×1.5×100	1.5×4×100	1.5×4×150	1.5×6×100	1.5×6×150	1.5×10×100	1.5×10×150	2.0×2×100
#1500 (Yellow)	AY-1004M	-	AY-1006M	-	( ) ( <del> </del>	-	AY-1010M	-	) <del>=</del> :	-	*	-	1	-	-	-
#1200 (Red)	AR-1004M	AR-1004L	AR-1006M	AR-1006L	AR-1008M	AR-1008L	AR-1010M	AR-1010L	AR-15015M	AR-1504M	AR-1504L	AR-1506M	AR-1506L	AR-1510M	AR-1510L	AR-2002M
#1000 (White)	AW-1004M	AW-1004L	AW-1006M	AW-1006L	AW-1008M	AW-1008L	AW-1010M	AW-1010L	AW-15015M	AW-1504M	AW-1504L	AW-1506M	AW-1506L	AW-1510M	AW-1510L	AW-2002N
#800 (Blue)	AB-1004M	AB-1004L	AB-1006M	AB-1006L	AB-1008M	AB-1008L	AB-1010M	AB-1010L	AB-15015M	AB-1504M	AB-1504L	AB-1506M	AB-1506L	AB-1510M	AB-1510L	AB-2002M
#600 (Black)	AP-1004M	AP-1004L	AP-1006M	AP-1006L	AP-1008M	AP-1008L	AP-1010M	AP-1010L	AP-15015M	AP-1504M	AP-1504L	AP-1506M	AP-1506L	AP-1510M	AP-1510L	AP-2002M
#400 (Orange)	AO-1004M	AO-1004L	AO-1006M	AO-1006L	AO-1008M	AO-1008L	AO-1010M	AO-1010L	AO-15015M	AO-1504M	AO-1504L	AO-1506M	AO-1506L	AO-1510M	AO-1510L	AO-2002M
#300 (Light Brown)	AL-1004M	AL-1004L	AL-1006M	AL-1006L	AL-1008M	AL-1008L	AL-1010M	AL-1010L	AL-15015M	AL-1504M	AL-1504L	AL-1506M	AL-1506L	AL-1510M	AL-1510L	AL-2002M
#220 (Dark Brown)	AD-1004M	AD-1004L	AD-1006M	AD-1006L	AD-1008M	AD-1008L	AD-1010M	AD-1010L	AD-15015M	AD-1504M	AD-1504L	AD-1506M	AD-1506L	AD-1510M	AD-1510L	AD-2002M
#120 (Violet)	AV-1004M	AV-1004L	AV-1006M	AV-1006L	AV-1008M	AV-1008L	AV-1010M	AV-1010L	-	AV-1504M	AV-1504L	AV-1506M	AV-1506L	AV-1510M	AV-1510L	-

Equivalent grit		T×W×L (mm)												
(color)	2.0×4×100	2.0×4×150	2.0×6×100	2.0×6×150	2.0×10×100	2.0×10×150	3.0×4×100	3.0×4×150	3.0×6×100	3.0×6×150	3.0×10×100	3.0×10×150		
#1200 (Red)	AR-2004M	AR-2004L	AR-2006M	AR-2006L	AR-2010M	AR-2010L	AR-3004M	AR-3004L	AR-3006M	AR-3006L	AR-3010M	AR-3010L		
#1000 (White)	AW-2004M	AW-2004L	AW-2006M	AW-2006L	AW-2010M	AW-2010L	AW-3004M	AW-3004L	AW-3006M	AW-3006L	AW-3010M	AW-3010L		
#800 (Blue)	AB-2004M	AB-2004L	AB-2006M	AB-2006L	AB-2010M	AB-2010L	AB-3004M	AB-3004L	AB-3006M	AB-3006L	AB-3010M	AB-3010L		
#600 (Black)	AP-2004M	AP-2004L	AP-2006M	AP-2006L	AP-2010M	AP-2010L	AP-3004M	AP-3004L	AP-3006M	AP-3006L	AP-3010M	AP-3010L		
#400 (Orange)	AO-2004M	AO-2004L	AO-2006M	AO-2006L	AO-2010M	AO-2010L	AO-3004M	AO-3004L	AO-3006M	AO-3006L	AO-3010M	AO-3010L		
#300 (Light Brown)	AL-2004M	AL-2004L	AL-2006M	AL-2006L	AL-2010M	AL-2010L	AL-3004M	AL-3004L	AL-3006M	AL-3006L	AL-3010M	AL-3010L		
#220 (Dark Brown)	AD-2004M	AD-2004L	AD-2006M	AD-2006L	AD-2010M	AD-2010L	AD-3004M	AD-3004L	AD-3006M	AD-3006L	AD-3010M	AD-3010L		
#120 (Violet)	AV-2004M	AV-2004L	AV-2006M	AV-2006L	AV-2010M	AV-2010L	AV-3004M	AV-3004L	AV-3006M	AV-3006L	AV-3010M	AV-3010L		

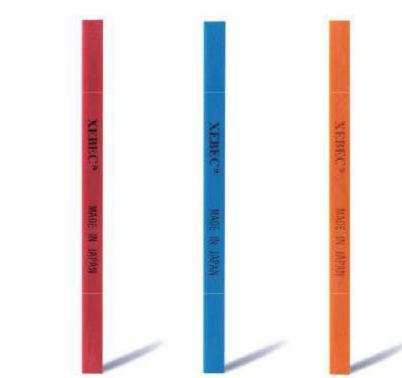
# Rod type

Equivalent grit							D×L (mm)						
(color)	φ1×50	φ1×100	φ1.5×50	φ1.5×100	φ2×50	ф2×100	ф2.34×50	ф2.34×100	ф3×50	ф3×100	ф3×150	φ6×50	φ6×100
#1200 (Red)	PR-10S	PR-10M	PR-15S	PR-15M	PR-20S	PR-20M	PR-234S	PR-234M	PR-30S	PR-30M	PR-30L	U <u>20</u>	20
#1000 (White)	PW-10S	PW-10M	PW-15S	PW-15M	PW-20S	PW-20M	PW-234S	PW-234M	PW-30S	PW-30M	PW-30L	1925	<u> </u>
#800 (Blue)	PB-10S	PB-10M	PB-15S	PB-15M	PB-20S	PB-20M	PB-234S	PB-234M	PB-30S	PB-30M	PB-30L		=
#600 (Black)	PP-10S	PP-10M	PP-15S	PP-15M	PP-20S	PP-20M	PP-2345	PP-234M	PP-305	PP-30M	PP-30L	350	-
#400 (Orange)	PO-10S	PO-10M	PO-15S	PO-15M	PO-20S	PO-20M	PO-234S	PO-234M	PO-30S	PO-30M	PO-30L	-	-
#300 (Light Brown)	PL-10S	PL-10M	PL-15S	PL-15M	PL-20S	PL-20M	PL-234S	PL-234M	PL-30S	PL-30M	PL-30L	-	-
#220 (Gray)	PM-10S	PM-10M	PM-15S	PM-15M	PM-20S	PM-20M	PM-234S	PM-234M	PM-30S	PM-30M	PM-30L	PM-60S	PM-60M

# **XEBEC Ceramic Stone™ Heat-Resistant**

Heat resistant up to 200 °C and suitable for continuous use with an ultrasonic tool

quivalent grit	T×W×L (mm)										
(color)	1×4×100	1×6×100	1×10×100	2×4×100	2×6×100	2×10×100					
#1200 (Red)	HR-1004M	HR-1006M	HR-1010M	HR-2004M	HR-2006M	HR-2010M					
#800 (Blue)	HB-1004M	HB-1006M	HB-1010M	HB-2004M	HB-2006M	HB-2010M					
#400 (Orange)	HO-1004M	HO-1006M	HO-1010M	HO-2004M	HO-2006M	HO-2010M					
#220 (Dark Brown)	HD-1004M	HD-1006M	HD-1010M	HD-2004M	HD-2006M	HD-2010M					
#120 (Violet)	HV-1004M	HV-1006M	HV-1010M	HV-2004M	HV-2006M	HV-2010M					

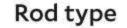


# **XEBEC Ceramic Stone™ Diamond**

Suitable for materials harder than HRC57 such as cemented carbide and hardened steel (SKD, STAVAX, etc.)

# Stick type

Equivalent grit	T×W×L (mm)						
(color)	1×4×100	1×6×100	1×10×100				
#1200 (Moss Green)	DU-1004M	DU-1006M	DU-1010M				
#800 (Gray)	DS-1004M	DS-1006M	DS-1010M				
#400 (Blue Green)	DF-1004M	DF-1006M	DF-1010M				
#200 (Black)	DM-1004M	DM-1006M	DM-1010N				



Equivalent grit	D×L (mm)				
(color)	φ3×50	ф3×100			
#400 (Blue Green)	PDF-30S	PDF-30M			



# **XEBEC Ceramic Stone™ Soft**

Rubber binder allows soft contact and fits into a workpiece

# Stick type

Equivalent grit	Product code	T×W×L (mm)
#1200	BS-2006M	2×6×100

# Rod type

Equivalent grit	Product code	D×L (mm)
#1200	PBS-30M	φ3×100

### Precautions for Use

The tool may result in breakage when:

ng twisted.

being mounted on a rotary tool, an ultrasonic tool or a vibratory tool.

# **XEBEC Ceramic Stone™ Pencil**

Ideal for polishing and deburring engraved and narrow details of mold

# XEBEC Ceramic Stone™ Pencil

Equivalent grit (color)	Product code	T×W×L (mm)	Quantity per pack	Pencil holder
#1200	3PACK-AR-0505S	0.5×0.5×50	3	PCL-5
(Red)	3PACK-AR-0909S	0.9×0.9×50	3	PCL-9
#800	3PACK-AB-0505S	0.5×0.5×50	3	PCL-5
(Blue)	3PACK-AB-0909S	0.9×0.9×50	3	PCL-9

# Pencil holder

Product code	Pencil diameter (mm)	XEBEC Ceramic Stone™ Pencil
PCL-5	0.7	AR-0505S/AB-0505S
PCL-9	1.3	AR-0909S/AB-0909S

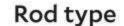


# Stick holder for XEBEC Ceramic Stone™

Designed for XEBEC Ceramic Stone™ Meister Finish Stick type and Rod type

# Stick type

Product code	Thickness of stick (mm)	Width of stick (mm)	
SSH-1	0.5~3	1	
SSH-2		2	
SSH-4		4	
SSH-6		6	
SSH-8		8	
SSH-10		10	



Product code	Diameter of rod type (mm)
SNH-20	φ2~2.34
SNH-30	ф3



# Mobile Micromotor System

Designed for XEBEC products

Battery-powered tool which is usable where power supply is not available An ultra lightweight handpiece reduces work burden for long time use

Product code	For use with	Maximum rotational speed (min <sup>-1</sup> )	Standard components
M2P33STX	Φ3 mm shank	30000	Handpiece with stand, controller On/Off foot switch, power cable for charging

