



# Beyond the Next!



MCK is a company that takes new challenges towards the unknown world.



**Micro Chemical Korea Co., Ltd.**

[www.microchem.co.kr](http://www.microchem.co.kr)

# Company Introduction

## Greetings from CEO

MCK is a company that makes new challenges for the unknown world. MCK manufactures various kinds of abrasive products such as pads, belts, wheels, and brushes that combine abrasive and other various materials, and develops new products in various fields to meet customer demand. We are expanding our customer base by developing products that lead the market with new technologies and original ideas that exceed the existing common sense in accordance with the company's vision. Through cooperation with domestic and foreign global companies, we are rapidly acquiring market information and spreading the market of products.

C.E.O Mr. Moon, Deog Ju

## Company history

- 2000. 07 Established the company
- 2000. 09 Developed 'MCP (Micro Cleaning Paper)' for LCD glass cleaning
- 2005. 05 Established 'MCK Advanced Material R&D Center'
- 2007. 06 Developed Cleaning belt, pad and roller for LCD glass cleaning
- 2009. Developed Polishing Wheel
- 2015. Developed "Diamond Lapping Pad"
- 2018. Developed XPS-P1 series
- 2019. Developed XPS-P2,P3,P5 series
- 2020. Developed polishing compound

## Company overview

<b>Company name</b>	MCK Co., Ltd.
<b>CEO</b>	Mr. Moon, Deog Ju
<b>Location</b>	#46, Gak-ri 1-gil, Ochang-eup, Cheongwon-gu, Cheongju-si, Chungbuk-province, Korea(28126)
<b>Date of establishment</b>	2000. 07. 01
<b>Capital</b>	\$500,000
<b>Brand</b>	Xon®, Xonite®

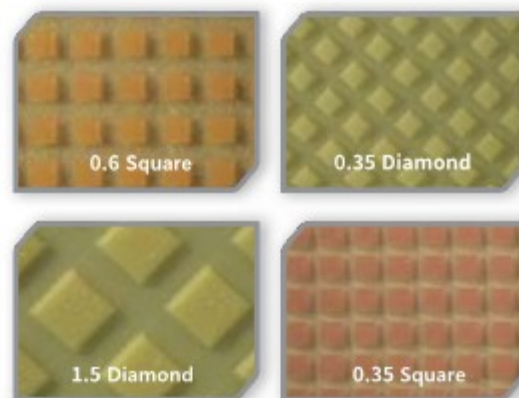
# Xon® Cleaning belt

Xon cleaning belt was developed for the cleaning of glass substrates such as LCD and OLED, and consists of abrasives and particles suitable for physically and efficiently cleaning cullets and various types of organic contaminants.

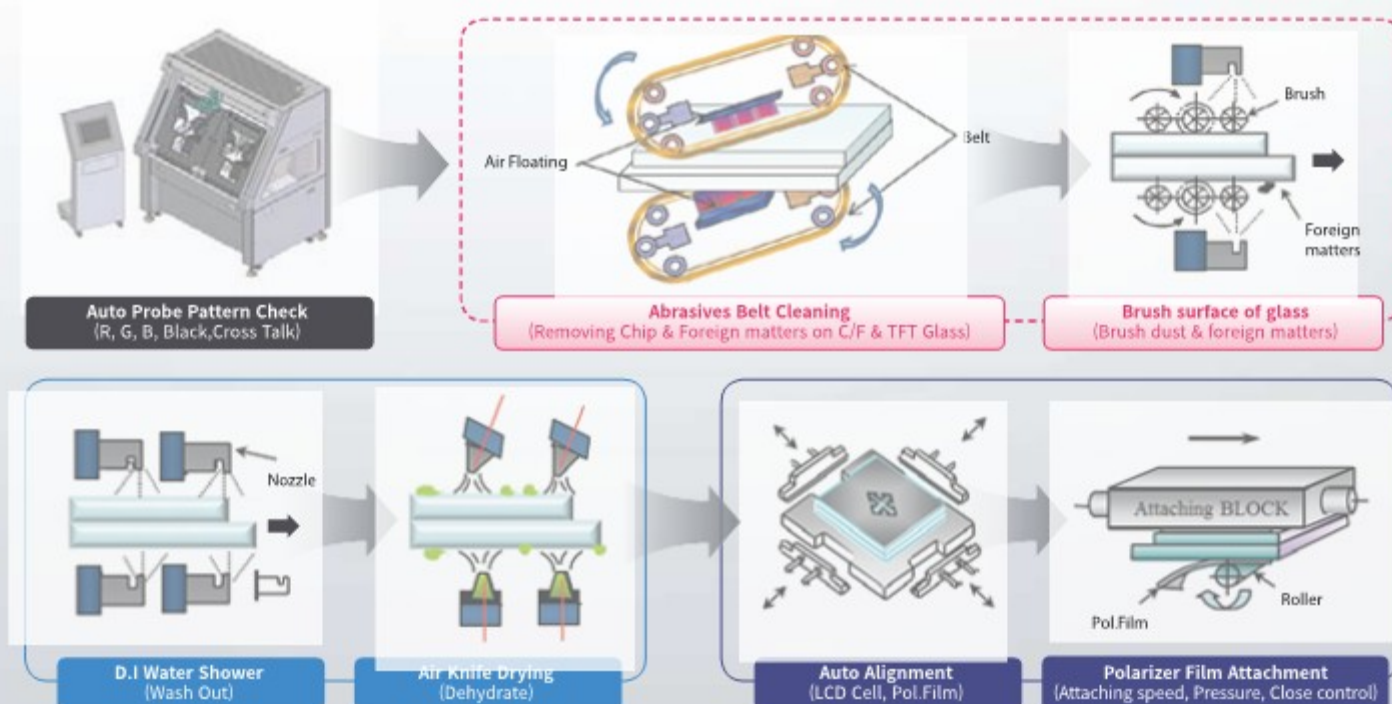


## Product specification

- Length : 700~5,000 mm
- Width : 10~60mm
- Thickness : 0.52±0.02mm
- Pattern shape : Square, Diamond
- Pattern size: 0.35 x 0.35mm, 0.6 x 0.6mm, 1.5 x 1.5mm
- Pattern height : 0.25mm
- Hardness : Shore 'D' 83±5, 'D' 70±5
- Abrasive : W/A, A/ H

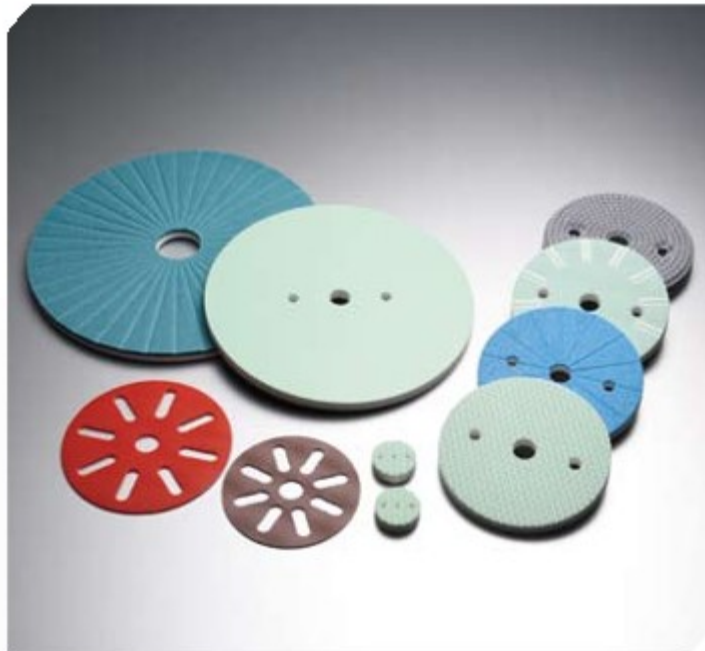


## Process of use



## Xon<sup>®</sup> Cleaning pad

Xon Cleaning Pad was developed for cleaning glass substrates such as LCD and OLED, and consists of abrasives and particles suitable for physically and efficiently cleaning glass cullets and various types of organic contaminants.



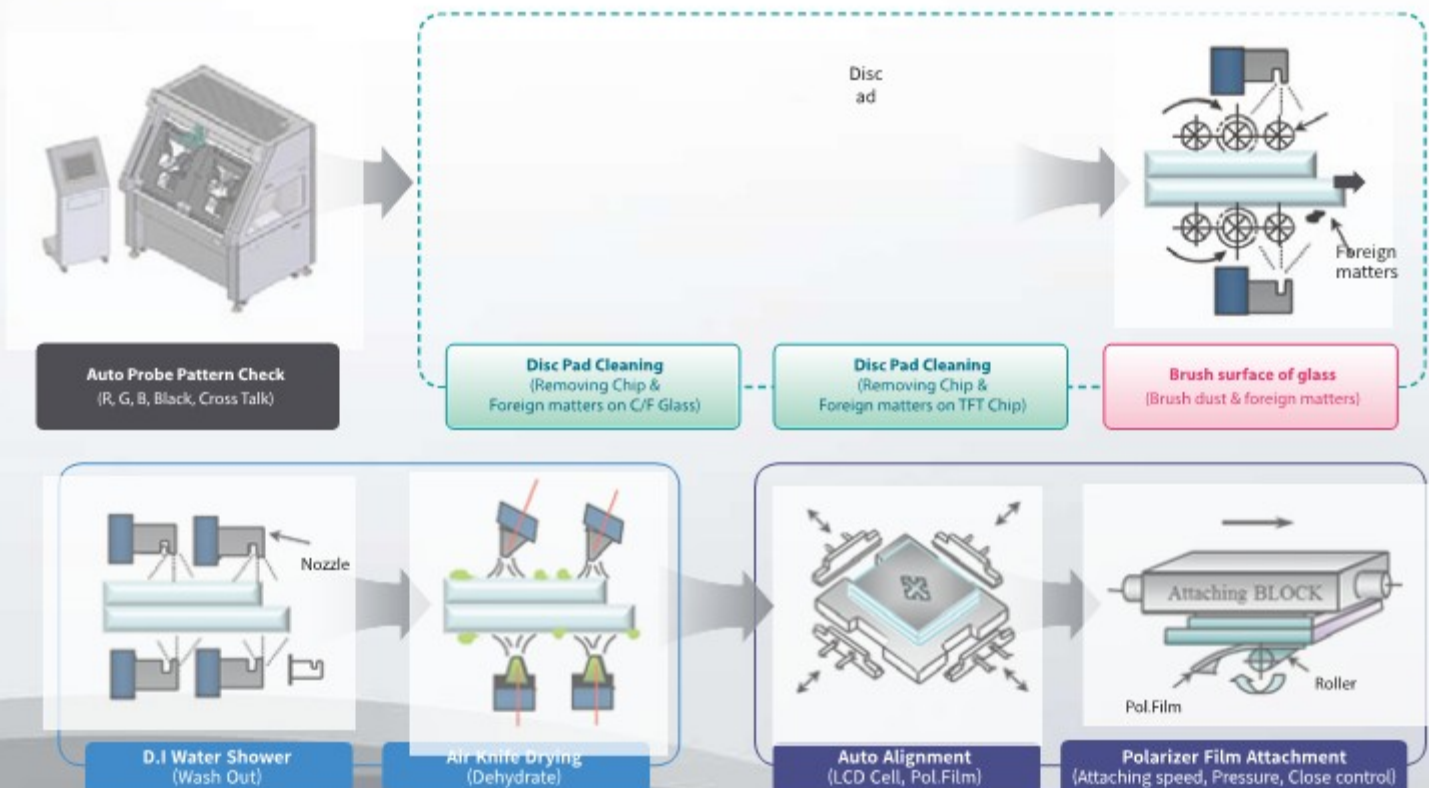
### Product specification

- Size : Ø80~400mm
- Thickness : 5~12mm
- Hardness : Shore 'D' 50~80
- Pattern Shape : Wave, Square, Hexagon
- Abrasive : W/A, A/H, Z/O
- Resin : 에폭Epoxy, Polymeric resin

### Conditions of use

- RPM : 400 ~ 600
- Pressure : 2.0 ~ 5.0 kg/cm<sup>2</sup>
- Life time : 7,000 ~ 8,000 Sheet/pad
- Wet use
- Strong cleaning effect by surface contact cleaning

### Process of use



# Xon® Cleaning roller

Xon cleaning roller was developed to clean glass substrates such as LCD and OLED, and consists of abrasives and particles suitable for physically and efficiently cleaning glass cullets and various types of organic contaminants.

## Xon® Cleaning Roller



### Product specification

- Length : 300~2,300 mm
- Pattern shape : Wave
- Out diameter : Ø30, Ø50, Ø70, Ø80mm
- Structure : Pattern layer + Cushion layer + Shaft
- Pattern height : 1.3~1.7mm
- Pattern hardness : Shore 'D' 65±5
- Cushion hardness : Shore 'A' 25±5
- Abrasive : Z/ O, W/ A, Sic etc.
- Resin : Epoxy, Urethane

## Process of use



## Xon<sup>®</sup> Dendroid brush(For Cleaning)

Xon Dendroid brush was developed for cleaning glass substrates such as LCD and OLED, and has a structure that can efficiently remove foreign substances attached to cullents and substrates using a specially designed hook-shaped brush.



### Product features

- Excellent cleaning power compared to regular nylon roll brushes.
- Hook-type brush structure to increase glass chip removal power.
- Cross arrangement of brush heads prevents miss cleaning area.
- Excellent abrasion and chemical resistance.

### Abration test



< Panel edge test >



< Before >

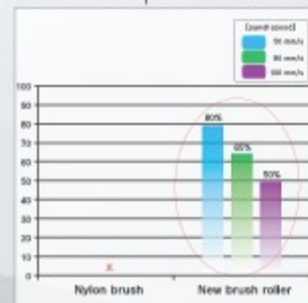
24h



< After >

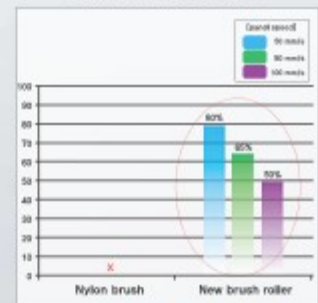
- Outer Dia(mm) : Ø70, Ø80
- Inner Dia(mm) : Ø30
- Resin : Polymeric resin
- Hardness : Shore D55±3
- RPM : 400~2000

### < Permanent pen remove Test >



Nylon Brush Dendroid Brush

### < Glue remove Test >



Nylon Brush Dendroid Brush

# Xonite® Dendroid Brush(For polishing)

Xonite Dendroid Brush can be used for polishing, finishing and deburring of metal and plastic materials, and it is composed of alumina or abrasive and resin with elasticity, so it can be used freely not only on flat surfaces, but also on curved and uneven areas.



## Product features

Deburring work that cannot be done with a wire brush or nylon brush is possible.

Since it contains abrasive particles, it is not necessary to use it with a compound, so the work environment is clean.

No risk of injury to workers due to flying objects like wire brushes.

Various products can be selected according to brush diameter and abrasive grain size

It can be easily used by attaching it to a hand grinder or applied to an automated process

## Product specification

Outer Dia(mm)	1", 2", 3"
Inner Dia(mm)	Φ2, 10mm
Resin	Polymeric resin
Abrasive	WA (# 80, 120, 220, 400, 800, 2000, 8000)
Hardness	Shore D55±3
RPM	30,000

## Applications

- Polishing on sharp and small area
- Deburring and Cleaning of cutting face
- Remove Scratches or burns on the metal parts surface
- Remove top layer of workpiece
- Polishing for pipe inner surface
- Finishing for medical tools

## Xonite® Diamond Lapping Pad

- Xonite Diamond Lapping Pad is used for optical glass lapping process. It is a fixed abrasive pad which is made by mixing diamond agglomerate and resin.
- No slurry or only a small amount of slurry during the process can save costs and keep your working environment clean.

### Product features

- Depending on the glass substrate, it is possible to change specifications such as abrasive type, grain size, and resin type.
- Excellent lapping performance compare to conventional slurry method.
- Slurry and platen replacement costs can be greatly reduced.
- Maintain a clean working environment.

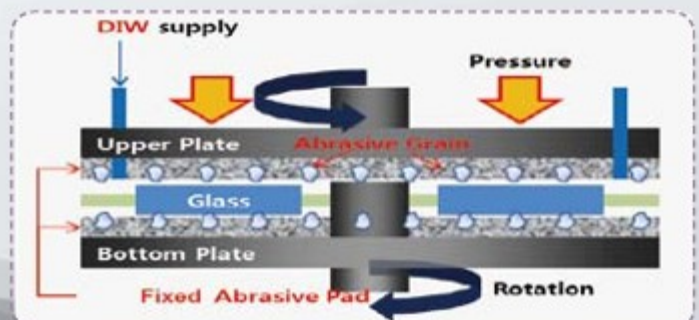
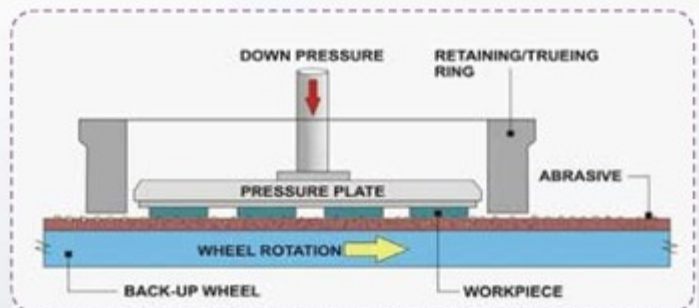


### Grade

- Diamond grain 2, 3, 5, 8, 10 μm

### Application

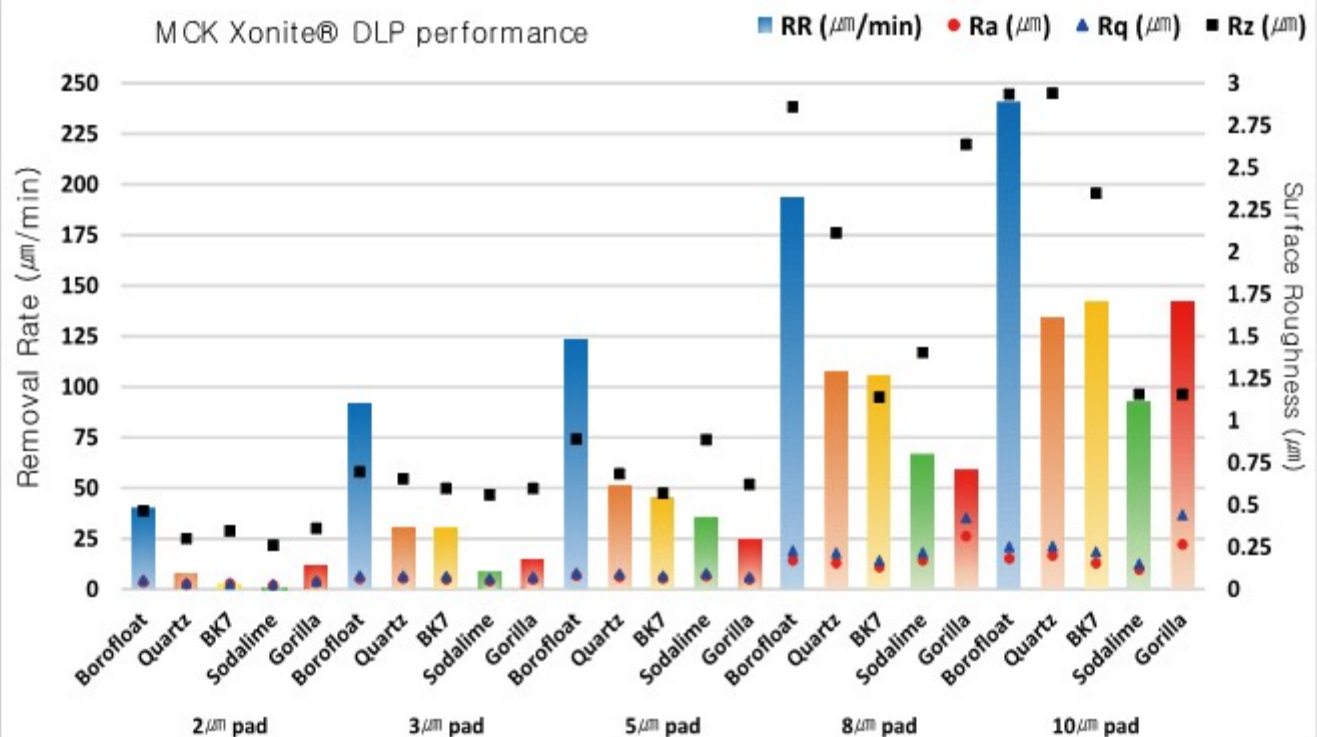
- Optical glass
- Mobile cover glass
- Wafer
- Sapphire
- etc.



## Xonite® Diamond Lapping Pad

- Xonite Diamond Lapping Pad is used for optical glass lapping process. It is a fixed abrasive pad which is made by mixing diamond agglomerate and resin.
- No slurry or only a small amount of slurry during the process can save costs and keep your working environment clean.

### Performance evaluation data



#### Test condition

- Machine : Double-sided lapping (Speedfam DSM\_9B-5P-IV)
- Pressure : 0.4kgf/cm<sup>2</sup>
- Platen speed : 50rpm
- Lapping time : 3min
- Slurry Free (DIW, Coolant only)
- Dressing : Xonite® XPS Dressing sheet

#### Install

Double-sided adhesive can be easily attached to single-sided and double-sided grinding machines.

#### Storage

Keep it flat and level. Erect or Leaning against it may cause deflection of the pad.

## Xonite® Abrasive film

### XDS Series

#### Product Image



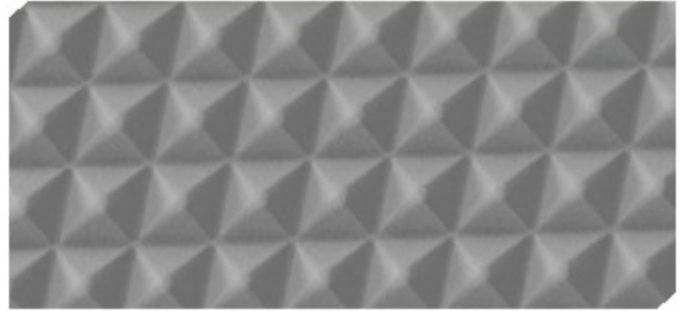
#### Product features

- XDS Series (Diamond Abrasive Film) is a product developed to apply to a very precise surface finishing process of a difficult material like optical glass, quartz and ceramics. It realizes high polishing rate using diamond abrasive and persistence of polishing rate through three-dimensional pattern structure.

#### Application

- Optical glass, glass fiber, ceramic, high strength alloy

#### Pattern Image



#### Product specification



Grade	XDS-P60-C5	XDS-P60-C10	XDS-P60-C15
Abrasive	Dia 5µm	Dia 10µm	Dia 15µm
Color	Grey	Light brown	Light brown
Base film	PET	PET	PET

### XPS-P1

#### Product Image



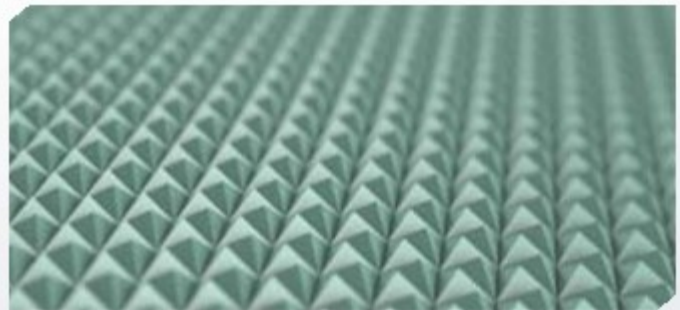
#### Product features

- Long life due to three-dimensional pattern shape
- Precise grinding is possible by fine pattern structure
- Removable to hand tool using double sided tape
- Abrasive type and particle size can be changed to suit the application

#### Application

- Metal surface polishing
- Fix defect after car painting

#### Pattern Image



#### Product specification



Grade	XPS-P1-G5	XPS-P1-G7	XPS-P1-G9
Abrasive	GC 5µm	GC 7µm	GC 9µm
Color	Light brown	Purple	Sea Blue
Base film	PET	PET	PET

## Xonite® Abrasive film

### XPS-P2

#### Product Image



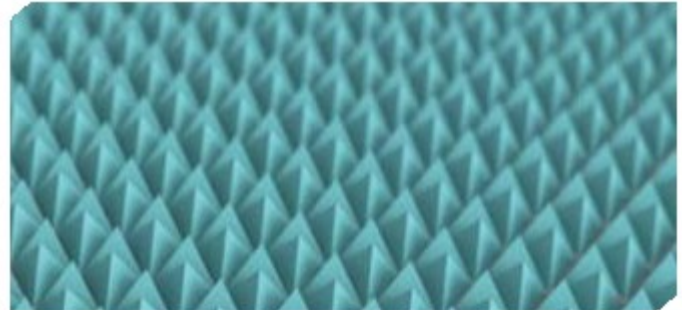
#### Product features

- Long life due to three-dimensional pattern shape
- Grinding curved surface is possible by PET/TPU base material

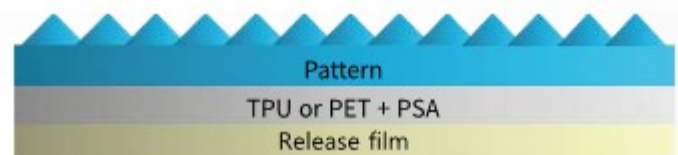
#### Application

- Metal surface and curved surface polishing

#### Pattern Image



#### Product specification



Grade	XPS-P2-W2	XPS-P2-W5	XPS-P2-W9
Abrasive	WA 2µm	WA 5µm	WA 9µm
Color	Yellow	Blue	Orange
Base film	PET or TPU	PET or TPU	PET or TPU

### XPS-P3

#### Product Image



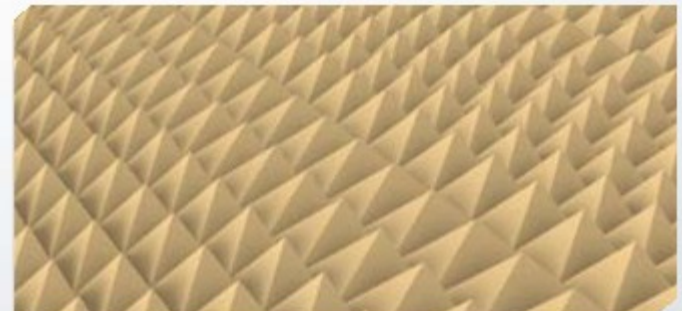
#### Product features

- Long life due to three-dimensional pattern shape
- Precise grinding and is possible by fine pattern
- Can be used for various materials and industrial fields

#### Application

- Metal surface and curved surface polishing

#### Pattern Image



#### Product specification



Grade	XPS-P3-W5	XPS-P3-W10	XPS-P3-W20	XPS-P3-W35
Abrasive	WA 5µm	WA 10µm	WA 20µm	WA 35µm
Color	Orange	Blue	Pink	Green
Base film	PET	PET	PET	PET



## **MCK Co., Ltd.**

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