Combined Lathe — XEBEC Back Burr Cutter and Path™ Application Sheet Guideline 1/2

How to order

Application Sheet

	Customer	Distributor	XEBEC
STEP1	Fill out the application sheet. Submit to XEBEC distributor by e-mail.	→	
STEP2			XEBEC Technology checks if XEBEC Path is applicable. XEBEC Path Code and the optimal Cutter size will be returned. →
STEP3	Order using the XEBEC Path Code given at Step 2.	→	
STEP4			Delivery →

Guidelines for the application sheet

1 Read before proceeding

- Check the boxes on the section 7 Path usage conditions to indicate your consent.
- 3-axis simultaneous control is required.
- If ordering more than 2 Paths, fill out 1 sheet each.
- Before implementing the Cutter and Path, read and follow the instruction manual.

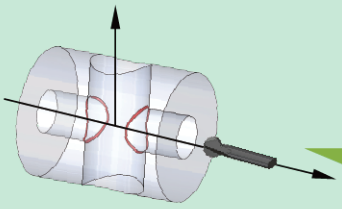
Path generation restrictions

- Path may not be generated for certain hole combinations.
- This is not applicable if either a cross hole or a main bore is a female screw or a material surface.
- Contact us for the following cases.
  - A hole type is not listed on this sheet
  - The Cutter is inserted from Y-axis direction
  - The Cutter is inserted from X-axis when Y-axis is controlled by a diameter mode

3 Axis configuration

Combined Lathe (XZC-axis)

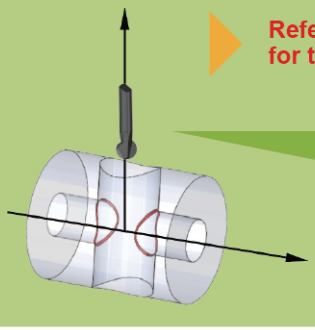
Refer to the section blow for the hole types



Cutter is inserted from Z-axis direction

Combined Lathe (XZY-axis)

Refer to the next page for the hole types



Cutter is inserted from X-axis direction

4 XZC Hole type

Deburring location is marked up in red or blue.

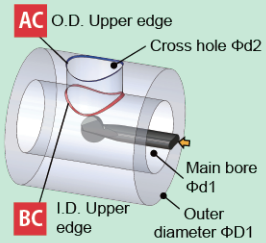
Outer diameter (O.D.)
Inner diameter (I.D.)

Orthogonal Cross hole

Main bore ≥ Cross hole

AC O.D. edge

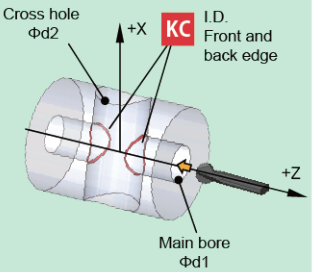
BC I.D. edge



Rotate C-axis to change a phase.

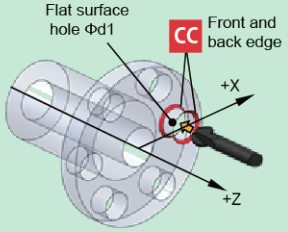
Main bore < Cross hole

KC I.D. Front and back edges



Flat surface hole

CC Front and back edges

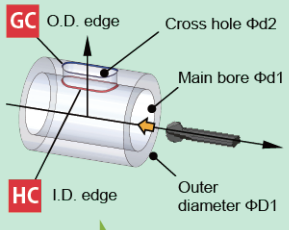


Slotted hole

Parallel to Main bore

GC O.D. edge

HC I.D. edge



If ordering more than 2 Paths, fill out 1 sheet each.

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4 XZY Hole type

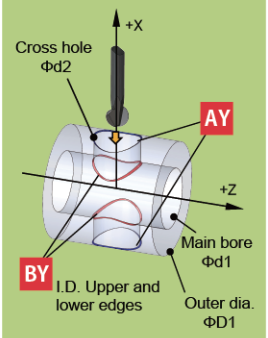
Deburring location is marked up in red or blue.

Outer diameter (O.D.)
Inner diameter (I.D.)

Orthogonal Cross hole

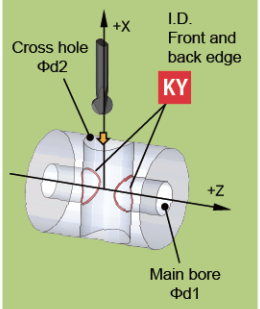
Main bore ≥ Cross hole

AY O.D. edges
BY I.D. edge



Main bore < Cross hole

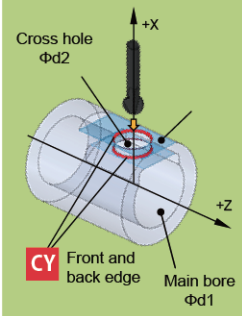
KY I.D. Front and back edges



When the hole is broken, select MY

Flat surface hole

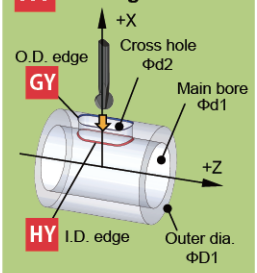
CY Front and back edges



Slotted hole

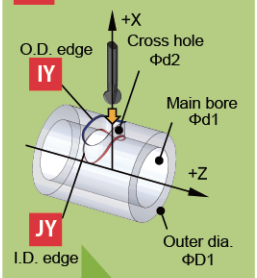
Parallel to Main bore

GY O.D. edge
HY I.D. edge



Perpendicular to Main bore

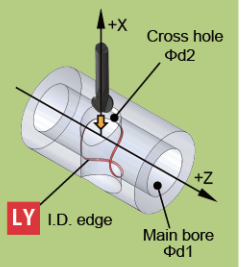
IY O.D. edge
JY I.D. edge



Broken hole

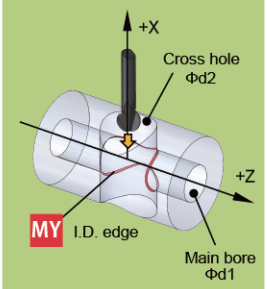
Main bore ≥ Cross hole

LY I.D. edge



Main bore < Cross hole

MY I.D. edge



If ordering more than 2 Paths, fill out 1 sheet each.

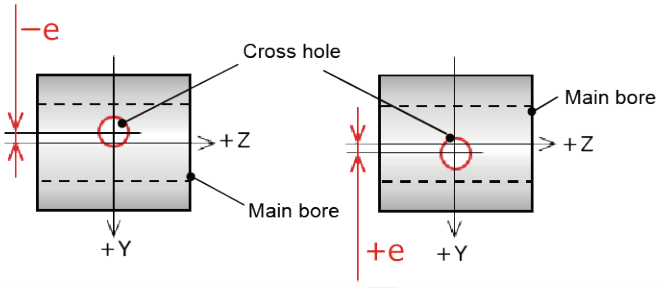
5 Amount of shift

Required for AY BY GY HY IY JY KY LY MY,

Enter how much the Cross hole is shifted from the central axis of the Main bore and its direction.

When the Cross hole is:

- **On-center,**
  e="0"
- **Off-center,**
  e="+" or "-" sign and the "amount of shift"
  *Beware of "+/-" sign.



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Combined Lathe — XEBEC Back Burr Cutter and Path™ Application Sheet — Entry form

The number of Paths

☐ of ☐

Submit to:

XEBEC local distributor or
bbcp@xebec-tech.co.jp

Caution: numeric values

Make sure to enter the accurate values. TheXEBEC Path for Back Burr Cutter is generated based on the numeric values you provide. If incorrect values are provided, the incorrect Path will be generated, which may cause damage to the workpiece, the Cutter, and the equipment. XEBEC Technology is not responsible for any damage caused by an incorrect value. There is a possibility that secondary burrs may occur depending on the condition of the Cross hole edge and the workpiece material.

1 Notes

This sheet is used to examine if XEBEC Path is applicable for a designated edge. Additionally, an optimal Cutter size is determined based on the values on this form.

- Read 1 on the guideline before filling out the application sheet.
- For fields 3 to 5, refer to the sections 3 4 5 on the guideline.
- Fill out from 2 to 8 and send this application sheet by e-mail to XEBEC distributor or XEBEC Technology.
- If requesting more than 2 Paths, fill out 1 sheet for each Path

2 Controlling mode

☐ **Diameter mode**

☐ **Radius mode**

Contact us if Y-axis is controlled by a diameter mode (e.g. automatic lathe)

3 Type of combined lathe

☐ **XZC-axis**
- Polor coordinate interpolation is required
- Path is generated in UHW.

☐ **XZY-axis**
- Path is generated in UVW

For MC, fill out the sheet for MC

5 Amount of shift (e)

☐☐☐☐☐☐ . ☐☐☐ mm

4 Hole type

Select 1 edge type and check a box below.
(Only one for each sheet)

	Lathe type XZC	Lathe type XZY	Edge type	Check
Cross hole	AC	AY	O.D. edge	
	BC	BY	I.D. edge	
	KC	KY	I.D. Front and back edge	
Flat Surface hole	CC	CY	Back and front edge	
Slotted hole	GC	GY	Parallel to Main bore O.D. edge	
	HC	HY	Parallel to Main bore I.D. edge	
		IY	Perpendicular to Main bore O.D. edge	
		JY	Perpendicular to Main bore I.D. edge	
Broken hole		LY	I.D. edge (Main bore ≥ Cross hole)	
		MY	I.D. edge (Main bore < Cross hole)	

Dimensions

Enter the dimensions of the area to be deburred
Make sure to enter the aimed value up to the 3rd decimal place.

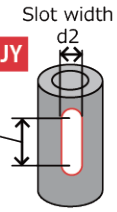
Cross hole diameter φd2 or slot width d2

☐☐☐☐☐☐ . ☐☐☐ mm

Outer dia. φD1 or Main bore dia. φd1

☐☐☐☐☐☐ . ☐☐☐ mm

Enter for GC GY HC HY IY JY



☐☐☐☐☐☐ . ☐☐☐ mm

6 Cutter size (optional)

If you need to specify a Cutter size, check a box below.
*If the specified Cutter diameter is not appropriate, an optimal Cutter size is selected.

☐ Not specified ☐ φ0.8 ☐ φ1.3 ☐ φ1.8 ☐ φ2.3 ☐ φ2.8 ☐ φ3.3 ☐ φ3.8 ☐ φ4.8 ☐ φ5.8 ☐ φ7.8 ☐ φ9.8

7 Path usage conditions

Check the both boxes below to consent the conditions.
The order will not be placed unless you check both of them.

☐ I agree that XEBEC TECHNOLOGY grants us permission to use XEBEC Path for Back Burr Cutter and agree not to transfer or distribute the data to parties outside the company. I take it upon ourselves to manage the data appropriately, ensuring it is not used for purpses or subjects other than the intended ones, excluding possible temporary use outside for testing and during the startup period.

☐ I agree not to use any tool other than XEBEC Back Burr Cutter when using XEBEC Path.

8 User information

If requesting more than 2 Paths at one time, fill out this section on the first sheet.

Company name :

Dept. name:

Name:

Tel.:

E-mail:

Country:

Signature :

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