Machining Center

XEBEC
XEBEC Back Burr Cutter and Path™

Application Sheet Guideline 1/2

How to order

Application Sheet

	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

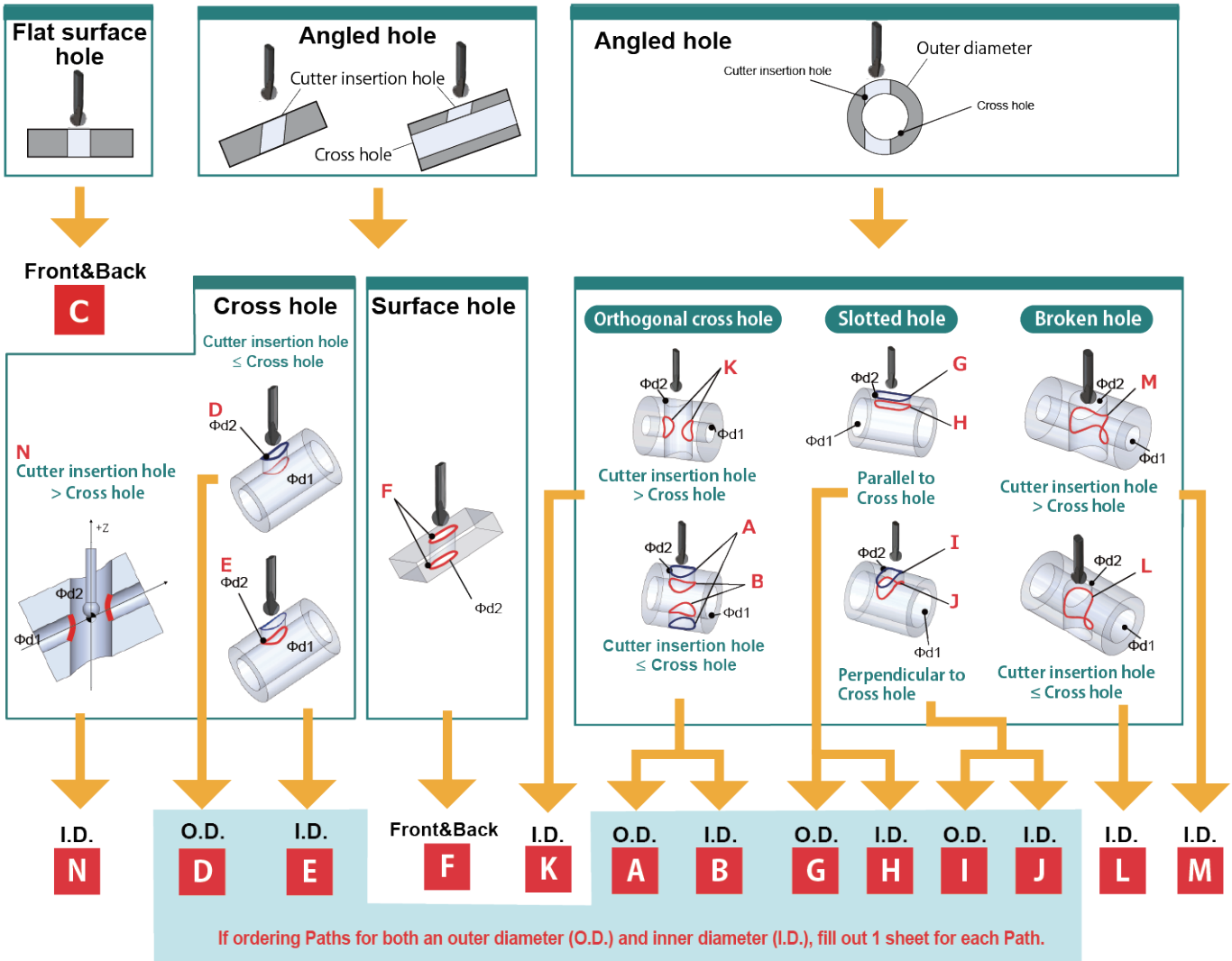
Read before proceeding

- 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

- This is applicable only when the central axis of the Cutter insertion hole is parallel to Z-axis.
- Path may not be generated for certain hole combinations.
- This is not applicable if either a Cutter insertion hole or a cross hole 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 X-axis
  - Other irregular machine configuration

2 Hole type



If ordering Paths for both an outer diameter (O.D.) and inner diameter (I.D.), fill out 1 sheet for each Path.

3 Cross hole orientation

Required for: All types except C

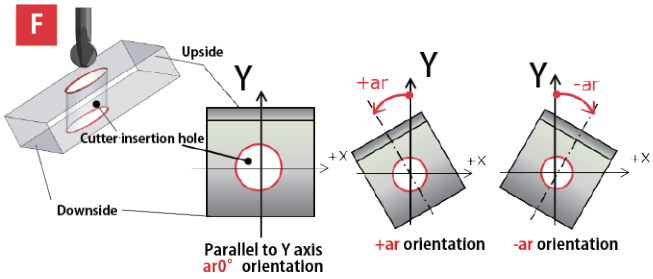
The standard position ar0° is the position that the central axis of the Cross hole is parallel to the Y-axis of the machine.

Enter the Cross hole orientation. For the hole type F, enter the orientation of the angled surface.

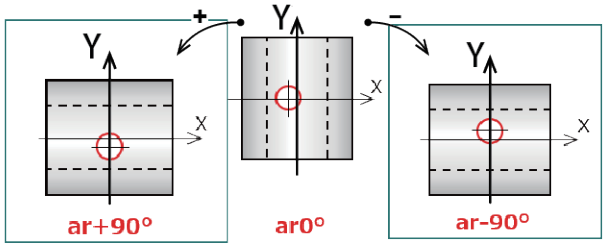
When the Cross hole is:

- Parallel to Y axis : ar= "0°"
- Parallel to X axis : ar= "-90°"
- Neither of the above: Enter the angle of the Cross hole when being machined
  * Beware of "+/−" sign.

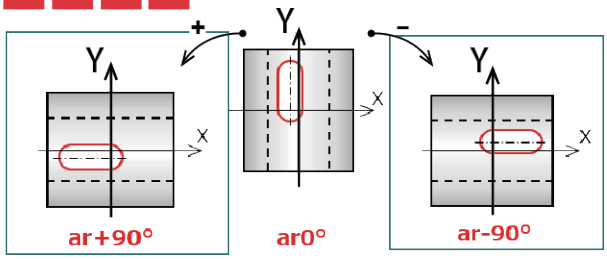
F



A B D E K L M N



G H I J



4 Amount of Shift

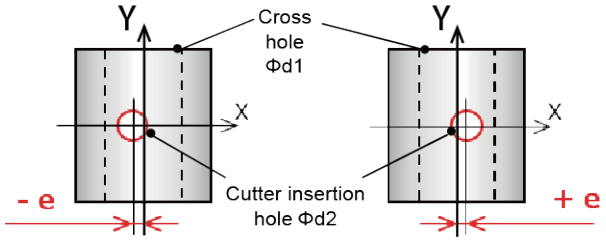
Required for: All types except C F

Assume that the workpiece position is ar0°.

Enter how much the Cutter insertion hole is shifted from the central axis of the Cross hole.

When the Cross hole is:

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



5 Inclination angle

Required for: D E F N

Assume that the workpiece position is ar0°.

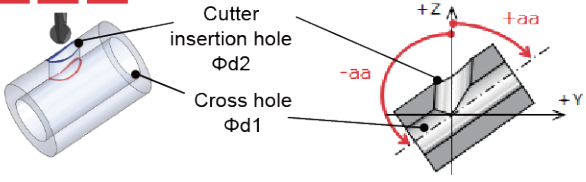
Enter the inclination angle of the central axis of the Cross hole (or surface) from the central axis of the Cutter insertion hole (+Z-axis).

When the Cross hole is inclined to:

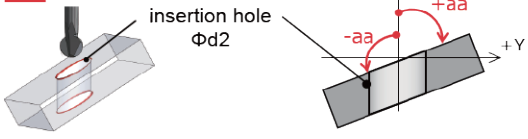
- +Y side : aa= +°
- -Y side : aa= - □°

<supported angles for aa>
+60° ≤ +aa ≤ +120°
−120° ≤ −aa ≤ − 60°

D E N



F



* If the direction of inclination of the Cross hole/ surface is not in the same direction as the inclination of the Cross hole please contact us.

Machining Center — XEBEC Application Sheet — Entry Form

XEBEC Back Burr Cutter and Path™

The number of Paths

☐ of ☐

Submit to:

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

Caution: numeric values

Make sure to enter the accurate values. The XEBEC 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 edges and the workpiece material.

1 Notes

This sheet is used to examine if XEBEC Path can be generated for the 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 2 to 5, refer to the sections 2 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 Hole type

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

Hole type	Type	Edge type	Check
Orthogonal cross hole	A	O.D. Upper and lower edges	☐
	B	I.D. Upper and lower edges	☐
	K	I.D. (Cutter insertion hole > Cross hole)	☐
Flat surface hole	C	Back and Front edges	☐
Slotted hole	G	Parallel to Cross hole : O.D.	☐
	H	Parallel to Cross hole : I.D.	☐
	I	Parpendicular to Cross hole : O.D.	☐
	J	Parpendicular to Cross hole : I.D.	☐
Broken hole	L	I.D. (Cutter insertion hole ≤ Cross hole)	☐
	M	I.D. (Cutter insertion hole > Cross hole)	☐
Angled cross hole	D	O.D. Upper edge	☐
	E	I.D. Upper edge	☐
	N	I.D. (Cutter insertion hole > Cross hole)	☐
Angled surface hole	F	Back and Front edges	☐

Dimensions

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

Cutter insetion hole dia. φd2 or slot width d2

☐☐☐ . ☐☐☐ mm

Outer dia. φD1 or Cross hole dia. φd1

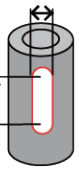
☐☐☐ . ☐☐☐ mm

Enter for G H I J

Slot width d2

Length between the R center points ℓ

☐☐☐ . ☐☐☐ mm



3 Cross hole orientation (ar)

☐ ☐☐☐ . ☐☐☐ °

4 Amount of Shift (e)

☐ ☐☐☐ . ☐☐☐ mm

5 Inclination angle (aa)

☐ ☐☐☐ . ☐☐☐ °

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 the time, fill out this section on the first sheet.

Company name :

Dept. name:

Name:

Tel.:

E-mail:

Country:

Signature :