Combined Lathe (XZC axis)
Type BC: Inner Diameter
For polar coordinate interpolation

XEBEC Back Burr Cutter and Path Order Code Request Sheet

(LBP-04)

This sheet is used to confirm the dimensions of deburring areas and to confirm whether or not point group data (Name : XEBEC Path for Back Burr Cutter) can be generated. If a path can be generated then the path order code and optimal cutter diameter will be notified to a customer.

1. Deburring Location

This is sheet is for edges on an orthogonal crosshole, being processed with a 3-axis simultaneous combined lathe (XZC-axis).
Make sure that the sheet type matches burr locations.
Polar coordinate interpolation required for the type BC.

[Restrictions for generating a path]

Orthogonal Crosshole
Supports secondary hole diameter of Φ1mm or more
The primary hole diameter to the secondary hole diameter can be up to 1:1

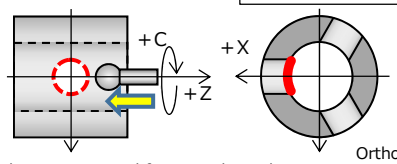
Off-center Crosshole
Supports secondary hole diameter of Φ1mm or more
Supports an amount of shift that does not cause the primary hole to be broken.

* It is not applicable if either the primary or secondary hole is a female screw or the material surface.
* There is a possibility that a path data cannot be generated for certain hole combinations.

[Caution]
Make sure to enter accurate values. The XEBEC Path for Back Burr Cutter is generated based on these values. If erroneous values are entered, an incorrect path will be generated which will cause a workpiece, cutter or machine to break. XEBEC Technology is not responsible for any damage caused in such a case.

Type BC
Inner Diameter Upper Edge
For polar coordinate interpolation

: Burr location
: Cutter direction



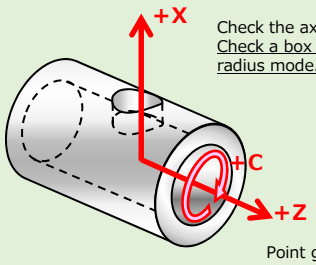
*Path data is generated for C0° edge only.
*The Cutter is approached in Z-axis direction.
*Rotate the C-axis if a phase is different.

Orthogonal or off-center crossing

▼Enter the dimensions in the boxes below.

*Fill in all spaces. For "0", enter "0".
*Enter up to the 3rd decimal.

2. Axial Composition

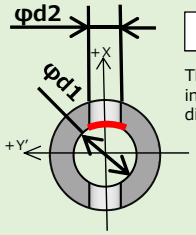


Check the axial composition.
Check a box on diameter or radius mode.

Point group data is generated at XZC-axis.
Polar coordinate interpolation required.

➢ **Controlling Mode** ☐ **Diameter mode** ☐ **Radius mode**
*Check a box

3. Hole Diameters



: Burr location

The Cutter is approached in Z-axis (the primary hole) direction.

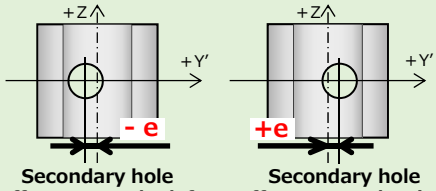
Enter an aimed value.

➢ **Primary hole (φd1)** ☐☐.☐☐ mm

➢ **Secondary hole (φd2)** ☐☐.☐☐ mm

4. Secondary Hole Position

Check the position of the primary hole at YZ-planar.
Enter the position of the secondary hole in regards to the primary hole. Be careful of the +/- direction.



Secondary hole off-center to the left

Secondary hole off-center to the right

If the secondary hole is:
on-center to the primary hole: e=0mm
off-center to the left of the primary hole: e=-□mm
off-center to the right of the primary hole: e=+□mm

➢**Amount of shift e** ☐+ ☐− ☐☐.☐☐ mm
*Check a box on + or -

Customer Information and Confirmation of Path Use Conditions

Please check the boxes. An order cannot be placed unless the following boxes are filled out.

☐ **I agree to not use any tools besides the XEBEC Back Burr Cutter when using the XEBEC Path.**
☐ **I agree that XEBEC Technology has granted the authority to use the XEBEC Path for Back Burr Cutter and that I will not hand over or distribute this data outside the company.**

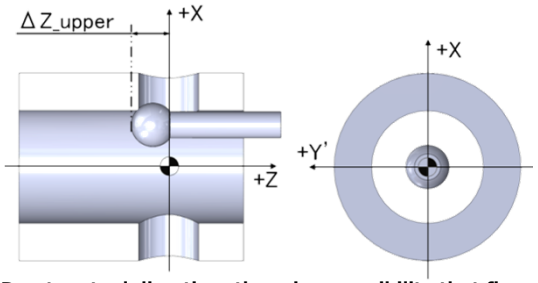
Company name | Dept. | Name

Country: | Phone | E-mail | (FAX)

▼Only for XEBEC Technology▼ Order Code Contact Sheet

XEBEC Technology will inform the order code for the XEBEC Path and tool diameter of the XEBEC Back Burr Cutter based on the workpiece dimensions filled in the Order Code Request Sheet. Please order with the following order code after confirming the path use conditions and tool interference.

XEBEC Path Order Code No.	
△Z_Upper (mm)	
XEBEC Back Burr Cutter Diameter	Product Code
φ	
Reason for disapproval (*Only if path generation is disapproved)	



***Due to a tool direction, there is a possibility that fine secondary burrs generated.**

[Caution]
- The tool interference in vertical direction was not examined. Check the Cutter length and ΔZ (maximum amount of descent), and make sure to confirm there is no tool interference from the processing environment (jig, holder, workpiece, etc.) Then select the appropriate Cutter from the catalog.
- Only the optimal tool diameter was selected according to the workpiece dimensions filled in the Order Code Request Sheet.
- ΔZ (maximum amount of descent) is the furthest the tool will fall from the starting point until the deburring operation is complete.

No. of sheets: /
*Enter the number of sheets if more than one sheet will be submitted.
(e.g.) If three sheets will be submitted, mark the first as "1/3", the second "2/3" and the third "3/3".

161007

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Combined Lathe (XZC axis)
Type BC: Inner Diameter
For polar coordinate interpolation

XEBEC Back Burr Cutter and Path Order Code Request Sheet (LBP-04)

XEBEC TECHNOLOGY CO.,LTD.

This sheet is used to confirm the dimensions of deburring areas and to confirm whether or not point group data (Name : XEBEC Path for Back Burr Cutter) can be generated. If a path can be generated then the path order code and optimal cutter diameter will be notified to a customer.

1. Deburring Location

This is sheet is for edges on an orthogonal crosshole, being processed with a 3-axis simultaneous combined lathe (XZC-axis).
Make sure that the sheet type matches burr locations.
Polar coordinate interpolation required for the type BC.

[Restrictions for generating a path]

Orthogonal Crosshole
Supports secondary hole diameter of Φ1mm or more
The primary hole diameter to the secondary hole diameter can be up to 1:1

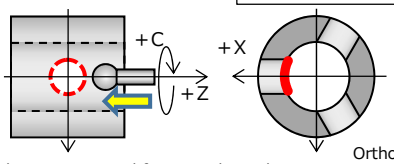
Off-center Crosshole
Supports secondary hole diameter of Φ1mm or more
Supports an amount of shift that does not cause the primary hole to be broken.

* It is not applicable if either the primar
* There is a possibility that a path data

[Caution]
Make sure to enter accurate values. The
If erroneous values are entered, an incor
machine to break. XEBEC Technology is

Type BC
Inner Diameter Upper Edge
For polar coordinate interpolation

: Burr location
: Cutter direction



ch data is generated for C0° edge only.
e Cutter is approached in Z-axis direction.
tate the C-axis if a phase is different.

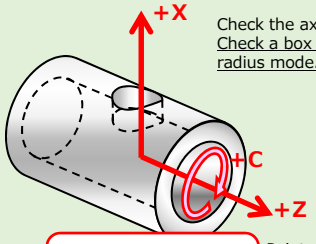
Orthogonal or off-center crossing

Double check the deburring location and the sheet type.
There are **4** kinds of sheet (AY, BY, AC and BC)

▼Enter the dimensions in the boxes below.

*Fill in all spaces. For "0", enter "0".
*Enter up to the 3rd decimal.

2. Axial Composition



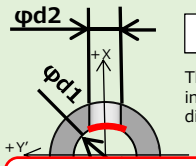
Check the axial composition.
Check a box on diameter or radius mode.

Check 1 box

Point group data is generated at XZC-axis.
Polar coordinate interpolation required.

➢ **Controlling Mode** ☐ **Diameter mode** ☐ **Radius mode**
*Check a box

3. Hole Diameters



: Burr location

The Cutter is approached in Z-axis (the primary hole) direction.

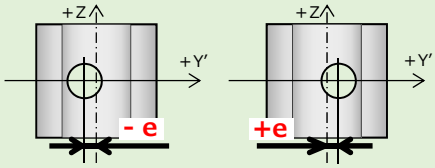
Enter up to the 3rd decimal

nter an aimed value.

➢ **Primary hole (φd1)**	7.777	mm
➢ **Secondary hole (φd2)**	6.789	mm

4. Secondary Hole Position

Check the position of the primary hole at YZ-planar.
Enter the position of the secondary hole in regards to the primary hole. Be careful of the +/- direction.



Secondary hole off-center to the left

Secondary hole off-

If th
on-c
off-c
off-center to the right

Check + or -

Enter "0" for "(

e primary ho

+□mm

➢**Amount of shift e** ☐+ ☐− 0.□□ mm
*Check a box on + or -

Check the boxes

Customer Informa ... of Path Use Conditions

Please check the boxes. An order cannot be placed unless the following boxes are filled out.

☑ **I agree to not use any tools besides the XEBEC Back Burr Cutter when using the XEBEC Path.**
☑ **I agree that XEBEC Technology has granted the authority to use the XEBEC Path for Back Burr Cutter and that I will not hand over or distribute this data outside the company.**

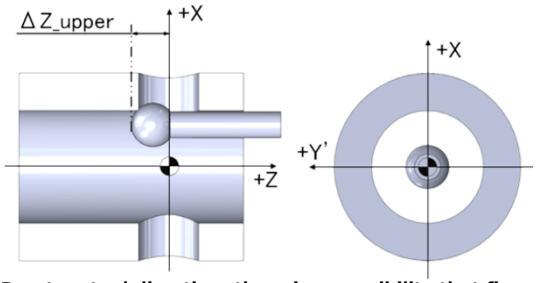
Company name Company Name | Dept. Dept | Name Name

Country: Country Name | Phone TEL | E-mail E-mail | (FAX)

▼Only for XEBEC Technology▼ Order Code Contact Sheet

XEBEC Technology will inform the order code for the XEBEC Path and tool diameter of the XEBEC Back Burr Cutter based on the workpiece dimensions filled in the Order Code Request Sheet. Please order with the following order code after confirming the path use conditions and tool interference.

XEBEC Path Order Code No.	PGC007-01-58
△Z_Upper (mm)	
XEBEC Back Burr Cutter Diameter	**Product Code**
φ 5.8	XC-58-B
Reason for disapproval (*Only if path generation is disapproved)	



***Due to a tool direction, there is a possibility that fine secondary burrs generated.**

[Caution]
• The tool interference in vertical direc
interference from the processing env
• Only the optimal tool diameter was s
• ΔZ (maximum amount of descent) is

nd make sure to confirm there is no tool
.
plete.

If submitting multiple sheets, enter the sheet number.
e.g. 1/3, 2/3, 3/3.

No. of sheets: 1 / 3
*Enter the number of sheets if more than one sheet will be submitted.
(e.g.) If three sheets will be submitted, mark the first as "1/3", the second "2/3" and the third "3/3".

161007

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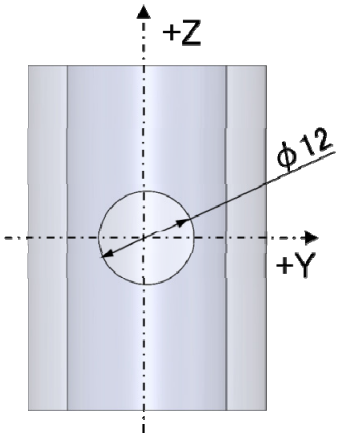
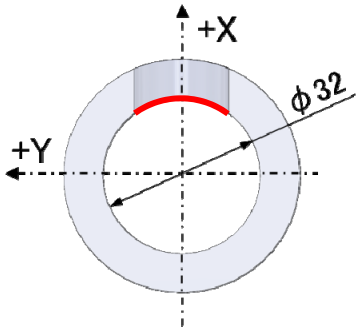
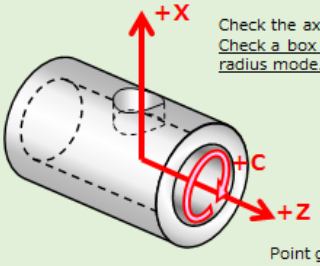
Description Example: Type BC

Example 1





2. Axial Composition

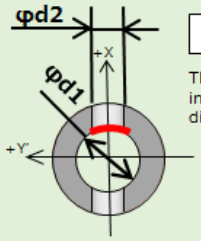


Check the axial composition.
Check a box on diameter or radius mode.

Point group data is generated at XZC-axis.
Polar coordinate interpolation required.

➢ Controlling Mode (*Check a box)
☑ Diameter mode
☐ Radius mode

3. Hole Diameters



▬ : Burr location

The Cutter is approached in Z-axis (the primary hole) direction.

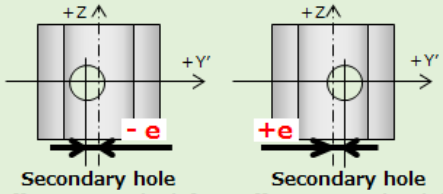
Enter an aimed value.

➢ Primary hole (φd1) 32.000 mm

➢ Secondary hole (φd2) 12.000 mm

4. Secondary Hole Position

Check the position of the primary hole at YZ-planar.
Enter the position of the secondary hole in regards to the primary hole. Be careful of the +/- direction.



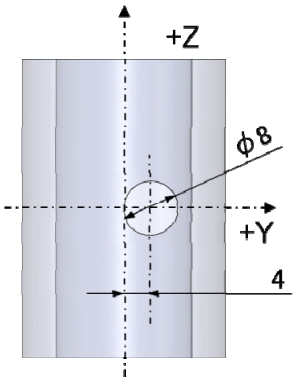
Secondary hole off-center to the left

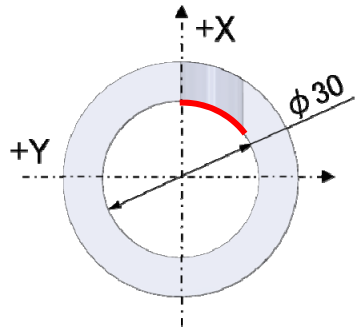
Secondary hole off-center to the right

If the secondary hole is:
on-center to the primary hole: e=0mm
off-center to the left of the primary hole: e=-□mm
off-center to the right of the primary hole: e=+□mm

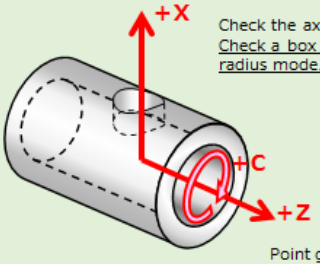
➢ Amount of shift e (*Check a box on + or -)
☐+ ☐− 0. mm

Example 2





2. Axial Composition

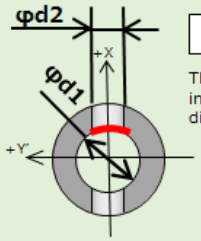


Check the axial composition.
Check a box on diameter or radius mode.

Point group data is generated at XZC-axis.
Polar coordinate interpolation required.

➢ Controlling Mode (*Check a box)
☑ Diameter mode
☐ Radius mode

3. Hole Diameters



▬ : Burr location

The Cutter is approached in Z-axis (the primary hole) direction.

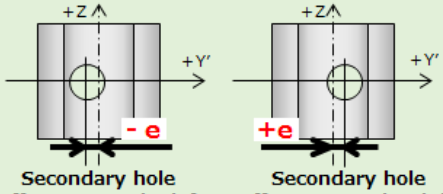
Enter an aimed value.

➢ Primary hole (φd1) 30.000 mm

➢ Secondary hole (φd2) 8.000 mm

4. Secondary Hole Position

Check the position of the primary hole at YZ-planar.
Enter the position of the secondary hole in regards to the primary hole. Be careful of the +/- direction.



Secondary hole off-center to the left

Secondary hole off-center to the right

If the secondary hole is:
on-center to the primary hole: e=0mm
off-center to the left of the primary hole: e=-□mm
off-center to the right of the primary hole: e=+□mm

➢ Amount of shift e (*Check a box on + or -)
☑+ ☐− 4.000 mm

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