

New conditions and chips for conditioning

Introduction

The end face is the area of a flange or hub mount, which contacts with a blade. And the term called "conditioning" refers to the operations to arrange the shape of the end face. When the precision of the end face is poor, the process quality would be degraded. In some cases, cut grooves could be tapered, the kerf width might be wider or the blade could be damaged.

It is necessary to conduct the conditioning in order to keep the end face in a good condition and obtain the stable process quality.

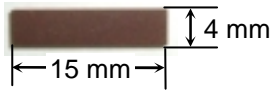
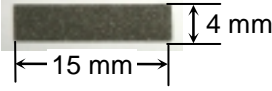
We have reviewed the conditions for the conditioning. As a result of these reexaminations, we'd like to present the new recommended conditions and chips, which will enable customers to get better conditioning results.

New chips

In order to make the status of the end face much better, the customers are recommended use the following new chips and conditions.

Please contact your nearest Disco office or Disco service office before making a purchase.

Please note that we have already discontinued selling the old chips.

Purpose	Part No.	Color	Shape
Flange conditioning ^{*)}	LKKN-010050-0	Dark brown	
Hub mount conditioning ^{*)}	LKKN-010049-0	Black	

*) LKKN-010050-0 is also used for some hub-mounts. For details, please see the "Recommended condition B" on the next page.

New conditions for conditioning and applicable models

The recommended conditions differ depending on model.

Please select the conditions which are appropriate for your machine.

Conditions	Model
A	- 3000 series - DFD6240 - DFD6340 (with shaft-lock spindle) - DFD6361
B	- 300, 301 series - 500, 501 and 502 series - 600, 601 series - DFD6340 (without shaft-lock spindle) - DFD6350 - DFD6360

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Recommended conditions A

The recommended conditions A apply to the 3000 series, DFD6240, DFD6340 (with a shaft-lock spindle feature) and DFD6361.

	2 inch		3 inch	
	Flange (R type)	Hub mount	Flange (S type)	Hub mount
Chip part No.	LKKN-010050-0	LKKN-010049-0	LKKN-010050-0	LKKN-010049-0
Chip color dimension (mm)	Dark brown 15×4	Black 15×4	Dark brown 15×4	Black 15×4
Conditioning mode	Flange mode	Mount mode	Flange mode	Mount mode
Index (μm)	1	3	1	3
Spindle revolution (min ⁻¹)	10000	13000	7000	9000
Feed rate (mm/s)	15	18	15	18
Dwell (spark-out times)	1	1	1	1
Necessary times of conditioning	End face run-out (μm) × 100	150	End face run-out (μm) × 100	200
Recommended end face accuracy	2 μm or less	2 μm or less	2 μm or less	2 μm or less

Recommended conditions B

The recommended conditions B apply to the 300, 301, 500, 501, 502, 600 and 601 series, DFD6340 (without a shaft-lock spindle feature), DFD6350 and DFD6360.

	2 inch		3 inch	
	Flange (M type)	Hub mount	Flange (L2 type)	Hub mount
Chip part No.	LKKN-010050-0	LKKN-010049-0	LKKN-010050-0	LKKN-010050-0
Chip color dimension (mm)	Dark brown 15×4	Black 15×4	Dark brown 15×4	Dark brown 15×4
Conditioning mode	Flange mode	Mount mode	Flange mode	Mount mode
Index (μm)	1	3	1	5
Spindle revolution (min ⁻¹)	10000	10000	7000	10000
Feed rate (mm/s)	15	10	15	5
Dwell (spark-out times)	1	1	1	1
Necessary times of conditioning	End face run-out (μm) × 100	150	End face run-out (μm) × 100	End face run-out (μm) × 100
Recommended end face accuracy	2 μm or less	2 μm or less	2 μm or less	2 μm or less

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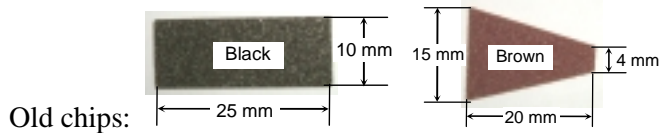
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To customers who own old chips

The customers who own old chips are strongly recommended replace them with new chips as soon as possible and conduct the conditioning using the new conditions, which could enable customers to get better conditioning results.



[Note]

When the customer wants to keep using the old chips, the conditioning must be conducted according to the conditions with which the old chips were used.

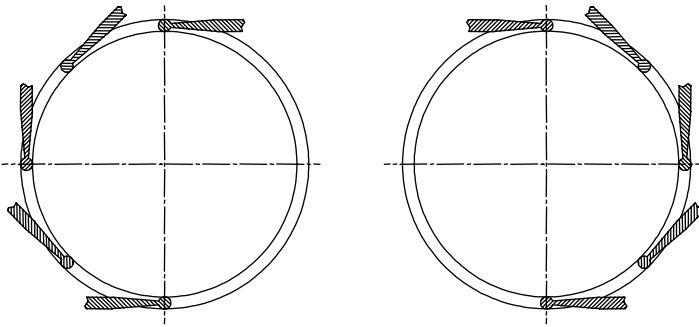
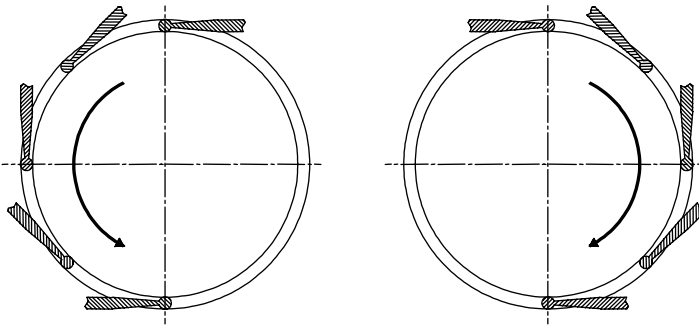
When the conditioning is conducted with the conditions which do not meet the chip specification, the precision of the end face could be degraded further than it was before the conditioning. The conditioning must be performed according to the conditions that match the chip specification.

When the procedures for old chips are printed on your manual

Please affix the new conditions on the previous page to the appropriate page.

How to apply the dial gauge and rotation direction of the spindle in measurement of the end face accuracy

Please measure the end face accuracy using the dial gauge according to the explanation below.

<p>How to apply the dial gauge</p>	<p>Move the X- and Y-axes a little bit at a time so that the tip of the dial gauge is brought into contact with the end face.</p> <ul style="list-style-type: none">- As for the contact point of the tip of the dial gauge, select the point at which you place the tip easily, from the following points. 
<p>Direction to rotate the spindle</p>	<p>Turn the spindle with your hand lightly and measure the deflection of the needle of the dial gauge.</p> <ul style="list-style-type: none">- The direction to rotate the spindle differs depending on to what point of the end face the tip of the dial gauge contacts. Before rotating, refer to the diagram below and select the direction. 

Contact

If you have a question regarding this technical newsletter, please contact Disco office or Disco service office.