NS TOOL

reich
ADVANCED TECHNOLOGY TOOLS
Wir verändern.

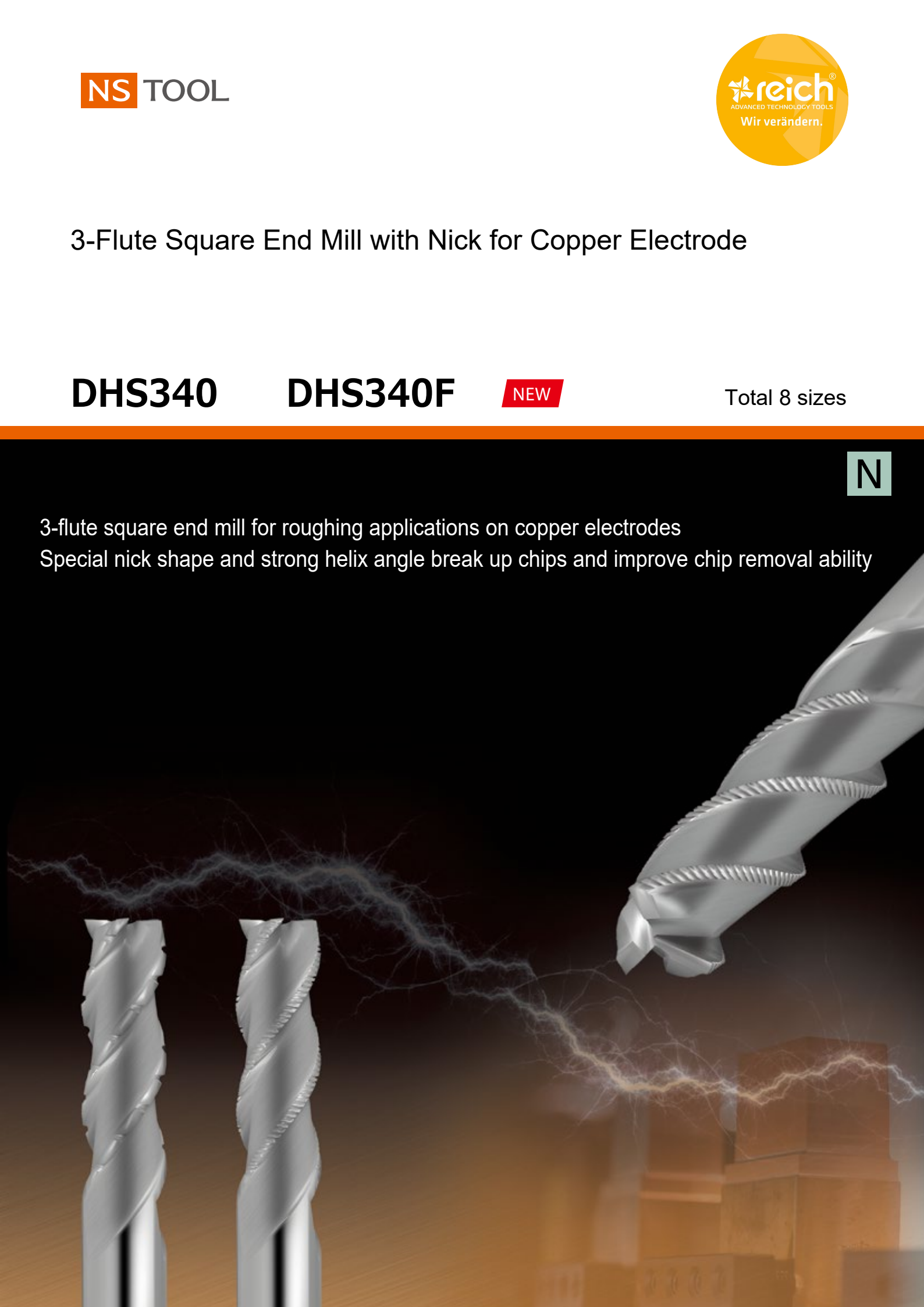
3-Flute Square End Mill with Nick for Copper Electrode

DHS340 DHS340F NEW

Total 8 sizes

N

3-flute square end mill for roughing applications on copper electrodes
Special nick shape and strong helix angle break up chips and improve chip removal ability



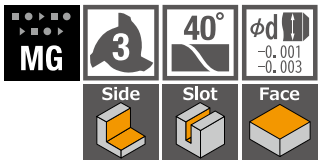
DHS340 New

Size ϕ3 ～ ϕ6

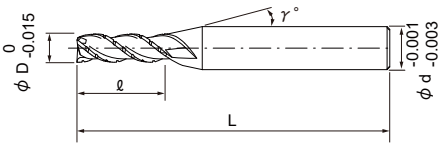
3-Flute Square End Mill with Nick for Copper Electrode

Total 4 sizes

3-flute square end mill for roughing applications on copper electrodes
Strong helix angle and special nick shape are suitable for roughing



Standard nick shape



Cutting edge shape

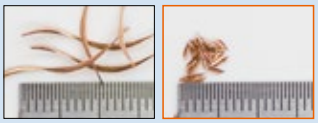
- Adopt nick shape (standard type) on peripheral cutting edge.
- Chips can be removed smoothly by breaking up the chips that preventing chipping and tool breakage.
- Strong helix angle and special nick shape are suitable for roughing.

Work Material

Copper	N
◎	

■ Comparison of chips with conventional tools

Application: Side milling with ϕ6×18



Conventional　　DHS340

DHS340 achieves thinner and shorter chips that improving chips removal ability and preventing tool breakage compared to chips of conventional tools

◆ Release in Aug, 2025.

Unit [Size : mm]

Code No.	Dia. (D)	Length of Cut (ℓ)	Neck Taper Angle (γ)	Shank Dia. (d)	Overall Length (L)
◆ 07-00300-03090	**3**	9	12°	6	60
◆ 07-00300-04120	**4**	12	12°	6	60
◆ 07-00300-05150	**5**	15	12°	6	60
◆ 07-00300-06180	**6**	18	-	6	60

How to Order　When you order, indicate DHS340 (D).　※ (γ) is reference value.

Recommended Milling Conditions

Work Material		Copper						
		Side Milling				Slotting		
Dia.	Length of Cut	Spindle Speed	Feed	Depth of Cut		Spindle Speed	Feed	Depth of Cut
		min^{-1}	mm/min	a_p mm	a_e mm	min^{-1}	mm/min	a_p mm
3	9	7,000	410	9	0.9	6,700	270	3
4	12	5,300	470	12	1.2	5,000	310	4
5	15	4,200	490	15	1.5	4,000	320	5
6	18	3,500	490	18	1.8	3,300	320	6
Note		※1 Depth of Cut : ap = Axial Depth of Cut / ae = Radial Depth of Cut. ※2 Use machine tool and chuck holder with rigidity and highly accuracy. ※3 Adjust milling condition according to machine tool rigidity and clamp condition of work material. ※3 Actual milling conditions are subject to machining profile, purpose and machine tool status. ※4 Reduce both spindle speed and feed at the same rate for chattering and also for insufficient spindle speed of a machine tool. ※5 Water-insoluble fluid is recommended.						

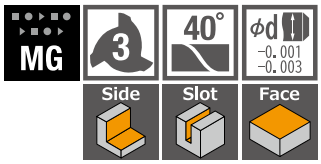
DHS340F New

Size ϕ3 ～ ϕ6

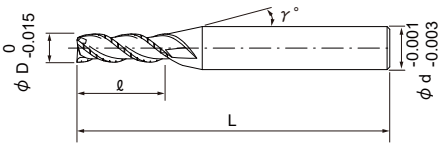
3-Flute Square End Mill with Nick for Copper Electrode

Total 4 sizes

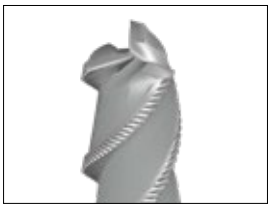
Realizes roughing applications on copper electrodes with reduced cutting load, independent of spindle rigidity or work holding stiffness



Fine pitch nick shape



- Adopt nick shape (fine pitch type) on peripheral cutting edge to suppress cutting load.
- Chips can be removed smoothly by breaking up the chips smaller that preventing chipping and tool breakage.
- Strong helix angle and special nick shape are suitable for roughing.



Cutting edge shape

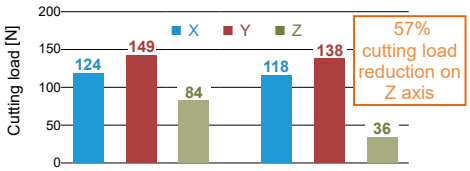
Work Material

Copper	N
◎	

■ Comparison of chips and cutting load with conventional tools

Application: Side milling with ϕ6×18

Conventional DHS340F



Fine Chips

The fine pitch type nick shape breaks chips into smaller pieces that preventing chipping and tool breakage even in high cutting load machining

◆ Release in Aug, 2025.

Unit [Size : mm]

Code No.	Dia. (D)	Length of Cut (ℓ)	Neck Taper Angle (γ)	Shank Dia. (d)	Overall Length (L)
◆ 07-00301-03090	**3**	9	12°	6	60
◆ 07-00301-04120	**4**	12	12°	6	60
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◆ 07-00301-06180	**6**	18	-	6	60

How to Order When you order, indicate DHS340F (D).

※ (γ) is reference value.

Recommended Milling Conditions

Work Material		Copper						
		Side Milling				Slotting		
Dia.	Length of Cut	Spindle Speed	Feed	Depth of Cut		Spindle Speed	Feed	Depth of Cut
		min^{-1}	mm/min	a_p mm	a_e mm	min^{-1}	mm/min	a_p mm
3	9	7,600	450	9	0.9	7,200	290	3
4	12	5,700	510	12	1.2	5,400	330	4
5	15	4,500	530	15	1.5	4,300	340	5
6	18	3,800	530	18	1.8	3,600	350	6

Note

※1 Depth of Cut : ap = Axial Depth of Cut / ae = Radial Depth of Cut.
※2 Use machine tool and chuck holder with rigidity and highly accuracy.
※3 Adjust milling condition according to machine tool rigidity and clamp condition of work material.
※3 Actual milling conditions are subject to machining profile, purpose and machine tool status.
※4 Reduce both spindle speed and feed at the same rate for chattering and also for insufficient spindle speed of a machine tool.
※5 Water-insoluble fluid is recommended.

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CAUTION **Attention on Safety**

1) When removing tools from cases, be careful of getting-out of tools and don't touch directly the cutting edges.
2) Never touch the cutting edges directly with bare hand.
3) Use safety covers and eye protection, as tools may be broken.
4) Use holders, etc. that match the tools and nature of the processing operations. The tool should be firmly attached to the holder to prevent shaking.
5) The work materials clamp firmly.
6) Make sure of dimensions of tools and work pieces before starting operation.
7) It is necessary to adjust conditions according to the dimensions of work materials and the machine.
8) Select a cutting fluid appropriate to the particular usage. Using a non-water cutting fluid could lead to fires due to sparks generated during processing or heat caused by breakage. Ensure that you take proper fire-prevention measures.
9) If abnormal sound, etc. occurs during processing, stop the machine immediately.
10) Don't modify tools.

ISO 9001 JQA-QM6096 ISO 14001 JQA-EM3712

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DHS340_DHS340F_A1_202606