SEEN Wiper Insert

Wiper Insert Features

By installing one wiper insert on the cutter that also has a standard inserts attached, the surface roughness can be improved.
The edge geometry of the wiper insert is an arc style and overhang is slightly prominent to the axis direction when cutter is installed.
Finishing with a wiper insert enables better surface quality.

Recommended Cutting Conditions

1) Vc, fz should be within recommended cutting conditions
2) D.O.C. ≤ 0.0197"

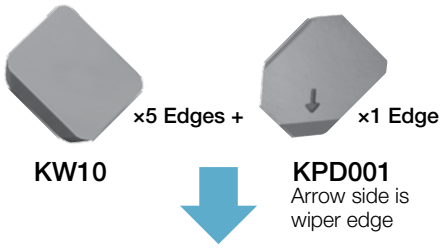
Mounting Wiper Insert

1) Install only one wiper insert along with standard inserts.
2) As only one edge of the wiper insert is used, make sure insert arrow mark " ↓ " faces the workpiece cutting surface.
3) Check overhang amount of wiper insert using MSE45-SF type so that you can obtain stable surface roughness.

Setup Overhang for Wiper Edge

1) **Please adjust wiper insert overhang within 0.0012" to 0.0039" from the largest overhang of the standard inserts.** If overhang is larger than this, the life of the wiper insert will be lower.
2) **0.0020" overhang is recommended for the wiper insert.**

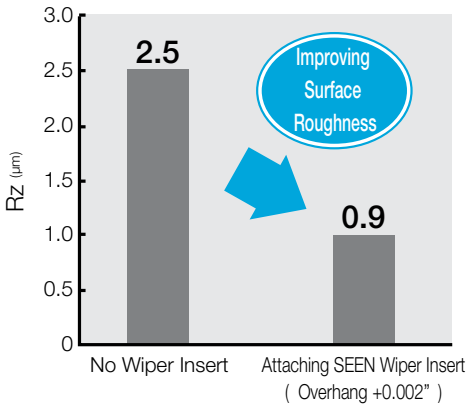
Example when Finishing Aluminum with Ø125mm…



Lower Costs & Good Surface Finish

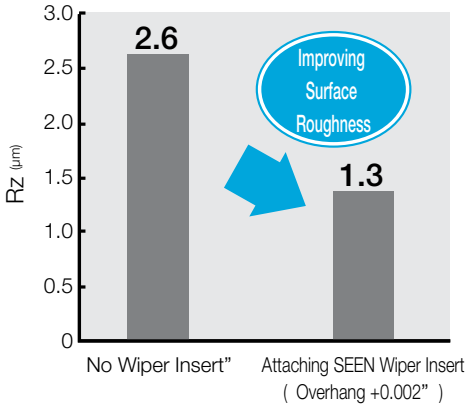
Case Studies

For Aluminum (5052)



Cutting Conditions
·MSE45100R-6T-SF
·Vc = 980 sfm
·D.O.C. = 0.0079"
·fz = 0.0079 ipt
·Wet
·No Wiper Insert
SEKN42AFFN (KW10)
6 Inserts
·With Wiper Insert
SEKN42AFFN (KW10)
5 Inserts
SEEN42AFFR-W (KPD001)
1 Insert

For Steel (1049)



Cutting Conditions
·MSE45100R-6T-SF
·Vc = 660 sfm
·D.O.C. = 0.0079"
·fz = 0.0039 ipt
·Dry
·No Wiper Insert
SEKN42AFTN (TN100M)
6 Inserts
·With Wiper Insert
SEKN42AFTN (TN100M)
5 Inserts
SEEN42AFTR-W (TN100M)
1 Insert

Example of attaching wiper insert

No.	Insert	Edge Fluctuation
①	Standard	-0.006mm
②	Standard	-0.011mm
③	Standard	-0.015mm
④	Standard	0mm
⑤	Standard	-0.008mm
⑥	With Wiper Edge	+0.03mm~+0.10mm