New Generation Hub Blades for Silicon Wafer Dicing, Particularly for Discrete, Logic IC & LCD Driver

HIGH COMPETITIVE LINE

HCL Hub Blades series provides a competitive solution to general silicon wafer dicing for quality, precision and COO improvement by delivering superior product quality and value added features.

Key new features:

- *Enhanced Solution for Single & Step Cut Dicing Processes*
- *New Hub Design to Enable High Spindle Frequency Application*
- *Standardized Part Number Choice as Universal Solution*
- *Shiny Hub with Enhanced Visual Control*

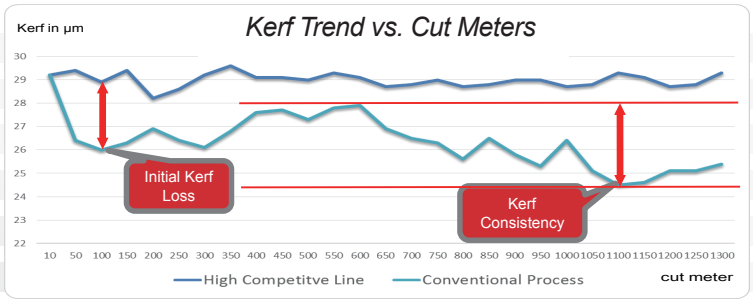
NEW Aluminum Hub
The NEW Aluminum Hub is designed for high spindle frequency application aiming improved production throughput and extended blade life, while enabling thinner blade thickness and kerf for narrow saw street silicon wafer dicing.

Universal Dicing Solution
K&S has accumulated strong experience in wafer dicing, such as discrete, logic IC, LCD driver IC, etc.. By launching the HCL Hub Blades, K&S provides standardized & competitive dicing solution to typical wafer types such as metalized street, back-coated, bumped or laser grooved, etc.

Shorten Blade Pre-Dressing
Enhanced in-house blade dressing balances diamond expose and controls blade eccentricity. HCL hub blades are equipped with well pre-dressed feature to shorten blade dicing application pre-cut, pre-dressing cycle and to maximize blade cutting power per defined application recipes.

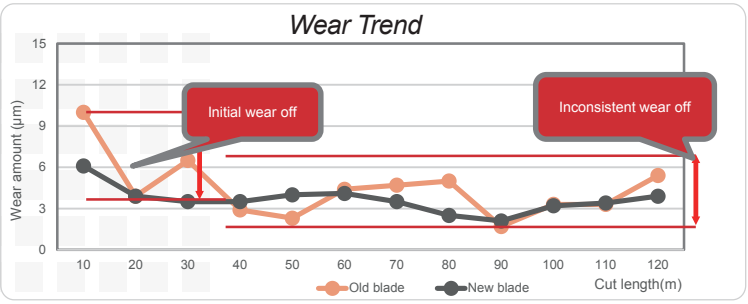
Shorten Samples Evaluation Cycle
To enable quick implementation and experienced the benefits of HCL series blades, a Quick samples selection guide is available now. Moreover, K&S will provide free DOE support using our application lab or on customers site, to shorten the samples evaluation cycle and to meet customer cost saving target.

Kerf Consistency



Material: 8” 300µm mirror wafer
Tape: SPV224
DAD3350
PRM:Spindle 36K
Cut speed 50mm/sec
Single cut

Wear Consistency



Material: Mirror wafer
F/R: pre-cut ramp up to 50mm/s
Thickness: 0.3mm
PRM:Spindle 36K
BH: 0.045mm
PN: SC-30-Q-70-CB vs J0825-Q3H0-000

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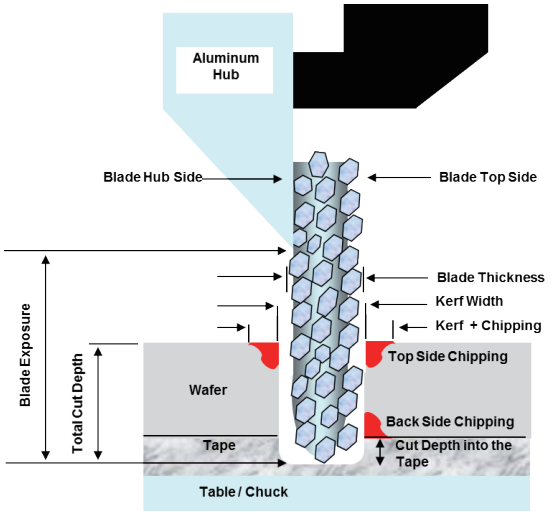
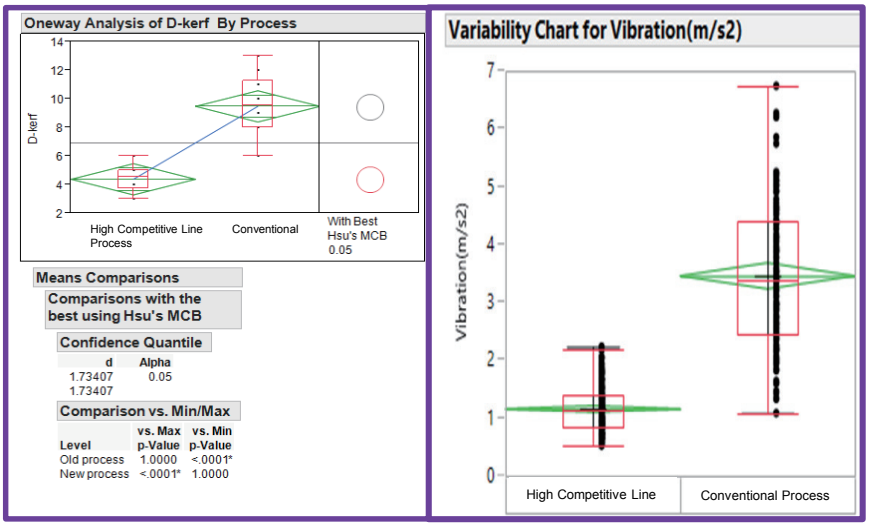
Vibration Control

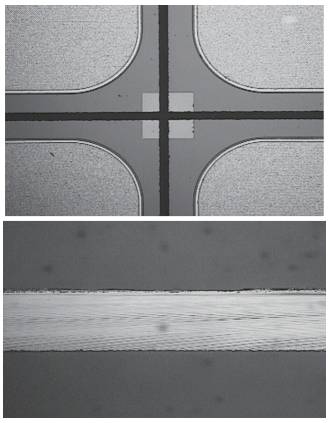
- Advanced Vibration Control
- Smaller D-kerf Capability (Kerf Thickness) to Enable Extended Blade Exposure (Average Blade Life Improvement)

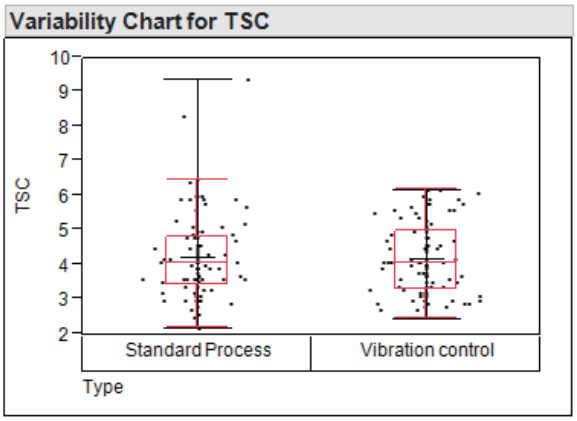




Chipping Result

More Consistent Top Side Chipping Performance by Vibration Control





Material: Discrete Wafer
Thickness: 0.3mm
RPM: 36K
F/R: pre-cut ramp up to 50mm/s
BH: 0.045mm
PN: SC-20-Q-70-CB

Part Number Configuration

1st	2nd	3rd	4th	5th	6th	7th	8th	9th	10th	11th	12th
S	C	3	0	L	7	0	C	B			
Series		Grit size		Bond	C%		EXP	KF	Reserved for Special		

Series	
Silicon	Competitive

Grit size
15
18
20
25
30
35
40

Bond
H
Q
L
E

C%
30
50
70
90
B0
D0

K&S EXP spec (µm)	
A	381-507
B	508-634
C	635-761
D	762-888
E	889-1015
F	1016-1142
G	1143-1269
H	1270-1396

K&S KERF spec (µm)	
A	16-20
B	21-25
C	26-30
D	31-35
E	36-40
F	41-50
G	51-60
H	61-70

For sales, service and manufacturing locations, visit www.kns.com

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