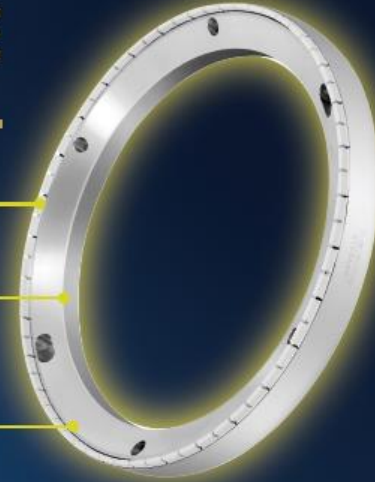


BREAK UP OF MONOPOLY

SILICON CARBIDE GRINDING WHEEL

- Surface Damage Layer: **Remove**
- Surface Finishing: **Improve**
- Wafer Thickness & Surface Shape: **Control**



Surface Roughness
< 2nm (Ra)

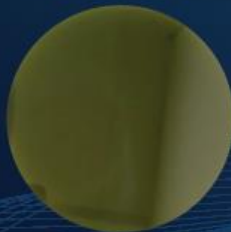


Wheel Wear
REDUCED 20%

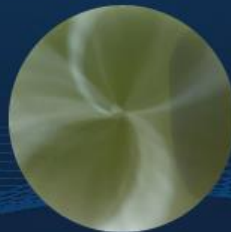


Spindle Current
REDUCED 15%

Application SiC



Fine Grinding



Rough Grinding

Stable Supply
Since 2023

BREAK UP OF MONOPOLY

CUTSTART BOARD™

Precision Cutting Starts Here

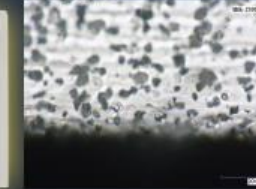
SAIL
Cutstart Board
R400-B-HTG1
75X75X1.0T



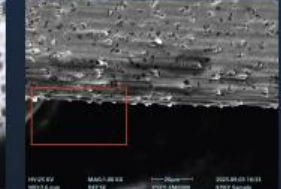
SAIL Cutstart Board
R400-D-HTG1-H
37.5X75X1.0T
20231124



Before



After



Faster Cycle Time



Optimal Blade Conditioning



Reduced Overall Cost

Application

Dicing

DICING PROCESS



BREAK UP OF MONOPOLY



METAL BLADE MIA8 SERIES

Ultra Thin



NARROW
SAW STREETS



BLADE LIFE
EXTENDED



MINIMIZE WAVY
& SLANT CUTS

Application



Ceramic

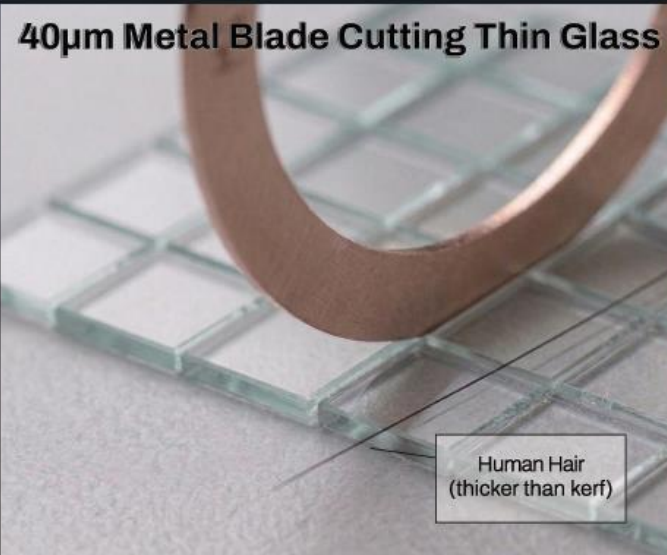


Optical Glass



CSP Packaging Products

40μm Metal Blade Cutting Thin Glass



Human Hair
(thicker than kerf)

BREAK UP OF MONOPOLY



RESIN BLADE BIA8 SERIES

For Handling High
Brittle Materials



HIGH ELASTICITY
FOR BRITTLE
MATERIALS



HIGH PRECISION
FOR QFN BURR
& SMEARING



WIDE VARIETY
OF BOND TYPES

Application



Ceramic

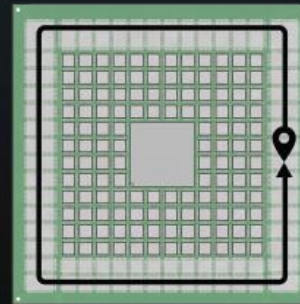


Optical Glass



CSP Packaging Products

COMPARISON OF DICING BLADE EXPOSURE PERFORMANCE



TOTAL RUN LENGTH:
1,800 METERS

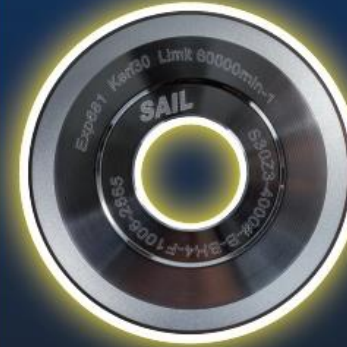
Blade Performance
Measurement Point



GOOD BLADE EXPOSURE

Cutting with SAILATMC
on QFN panel overall

BREAK UP OF MONOPOLY



NICKEL HUB BLADE S30T SERIES

For Initiate Cutting
Process Rapidly



HIGHER STIFFNESS:
NO WAVY CUT
& SLANT



SELF-SHARPENING:
LESS CHIPPING
& PEELING



HIGH E/K RATIO:
THIN + LONG

Application



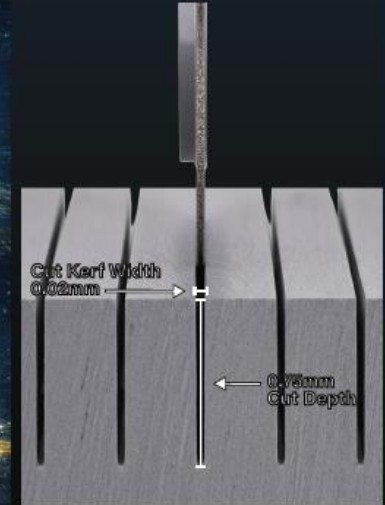
Sapphire



SiC



Silicon Wafer



NO SLANT NO WAVY