HUB BLADE


Hub Blades are a perfect solution for the optimization of the dicing process for various types of materials such as: Silicon, GaAs and other wafers.
FEATURES \& BENEFITS
Improved cut quality
Higher UPH

| OD=2.187" $\quad$ Part Number Definition |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 00 | 757 | - | 5 | 3 | 50 | - | 115 | 2 | 00 |
| Special Specification | Product Family |  | Grit size (Mesh) | Diamond \% | $\begin{gathered} \text { Max. } \\ \text { Thickness } \end{gathered}$ (um) |  | Min Exposure (um) | Bond Hardness | Special Specification |
|  |  |  | $1=5000$ | 1 = Low | 20 |  | 380 | 1 = Soft |  |
|  |  |  | $2=4500$ | 2 | 25 |  | 510 | $2=$ Medium |  |
|  |  |  | $3=4000$ | 3 = Medium | 30 |  | 640 |  |  |
|  |  |  | $4=3500$ | 4 | 35 |  | 760 |  |  |
|  |  |  | $5=3000$ | 5 = High | 40 |  | 890 |  |  |
|  |  |  | $7=2000$ |  | 50 |  | 1020 |  |  |
|  |  |  |  |  |  |  | 1150 |  |  |
| Available Dimensions |  |  |  |  |  |  |  |  |  |
|  | Min. Exposure [um] |  | 380 | 510 | 640 | 760 | 890 | 1020 | 1150 |
| Max. Thickness [um] | Tolerance Range [um] |  | 380-510 | 510-640 | 640-760 | 760-890 | 890-1020 | 1020-1150 | 1150-1270 |
| 20 | 17-20 |  |  |  |  |  |  |  |  |
| 25 | 20-25 |  |  |  |  |  |  |  |  |
| 30 | 25-30 |  |  |  |  |  |  |  |  |
| 35 | 30-35 |  |  |  |  |  |  |  |  |
| 40 | 35-40 |  |  |  |  |  |  |  |  |
| 50 | 40-50 |  |  |  |  |  |  |  |  |

FLANGES


Available for all blade types in the range of 2"-5", ADT's extensive line of flanges exhibits high-accuracy, excellent performance, ease-of-use and affordabillity. FLANGE SET OPTIONS A unique High Cooling Flange set (HCF) design spreads the coolant from the center of the thick materials. High

| Part Number | Flange O.D. |  | Blade O.D. 4.256" Exposure |  | Blade O.D. 4.600" Exposure |  | Blade O.D. 5.000 Exposure |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Inch | mm | Inch | mm | Inch | mm | Inch | mm |
| 00785-3515-000 | 4.550 | 115.57 |  |  | . 025 | 0.63 | . 225 | 5.72 |
| 00785-3534-000 | 4.530 | 115.06 |  |  | . 035 | 0.89 | . 235 | 5.97 |
| 00785-3514-000 | 4.500 | 114.30 |  |  | . 050 | 1.27 | . 250 | 6.35 |
| 00785-3525-000 | 4.474 | 113.64 |  |  | . 063 | 1.60 | . 263 | 6.68 |
| 00785-3513-000 | 4.450 | 113.03 |  |  | . 075 | 1.90 | . 275 | 6.99 |
| 00785-3512-000 | 4.400 | 111.76 |  |  | . 100 | 2.54 | . 300 | 7.62 |
| 00785-3511-000 | 4.350 | 110.49 |  |  | . 125 | 3.18 | . 325 | 8.26 |
| 00785-3510-000 | 4.300 | 109.22 |  |  | . 150 | 3.81 | . 350 | 8.89 |
| 00785-3509-000 | 4.260 | 108.20 |  |  | . 170 | 4.32 | . 370 | 9.40 |
| 00785-3508-000 | 4.236 | 107.59 | . 010 | 0.25 | . 182 | 4.62 | . 382 | 9.70 |
| 00785-3507-000 | 4.220 | 107.19 | . 018 | 0.46 | . 190 | 4.83 | . 390 | 9.91 |
| 00785-3506-000 | 4.213 | 107.01 | . 022 | 0.55 | . 194 | 4.91 | . 394 | 9.99 |
| 00785-3505-000 | 4.200 | 106.68 | . 028 | 0.71 | . 200 | 5.08 | . 400 | 10.16 |
| 00785-3504-000 | 4.180 | 106.17 | . 038 | 0.97 | . 210 | 5.33 | - | - |
| 00785-3503-000 | 4.140 | 105.15 | . 058 | 1.47 | . 230 | 5.84 | - |  |
| 00785-3502-000 | 4.100 | 104.14 | . 078 | 1.98 | . 250 | 6.35 | - |  |
| 00785-3563-000 | 4.050 | 102.87 | . 103 | 2.62 | . 275 | 6.99 |  |  |
| 00785-3501-000 | 4.000 | 101.60 | . 128 | 3.25 | . 300 | 7.62 |  |  |
| 00785-3521-000 | 3.900 | 99.06 | . 178 | 4.52 | . 350 | 8.89 | - |  |
| 00785-3522-000 | 3.800 | 96.52 | . 228 | 5.79 | . 400 | 10.16 | - |  |
| 00785-3523-000 | 3.700 | 93.98 | . 278 | 7.06 |  |  |  |  |
| 00785-3524-000 | 3.600 | 91.44 | . 328 | 8.33 |  |  |  |  |
| 40 mm Blade I.D. $\left(1.575^{\prime \prime}\right)^{\text {*** }}$ |  |  |  |  |  |  |  |  |
| $\begin{aligned} & \text { Part Number } \\ & 2 \text { Inch } \end{aligned}$ | Flange O.D. |  | Blade O.D. 2.188 Exposure |  | Blade O.D. 2.250" Exposure |  | Blade O.D. 3.000" Exposure |  |
|  | Inch | mm | Inch | mm | Inch | mm | Inch | mm |
| 4A785-4175-000-BBD | 1.750 | 44.45 | . 219 | 5.56 | . 250 | 6.35 | . 625 | 15.88 |
| 4A785-4176-000-BBD | 1.760 | 44.70 | . 214 | 5.44 | . 245 | 6.22 | . 620 | 15.75 |
| 4A785-4242-000-BBD | 2.420 | 61.47 |  |  |  |  | . 290 | 7.37 |
| 3 Inch |  |  |  |  |  |  |  |  |
| 4C785-4243-000 | 2.430 | 61.72 |  |  | . |  | . 285 | 7.24 |
| 4C785-4244-000 | 2.440 | 61.98 | . |  |  |  | . 280 | 7.11 |
| 4C785-4299-000 | 2.990 | 75.95 |  | - |  |  | 005 | 0.13 |

ACCESSORIES

$A D T=$ Dicing
DICING BLADES \& ACCESSORIES
A Winning Combination for your Complete Dicing Process

A wide selection of Tools and Accessories designed to facilitate and improve the Dicing Process



The optimum way to dice your Glass \& BGA applications

NOVUS " $G$ " Series for superior dicing quality on Glass applications.
Avaiable with OD $2^{\prime \prime}-3^{\prime \prime}$ and Thickness ranges of $40-200 \mu \mathrm{~m}$

- NOVUS "B" Series for longer blade life on BGA applications.



In a unique close-mold sintering process, diamond grit size, diamond concentration and meta binder are optimized to meet the precision and blade life requirements
of your specific application. The metal binder provides a very stable, stress-free blade matrix and can be bustom tailiored to meet the required hardness and load resistance for dicin
SPECLAL OFFER:
Metal steel Core blades for hard and thick substrates.
Available with OD of $3^{3}-8^{\prime \prime}$ and at thickness range of $0.032^{\prime \prime-0.062 "}$
FEATURES \& BENEFITS
The widest variety of matrixes for a broad range of applications
|The widest variety of matrixes
| Less wear higher blade life
Hisshy accurate blade life dimension
High precision dicing
High precision dicing
|Attractive Cost-of-Ownership (coo)



ADT's Resin-bond Blades are manufactured through a unique proprietary molding
Pocess. When cutting hard and brittle materials, the edge of the blade wears out ta controlled rate exposing new diamonds to constantly sharpen the bears oun thus achieve highty
D' Matrix for best dicing results for QFN applications
Metal steel Core blades for hard and thick substrates. Available with OD of $3^{3}-12^{2}$
IRES \& BENIEFTS
EATURES \& BENEFITS
Self-sharpening matri
TSuperior cut quality
Best performing matrix for hard, brittle and composite materials
The widest variety of combinations for your most challenging application Ine widest variely of
High precision idicig
Attractive Cost-of-Own

| EDGE TYPE | O.D. \& I.D. |  | $\underset{\substack{\text { GRIT SIIZ" } \\(\mathrm{um}) \\ \text {. }}}{ }$ | $\begin{gathered} \text { THICKNESS** } \\ \text { (mil) } \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: |
| 1=Serrated, 16 slots 2=Shaped edge <br> (88.9) <br> $5=$ Serrated, 8 slots |  | $K=4.45^{\prime \prime} \times 88.82 \mathrm{~mm}$ <br> $M=50 \mathrm{~mm} \times 40 \mathrm{~mm}$ <br> $\mathrm{N}=52.5 \mathrm{~mm} \times 40 \mathrm{~mm}$ <br> $P=78 \mathrm{~mm} \times 40 \mathrm{~mm}$ <br> $\mathrm{R}=64 \mathrm{~mm} \times 40 \mathrm{~mm}$ <br> $\mathrm{T}=74 \mathrm{~mm} \times 40 \mathrm{~mm}$ <br> $\mathrm{U}=76.4 \mathrm{~mm} \times 40 \mathrm{~mm}$ <br> $\mathrm{Q}=4.8^{\prime \prime} \times 88.82 \mathrm{~mm}$ <br> $\mathrm{W}=72 \mathrm{~mm} \times 40 \mathrm{~mm}$ <br> $\mathrm{V}=55 \mathrm{~mm} \times 40 \mathrm{~mm}$ <br> $X=59 \mathrm{~mm} \times 40 \mathrm{~mm}$ <br> $Z=75 \mathrm{~mm} \times 40 \mathrm{~mm}$ | (003) $=$ <br> $(000)=$ $(009)$ (00) $=1$ <br> $1009)=9$ <br> $(015)=15$ <br> 15 <br> $(020)=20$ $025)=25$ 0.05 <br>  <br>  <br> (063) $=63$ <br> $(075)=75$ <br> (078) $=88$ <br> (1055) 105 <br> $(155)=125$ $(150)=250$ <br> (200) $=200$ | $\begin{aligned} & (003)=3 \\ & -(000)=10 \\ & (8111)=21.8 \\ & -(512)=1.5 \\ & -(020)=20 \\ & (0099)=99 \end{aligned}$ |
|  | 777-4006 | -010-XXX |  | product family |
| $\underbrace{\text { a }}_{\substack{\text { Serated } \\ 8 \text { slos }}}$ |  | O.D. | ${ }_{\text {GRITITEE }}^{\text {Gum }}$ | 10 mil |

ADT's Annular Nicke Blades are produced using a state-offthe-art, tightly controlled
electroforming process which guarantees a uniform distribution of diamonds througout the Nickel layer.
This process not only allows for blades to be produced to very tight torances That also permits optimization of grititsize, hardness and geometry to meet the
particular reauirements of your application FEATURES \& BENEFITS

$$
\begin{aligned}
& \text { FEATURES \& BENEFITS } \\
& \text { |The hardest binder for suoerior }
\end{aligned}
$$

The hardest binder for superior wear resistance
The thinnest blade available (down to .0008") Exxcellent rigidity for higher exposure
$\|$ Exceptionally long blad
| High precision dicing
The full dimensions range can be found in ADT website


