

Dicing Process – Handling Tips

- \square When you have a choice, be sure to pick the appropriate type of spindle for your application (2", 4")
- ☑ When mounting on tape, always make sure that the substrates are mounted properly to avoid air bubbles and non-uniform tape tension
- ☑ When using a non tape-based mounting method, make sure that the substrate is held securely to eliminate any die movement during the dicing process
- ☑ Ensure no damage to the flange (nicks, scratches) to avoid blade breakage and oversize cut widths
- ☑ As a starting point, follow the blade exposure rule of thumb regarding maximum recommended ratio of blade exposure to thickness:
- Resin-blades 10:1
- Metal Sintered Blades 20:1
- Nickel Blades 30:1
- ☑ Double check your cutting parameters before you begin dicing (e.g. blade type and P/N, spindle speed, feed rate, cut depth, water flow rate, cooling pressure)
- ☑ Always handle the blade with special care when transferring it from the blade package to the flange and to the spindle
- ☑ Make sure that the blade is properly mounted in the flange and that the flange is properly mounted to spindle. Be sure to use a torque meter for controlling the amount of closure sensitive applications
- ☑ Make sure that the blade and the substrate are cooled sufficiently by adjusting the coolant nozzle and the flow rate
- ☑ Consider dressing and override procedures in order to prepare the blade for the cutting process
- ☑ Consider periodic dressing during dicing in order to maintain the quality of the blade edge