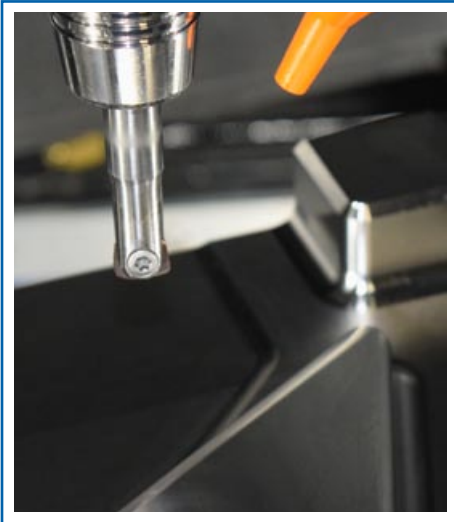


ABL Series Ball Lens Inserts

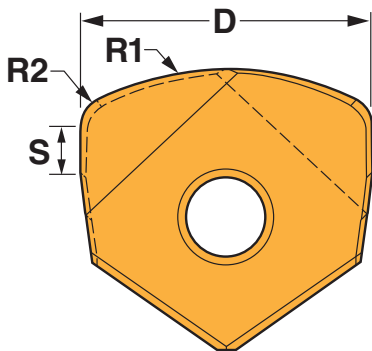
Increased Productivity Meets Excellent Surface Finish



Millstar's ABL tooling system uses an innovative hybrid ball lens design to provide a large end face radius – typically equal to the diameter. This allows up to twice the step-over to greatly decrease your cycle time without sacrificing surface finish. ABL is a great option for 5 axis milling as well as 3 axis.

ABL Advantages:

- Achieve optimal surface quality in almost any material
- Greatly increase productivity, even on specialty machines with smaller spindles
- Improve cutting performance in hard-to-reach areas of a complex workpiece



Available Grades

HSN – Multi-layer hybrid nano coating with excellent heat resistance and high hardness. For use in HSM of most materials including heat treated materials up to 72 HRC.

HNC – Enhanced hard nano coating for the most difficult high speed machining applications when tool life is most critical. For use in HSM of most materials including heat treated materials up to 72 HRC.

Contact Millstar for our recommended grade for your application

ABL Series – Imperial (Inch)

Part Number	D	S	R1	R2
ABL-0375-	0.375	0.050	0.375	0.0375
ABL-0500-	0.500	0.050	0.500	0.050
ABL-0625-	0.625	0.125	0.625	0.0625
ABL-0750-	0.750	0.125	0.750	0.075
ABL-1000-	1.000	0.125	1.000	0.100

ABL Series – Metric (mm)

Part Number	D	S	R1	R2
ABL-10-	10.0	1.27	10.0	0.95
ABL-12-	12.0	1.27	12.0	1.27
ABL-16-	16.0	3.17	16.0	1.59
ABL-20-	20.0	3.17	20.0	1.91
ABL-25-	25.0	3.17	25.0	2.54

