

2025

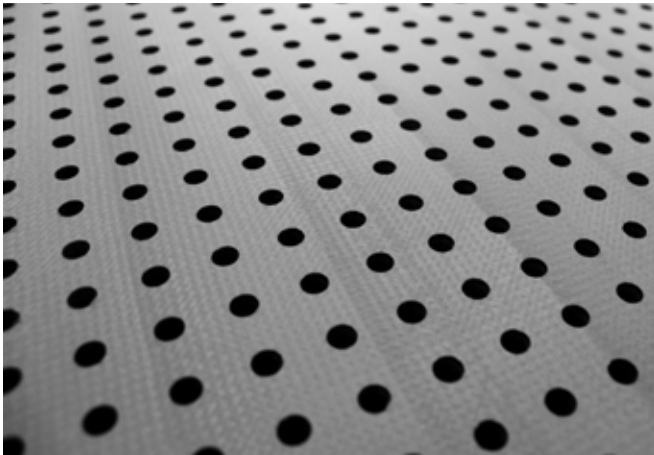
LINE-UP

DIAMOND COATING PROGRAMME



PCD CUTTING TOOLS FOR THE AEROSPACE AND COMPOSITE INDUSTRIES

Thanks to its 60 years worth of experience, Cruing provides and suggest the latest solutions in composite machining and offers a wide range of PCD and Solid Carbide cutting tools tailored to specific customer needs.



The passion for development and the determination employed in every challenge, have allowed Cruing to work closely with the major leaders in the aerospace sector, Formula 1 teams and luxury yacht builders.



OVERLINE COATING FOR COMPOSITE MACHINING



Overline Diamond (OVD) Coating, often referred to as diamond coating, is prized for its **high wear resistance**, a key feature for **machining abrasive materials** such as carbon fiber composites, reinforced plastics, synthetic materials and sandwich panels.

OVERLINE BENEFIT



1

HIGH WEAR RESISTANCE

Overline diamond coating significantly extends tool life, as diamond is one of the hardest materials available, also resistant to wear caused by abrasive materials.

2

REDUCED FRICTION

Thanks to the low adhesion of the diamond, the friction between the cutter and the material is reduced, allowing for a smoother cut and a reduction in heat build-up.

3

INCREASED PROCESSING SPEED

Overline allows you to operate at higher speeds, improving productivity without compromising the quality of the cut

4

PRECISION IN FINISHING

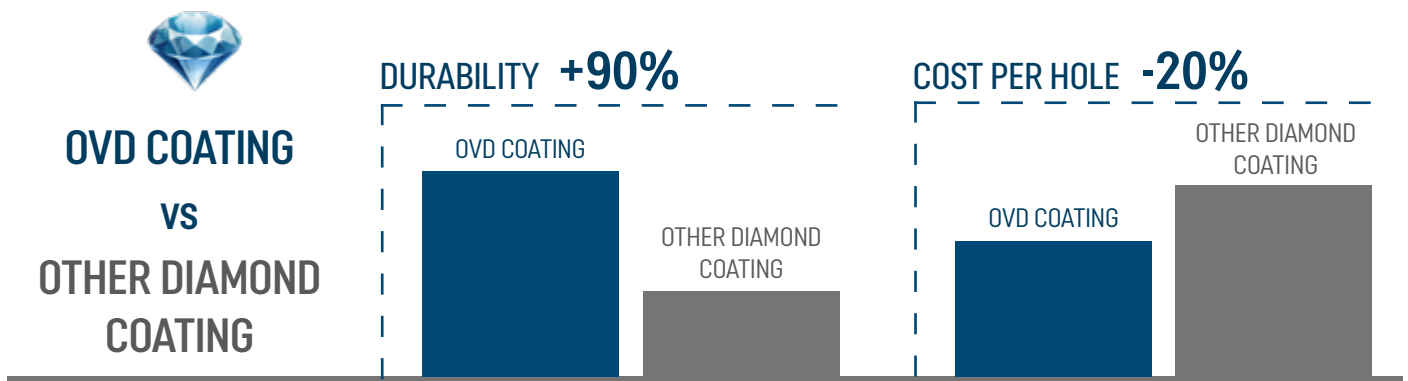
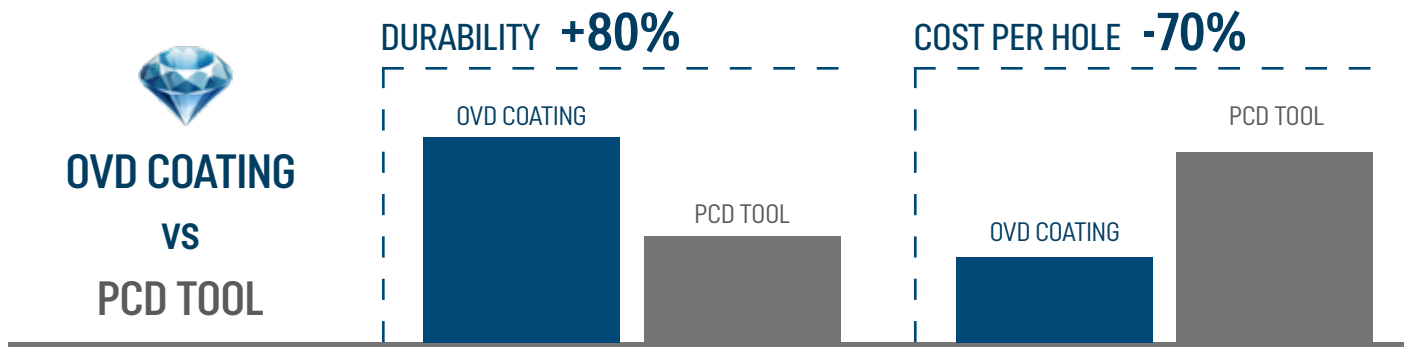
The diamond keeps the cutting edge sharp, allowing a precise finish and reducing the need for secondary machining.

5

VERSATILY ON DIFFICULT MATERIALS

Overline is particularly effective on abrasive materials such as carbon fibers, reinforced plastics and non-ferrous materials, widely used in the aerospace industries

OVERLINE COATING vs COMPETITORS



Diamond-coated tools are widely used in the aerospace industries, where composite materials require clean cuts and low radial force to avoid structural damage. In particular, Overline (OVD) coating is known to **improve productivity**, offering a longer tool life and reducing maintenance downtime.



OVD COATING

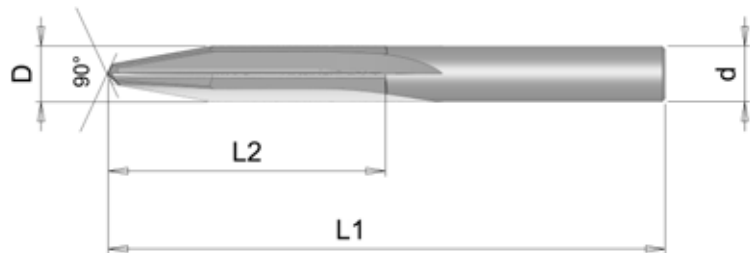


OTHER DIAMOND COATING

AeroDrill D30

OVD
COATING

HM
BODY



TECHNICAL FEATURES

- Overline Diamond Coating (OVD)
- Triple angle drill
- Solid Carbide body
- Cutting tolerance: 0/-0.02
- Excellent exit hole quality

APPLICATION

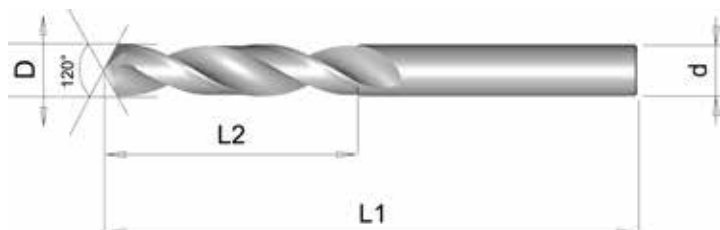
- Carbon fiber composites, reinforced plastics, synthetic materials and sandwich panels

D	L1	L2	d	Code
2,489	100	40	2,489	AD30010D
3,26	100	40	3,3	AD30015D
4	100	40	4	AD30020D
4,82	100	40	5	AD30025D
6,35	100	50	6,35	AD30030D
6,375	110	60	6,375	AD30035D
7,96	100	50	8	AD30040D
9,55	100	50	10	AD30045D

AeroDrill D40

OVD
COATING

HM
BODY



TECHNICAL FEATURES

- Overline Diamond Coating (OVD)
- Helix angle: 40°
- 120° point angle drill
- Solid Carbide body
- Cutting tolerance: 0/-0.02
- Excellent exit hole quality

APPLICATION

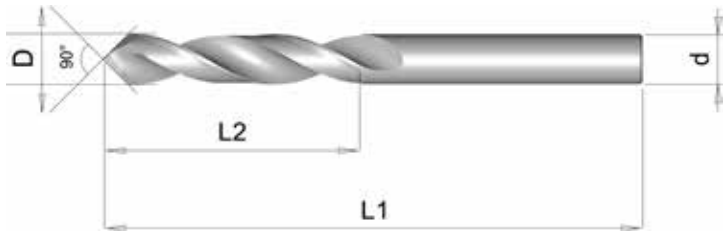
- Carbon fiber composites, reinforced plastics, synthetic materials and sandwich panels

D	L1	L2	d	Code
2,5	50	15	2,5	AD40010D
3,3	76	20	3,27	AD40015D
4,1	80	25	5	AD40020D
4,8	80	29	4,8	AD40025D
6,3	94	38	7	AD40030D
6,5	80	40	8	AD40035D
7,93	80	40	8	AD40040D
9,5	115	57	9,5	AD40045D

AeroDrill D50

OVD
COATING

HM
BODY



TECHNICAL FEATURES

- Overline Diamond Coating (OVD)
- Helix angle: 40°
- 90° point angle drill
- Solid Carbide body
- Cutting tolerance: 0/-0.02
- Excellent exit hole quality

APPLICATION

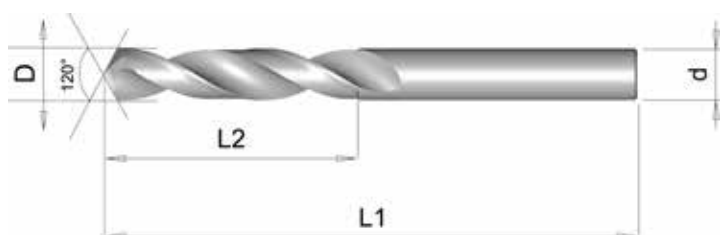
- Carbon fiber composites, reinforced plastics, synthetic materials and sandwich panels

D	L1	L2	d	Code
2,5	50	15	2,5	AD50010D
3,3	76	20	3,27	AD50015D
4,1	80	25	5	AD50020D
4,8	80	29	4,8	AD50025D
6,3	94	38	7	AD50030D
7,938	79	41	8	AD50035D
9,5	115	57	9,5	AD50040D

AeroDrill D60

OVD
COATING

HM
BODY



TECHNICAL FEATURES

- Overline Diamond Coating (OVD)
- Helix angle: 40°
- 120° point angle drill
- Solid Carbide body
- Cutting tolerance: 0/-0.02
- Excellent exit hole quality

APPLICATION

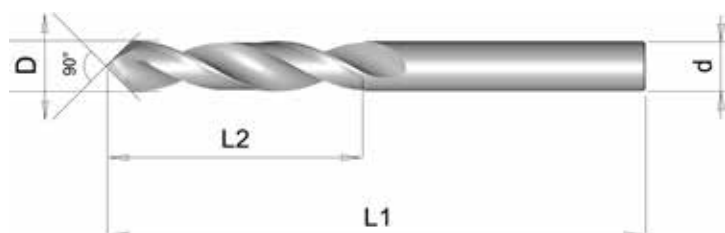
- Carbon fiber composites, reinforced plastics, synthetic materials and sandwich panels

D	L1	L2	d	Code
2,5	101,6	38,1	2,5	AD60010D
2,5	152,4	38,1	2,5	AD60015D
3,3	101,6	38,1	3,27	AD60020D
3,3	152,4	38,1	3,27	AD60025D
4,1	101,6	38,1	5	AD60030D
4,1	152,4	38,1	5	AD60035D
4,8	101,6	38,1	4,8	AD60040D
4,8	152,4	38,1	4,8	AD60045D
6,3	101,6	38,1	7	AD60050D
6,3	152,4	38,1	7	AD60055D
6,5	101,6	38,1	8	AD60060D
6,5	152,4	38,1	8	AD60065D
7,93	101,6	38,1	8	AD60070D
7,93	152,4	38,1	8	AD60075D
9,5	101,6	38,1	9,5	AD60080D
9,5	152,4	38,1	9,5	AD60085D

AeroDrill D70

OVD
COATING

HM
BODY



TECHNICAL FEATURES

- Overline Diamond Coating (OVD)
- Helix angle: 40°
- 90° point angle drill
- Solid Carbide body
- Cutting tolerance: 0/-0.02
- Excellent exit hole quality

APPLICATION

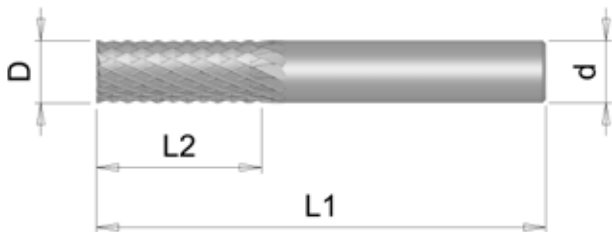
- Carbon fiber composites, reinforced plastics, synthetic materials and sandwich panels

D	L1	L2	d	Code
2,5	101,6	38,1	2,5	AD70010D
2,5	152,4	38,1	2,5	AD70015D
3,3	101,6	38,1	3,27	AD70020D
3,3	152,4	38,1	3,27	AD70025D
4,1	101,6	38,1	5	AD70030D
4,1	152,4	38,1	5	AD70035D
4,8	101,6	38,1	4,8	AD70040D
4,8	152,4	38,1	4,8	AD70045D
6,3	101,6	38,1	7	AD70050D
6,3	152,4	38,1	7	AD70055D
7,938	101,6	38,1	8	AD70060D
7,938	152,4	38,1	8	AD70065D
9,5	101,6	38,1	9,5	AD70070D
9,5	152,4	38,1	9,5	AD70075D

AeroMill M90

OVD
COATING

HM
BODY



TECHNICAL FEATURES

- Overline Diamond Coating (OVD)
- Carbide end mill
- Eliminate uncut and delamination
- Diameter tolerance: H6
- For roughing and finishing operations

APPLICATION

- Carbon fiber composites, reinforced plastics, synthetic materials
- For slotting, routing, pocketing and plunging operations.

TYPE 1

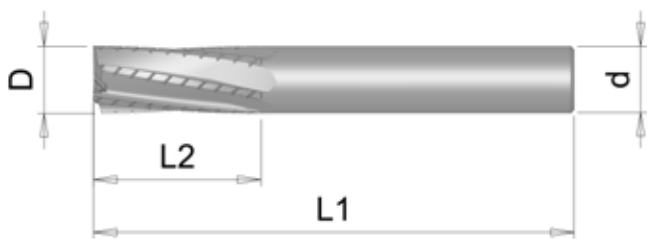

TYPE 2


Z	D	L1	L2	d	Type	Application	Code
8	6	68	18	6	2	Trimming and Plunging	AM90010D
10	8	74	24	8	2	Trimming and Plunging	AM90015D
12	10	80	30	10	2	Trimming and Plunging	AM90020D
14	12	86	36	12	2	Trimming and Plunging	AM90025D

AeroMill M50

OVD
COATING

HM
BODY



TECHNICAL FEATURES

- Overline Diamond Coating (OVD)
- Carbide end mill
- Multi flute, roughing and semi finishing
- Diameter tolerance: H10

APPLICATION

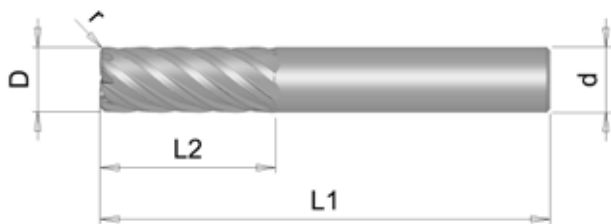
- Carbon fiber composites, reinforced plastics, synthetic materials

Z	D	L1	L2	d	Code
6	4	40	15	4	AM50010D
6	6	50	18	6	AM50020D
6	8	63	20	8	AM50025D
6	10	72	25	10	AM50030D

AeroMill M98

OVD
COATING

HM
BODY



TECHNICAL FEATURES

- Overline Diamond Coating (OVD)
- Carbide end mill
- Solid Carbide body
- Multi flute, roughing and semi finishing
- Diameter tolerance: H10

APPLICATION

- Carbon fiber composites, reinforced plastics, synthetic materials

Z	D	L1	L2	d	Code
8	6	80	18	6	AM98010D
10	8	90	24	8	AM98015D
12	10	100	30	10	AM98020D

