

AV3 SERIES Aluminum 3FL V-Notch RampMill



PATENT PENDING

The AV3 **RampMill** is the fastest way to machine Aluminum. When used in conjunction with controlled engagement toolpaths and trochoidal paths, it achieves the highest Material Removal Rate (MRR) possible by a solid carbide tool and the Patent Pending coolant hole extends tool life exponentially. By ramping at 5-9 times greater angles than an endmill, the **RampMill** can enter material by helically ramping holes nearly as fast as they can be drilled. By making entry into the middle of the pocket, retract cutter path (air time) is greatly reduced and peak MRR can be achieved, drastically reducing cycle times.

- Outperforms All Other Tools In Controlled Engagement Toolpaths.
- The RampMill's Patent Pending Features Are Engineered Specifically For Controlled Engagement Toolpaths.
- RampMill End Geometry Allows For Ramping At 12-17 Degrees In Aluminum.
- Core Designed For Optimum Strength To Handle The Highest Tool Loads.
- Truncated Radius Adds Corner Strength While Avoiding The Wear Points Of A traditional Radius.
- Center Through-Coolant Hole Delivers Coolant Or Air To Blast Chips Away, Eliminating Re-Cutting And Skyrocketing Tool Life And Productivity.



How To Build Your 16 Digit Part Number

| | | | | | | |
|--------|---------|---------|--------------|---------|---|------------------|
| First6 | Middle6 | End Geo | Coolant Hole | Coating | = | Part # to Order |
| AV0187 | 34E001 | T3 | 0 | 0 | | AV018734E001T300 |



| First 6 GEO & DIA# | Middle 6 FL,LOC, & LBS# | End Geometry | | | | | Stk/Std Roughing *T.Rad | Pick 1 | | Pick 1 |
|--------------------------|-------------------------------|--------------|-----|-------|-----|-------|----------------------------|--------------|---------|--------|
| | | DIA | FL# | LOC | LBS | OAL | | Coolant Hole | Coating | |
| | | | | | | | None | Center | None | |
| AV0187 | 34E001 | 0.187 | 3 | 0.187 | 0 | 2.000 | T3 (.015) | 0 | C | 0 |
| | 35M001 | 0.187 | 3 | 0.281 | 0 | 2.000 | | | | |
| | 36W001 | 0.187 | 3 | 0.375 | 0 | 2.000 | | | | |
| | 384001 | 0.187 | 3 | 0.468 | 0 | 2.000 | | | | |
| | 39C001 | 0.187 | 3 | 0.562 | 0 | 2.000 | | | | |
| | 3AK001 | 0.187 | 3 | 0.656 | 0 | 2.000 | | | | |
| | 3BU003 | 0.187 | 3 | 0.750 | 0 | 2.500 | | | | |
| AV0250 | 358001 | 0.250 | 3 | 0.250 | 0 | 2.000 | T6 (.030) | 0 | C | 0 |
| | 36W001 | 0.250 | 3 | 0.375 | 0 | 2.000 | | | | |
| | 38I001 | 0.250 | 3 | 0.500 | 0 | 2.000 | | | | |
| | 3A6001 | 0.250 | 3 | 0.625 | 0 | 2.000 | | | | |
| | 3BU003 | 0.250 | 3 | 0.750 | 0 | 2.500 | | | | |
| | 3CA003 | 0.250 | 3 | 0.875 | 0 | 2.500 | | | | |
| | 3CS005 | 0.250 | 3 | 1.000 | 0 | 3.000 | | | | |
| AV0312 | 362001 | 0.312 | 3 | 0.312 | 0 | 2.000 | T6 (.030) | 0 | C | 0 |
| | 384001 | 0.312 | 3 | 0.468 | 0 | 2.000 | | | | |
| | 3A6003 | 0.312 | 3 | 0.625 | 0 | 2.500 | | | | |
| | 3BY003 | 0.312 | 3 | 0.781 | 0 | 2.500 | | | | |
| | 3CI003 | 0.312 | 3 | 0.937 | 0 | 2.500 | | | | |
| | 3D2005 | 0.312 | 3 | 1.100 | 0 | 3.000 | | | | |
| | 3DG005 | 0.312 | 3 | 1.250 | 0 | 3.000 | | | | |
| AV0375 | 36W001 | 0.375 | 3 | 0.375 | 0 | 2.000 | T6 (.030) | 0 | C | 0 |
| | 39C003 | 0.375 | 3 | 0.562 | 0 | 2.500 | | | | |
| | 3BU003 | 0.375 | 3 | 0.750 | 0 | 2.500 | | | | |
| | 3CI003 | 0.375 | 3 | 0.937 | 0 | 2.500 | | | | |
| | 3D4005 | 0.375 | 3 | 1.125 | 0 | 3.000 | | | | |
| | 3DM005 | 0.375 | 3 | 1.312 | 0 | 3.000 | | | | |
| | 3E6005 | 0.375 | 3 | 1.500 | 0 | 3.000 | | | | |
| AV0437 | 37Q004 | 0.437 | 3 | 0.437 | 0 | 2.750 | TC (.060) | 0 | C | 0 |
| | 3AK004 | 0.437 | 3 | 0.656 | 0 | 2.750 | | | | |
| | 3CA005 | 0.437 | 3 | 0.875 | 0 | 3.000 | | | | |
| | 3D2005 | 0.437 | 3 | 1.100 | 0 | 3.000 | | | | |
| | 3DM007 | 0.437 | 3 | 1.312 | 0 | 3.500 | | | | |
| | 3EA007 | 0.437 | 3 | 1.550 | 0 | 3.500 | | | | |
| | 3EW009 | 0.437 | 3 | 1.750 | 0 | 4.000 | | | | |

* These tools are stocked with a patent pending truncated roughing radius, which is not suitable for finished radius tolerances.

AV3 SERIES Continued



How To Build Your 16 Digit Part Number

| | | | | | | |
|--------|---------|---------|--------------|---------|---|------------------|
| First6 | Middle6 | End Geo | Coolant Hole | Coating | = | Part # to Order |
| AV0500 | 38I003 | TC | 0 | 0 | | AV050038I003TC00 |



| GEO & DIA# | FL,LOC, & LBS# | | | | | | Stk/Std Roughing *T.Rad | Coolant Hole | | Coating |
|------------|----------------|-------|-----|-------|-----|-------|-------------------------|--------------|--------|---------|
| | | DIA | FL# | LOC | LBS | OAL | | None | Center | |
| AV0500 | 38I003 | 0.500 | 3 | 0.500 | 0 | 2.500 | TC (.060) | 0 | C | 0 |
| | 3BU005 | 0.500 | 3 | 0.750 | 0 | 3.000 | | | | |
| | 3CS005 | 0.500 | 3 | 1.000 | 0 | 3.000 | | | | |
| | 3DG005 | 0.500 | 3 | 1.250 | 0 | 3.000 | | | | |
| | 3E6007 | 0.500 | 3 | 1.500 | 0 | 3.500 | | | | |
| | 3EW007 | 0.500 | 3 | 1.750 | 0 | 3.500 | | | | |
| | 3FK009 | 0.500 | 3 | 2.000 | 0 | 4.000 | | | | |
| AV0625 | 3A6005 | 0.625 | 3 | 0.625 | 0 | 3.000 | TC (.060) | 0 | C | 0 |
| | 3CI005 | 0.625 | 3 | 0.937 | 0 | 3.000 | | | | |
| | 3DG007 | 0.625 | 3 | 1.250 | 0 | 3.500 | | | | |
| | 3EC007 | 0.625 | 3 | 1.563 | 0 | 3.500 | | | | |
| | 3F8009 | 0.625 | 3 | 1.875 | 0 | 4.000 | | | | |
| | 3G2009 | 0.625 | 3 | 2.200 | 0 | 4.000 | | | | |
| | 3GS00E | 0.625 | 3 | 2.500 | 0 | 5.000 | | | | |
| AV0750 | 3BU005 | 0.750 | 3 | 0.750 | 0 | 3.000 | TC (.060) | 0 | C | 0 |
| | 3D4007 | 0.750 | 3 | 1.125 | 0 | 3.500 | | | | |
| | 3E6009 | 0.750 | 3 | 1.500 | 0 | 4.000 | | | | |
| | 3F800E | 0.750 | 3 | 1.875 | 0 | 5.000 | | | | |
| | 3G600E | 0.750 | 3 | 2.250 | 0 | 5.000 | | | | |
| | 3H200E | 0.750 | 3 | 2.625 | 0 | 5.000 | | | | |
| | 3HY00I | 0.750 | 3 | 3.000 | 0 | 6.000 | | | | |
| AV0875 | 3CA009 | 0.875 | 3 | 0.875 | 0 | 4.000 | TC (.060) | 0 | C | 0 |
| | 3DM009 | 0.875 | 3 | 1.312 | 0 | 4.000 | | | | |
| | 3EW009 | 0.875 | 3 | 1.750 | 0 | 4.000 | | | | |
| AV1000 | 3CS009 | 1.000 | 3 | 1.000 | 0 | 4.000 | TC (.060) | 0 | C | 0 |
| | 3E6009 | 1.000 | 3 | 1.500 | 0 | 4.000 | | | | |
| | 3FK00B | 1.000 | 3 | 2.000 | 0 | 4.500 | | | | |
| | 3GS00E | 1.000 | 3 | 2.500 | 0 | 5.000 | | | | |
| | 3HY00I | 1.000 | 3 | 3.000 | 0 | 6.000 | | | | |
| | 3J400I | 1.000 | 3 | 3.500 | 0 | 6.000 | | | | |
| | 3KA00L | 1.000 | 3 | 4.000 | 0 | 7.000 | | | | |

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