



REPLACEMENT CYLINDERS







IT'S THE NUMBER ONE AFTERMARKET CYLINDER IN THE WORLD.

With well over 100,000 currently in service around the world and millions of flight hours behind them, Superior's Millennium Cylinders® are without question, the most popular FAA-approved, PMA aftermarket cylinders in all of general aviation.

But Superior is not just the world's #1 dedicated cylinder supplier, we are also the leader in cylinder design and performance innovation.

Each Millennium Cylinder is an engineering and manufacturing masterpiece. From its advanced computer generated head fin configuration, to its 3-D port contour and increased wall thickness, to its advanced aluminum alloy heads and through hardened AMS 6382 steel barrel, Millennium Cylinders deliver performance and quality benefits far surpassing anything else in the air.

MORE FEATURES. MORE BENEFITS.

More reasons to put your trust in our Millennium Cylinders.

1 ADVANCED ALUMINUM ALLOY HEADS

Millennium Cylinders are manufactured from the most advanced alloys available. That means their structural strength exceeds the latest aerospace industry requirements for air-cooled cylinder heads. In addition, our head castings meet, or exceed, the industry's more stringent standards for porosity and shrinkage.

2 INCREASED PORT WALL THICKNESS 3

The Millennium Cylinder's unique design also features increased port wall thickness to eliminate problems with premature warpage and cracking. In addition, the exhaust and intake ports are volumetrically matched to maximum output and performance.

3 COMPUTER-GENERATED HEAD FIN CONFIGURATION **3**

Millennium Cylinders feature a new and advanced computer-generated head fin configuration that provides more consistent head fin thickness and spacing – that means they deliver more uniform heat transfer and fewer "hot" spots.

4 IMPROVED COOLING

Millennium Cylinders also have aerodynamically smoother surfaces to reduce wind resistance, which enables ambient air to more rapidly draw heat away. Bottom line: Millennium Cylinders run cooler and cooler cylinders last longer.

5 VERY HIGH QUALITY CASTING 🔊

Millennium Cylinders perform better because they are made better. Our extremely high-quality castings create more consistent surfaces to improve overall airflow and cooling.



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Put any Millennium Cylinder side-by-side with any other OEM or aftermarket cylinder and the difference in quality, craftsmanship and attention to detail is strikingly obvious.

And while it looks really great, it performs even better. Millennium Cylinders resist cracking, run cooler, last longer and generally out perform the standard cylinders available from Lycoming, Continental or any other aftermarket supplier.

We're so confident in the Millennium Cylinder's performance that it's covered by a full 25-month/TBO* (whichever comes first) warranty. It's one of the best in the business.

6 THROUGH HARDENED STEEL BARRELS **3**

The barrel of each Millennium Cylinder offers uniform hardness all the way through the steel walls allowing the barrel to provide even wear while withstanding extreme cylinder temperatures and pressures. This means Millennium Cylinders typically reach and often exceed, recommended TBO times.

7 AMS6382 STEEL BARRELS

Millennium Cylinders are manufactured with AMS6382 steel barrels ensuring complete control of all critical manufacturing processes from the grain size of the steel to the elimination of both micro-impurities and defects in the alloy.

8 ADVANCED CYLINDER BARREL CHOKE

Our advanced manufacturing techniques also enable us to craft the Millennium Cylinder's barrel choke from 10 to 13 thousandths of an inch, allowing the rings and pistons to work more efficiently throughout the normal operating temperature range.

VOLUMETRICALLY MATCHED PORTS

The intake and exhaust ports on each Millennium Cylinder are volumetrically matched for maximum output and performance.



The Superior mark signifies that the feature is a Superior design or manufacturing innovation.











MILLENNIUM CYLINDERS FOR CONTINENTAL ENGINES	
Part Number	Application
SA65000S0	A-65 (Sold in Kit of 4 - STC)
SA10200-A20P	O-200-A, B; C-125-2, C-145-2, -2H; O-300A, B, C, D
SA10200-A21P	C-75, 85
SA10200-A22P	C-90
SA47006L-A20P	O-470-U; IO-470-D, E, F, H, L, M, N, S, U, V
SA47006S-A20P	O-470-G, M, P; IO-470-C, G, P, R
SA47006S-A21P	O-470-K, L, R, S
SA52006-A20P	IO-520-A, B, BA, BB, C, CB, D, E, F, J, K, L, M, MB
SA52006-A22P	TSIO-520-AF, B, BB, C, CE, D, DB, E, EB, G, H, J, JB, K, KB, L, LB, M, N, NB, P, R, T, UB, VB, WB
SA52006-A23P	IO-550-A, B, C
SA55006-A20P	IO-550-D, E, F, L (Taper Finned Barrel)

MILLENNIUM CYLINDERS FOR LYCOMING ENGINES	
Part Number	Application
SL10302-A20P	O-235-F, J (High Compression)
SL10302-A21P	O-235-K, L, M (Medium Compression)
SL32006N-A20P	O-320-B, D, IO-320-B (Narrow Deck)
SL32006W-A20P	O320-B, D; IO-320-B, D; AIO-320-B, C; AEIO-320-D; LIO-320-B (Wide Deck)
SL32006W-A21P	O-320-A, C, E; IO-320-A, E; AEIO-320-E; (Wide Deck)
SL36006N-A20P	O-360-A, C; IO-360-B; HO-360-B; HIO-360-B; O-540-A, D, E, G; IO-540-C, D, N; TIO-540-G (Narrow Deck)
SL36006N-A21P	O-360-B, D; O-540-B (Narrow Deck)
SL36006TW-A20P	O-540-J; IO-540-A, W (Thin Wide)
SL36006TW-A21P	O-360-J2A; O-540-F1B5 (Thin Wide)
SL36006W-A20P	O-360-A, C, F, G; IO-360-B, E, M; HO-360-C; HIO-360-B; LO-360-A; AEIO-360-B, H; O-540-A, E, G, H; IO-540-C, D, N, T; AEIO-540-D (Wide Deck)
SL36006W-A21P	O-360-B, D; O-540-B

NOT TO BE USED FOR INSTALLATION ELIGIBILITY

Millennium Cylinders is a registered trademark of Superior Air Parts, Inc.

