



## USING ABRADABLE POWDER COATINGS™



**Line2Line Coatings** is a thick, self-fitting, graphite coating that safely minimizes piston-to-wall clearance and finds the perfect operational fit to stabilize pistons and reduce piston assembly friction and wear. A stable piston improves ring seal and reduces wear modes within the piston-ring-bore assembly. Power cylinders are more efficient and last longer. Engines benefit with a cleaner burn for better tuning, less blow-by, higher crankcase (pan) vacuum, less noise, better oil control, and longer life.



**HOW IT WORKS:** Start with normal or increased metal-to-metal Piston to Wall Clearance (PWC). Order coating to custom thickness, leaving 25% of the Recommended PWC (RPWC). During a brief break-in period, the pistons expand, causing the Line2Line abrasible powder coating to lap in and find the optimum fit within each bore, under load and at temperature. As the perfect skirt shape is approached, the oil film develops uniform loading across an enlarged contact area, and becomes nearly impenetrable. The wear rate drops (asymptotically) to zero, and the perfect fit is locked in for the life of the engine.



**HOW TO SELECT THICKNESS:** (all coating thicknesses are figured on the diameter, relative to PWC) Line2Line Coatings 'Standard Thickness' Targets 25% of Recommended PWC (RPWC) after coating.

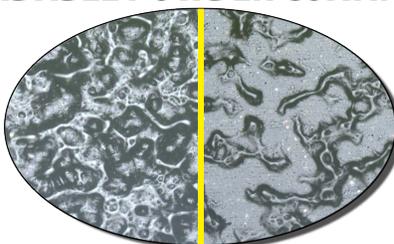
**NOTE:** Because the pistons are installed with reduced clearance, and the coated pistons need to lap in, the assembled engine will require a short series of gradually increasing engine load cycles to increase piston temperature and size, with pauses (idle or off) between cycles. If you have not used Line2Line on this specific engine configuration before, allow more time for a more gradual break-in. Visit [www.line2linecoatings.com](http://www.line2linecoatings.com) for break-in guideline videos.



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BEFORE



AFTER

### BREAK-IN

#### HOW TO CALCULATE THICKNESS:

HOW TO CALCULATE THICKNESS:	EXAMPLE	ACTUAL	ENGINE I.D.
Uncoated Piston Size (UPS) =	4.1240	<input type="text"/>	<input type="text"/>
Finished Bore Size (FBS) =	4.1320	<input type="text"/>	<input type="text"/>
Recommended Metal PWC (RPWC) =	0.0060	<input type="text"/>	<input type="text"/>



#### HOW TO CALCULATE TARGET PISTON SIZE (TPS):

**EXAMPLE:** TPS = FBS  4.1320 - ( RPWC  0.0060 X 0.25 ) = TPS  4.1305

**ACTUAL:** TPS = FBS  - ( RPWC  X 0.25 ) = TPS

#### HOW TO CALCULATE TARGET COATING THICKNESS (TCT):

**EXAMPLE:** TCT = TPS  4.1305 - UPS  4.1240 = TCT  0.0065 \*

**ACTUAL:** TCT = TPS  - UPS  = TCT  \*

\*Round up to go tighter. Round down for looser build.