



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 only 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 75% of the Recommended PWC (RPWC).**

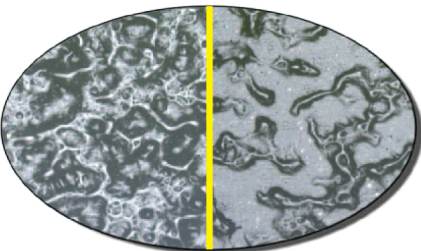
NOTE: Because the pistons are installed with reduced clearance, and the coated pistons need to lap in, the assembled engine will require a short series of gradually increasing engine load cycles to increase piston temperature and size, with pauses (idle or off) between cycles. If you have not used Line2Line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



ABRADABLE POWDER COATINGS™



BEFORE



AFTER

BREAK-IN

COATING THICKNESS CALCULATION WORKSHEET

DIMENSIONS REQUIRED TO START:	EXAMPLE	ACTUAL	ENGINE I.D.	
Finished Bore Size (FBS) =	4.1320		FBS	
Recommended Metal PWC (RPWC) =	0.0060		RPWC	
Uncoated Piston Size (UPS) =	4.1240		UPS	



HOW TO CALCULATE TARGET PISTON SIZE (TPS):

Multiply the **RPWC** by **.25** (25%) then subtract that amount from the **FBS** to get the **TPS**. See example:

EXAMPLE: TPS = FBS 4.1320 – (RPWC 0.0060 X 0.25 = 0.0015) = 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.



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PISTON COATING ORDER FORM

Ship To Address:		Bill To Address (if different):	
Company:		Company:	
Name:		Name:	
Address:		Address:	
City:		City:	
State:	Post Code:	State:	Post Code: P.O. / Reference #:
Date: _____ Phone: _____ Email: _____			
☐ 2 Stroke ☐ 4 Stroke No. of cylinders: _____ ☐ Nitrous ☐ Supercharged ☐ Turbo ☐ Diesel			
Block: ☐ Water cooled ☐ Hard Blok ☐ Billet Engine use: ☐ Street ☐ Race ☐ Other _____			
THIS SECTION MUST BE FILLED OUT COMPLETELY Complete “Coating Thickness Calculation Worksheet” first			
Engine HP: _____ Displacement: _____ Finish Bore Size (FBS): _____ Mfr’s RPWC _____			
☐ Target Coating Thickness (On Diameter): _____ (thousandths of an Inch) OR			
☐ Target Coated Piston Diameter: _____ (thousandths of an Inch)			
APC™ Skirts – enter # of pistons:			
☐ 1-3 Pistons: \$88 per piston X _____ ☐ 4-7 Pistons: \$80 per piston X _____ ☐ 8+ Pistons: \$77 per piston X _____			
Crown Coat – enter # of pistons: ☐ \$66 per piston X _____			
Additional Charges:			
+ Coating over .006” diametric thickness: add \$5 per .001” per piston		+ Individual piston diameter sizing: add \$10 per piston	
+ Piston skirts over 2-1/2” in height: add \$7 per piston		+ Degreasing fee for dirty or oily pistons: \$44	
+ Pistons over 5” diameter: add \$20 per piston		+ Ring/pin/clip removal if left in: \$44*	
+ Bore measurement \$15 per cylinder X _____		* L2LAUS is not responsible for broken or missing rings/pins/clips	
+ Special masking/coating instructions that are not part of standard coating process – quote required			
DO NOT SEND ring sets, wrist pins, or circlips – REMOVE prior to shipping			

We coat superchargers, turbos, oil pumps, compressors, carb slides and more....Email for info

Coating Services Turn-Around Time (in BUSINESS days)
Standard (5-10 days +/- (Parts are shipped via Startrack or your transport provider
☐ Startrack Transport Service ☐ Your Transport Provider
Expedited turnaround POA Return Shipping Service

Our Invoices are sent by email through Zero e-billing which allows you to select your payment option.
PARTS WILL SHIP AFTER PAYMENT IN FULL IS RECEIVED

Shipping terms and conditions: Return shipping is by Startrack. Customer is responsible for all shipping costs, which shall be added to the invoice and is based on package size, weight and destination. Return shipping cost cannot be calculated until the order is complete, packaged and ready to ship. **Expedited shipping and/or insurance coverage must be specifically requested by Customer prior to shipping;** all additional shipping charges shall be added to the invoice price.
Please note: Customer parts are returned in the same packaging materials that they are received in. Line2Line Coatings shall not be liable for any part and/or coating damage that occurs from shipping in customer supplied packaging that does not adequately protect individual parts or prevent them from coming in contact with each other while in transit.
A \$10 repackaging fee will be applied for any bubble wrap, partitions, etc. supplied by Line2Line to protect parts.