



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.



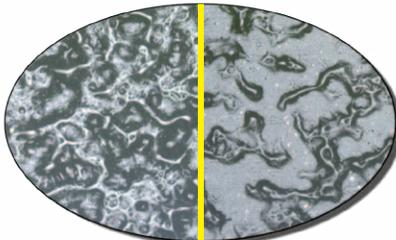
HOW TO SELECT THICKNESS: (all coating thicknesses are figured on the diameter, relative to PWC) **Line2Line Coatings 'Standard Thickness' targets 75% of the Recommended PWC (RPWC).**

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	<input type="text"/>	<input type="text"/>
Recommended Metal PWC (RPWC) =	0.0060	<input type="text"/>	<input type="text"/>
Uncoated Piston Size (UPS) =	4.1240	<input type="text"/>	<input type="text"/>



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.



4866 White Lake Road
 Clarkston, MI 48346
 248-625-3052

info@line2linecoatings.com
www.line2linecoatings.com

PISTON COATING ORDER FORM

DO NOT SEND ring sets, wrist pins, or circlips – please remove prior to shipping

Ship To Address:		Bill To Address (if different):	
Company:		Company:	
Name:		Name:	
Address:		Address:	
City:		City:	
State:	Zip:	State:	Zip: P.O. / Reference #:

Date: _____ **Phone:** _____ **Email:** _____

Engine Displacement: _____ **HP Range:** _____ **Engine Description:** _____

2 Stroke 4 Stroke # of cylinders: _____ Nitrous Supercharged Turbo Diesel

Block: Water cooled Hard Blok Billet **Engine use:** Street Race Other _____

Please complete "Coating Thickness Calculation Worksheet" first

Finish Bore Size (FBS): _____ **Piston Mfg's Recommended PWC (RPWC):** _____

Option 1: Target Coating Thickness (TCT) as calculated on "How To Order" Worksheet: _____

Option 2: Add **(thousandths of an Inch) coating to the piston diameter**

APC™ Skirts – please check box and write in the number of pistons

1-3 Pistons: \$38 per piston X _____ 4-7 Pistons: \$36 per piston X _____ 8+ Pistons: \$33 per piston X _____

Individual piston sizing to a specific target dimension: add \$3 per piston. The piston target size is _____"

There will be an Additional Charge for:

- + Coating over .006" diametric thickness: add \$2 per .001" per piston
- + Pistons over 5" diameter: add \$10 per piston
- + Diesel pistons with crown cooling: add \$15 per piston
- + Bore measurement \$5 per cylinder X _____
- + Degreasing fee for dirty or oily pistons: \$30
- + Ring/pin/clip removal if left in: \$30*

Crowns: ThermBar crowns only, no skirt coatings: \$35 per piston * L2L is not responsible for broken rings/clips

ThermBar done with APC skirt coating: \$30 per piston in addition to skirt coating price

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

Coating Services Turn-Around Time (in business days)

- Standard (10 days +/-) 5 days +30% of total 3-4 days +50% of total 1-2 days +100% of total

Return Shipping Service (Parts are shipped via UPS ground with no declared value unless otherwise specified)

- UPS Ground Service UPS 3 Day Select UPS 2nd Day Air UPS Next Day Air

Payment Options: Business or personal check. Parts will ship when check clears our account. Money order

Visa/MasterCard/American Express /PayPal – a 3% convenience fee will be added to your total

Account Number: _____ Expiration Date: _____ Security Code: _____

Signature _____ Credit Card Billing Zip Code: _____

Credit cards are not billed until the coating work is complete and the parts are ready to ship. **We do not ship COD**

PARTS WILL SHIP WHEN PAYMENT IN FULL IS RECEIVED

Shipping details: Return shipping is by UPS; shipping cost is added to the invoice and is based on package size, weight and destination. Return shipping cost cannot be calculated until the order is complete, boxed up and ready to return. UPS expedited shipping and/or additional insurance coverage must be specifically requested prior to shipping; these additional shipping charges shall be added to the invoice price.