

37M Finishing Films

Master® Microfinishing Film

Premium, heat-treated aluminum oxide grain, precision coatings, durable bond and frictional backing technology are uniquely designed for demanding microfinishing applications delivering high stock removal rate, exceptional finish consistently.



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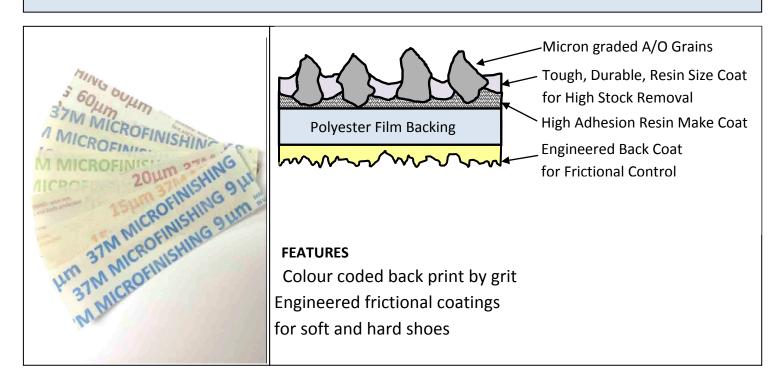
Also offering tape finishing devices by Thielenhaus Superfinish Innovation



37M Finishing Films

FEATURES	BENEFITS		
Premium, heat-treated, precision micron-graded aluminum oxide	Superior stock removal rate and consistent finish		
Tough, durable, high	Higher stock removal rate with better surface finish		
performance, reinforced adhesive	 Excellent adhesion for grain retention contributes to scratch- 		
bond system	free, uniform, consistent finishes		
	 Excellent durability for long product life 		
Strong and uniform 5 mil	Excellent friction control		
polyester film back with non-	 Non tape slip results in excellent cut and finish 		
abrasive engineered anti-slip	 Non-abrasive coating for minimum tool wear 		
back-coat layer	 Universal design for both soft and hard shoes 		
Full Grit range: 100 – 9 micron	 Extensive grit offering for broad range of microfinishing film applications 		
Colour coded back print by grit size	Ease of product identification		
Available in straight and scallop	High-precision edge cutting: +/- 0.03mm		
edged rolls	 Custom designed scalloped-edge rolls for perfect fit to finish 		
	diesel crankshafts, and curved parts		
	 Generate superior part tolerances 		

37M Microfinishing Film Design





SOLUTIONS FOR INDUSTRY

AVAILABILITY

Back print	Abrasive	Backing	Shapes Available
colour	Micron Size		
Purple	80 μm	5 mil	
Yellow	60 μm	And 3 mil	Straight-edge rolls
Black	50 μm	Polyester	Scallop rolls
Blue	40 μm	Backing	Belts
Green	30 μm	with	
Red	20 μm	Engineered	Discs & Sheet with
Orange	15 μm	Frictional	or without pressure
Light blue	9 μm	coating	sensitive adhesive



MAIN APPLICATIONS

• Camshaft lobes and journals

• Crankshaft mains, pins, thrust walls, and oil seals

- Transmission shafts
- Axles
- Cylinder shaft
- Hydraulic Spool Valves
- Compressor Shafts
- Torque Convertor Covers
- Engine Balance Shaft
- Drive Sprocket Assemblies
- Turbine Shaft
- Gears
- Bearings
- · Roll finishing



SCALLOP ROLL SPECIFICATION

W: Total width

D: Depth from peak to valley

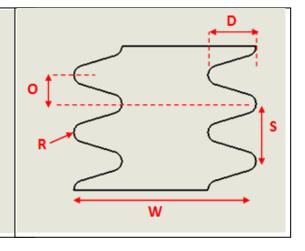
S: Step from peak to peak

R: Radius

O: Offset from peak on one side

to peak on the opposite side

(we recommend that O = S/2 or zero)





CASE HISTORY EXAMPLES

Roll Finishing

Product: Master® 37M 15 µm film rolls vs.

competitive 15 and 9 µm microfinishing

film rolls

Material: Steel

Results: Higher cut-rate of Master® film rolls

> achieved target finish with the 15 µm product only and replaced the two-step 15 and 9 µm process; customer improved productivity by 60% and saved 50% film

consumption cost

Diesel Crankshaft Polishing

Product: Master® 37M 40 and 20 µm scalloped

edge film rolls vs. competitive 40 and 20

µm scalloped edge film rolls

Material: Forged Steel

Tooling: Urethane and Diamond shoes

Results: Master® film rolls achieved similar cut

and finish as the competitive film rolls at slower film index rate, results in 30% cost and labor savings for the customer

Compressor Polishing

Master® 37M 30 µm film rolls vs. Product:

competitive 30 µm film rolls

Material: Cast Iron

Master® film rolls produced 10% better Results:

> Ra finishing than the competitor product with 90% cycle time, generated 20% saving

for the customer.

V12 Diesel Crankshaft Polish

Product: Master® 37M 40 and 20 µm film rolls vs.

competitive 40 and 20 µm film rolls

Material: Forged Steel

Master® film rolls worked well on Pins Results:

and Mains – equal or better than the competition with a 10% cost savings;

product approved by customer

Automotive Camshaft Polishing

Master® 37M 40 and 15 µm film rolls vs. Product:

competitive 40 and 15 µm film rolls

Material: Forged Steel

Urethane and Diamond Tooling:

Results: Master® film rolls achieved Ra 0.08

> micron, better than the competitor's Ra 0.10 at slow film tape index rate with 20% cost savings Master® 37M product

approved by customer

Automotive Transmission Shaft Polishing

Product: Master® 37M 20 μm and 36M 15 μm

film rolls vs. competitive film rolls

Material: Forged steel Coolant: Oil-based Tooling: Urethane

Results: Master® film rolls worked well on the

> journal and nose of the transmission shaft; equal to or better than competition

Axle and related Parts Polishing

Product: Master® 37M 50 µm film rolls; new

machine

Material: Hardened steel 60 HRC

Coolant: Water based

Master® film roll met customer's stock Results:

removal, cycle time and finish

requirements for the newly-installed machine, product approved by customer

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