

# Diamond Compound | Thinner Lubricator

## Diamond Compound

### FOR HIGH-QUALITY MOLD AND DIE POLISHING

Quality of mold or die finish is frequently an important factor in how a mold or die operates. D-M-E Diamond Compound is proven to produce the finest quality finish with considerable savings in time and labor.

D-M-E Diamond Compound contains no adulterants, nor non-graded, non-working diamond "fines". The precision-graded diamond particles are uniformly and permanently dispersed and blended in a high-quality, universally soluble, synthetic vehicle; giving the best composition possible. It will not "cake" or dry out and is completely stable at temperatures from -50°F to +150° F, permitting high-speed mechanical polishing operations.

Available in 2½ gram, 5 gram, and 18 gram sizes.

**Since D-M-E Diamond Compound is not water soluble, the use of water as a thinning agent is not recommended. For best results, use D-M-E THINNER LUBRICATOR to reduce the compound to its most efficient working consistency.**



18 Gram



5 Gram



2½ Gram

FINISH	ITEM NUMBER	LABEL COLOR GUIDE	NAT'L BUR. STD. GRADE	MICRON SIZE. RANGE <sup>†</sup>	COMPOUND NUMBER AND DIAMOND CONTENT	APPROX. MESH EQUIVALENT
Final ultra-mirror polishing of plastics mold cavities.	DC-00H	Pink	¼	0-½	½-Heavy	100,000
	DC-0H	Silver	½	0-1	1-Heavy	60,000
Final high-mirror polishing of selected work such as optical quality plastics mold cavities.	DC-1M	Ivory	1	0-2	1-Medium	15,000
	DC-1H	Ivory	1	0-2	1-Heavy	15,000
Final mirror-polishing of high-quality plastics mold cavities, especially those producing clear plastic parts.	DC-3M	Yellow	3	1-5	3-Medium	9,000 to 7,000
	DC-3H	Yellow	3	1-5	3-Heavy	9,000 to 7,000
Final polishing of most plastics mold cavities.	DC-6U	Orange	6	4-8	6-Universal	5,000 to 2,500
	DC-6M	Orange	6	4-8	6-Medium	5,000 to 2,500
Intermediate polishing of plastics mold cavities and final polishing of die cast die cavities.	DC-9U	Green	9	6-12	9-Universal	1,300
	DC-9M	Green	9	6-12	9-Medium	1,300
	DC-15U	Blue	15	8-22	15-Universal	1,300 to 900
	DC-15M	Blue	15	8-22	15-Medium	1,300 to 900
Preliminary polishing of all plastics mold and die cast die cavities.	DC-30U	Red	30	20-40	30-Universal	800 to 550
	DC-30M	Red	30	20-40	30-Medium	800 to 550
	DC-45U	Brown	45	30-60	45-Universal	500
	DC-45M	Brown	45	30-60	45-Medium	500
Heavy stock removal. Enlarging holes in hardened steel.	DC-170H	Grey-Black	170		170M-Heavy	120 to 80

<sup>†</sup>The smaller the micron size, the finer the finish.

## Thinner Lubricator

### FOR DIAMOND COMPOUND

When polishing with Diamond Compound, stock removal may cause the compound to thicken. Thinner Lubricator is recommended to prevent this thickening and assure proper lubrication of the diamond particles. It is supplied in a convenient 4-ounce squeeze bottle.

**ITEM NUMBER**  
TL-4



# Mold Finish Comparison Kit

## EXPANDED VERSION – 12 SAMPLES FINISHED TO SPI STANDARDS

- Eliminates errors or guesswork in achieving desired or specified finishes
- Saves time...eliminates over-polishing
- Provides a visual and numerical standard for specifying mold/part finishes

Professionally finished to SPI standards, this kit is an invaluable tool for both selection of finishes required and comparison to work in progress. The visual and numerical standards are also helpful in communications between end user, molder and moldmaker. Each finish has been generated on a 1" diameter x 3/8" -thick piece of H-13 steel. Edges are chamfered and O.D. is knurled for safe, easy pick-up and handling. Finish numbers are stamped on the back of each sample for quick reference. A molded plaque in the kit's lid shows the part finishes that result from each mold finish.



ITEM NUMBER

MFK-1200

FINISH TYPE	DESCRIPTION	ROUGHNESS AVERAGING (RA) micro-inches range	COMMENTS
A-1	grade # 3 diamond buff	0-1	<ul style="list-style-type: none"> <li>• for mirror or optical finishes</li> <li>• most time consuming and costly finishes to achieve</li> <li>• steel grade important to results (D-M-E No. 3 or No. 5 steel recommended)</li> </ul>
A-2	grade # 6 diamond buff	1-2	
A-3	grade # 15 diamond buff	2-3	
B-1	600 grit paper	2-3	<ul style="list-style-type: none"> <li>• removes all tool and machining marks</li> <li>• provides good mold release</li> <li>• light reflecting finish on molded part, some sheen</li> </ul>
B-2	400 grit paper	4-5	
B-3	320 grit paper	9-10	
C-1	600 stone	10-12	<ul style="list-style-type: none"> <li>• removes all tool and machining marks</li> <li>• provides good mold release</li> <li>• mute finish on molded part, no sheen</li> </ul>
C-2	400 stone	25-28	
C-3	320 stone	38-42	
D-1	dry blast glass bead #11 (8" distance at 100 psi; 5 secs.)	10-12	<ul style="list-style-type: none"> <li>• for decorative finishes</li> <li>• often used for diecast and thermoset tooling</li> <li>• helps hide shrink marks and other imperfections</li> <li>• dull, non-reflecting finish on molded or cast part</li> </ul>
D-2	dry blast # 240 oxide (5" distance at 100 psi; 6 secs.)	26-32	
D-3	dry blast # 24 oxide (6" distance at 100 psi; 5 secs.)	190-230	