M680™ Mortar Pump
Sprayer for Mortar, Cementitious and Heavily Filled Materials
A better way to spray heavy, gritty materials

The Graco M680™ Mortar Pump handles abrasive materials such as epoxy mortars, non-skid coatings or cementitious materials, and tackles difficult polymers with fillers such as glass flake, silica or sand.

**Profitable shortcut to hand troweling**

Hand troweling cementitious materials is time-consuming. With a Graco M680 Mortar Pump, you can save time, speed up the process and increase your profits by spraying and finish-troweling the material instead of using the traditional hawk and trowel method.

**Less material waste and improved quality**

With Graco’s M680 Mortar Pump, your crews can get more thickness control by spraying instead of hand applying. The surface gets a more consistent layer of material. In addition, there’s much less chance of material curing before it gets applied.

**Fast, easy cleaning**

The sprayer’s high velocity flush is often all that is needed to clean the pump and prevent buildup of heavy material in the spray lines. If needed, the pump is designed to be quickly taken apart for hand cleaning.

**Built tough for long-lasting durability**

Engineered to withstand the grittiest materials, the Graco M680 pumps heavy materials at low pressures (typically 200 to 500 psi/13.7 to 34.5 bar) and uses an applicator to atomize the material and transfer it to the substrate. Its low-pressure design reduces wear and tear on the pump lower.

**Ideal for coating contractors**

Your crew will discover that the Graco M680 Mortar Pump is easy to use, with similar functionality to an air-operated sprayer. They’ll be up and running in no time.

- Explosion proof for hazardous spray areas
- Convenient – one air source runs the pump and atomizing air

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**Industries**

Water and wastewater  
Mining  
Oil and gas  
Marine and offshore  
Building and infrastructure  
General construction

**Materials and Applications***

Epoxy-based mortars  
Cementitious coatings  
Re-surfacing materials  
Coatings with small aggregate  
Non-skid coatings  
Waterproofing  
Epoxy claddings  
Cementitious fireproofing  
...and more

* Some materials require special handling and testing; contact Graco or your distributor for assistance
Air Motor and Controls
- 3400 NXT™ Motor
- Filtered air for pump and applicator
- Chicago-style inlet air connection

Tool box
- For convenient storage of accessories and spare parts

Hopper
- Heavy-duty stainless steel
- Straight sides for easy cleaning
- Quick-release connections

Hose Cam and Groove Connection
- For quick and easy assembly

Pump Lower – 680cc
- Designed for heavy materials, stainless steel construction
- Tri-clamp on cylinder – easy to disassemble
- Pack-less pressure relief valve
- High-velocity flush for effective cleaning

Fluid and Air Lines
- Chemically resistant fluid hoses
- Solvent resistant sleeve
- Cam and groove connections

Applicator
- Your choice of Flex Hose, Pole or HTX 680 Applicator
  - Flex – for heavy materials
  - Pole – for heavy materials in hard to reach areas
  - HTX 680 – for lighter materials
- On/off motor pilot controls
- Atomization air adjustments
## Features and Benefits

<table>
<thead>
<tr>
<th>ITEM</th>
<th>FEATURE</th>
<th>BENEFIT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hopper</td>
<td>10 gal (38 L) capacity</td>
<td>Holds two mixed kits</td>
</tr>
<tr>
<td></td>
<td>Durable with straight sides</td>
<td>Easy to scrape sides clean</td>
</tr>
<tr>
<td></td>
<td>Cam and groove intake connections</td>
<td>Easy to remove and clean inlet connections</td>
</tr>
<tr>
<td>Pump Lower</td>
<td>Specialized 680 cc pump lower</td>
<td>Handles cementitious and repair mortars</td>
</tr>
<tr>
<td></td>
<td>High out, 680 cc lower</td>
<td>Maximized production for sprayable materials</td>
</tr>
<tr>
<td></td>
<td>Stainless steel construction</td>
<td>Won’t rust or corrode with water-based materials</td>
</tr>
<tr>
<td></td>
<td>Packless relief valve</td>
<td>Safety relief – won’t pack out after first use</td>
</tr>
<tr>
<td></td>
<td>Tri-clamps on pump cylinder</td>
<td>Easy to disassemble – tool provided</td>
</tr>
<tr>
<td></td>
<td>One-piece throat and piston packing</td>
<td>Few wear parts</td>
</tr>
<tr>
<td></td>
<td>Cam and groove outlet connection</td>
<td>Easy to remove hoses for pump tear down</td>
</tr>
<tr>
<td>Fluid Hoses</td>
<td>Compatible with epoxies, urethanes, solvents, water</td>
<td>One hose fits all – no changing hoses between applications</td>
</tr>
<tr>
<td></td>
<td>Cam and groove connections</td>
<td>Easy to change hoses – saves time</td>
</tr>
<tr>
<td>Spraying</td>
<td>Multiple applicator technologies</td>
<td>Handles a variety of heavy and lightweight materials and coatings</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Allows for various spray patterns</td>
</tr>
<tr>
<td>Flushing</td>
<td>High velocity circulating flush, up to 15 gpm (57 lpm)</td>
<td>Effectively cleans lower and hoses after each spray period</td>
</tr>
<tr>
<td>Approvals</td>
<td>CE-approved</td>
<td>Approved for use in explosive atmospheres</td>
</tr>
</tbody>
</table>

### Pole Applicator
- For hard to reach areas
- Best for heavily filled materials that easily pack out
- Includes Round Nozzle; provides a rough finish texture
- Simple design
- Easy to clean

### HTX 680 Applicator
- Good for lighter materials that don’t typically pack out
- Includes Round Pattern Nozzles; provides a medium round pattern texture finish
- Air mixed into fluid through multiple venturi ports provides a consistent pattern
- Gives a more controlled pattern for lightweight materials or high solids coatings
- Includes flat pattern discs – fans spray pattern for wider coverage area per pass

### Flex Hose Applicator
- Best for heavily filled materials that easily pack out
- Includes Round Nozzle; provides a rough finish texture
- Simple design
- Easy to clean
## Return on Investment

Save time and money by spraying material with the Graco M680 Mortar Pump and troweling to finish.

### Graco M680 Mortar Pump R.O.I.

<table>
<thead>
<tr>
<th>With Sprayer</th>
<th>Without Sprayer</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Pump operator(s) / Mixer(s)</td>
<td>1. People mixing kits</td>
</tr>
<tr>
<td>2. People spraying</td>
<td>2. People spraying</td>
</tr>
<tr>
<td>3. # of people required to finish trowel only</td>
<td>3. # of people required to hawk &amp; trowel manually</td>
</tr>
<tr>
<td>4. Labor rate/hour (including benefits)</td>
<td>4. Labor rate/hour (including benefits)</td>
</tr>
<tr>
<td>5. Hours to complete resurfacing</td>
<td>5. Hours to complete resurfacing</td>
</tr>
<tr>
<td>6. Crew Total</td>
<td>6. Crew Total</td>
</tr>
<tr>
<td>7. Man hours</td>
<td>7. Man hours</td>
</tr>
<tr>
<td>8. Labor cost</td>
<td>8. Labor cost</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Example</th>
<th>Example</th>
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<tbody>
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<td>1</td>
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<tr>
<td>$1,296.00</td>
<td>$3,456.00</td>
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</tbody>
</table>

**LABOR SAVINGS % 63%**

### How much will you save?

<table>
<thead>
<tr>
<th>With Sprayer</th>
<th>Actual</th>
<th>Without Sprayer</th>
<th>Actual</th>
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<tr>
<td>1. Pump operator(s) / Mixer(s)</td>
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<td>_______</td>
<td>5. Hours to complete resurfacing*</td>
<td>_______</td>
</tr>
<tr>
<td>6. Crew Total [add lines 1, 2, 3]</td>
<td>_______</td>
<td>6. Crew Total [add lines 1, 2, 3]</td>
<td>_______</td>
</tr>
</tbody>
</table>

**LABOR SAVINGS % _______**

LABOR SAVINGS % = change in line 8 labor cost / labor cost without sprayer

* Based on field testing, resurfacing takes less than half the time with a Graco M680 Mortar Sprayer
What are people saying about the Graco M680 Mortar Pump?

“We sprayed 200 gallons one day with four guys finish troweling. At the end of the day, we had to hawk and trowel a small section by hand and the crew quickly realized how easy the pump had made their job.” — Shane Anderson – Owner, Applewood Painting Company, Arvada, CO

“We cut our time in half and reduced our costs by one third to resurface a lift station using the Graco M680 pump. We also sprayed a new material we normally have to do by hand.” — Jeff White – Owner, Commonwealth Epoxy Coatings, Newport News, VA

“This pump was a big time saver for our project. Normally we would have had one man mixing and three to four guys troweling to cover 900 square feet per day. With the pump, we were able to complete as much as 2500 square feet in a day with two guys mixing, one spraying and one guy troweling.” — Jason Becker - Project Manager, Coblaco Services, Denver, CO

Technical Specifications

Pressure Ratio ....................................................................................................................................................................10:1 fluid to air
Maximum air operating pressure .................................................................................................................................. 100 psi (0.7 MPa, 7 bar)
Air Inlet Size ........................................................................................................................................ 3/4 in. npt(f) (Chicago Claw Fitting)
Fluid Inlet Size .........................................................................................................................................................2 in cam groove male
Fluid Outlet Size ..........................................................................................................................................................................1 in npt(f)
Dry Weight ..............................................................................................................................................................250 lb (113 kg) with 35ft hose and applicator
Chemical resistance .......................................................................................................................................Compatible with solvent or water based materials
Inlet air filtration ..............................................................................................................................................40 micron, moisture separation with auto drain
Wetted parts ........................................SST, aluminum, carbide seats, plated steel fittings, PTFE, UHMWPE, solvent-resistant elastomer
Manual..............................................................................................................................................................................332612

Sprayability may be affected by aggregate size or distribution, hose size and other factors.
Check with material suppliers or contact your Graco distributor for a demonstration.
Ordering Information

Packages

All packages include: pump; motor; controls on cart; gaskets for cam and groove connectors; pilot tube repair fitting; pump rachet tool and soft seal pump kit. Package 262927 includes a complete pump repair kit instead of soft seal kit.

262927  M680 Cart Unit, 60 ft (18 m) hose kit, 24U209 HTX 680 and 24T947 Flex Hose applicator, SST hopper, spare hard rubber retaining cap, extra #3, 4, 8, 9, size nozzles for Flex Hose/Pole applicator
24T834  M680 Cart Unit, 35 ft (10.7 m) hose kit, 24T947 Flex Hose applicator, SST hopper
24T835  M680 Cart Unit, 35 ft (10.7 m) hose kit, 24T947 Flex Hose applicator, no hopper
262909  M680 Cart Unit, 35 ft (10.7 m) hose kit, 24U209 HTX 680 applicator, SST hopper
262926  M680 Cart Unit, 35 ft (10.7 m) hose kit, 24U209 HTX680 applicator, no hopper
24T836  M680 Cart Unit with SST hopper, no hoses, no applicator
24T837  M680 Cart Unit, bare, (cart, pump, motor and air controls only)

Applicators, Flex Hose and Pole

24T947  Flex Hose applicator kit
24T946  Pole applicator kit
16A405  Retaining cap, medium rubber (supplied with gun)
16A421  Retaining cap, hard rubber
16A443  Round Nozzle #3, 3/16 in
16A444  Round Nozzle #4, 1/4 in
16A445  Round Nozzle #5, 5/16 in (supplied with applicator)
16A446  Round Nozzle #6, 3/8 in (supplied with applicator)
16A447  Round Nozzle #7, 7/16 in (supplied with applicator)
16A448  Round Nozzle #8, 1/2 in
16A449  Round Nozzle #9, 9/16 in

HTX 680 Applicators

24U209  HTX 680 Applicator Kit. Includes 4 mm, 6 mm, 8 mm, 10 mm round nozzles, and A, B, C, D pattern discs.
248524  HTX Round Pattern Nozzle, 4 mm (supplied with HTX 680 Gun)
248525  HTX Round Pattern Nozzle, 6 mm nozzle (supplied with HTX 680 Gun)
248526  HTX Round Pattern Nozzle, 8 mm nozzle (supplied with HTX 680 Gun)
248527  HTX Round Pattern Nozzle, 10 mm nozzle (supplied with HTX 680 Gun)
24U337  HTX 680 Fine Finish RAC Extension Kit. Includes RAC 671 tip and guard, extension tube, and 18 and 30 mesh filters.
24U217  HTX Applicator. Spare spray head assembly

Fluid and Air Lines

24R254  Spray Line Extension bundle (fluid and air), 25 ft (7.6 m)
24U210  Spray Line kit (fluid and air) with fluid shut-off valve, 35 ft (10.7 m)
16W511  Hose, 1 in x 25 ft (7.6 m), 1000 psi (69 bar) bare hose, solvent compatible, 1 in (mbe)
16W512  Hose, 3/4 in x 10 ft (3 m), 1000 psi (69 bar) bare hose, solvent compatible, 1 in (mbe)
24U185  Fluid line sleeve, replacement, 50 ft (15.2 m), solvent resistant. Keeps fluid lines clean. Polyethylene 3 in tubing, 6 mil
16W601  Hose Clean Pack Out Kit. Adapter to reverse fluid hoses.
24U331  Standard air hose replacement bundle, 3/8 in x 38 ft (11.6 m) with pilot line and solvent resistant sleeve
24T852  Air hose extension replacement bundle, 3/8 in x 26 ft (7.9 m) with pilot line and solvent resistant sleeve
24U184  Air line sleeve, replacement, 50 ft (15.2 m), solvent resistant. Keeps air lines clean. Polyethylene 2 in tubing, 6 mil
262910  Pilot line, 75 ft (11.6 m), (cut to length.)
127312  Pilot line splice connector (fbe). For repairing damaged pilot line.

Pump Accessories

24U173  M680 Pump soft seal kit
16W510  Carbide inlet seat with O-ring
16W509  Carbide piston seat with O-ring
16W513  Zero-cavity relief valve at pump outlet. Complete valve.
24T853  Hopper kit. Includes 10 gal (38 L) SST hopper with 2 in npt cam/groove fittings and mounting bracket
16U537  Hopper lid, SST (Not supplied with standard hopper kit)
16X005  Xtreme® connection kit. For light to medium duty airless spraying. Includes tie rods and couplers to adapt an Xtreme lower to the system. Requires Xtreme lower and high-pressure accessories.
ABOUT GRACO

PROVEN QUALITY. LEADING TECHNOLOGY.

Founded in 1926, Graco is a world leader in fluid handling systems and components. Graco products move, measure, control, dispense and apply a wide range of fluids and viscous materials used in vehicle lubrication, commercial and industrial settings.

The company’s success is based on its unwavering commitment to technical excellence, world-class manufacturing and unparalleled customer service. Working closely with qualified distributors, Graco offers systems, products and technology that set the quality standard in a wide range of fluid handling solutions. Graco provides equipment for spray finishing, protective coating, paint circulation, lubrication, and dispensing sealants and adhesives, along with power application equipment for the contractor industry. Graco’s ongoing investment in fluid management and control will continue to provide innovative solutions to a diverse global market.

Call today for product information or to request a demonstration.
877-84GRACO (1-877-844-7226) or visit us at www.graco.com.

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