



**ARDEX ARDIFLO™ and the  
ARDEX Concrete Management Systems (ACMS)**

**Process and Pumping Innovation**





## Breakthrough Concrete Solutions

Concrete is one of the oldest and most widely used building materials in the world. Despite concrete's durability, strength and versatility, the material's inherent properties have presented challenges over the years as installation requirements become more complex. These challenges include the curing and drying of slabs, labor-intensive placement and finishing and, for elevated concrete slabs, deflection.

Additionally, historical specification practices have built in a disparity between the slab tolerance standards between Division 3 and 9, often challenging today's fast track construction schedules with unplanned remedial

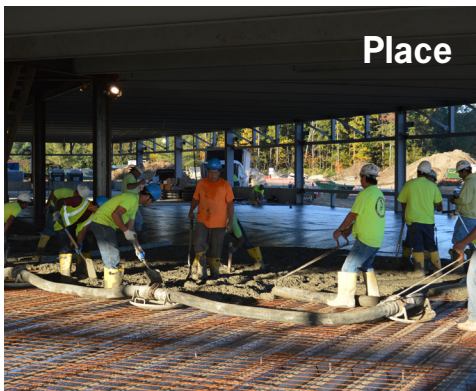
floor leveling and the associated delays, costs and lack of accountability. In response to these unavoidable challenges, ARDEX has developed ARDEX Concrete Management Systems (ACMS). ACMS proactively addresses these concrete construction issues through innovative specified finishing method for new concrete with an integrated system of moisture control and self-leveling underlayment products. The ARDIFLO™ System complements ACMS with a range of high-technology pumping platforms and provides the ability to achieve a flat and level floor.











**Place**



**Consolidate**



**Strike off**



**Float / Restraighen**



**Wet Cover Cure**

## Process Innovation – Rough Screed

In new construction applications, the ARDEX Concrete Management Systems saves time and labor costs by eliminating the traditional steel trowel step in the finishing process. Using this system, the contractor will only place, consolidate, strike off and bull-float/restraighen the surface and allow the bleed-water to dissipate. Following a wet-cover cure (3 to 7 day min.) and surface brush blast, a layer of ARDEX self-leveling underlayment is installed either immediately after deflection or during interior build out. In some cases, the system can be installed first using an ARDEX Moisture Control System to allow almost immediate installation of finished flooring while mitigating any future risks resulting from moisture emissions from the slab. The resulting finish delivers a concrete substrate capable of meeting the most demanding flatness and levelness tolerances for both the flooring and other interior trades while eliminating unplanned leveling and delays.

**FOR THE OWNER** – ACMS ensures your floors will be as level as needed for your application, minimizes schedule delays for the installation of flooring and eliminates disruptions of service to reinstall failed floor coverings due to flatness or moisture issues.

**FOR THE SPECIFIER** – ACMS removes floor covering performance concerns due to deflection, floor levelness and moisture issues – all from one global manufacturer with decades of industry success – providing the ultimate peace of mind.

**FOR THE GENERAL CONTRACTOR** – ACMS ensures floors will be as level as needed for the owner's application, minimizes schedule delays for the installation of flooring and removes floor levelness and moisture concerns from the equation.

## Innovative Products for an Innovative System

ARDEX High-Capacity Self-Leveling Underlayments are designed for the POWERFLO™ High-Capacity Pump Trailer. These blends of Portland and other hydraulic cements provide the performance characteristics expected from an ARDEX product and handle the challenge of delivery through high-speed, long distance requirements. ARDEX HC 100™ and HC 100R™ provide a durable, flat, smooth floor surface with minimum labor.

**ARDEX HC 100™** High-Capacity Self-Leveling Underlayment

**ARDEX HC 100R™** High-Capacity Rapid Self-Leveling Underlayment

**ARDEX MC™ RAPID** One-Coat Moisture Control System for Concrete to recieve ARDEX Underlayments

For detailed performance parameters and installation instructions, please refer to individual product brochures.

"Producing floors that are both level and flat after they have deflected has been my passion for more than 25 years. ARDEX Concrete Management Systems is an elegant solution to this challenge. Properly installed, ARDEX Concrete Management Systems ensures the owner and the design/construction team that the in-service flatness and levelness needs of their project will be achieved. The inclusion in the system of a moisture mitigation component that permits immediate installation of moisture-sensitive floor coverings is icing on the cake."

– Eldon Tipping  
Structural Services, Inc.  
Principal





## Pumping Innovation – Delivery Solutions

In 1984, ARDEX continued its innovation when it introduced an automatic mixing pump and became the first manufacturer in North America to promote, train and support the pumping of Portland cement-based, self-leveling underlayments.

ARDEX now introduces the ARDIFLO™ System which offers equipment ranging from traditional mixing barrels to standard, medium and high-capacity pumping systems. Each system is uniquely designed to match capabilities with the project parameters. Additionally, each system is available for rent or purchase with a broad range of training and support options, tailored warranty and contractor programs.

For smaller jobs, the ROVER® enables a single installer to mix, deliver and pour up to three bags in a single process.

For larger projects, at 24,000 to 33,000 pounds pumped per hour, the POWERFLO™ can level a 100,000 square-foot project in less than six hours.

For intermediate projects, a selection of models of the AMP® or CUBE™ can deliver the precise capacity and convenience needed.

## ARDEX Pumps It Up

**1985**

### **ARDEX S-58™**

Little Red unveiled at World of Concrete

**1996**

### **ARDEX S-48™**

LevelCraft Automatic Mixing Pump

**2002**

### **ARDEX S-48™**

LevelCraft Automatic Mixing Pump with Frequency Drive System

**2012**

### **ROVER®**

Rolling Barrel Cart and **AMP®** Automatic Mixing Pump

**2013**

### **CUBE™ and POWERFLO™**

Medium and High-Capacity Pump Trailers

**2013**

**ARDIFLO™** System & Self-Leveling Floor Underlayment Solutions



## One Size Does Not Fit All – Choose the Right Delivery System

### ROVER® Rolling Barrel Cart

The ROVER® eliminates the pains of the traditional barrel mixing and carrying process. Transportation of a three-bag batch, approximately 210 pounds, by a single installer is facilitated by the ROVER Rolling Barrel Cart that offers a precise and controlled pour. ROVER has full swivel, heavy duty caster wheels and a tilt mechanism constructed of robust steel with a compact and ergonomic design. Removable barrel sold separately.

### AMP® Automatic Mixing Pump

The AMP® is a self-contained unit for mixing and pumping ARDEX materials 60 feet vertically and 200 feet horizontally at 350 PSI. The unit operates with one three-phase gear motor with a variable frequency drive system for conveying, mixing and pumping. State-of-the-art, electronic circuitries eliminate variables caused by power fluctuations. AMP features an onboard water booster pump with a cam-lock adapter and accessible shaft-in mixing tube and spray nozzle for easy cleaning. All units are reversible for operator safety.

#### AMP® 100

- 4Kw/5.4 HP main motor
- Operates on 220V, single phase, 30A minimum on each leg/phase
- Recommended for 25mm (one inch) hoses
- Variable frequency drive system with an output range up to 100 bags an hour (2,500 sq.ft. at 1/4" per hour)

#### AMP® 200

- Higher output model, via 5.5Kw/7.5 HP main motor
- Operates on 220V, three phase, 30A minimum on each leg/phase
- Recommended for 35mm (1.5 inch) hoses
- Variable frequency drive system with an output range up to 200 bags an hour (5,000 sq.ft. at 1/4" per hour)

### CUBE™ Medium-Capacity Mobile Mixing Pump

The CUBE mobile mixing pump is designed for outdoor location, eliminating freight elevators and material staging, dust, bag disposal and allowing single source for power and water. It will accept bulk super sacks of ARDEX material with a 7,500-pound bulk hopper with a bag-piercing device to provide top load capability. The CUBE has an inline continuous mixer, rotor stator pump, on board generator and an optional crane. The CUBE is available in a standard model with 15,000 pounds of pumping capacity per hour and a high output model which pumps at 24,000 pounds per hour. The system also pumps 150 feet vertically and 400 feet horizontally.

Available models; Standard and Gooseneck Hitch Trailer.

#### CUBE™ Standard

- Modular and portable design, transported on a flatbed or trailer, optional on board generator

#### CUBE™ Gooseneck

- Towable with a gooseneck mount, on board generator, optional on board crane





## POWERFLO™ High-Capacity Pump Trailer

The POWERFLO pump trailers are designed for outdoor location, eliminating freight elevators and material staging, dust, bag disposal and allowing single source for power and water. The self-contained mobile mixing and pumping giant has a silo capacity of 22,000 pounds with an articulating knuckle boom crane and remote control hydraulic hatch that make bulk loading a breeze. It pumps 150 feet vertically and 600 feet horizontally. For large footprint jobs, or when the site requires a deep fill fast, the POWERFLO is fully computerized and offers an output range up to 33,000 pounds per hour with remote controlled pump output.

### POWERFLO™ on board features:

- On board dust filtration and recycling
- 100 kVA 480V 60Hz diesel generator
- 270-gallon water tank
- Thermostatically-controlled water heater
- Auxiliary lighting for night operation

### POWERFLO™ Wireless Remote and Computer Control:

- Computer control with touch screen menu
- Can be monitored remote via phone
- Crane operation linked to silo hatch
- Manual or computer-controlled mode

### POWERFLO™ Mechanical Features:

- Continuous inline mixer with rotor stator pumping system
- 260 feet of 2" full flow mortar hoses on reels with electric rotation gears
- 65 feet of 1.5" connector hose for use on mortar output end
- 200 feet of 1" water hose
- Articulating knuckle boom crane with 30-foot range

## Use the Super Sack

At 2500 pounds of powder per unit, a super sack eliminates transportation of about 50 bags via freight elevator and then pallet jack, open, empty and discard. Pumping from the exterior eliminates dust inside the building, eliminates loading material and equipment into the building and eliminates securing a water and power source on every floor.

### CUBE™ Medium-Capacity Mobile Pump

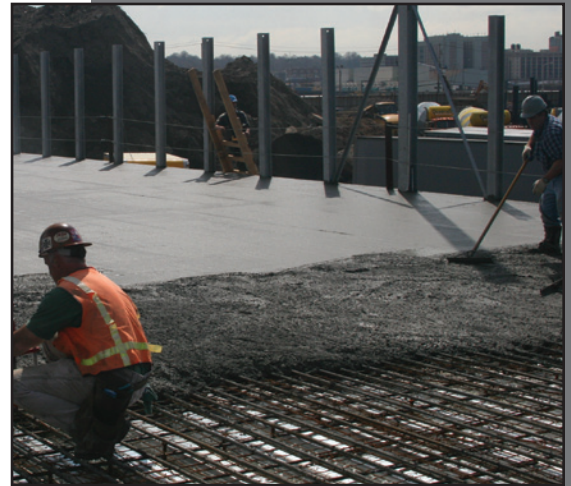
**Standard** - Pumps up to 15,000 pounds (300 bags) per hour  
(7,500 sq.ft. at 1/4" per hour)

**High Output** - Pumps up to 24,000 pounds (480 bags) per hour  
(12,000 sq.ft. at 1/4" per hour)

### POWERFLO™ High-Capacity Pump Trailer

Pumps up to 33,000 pounds (660 bags) per hour  
(16,500 sq.ft. at 1/4" per hour)

For information, call your local ARDEX Sales Professional at 1-888-512-7339 or visit [www.ardexardiflo.com](http://www.ardexardiflo.com).  
ARDEX pumps are available for rent providing inventory is available.







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