MaxFlow

Laboratory Mixing Plant

and APPARATUS SPECIFICATIONS

MAXFLOW Environmental Corporation

1. GENERAL

1.1 The equipment described herein is maintained by MaxFlow Environmental Corporation for the purpose of supporting material research. These research efforts would include those conceived in-house as well as those in support of our industry partners. This apparatus, when used in conjunction with a foam generator, is capable of producing and pumping cellular concrete meeting the requirements for testing in accordance with ASTM C 495, ASTM C 796 and ASTM C 869.

2. DESCRIPTION

2.1 The unit is skid mounted on a steel frame with casters for mobility on slab floor surfaces. The approximate weight of the mixing plant is 2500 lbs (1136 kg.) and has overall dimensions of L = 151 in. (384 cm) x W = 51 in. (130 cm) x H = 74 in. (188 cm).

2.2 Components

2.2.1 Mixer: 12 ft^3 (0.34 m^3) capacity with dual horizontal ribbon mixing blades having rubber wipers. The mixer has a manual discharge chute and is powered by a 3 hp Electric TEFC Gear Motor. The mixer is designed for top loading and is positioned above the wet material hopper.

2.2.2 Water: ¾ in. inlet port water meter with numeric display and manual reset.

2.2.3 Wet Material Hopper: 14 ft^3 (0.40 m^3) capacity positioned atop the delivery pump throat.

2.2.4 Pump: progressive cavity type powered by a 7.5 hp Electric TEFC Gear Motor. The pump output is rated at approximately 30 gpm (114 l/m) or 4 ft^3/m (0.19 m/m). The pump is fitted with a D = 6 in. (15.24 cm) to D = 1.5 in. (3.81 cm) x L = 36 in. (91.44 cm) bell reducer.

2.2.5 Delivery Hoses: D = 1.5 in. (3.81 cm) x various length, typically a minimum of length of not less than 50 lf (15.23 m).

3. LABORATORY SITE REQUIREMENTS

3.1 Electrical Power

3.1.1 Access to a 3 phase electrical source capable of supplying 240 VAC at 60 amps or 480 VAC at 30 amps.

3. LABORATORY SITE REQUIREMENTS (cont.)

3.1.2 The electrical source shall not be located further than 100 feet (30.5 m) from the setup site.

3.2 Other Considerations

3.2.1 The setup location should be on a hard, level surface.

3.2.2 Accommodations for gray water discharge are necessary.

4. SAFETY

4.1 Operator

4.1.1 The operator of this equipment shall have read and have full understanding of all operating procedures as provided in the Equipment Manufacturers Operating Manual.

4.1.2 The operator shall wear safety glasses while operating the mixer as splash possibility exists. Other personal protection equipment may be required such a chemical gloves and nuisance dust masks.

4.1.3 The operator shall not wear loose clothing while operating this equipment.

4.2 Material Handlers

4.2.1 The material handlers shall assure that the pumplines do not become kinked while pumping.

4.2.2 The material handlers shall wear safety glasses as splash possibility exists. Other personal protection equipment may be required such a chemical gloves and nuisance dust masks.

END OF SECTION

MaxFlow Environmental Corporation
775 US Hwy 70 West
Black Mountain, NC 28711
(828) 669-4875
(828) 669-4874 Fax
www.maxflow.com