

# Cemco 340 Mobile Paving Package

Specification Sheet



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## Cemco 340 Portable Paving Package

As the name implies, the Cemco 340 is rated at a maximum of 340 yards/hour. The Cemco 340 Paving Package consists of an upgraded Model 275 Batch Plant and a Model 240 Central Mixer. Both the Model 275 and the Model 240 are completely portable with leveling cylinders on all four corners of unit. The Model 275 Batch Plant has a 58 ton, self-erecting silo and the Model 240 has a self-erecting track. The Plant and the Mixer each has its own John Deere Diesel engine which supplies hydraulic and electrical power.

## Cemco 340 Production

The Cemco 340 is rated at 340 cubic yards per hour. This rating is based upon a 1:05 cycle time with 10 yard loads. Since weigh up for a load can be completed during the discharge of a previous load, this time is not considered in the overall cycle time. Please note that the drum will not begin discharging for the first 25 seconds of trolley up and dump time. This means that the Model 340 has a mechanical minimum of 25 seconds mix time. Additional mix time may be added by keeping the mixer in the “home” position for a user defined time before beginning to trolley up the track.

<b>Cemco 340 Minimum Cycle Times</b>	
<b>Step</b>	<b>Time (seconds)</b>
Mixer Charge	37
Trolley Up and Fully Tilt	45
Dump Hold time*	8
Mixer Return Home time	15

\*The Dump Hold time allows the mixer to fully empty before returning “home” and is factory set at 8 seconds. This time may be reduced if concrete is of a higher slump and dumps quickly.

## Aggregate Handling

The Plant can be configured with 2, 3, or 4 aggregate bins. Additional 12 cubic yard automatic feeder conveyors may be added per aggregate bin.

<b>2-bin Aggregate Storage</b>	
<b>Aggregate Storage Bin</b>	<b>Storage (cubic yards)</b>
Sand	10-15*
Rock	13-18*

<b>3-bin Aggregate Storage</b>	
<b>Aggregate Storage Bin</b>	<b>Storage (cubic yards)</b>
Sand	10-15*
Rock 1	13-18*
Rock 2	13-18*

  

<b>4-bin Aggregate Storage</b>	
<b>Aggregate Storage Bin</b>	<b>Storage (cubic yards)</b>
Sand	10-15*
Rock 1	13-18*
Rock 2	13-18*
Rock 3	13-18*

\*the higher storage ratings are achieved by adding bin extensions

Note: An additional 12 cubic yards can be added per aggregate bin by utilizing the automatic aggregate feeder conveyors.

<b>Aggregate Gate Control</b>		
<b>Aggregate Storage Bin</b>	<b>Gate Area (in<sup>2</sup>)</b>	<b>Flow Control</b>
Sand	336	Hydraulic inching clam gate*
Rock 1, 2, or 3	406	Hydraulic inching clam gate

\*Sand bin also has a computer controlled vibrator in order to foster flow

## Water Handling

The Model 340 includes a hydraulically driven 3” water pump which pushes water into an overhead water storage bin. The plant is hard wired to keep the storage tank full without operator interference. From the storage tank, water is gravity fed via a 6 inch, hydraulically actuated butterfly valve.

<b>Water Pump</b>	
<b>Brand</b>	<b>Rated Maximum Flow</b>
3 inch hydraulically driven Pacer Pump	280 GPM (1060 LPM)

<b>Water Storage and Transfer</b>		
<b>Water Storage Bin</b>	<b>Capacity</b>	<b>Butterfly Gate size</b>
Overhead Water Storage Tank	660 Gallons (2500 Liters)	6 inch
Water Weigh Batcher	400 Gallons (1500 Liters)	6 inch

## Cement Handling

The Model 340 includes a self-erecting 58 ton silo which feeds a cement weigh batcher via a 12 inch butterfly valve. The Cemco cement weigh batcher has a 12 inch flow controlled inching gate as well as a transfer screw and a vibrator in order to create a constant and controllable flow of cement based upon the users desired flow rate. In addition, aerators and a vibrator are included on the silo to increase weigh up speed. In the case of a clump in the cement silo, a guillotine plate and cutout have been provided so that the silo gate may be removed with limited cement spillage.

<b>Cement Storage and Transfer</b>		
<b>Cement Silo/Weigh batcher</b>	<b>Capacity</b>	<b>Butterfly Gate size</b>
Silo (self-erecting)	58 tons	12 inch
Cement Weigh Batcher	4 tons	12 inch inching gate

\*The batch plant comes standard with one 4" fill pipe. Additional fill pipes may be added.

<b>Cement Weigh Batch Auger Specifications</b>	
dimension (length x diameter)	50" x 10"
Max Motor Torque	8300 lbs·in (938 N·m)
Auger RPM (variable speed)	0-320 based upon hydraulic flow

\*The auger does not have to be running for cement to flow out of the gate; it simply helps maintain constant flow.

## Scale Capacities and Functionality

The Model 275 NTEP Certificate No. is 99-029.

<b>NTEP approved scale capacities</b>			
<b>Scale</b>	<b>Nominal Capacity (lbs.)</b>	<b>Load Cell Capacity (lbs.)</b>	<b>Grad Size (lbs.)</b>
Water	3,500	5,000	1
Cement	8,000	15,000	5
Aggregate	40,000	60,000	10

<b>Scale Weighing Method</b>	
<b>Scale</b>	<b>Accumulative/Decumulative</b>
Water	Accumulative
Cement	Accumulative
Aggregate	Decumulative*

\*If automatic aggregate feeder conveyors are used, then the Aggregate scales can accumulate

## Transfer Conveyors

All transfer conveyors are hydraulically driven. As such, they can start under full load and their speeds are easily adjustable.

<b>Transfer Conveyor Specifications</b>			
<b>Belt Location</b>	<b>Torque</b>	<b>Belt Speed</b>	<b>Belt Width</b>
Plant Conveyor	19560 lbs·in (2210 N·m)	0-650 ft./min	36 inches
Aggregate Feed Conveyor	10475 lbs·in (1184 N·m)	0-400 ft./min	30 inches

## Pneumatic System

The Batch plant has an onboard, hydraulically driven 50 CFM air compressor which supplies air for all pneumatic functions. All air storage tanks have a manual water drain for periodic maintenance. In addition, Cemco utilizes a parker filter and automatic water drain just after the air is compressed as well as a Wilkerson automatic particulate filter with automatic water drain further downstream to capture additional water droplets once the air has cooled from initial compression.

Two Wilkerson oilers are used to oil plant vibrators. Each oiler allows the operator to adjust oil flow to the vibrators.

<b>Standard Pneumatic Functions</b>	
<b>Function</b>	<b>Air Consumption if used continuously</b>
Silo Dust Collector Pulse Jets	2.65 CFM @ 87 psi
Cement Weigh Batcher Dust Collector Pulse Jets	1 CFM @ 87 psi
Vibrators	7.1 CFM @ 87 psi
Vibra-Pad Aerators (pulsing)	10-15 CFM @ 7-15 psi
Central Dust Collector*	5-12 CFM @ 90-100 psi

\*The 4,000CFM Central Dust Collector is an option and comes silo mounted (does not need separate trailer and does not affect the portability of the plant)

## Dust Collection

The Cemco 340 comes standard with two vent type silo top dust collectors and one vent type cement weigh batcher dust collector. As an option, a 4000 CFM load point dust collector may be purchased.

<b>WAM R01 Silo Top Dust Collector</b>	
Cartridge Area	264 ft. <sup>2</sup>
Cartridge Material / weave	Spun Polyester / 10 micron
Efficiency	99.8 – 99.9 %
Air to Cloth ratio	6:1
Method of Cleaning	Pulse Jet
Maximum Capacity	1500 ACFM
Collection Type	Venting

\*The two silo top dust collectors cannot support up to three 4" fill pipes. The standard 340 plant comes with two 4" fill pipe and two silo top dust collector.

<b>WAM Cement Weigh Batcher Dust Collector</b>	
Cartridge Area	25 ft. <sup>2</sup>
Cartridge Material / weave	Spun Polyester / 10 micron
Efficiency	98 – 99.9 %
Air to Cloth ratio	6:1
Method of Cleaning	Pulse Jet
Maximum Capacity	150 ACFM
Collection Type	Venting

Cemco's optional central dust collector is a C & W CP-535-678. The dust collector does not have any effect on portability as it pulls with the plant and is literally mounted directly to the silo. When the silo self erects the dust collector rises along with it. The dust collector is mounted on the bottom portion of silo in between the plant frame and the conveyor belt.

The Central Dust Collector is hardwired to collect dust whenever a load is discharging. During the next load's weigh up, dust from the previous load is deposited into the cement weigh batcher. In this manner the central dust collector's filters are cleaned every time a batch is weighed up.

<b>C &amp; W CP-535-678 Load Point Dust Collector</b>	
Cartridge Area	535 ft. <sup>2</sup>
Efficiency	99.99%
Air to Cloth ratio	7.48:1
Method of Cleaning	Pulse Jet
Normal Air Capacity	4,000 CFM
Collection Type	Blower (Suction)

## Plant Power

Like other Cemco Models, all motors, butterfly valves, and aggregate clam gates operate hydraulically with 12 VDC controls. Our dust collectors, high/low level indicators, and batching control systems are the only devices not controlled by 12 VDC and they are either 120 VAC or 220 VAC. Cemco has had success utilizes a 12 VDC to 120 VAC power inverter when the control house is close to the plant. The Power inverter can only support the aforementioned 120 VAC items. If power is needed for any other item aside from the batch plant, then a separate power source will be required.