



HIGH-CAPACITY MIXER/UNLOADER

The United Conveyor Corporation 400 ton Pin-Paddle Mixer/Unloader is specifically designed for stabilization of wet scrubber by-product (cake) with fly ash. Its robust design and stainless steel construction delivers high-capacity performance and longer life.

The large inlet opening accommodates multiple feeding belt conveyor lines for greater system flexibility and throughput. Paddles are arranged on a pair of counter-rotating shafts to feed the material into the conditioning section of the mixer/unloader. Pins mix the material while additional paddles move the conditioned material to the discharge. Spray nozzles installed on the domed mixer cover provide water for optimal moisture content. Uniformly conditioned (stabilized) material is discharged through a chute at the bottom of the mixing chamber.

ADVANTAGES

■ Reduced Corrosion and Reduced Maintenance

- › 316L stainless steel rigid body and shaft cladding provide corrosion protection for the mixer components in direct contact with the scrubber blow down water
- › The mixing pins are made from 316L stainless steel with ultra-high molecular weight polyethylene covers to reduce material buildup

■ Uniform Conditioning of Materials

- › The wetting system has a specifically designed nozzle arrangement above the mixing pin-paddles to wet the ash with a precise regulated volume of water
- › The nozzle spray pattern provides uniform distribution of water resulting in a homogeneous mix and functional dust suppression
- › The mixer/unloader has provisions to automatically flush and clean the mixing chamber during the wash down and cleaning period

■ Easy Access

- › Domed cover with multiple flip-up doors allows easy access to paddles, pins and shafts
- › Large access door over discharge allows easy monitoring of the output mixture



Shaft, Pin and Paddles



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ADVANTAGES (cont.)

- **Dust-Tight Seal**
 - › Self-adjusting, packing type seals eliminate the need to tighten the packing glands manually and results in a dust-tight seal and longer packing life
 - › Patented floating shaft seal arrangement compensates for shaft deflections
- **Durable Rubber Timing Belt**
 - › The rubber timing belt ensures efficient, trouble-free power transmission, saves energy, reduces operating noise and maintains a smooth, constant output speed
 - › The timing belt drives both shafts to provide even distribution of power, minimizing shaft stress and deflection



Large Inlet Opening



Drive End

SPECIFICATIONS

Model No.	12540
Discharge Capacity	400 tons
Paddle Rotation Speed	40 RPM
Motor	125 HP
Paddle Diameter (feeding)	37-1/4", 40-1/4" or 43-1/4"
Weight	16 tons (32,100 lbs)
Distance from center of ash inlet flange to center of ash outlet flange	160-1/16"
Mixer Body	3/8" – 316L stainless steel
Feeding Paddles	316L stainless steel
Mixing Pins	316L stainless steel with UHMW-PE covers DURITE® H Wear Cap
Mixing Paddles	316L stainless steel

ORDERING INFORMATION

Please reference UCC Drawing # 5-6300-1 for current product information.

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