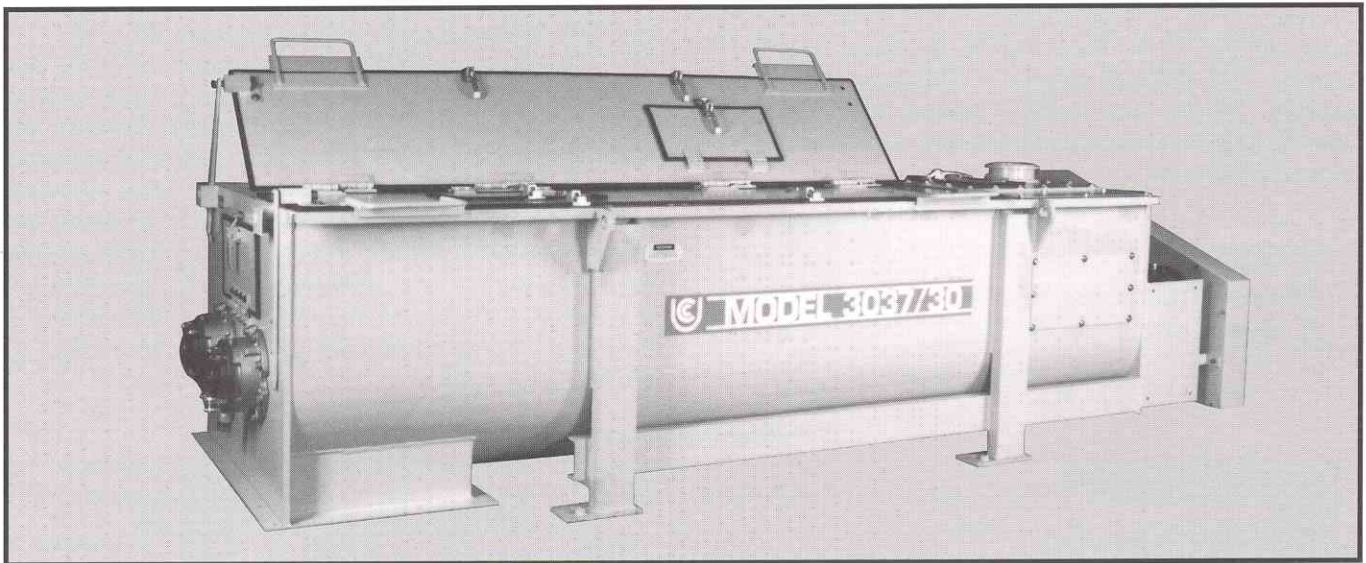


Product DATA



**UNITED
CONVEYOR
CORPORATION**

UCC Offers Mid-Range Unloading Capacity With the 3037/30 Mixer/Unloader



United Conveyor Corporation has extended its line of mixer/unloaders with the Model 3037/30. This unit operates at a nominal discharge capacity of 150 tph, and is designed for use in unloading storage bins in smaller utility systems and larger industrial systems.

The Model 3037/30 mixer/unloader conditions dry material – fly ash, bottom ash/fly ash mixture or spent bed material – with water to minimize dust and feeds the conditioned material to trucks or rail cars.

Efficient, Low Maintenance Drive Train

A 30-horsepower electric motor, supplied with the unit, drives two shaft mounted reducers through a double sided timing belt. The timing belt saves energy and provides even power distribution while maintaining a smooth, constant output speed. Power is distributed evenly between the two paddle shafts minimizing stress and deflection. Also, special couplings and chain lubrication are no longer needed because there is no metal-to-metal contact.

Corrosion-Resistant Mixing Chamber

The completely enclosed, durable mixing chamber is coated to resist corrosive substances. Inclined mixing paddles, arranged in a helix on a pair of counter-rotating shafts, efficiently mix the material with water and move the material toward the mixer/unloader discharge chute. To help keep mixing chamber wear to a minimum, ash moves through the mixer/unloader on a stationary bed that builds up between the paddle tips and the trough wall. A rigid mixing trough prevents twisting or deforming due to loads incurred in the mixing process.

The uniformly moistened material is discharged through a chute at the bottom of the mixing chamber. When the feed of material stops, the mixer paddles continue to rotate so that all material can clear the mixing chamber.

Packing Requires Minimum Maintenance

Spring loaded, self-adjusting packing-type seals eliminate the need to tighten packing glands manually. The packings stay in contact with the shaft, resulting in a dust-tight seal and longer packing life.

Precise, Economical Ash Feed and Water Spray

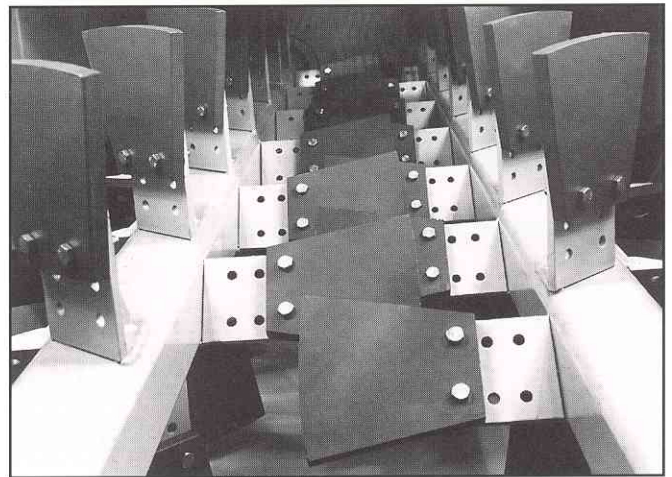
Eighteen specially configured nozzles located above the mixing paddles spray the ash with a precisely regulated volume of water during the mixing process. The spray pattern is different at each row of nozzles to provide complete watering and a homogenous mix. UCC's system begins moistening the incoming ash while it's still airborne, and the wide intersection of the ash and water paths allows for complete and uniform wetting. This ensures properly conditioned ash and prevents air pollution during unloading and transport.

Variable Sweep Diameters

Multiple paddle positions on paddle mounting brackets make it easy to change volumetric discharge capacity. Through the use of different paddle sweep diameters, the mixer can be run at 100% loading (paddles completely covered with ash) at different discharge rates. This provides for the best mixture quality combined with minimal paddle wear and minimum dust. The six discharge rates available are:

	37 RPM	30 RPM
28" Sweep Dia.	7,500 CFH	6,000 CFH
25" Sweep Dia.	6,000 CFH	4,800 CFH
22" Sweep Dia.	4,500 CFH	3,600 CFH

CFH = cubic feet per hour



Durable Mixing Paddles Keep the Ash Moving

AR 500 (Abrasion Resistant) steel mixing paddles are designed for maximum exposure of ash to water and for efficient movement of wet and dry material. Because the shafts rotate slowly, paddle wear is minimized. Ceramic tipped A36 steel mixing paddles, which provide extended wear with highly abrasive materials such as spent bed ash are available. TIVAR¹ mixing paddles, which prevent high CaO ash mixtures from sticking to the paddles during operation making cleanup easier, are also available. Full length flip-up covers allow unobstructed access to paddles and shafts.

Product Specifications

Paddle Speed Rotation	37 rpm			30 rpm		
	Motor	30 hp, 230/460 volts ac, 3-phase, 60 Hz				
Volumetric Capacity CFH	7,500	6,000	4,500	6,000	4,800	3,600
Paddle Diameter	28"	25"	22"	28"	25"	22"
Nominal Discharge Capacity (Dry) tph* @ 50 lb/ft ³	190	150	115	—	—	—
Nominal Discharge Capacity (Dry) tph* @ 70 lb/ft ³	—	—	—	210	170	125
Weight	4.4 tons					
Mixer Body Height	48-5/8"					
Overall Length	187-7/8"					
Center Line Mixer Inlet to Center Line Mixer Outlet - Rotary Vane Feeder	123-3/4"					
Center Line Mixer Inlet to Center Line Mixer Outlet - Ash Feed Valve	132" or 115-1/2" (depending on position of ash feed valve.)					
Nominal Water Requirements - gpm (16% moisture - by total weight)	145	115	90	160	130	95
Mixing Chamber Body	3/8" mild steel					
Mixing Paddles	Abrasion-Resistant Steel (Ceramic and TIVAR Optional)					

*Capacities listed are for reference only.

¹TIVAR is a trademark of Poly Hi Solidur, Menasha Corporation

For additional information on ash conditioning and unloading equipment, contact UCC or your local UCC Sales Representative.

Descriptions of UCC equipment and services stated herein do not constitute a warranty or a guarantee of performance, nor is any warranty implied.

M0695-733

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