

Ring Dryer Item DR-5201

Ring Dryer, GEA Barr-Rosin. Used for drying wet cake DDGS but can be used to dry almost anything – such as hemp or other grains.

- Dries material from 65% moisture to 11% moisture, evap rate 66,463 #/hr.
- Designed to handle 112,861 wet infeed at 65% moisture and 440,000 #/hr dry recycle material.
- This design lends itself well for varying flows and moistures, and precludes clogging or clumping.
- Comes with Lo-NOx main burner natural gas fired 83 MMBTU, a 1200HP main fan, 2 combustion/exhaust fans 150HP, Fluid Bed Cooler and Baghouse, (2) paddle mixers, (9) drag and screw conveyors, (4) rotary valves, (4) cyclones, disintegrator.
- Designed for 67,109 #/hr wet grain + 45,752 #/hr syrup IN = 46,398 #/hr OUT Evap rate 66,463 #/hr Fan: 189,339 scfm 1300HP. Burner heat 83.1 MMBTU.
- Mothballed well—all motors are rotated once/month



Components shown here



Fluid Bed Cooler & Baghouse

GEA Barr Rosin static fluid bed cooler package for ring dryer. Size 7 ft W x 19 ft L x 18 ft OAH. Includes fluid bed cooler, baghouse filter and ducting. (See also asset # [FBAG-31](#)) Sized for 22,100 cfm. Weight 15,800 pounds.

[Item PK-FBST-31](#)

Burner Lo-NOx

National Combustion Equipment (Nat-Com) Lo-NOx burner. Natural gas, sn 10815. Burner model P-96-G-23-1118, gas heater model GH-90-120-128-226, Includes gas train and fire management system. Gas train skid size 135" long x 31" deep x 86" tall (includes all valves and control panel)

[Item VK-2024](#)



Components continued

Paddle Mixer, Single 36" dia

Single shaft paddle mixer. GEA Barr Rosin 36" bed/mixer x 26 ft long x 32 ft OAL. Driven by 75 HP motor 1770 rpm 460/3/60. Belt drive 3-groove for reducer ratio 43.5 for output 40 rpm. Overall dimensions approx 3 ft wide x 32 ft long x 4'8" tall.

Item X-5207



Paddle Mixer, Double

ID Fan 29,613 cfm at 23" sp. Mfg by Northern Twin shaft paddle mixer, stainless steel. GEA Barr Rosin. Bed/Mixer size 68" wide x 26' long, Overall physical dimensions 36' 8" long x 8' wide x 9' 6" tall. Belt driven by 125 HP motor 1800 rpm frame 444T 460/3/60. Gearbox ratio 43:1 (885 rpm to 21 rpm). Shaft rotational speed 21 rpm.

Item X-5208

Disintegrator

Disintegrator. Size 84" dia x 42" wide cold disintegrator. Beater section 3' 6" wide x 84" dia. Overall dimensions 10' 6" length x V-belt drive (5 grooves) by 150 HP motor at 900 rpm for an operating speed of 278 rpm TEFC frame 449T 460/3/60.

Item X-5210



Cyclone 10' dia

Screw Conveyor ss304 - 14" dia x 10' long. Cyclones approx 10 ft dia x 39 feet tall. There are (4) of these, priced separately - same design but two are opposite handed. Includes a header for a set of two.

Item CYVM-11

Screw Conveyor ss 30" dia

Stainless steel screw conveyor. Two inlets, three discharges. Size 30" dia x 31' 8" long. Spacing 18" and 30". One screw shaft right handed 19'-3" long and one screw left handed 11'-7" long. Material ss304 shaft and housing. Driven by 30 HP motor belt driven to 56 rpm head shaft speed.

Item X-5204



Screw Conveyor ss 30" dia

Stainless steel screw conveyor, two inlets, one discharge. Size 30" dia x 12' 6" long. Driven by a 25 HP motor 1800 rpm belt driven to 30 rpm head shaft speed. Material 304 ss, housing 304ss. Used as Pre-separator recycle screw.

Item X-5206



Components continued



Screw Conveyor ss 30" dia

Stainless steel screw conveyor. Size 30" dia x 16' 7" long. Material ss304 screw/ss 394 housing. Driver by 40 HP motor 1800 rpm belt drive to 35 rpm head shaft speed. Used as Disintegrator feed screw.

[Item X-5209](#)



Screw Conveyor ss 20" dia

Stainless steel screw conveyor by GEA Barr Rosin. Size 20" dia x 19' 7" long. Material ss304 housing/ss304 screw. Driven by 10 HP motor 1800 rpm belt driven for 40 rpm head shaft speed. Used as cyclones B discharge.

[Item X-5212](#)



Screw Conveyor ss 20" dia

Stainless steel screw conveyor by GEA Barr Rosin. Size 20" dia x 19' 7" long. Material ss304 housing/ss304 screw. Driven by 10 HP motor 1800 rpm belt driven for 40 rpm head shaft speed. See drawing in link. Used as cyclones B discharge.

[Item X-5213](#)



Screw Conveyor ss 12" dia

Screw conveyor carbon steel, Size 12" dia x 11' 11" long. Has trough inlet for baghouse discharge.. Material cs housing/cs screw. Belt driven by 5 HP motor 1800 rpm for a 57 rpm head shaft speed. Part of the baghouse filter and will only be sold with it. Baghouse filter discharge screw conveyor.

[Item X-5217](#)



Screw Conveyor ss 18" dia

Screw conveyor by GEA Barr Rosin. Stainless steel. Size 18" dia x 16' 5" long. Material ss304 housing/ss304 screw. Driven by 10 HP motor 1800 rpm belt drive to 35 rpm head shaft speed. Used as Fluid bed feed screw conveyor.

[Item X-5218](#)

Stack ss 65 ft

Stainless steel stack, size 56" OD x 65 ft tall insulated duct. Dryer exhaust design 175,000 acfm (bleed off to RTO 63,000 acfm) Material ss 304L. Used as exhaust stack for Dryer system.

[Item ME-5201](#)



Components continued



[Drag Conveyor ss 31 ft](#)

Tramco drag conveyor stainless steel 24" w x 20" H x 31 ft long OAL (23 ft CL inlet to CL discharge). Designed for a 14° incline. Model G chain conveyor designed to move wet distillers grain at 7500 cu ft/hr 115 fpm. Inlet area approx 15" x 48"/outlet 24" x 30". Driven by 15 HP motor. Material SS304, flights UHMW polyethylene. Sn G-4178. Used as Dryer Transfer Conveyor.

[Item Y-5202](#)



[Drag Conveyor ss 68 ft](#)

Tramco drag conveyor stainless steel 304. Model G, Size 15" w x 20" H x 68 ft long. Material stainless steel 304. Designed for wet distillers grains at 3,750 cu ft/hr 115 fpm. Driven by 15 HP motor. Sn G-4179. Straight conveyor at incline rising 17.5 ft. Used as Dryer Feed Conveyor.

[Item Y-5203](#)



[Drag Conveyor ss 54 ft](#)

Tramco drag conveyor stainless steel 304. Model G, Size 24" w x 20" H x 54 ft long x 61 ft OAL. Designed for wet distillers grains at 7,500 cu ft/hr 115 fpm. Driven by 35 HP motor. Sn G-1358. Used as Wet Cake Pad Conveyor.

[Item Y-5204](#)



[Drag Conveyor ss 84 ft](#)

Tramco Bulk Flo drag conveyor 8"H x 20" wide Chain conveyor. Configuration Horizontal (22.5 ft) to vertical (56.75 ft) to horizontal (13 ft). Length overall 84' 8". Overall height 52' 2" from top of inlet to bottom of discharge flange. Designed for 3,333 cy ft/hr ay 23 lbs/cuft. Speed 64.7 fpm. (2) Inlets 20" x 14". Outlet 24" x 20". Conveyor material ss304. Flights UHMW polyethylene. Conveyed material DDGS. Driven by 15 HP motor. Used as DDG cyclone reclaim drag conveyor.

[Item X-5216](#)



[Baghouse Filter 3719 sf](#)

MAC baghouse filter dust collector, model 120RPT224 style 111. Serial number 112578-001-1. Carbon steel shell with 224 bags polyester 16oz for 3,719 sq ft filter area. Designed for 22,100 cfm at 17SF max. Air pulse cleaning uses 42 scfm at 90-100 psig. Air to media ratio 5.94:1 at 22,100 scfm. Includes sprinkler system (31.4 gpm per sprinkler x 3). Physical size 148" x 142" x 369" OAH.

[Item FBAG-31](#)

Components continued



Blower Combustion Fan 150HP

Combustion fan for ring dryer by Twin City Fan & Blower. Type HIB, Arr 1. Width SW, size 360, rotation CCW. Rated at 26,211 cfm at 21.3 sp. Sn 07-234050-2-1. Driven by 150 HP motor. Size approx 114" x 64" x 102". Used as combustriion fan FANC-11 for ring dryer.

Item FN-5201



Blower Main Fan 1200HP

Robinson Fan type 97" x 11-1/4" BI1120, Arr 3. Designed for 189,339 scfm at 30" sp. Material ss316 sn DA-98BI1120-118. Driven by 1200 HP motor Mfg TECO Type AEJH-TK, frame 1185 rpm. Physical size (w/o motor)" 149" wide x 119" deep x 186" tall. Used as Main ring dryer fan FANC/12.

Item FN-5202



Blower Exhaust Fan 150HP

Twin City blower with 150HP motor. Designed for 22,975 cfm at 32.3" WC static pressure. Model HIB-SW, size 400, sn 07-234050-1-1. Driven by 150HP motor. Overall size 60" diameter x 61" wide x 75" high. Used as ring dryer components fluid bed cooler (dryer) exhaust FANC-31.

Item FN-5203

Preseparator

Preseparator 45" x 84". Overall Physical size approx 14' 4" wide x 18' 10" deep x 27' 4" tall. Weight 19,000 pounds

Item VK-2026



Components continued

Rotary Valve 30"

Rotary motor driven airlock valve by Rotolok. Size 30" x 30" cast iron precision bore with stainless steel eight vane rotor open end adjustable for temps up to 194F
[Item RV-5201](#)



Rotary Valve (2) 20"

Rotary motor driven airlock valve by Rotolok. Size 20" x 20" cast iron precision bore with stainless steel eight vane rotor open end adjustable for temps up to 194F. Driven by 2 HP motor. Used as RVAL-12 A and RVAL-12B under cyclone screw conveyor.
[Item RV-5202](#)



Rotary Valve 24"

Rotary motor driven airlock valve by Rotolok. Size 24" x 24" cast iron precision bore with stainless steel eight vane rotor open end adjustable for temps up to 194F.
[Item RV-5204](#)



Rotary Valve 18"

Rotary motor driven airlock valve by Rotolok. Size 18" x 18" cast iron precision bore with stainless steel eight vane rotor open end adjustable for temps up to 110F.
[Item RV-5206](#)



Rotary Valve 14"

Rotary motor driven airlock valve by Rotolok. Size 14" x 14" cast iron precision bore with stainless steel eight vane rotor open end adjustable for temps up to 110F.
[Item RV-5207](#)



Ring Dryer Item DR-5201

DR-5201

Ring Dryer Components

Item #	Components	Size	Material	Motor
DR-5201	Ring Dryer			
PK-FBST-31	Fluid Bed Cooler & Baghouse	7 ft W x 19 ft L x 18 ft OAH		
FBAG-31	Baghouse Filter 3719 sf	148" x 142" x 369" OAH		
VK-2024	Burner Lo-NOx	135" long x 31" deep x 86" tall		
X-5207	Paddle Mixer, Single	32 ft L x 3 ft W x 4'8" H		75 HP
X-5208	Paddle Mixer, Double	36'8" L x 8 ft W x 9'6" H		125 HP
X-5210	Disintegrator	84" dia x 10'6" long		150 HP
CYVM-11	Cyclone 10' dia	10 ft dia x 39 ft tall		
X-5204	Screw Conveyor	30" dia x 31'8" long	SS304L	30 HP
X-5206	Screw Conveyor - pre-separator recycle	30" dia x 12'6" long	SS304L	25 HP
X-5209	Screw Conveyor - Disintegrator feed	30" dia x 16'7" long	SS304L	40 HP
X-5212	Screw Conveyor ss	20" dia x 19'7" long	SS304L	10HP
X-5213	Screw Conveyor ss	20" dia x 19'7" long	SS304L	10 HP
X-5217	Screw Conveyor - baghouse filter	12" dia x 11'11" long	CS	5 HP
X-5218	Screw Conveyor - fluid bed	18" dia x 16'5" long	SS304L	10 HP
Y-5202	Drag Conveyor - Dryer Transfer	24" W x 20" H x 31 ft L	SS304L	15 HP
Y-5203	Drag Conveyor - Dryer Feed	15" W x 20" H x 68 ft L	SS304L	15 HP
Y-5204	Drag Conveyor - Wet Cake Pad	24" W x 20" H x 54 ft L	SS304L	35 HP
X-5216	Drag Conveyor - Cyclone Reclaim	20" W X 8" H x 84'8" OAL	SS304L	15 HP
FN-5201	Blower Fan - Combustion fan	114" W x 64" deep x 102" T		150 HP
FN-5202	Blower Fan - Main ring dryer fan	149" W x 119" deep x 186 T		1200 HP
FN-5203	Blower Fan - Fluid bed cooler	60" dia x 75" H		150 HP
RV-5201	Rotary Valve - pre-separator	30" square		3 HP
RV-5202	Rotary Valve (2) 20"	20" square		2 HP
RV-5204	Rotary Valve	24" square		3 HP
RV-5206	Rotary Valve - Fluid bed	18" square		1.5 HP
RV-5207	Rotary Valve - Rotary discharge	14" square		1 HP
VK-2026	Preseparator	45" x 84"		
VK-2027	Dryer Instruments ~ approx. 350			

Terms: All equipment is sold As Is Where Is, Subject to prior sale and availability. All quotes are in US Dollars unless specifically noted otherwise. Description of the equipment - especially those relating to capacity, size, or condition - are stated as clearly as possible for information to the buyer or observer. The descriptions and representations cannot be taken as accurate. The buyer has the sole responsibility to determine size, capacity, capability, suitability, condition, or any other attribute pertaining to the piece of equipment represented or purchased. The assets are sold "As Is", "Where Is" and "with all faults" and except as explicitly stated in the Contract for Purchase. All warranties, including, without limitation, the warranties of merchantability, quality, and fitness for a particular purpose are hereby expressly excluded. Seller makes no representations or warranties as to design, condition, capacity, performance, or any other aspect of the asset.