

Asset Catalog for Plants & Systems (47 Items)

Asset	Description	Condition	Location
Columns		11 Items	
BDU Biodiesel Unit Asset ID: X2058	Biodiesel Recovery Unit (BDU) for Biodiesel 5 MGY plant. Size estimated at 2 ft dia x 8 ft tall, insulated . No more information available, specs unknown	Used - Fair	
		Mississippi	
Distillation Column 14" Asset ID: 8136 Paul Mueller Company	Glycerin Distillation Column. 14 inch Distillation Column built in 2006 by Paul Mueller Company. NEW S/N 357210-89. ASME NB# 43140 MAWP 50 psi @ 450F. Material: 304L stainless steel. 3 pieces - 313 inches overall height. NEW	New, Old Stock	
		Virginia	
Distillation Column 24" Asset ID: 8137 Paul Mueller Company	Methanol Distillation column. NEW - Built 2006 by Paul Mueller Company. 24" Distillation Column. S/N 357209 97-99. 4 pieces - 544 inch overall height. ASME MAWP 40 psi @ 250F. Material: stainless steel 304L. NEW. Empty Weight: 6116 pounds	New, Old Stock	
		Virginia	
Glycerin Coalescer Packed Tower 24" dia Asset ID: X2018 Ducon Environmental Systems	Column coalescer. ASME MAWP 14.5/F.V. at 392F. Material ss 316L. Packed tower, Capacity 750 gallons. Size must be measured but approx 2 ft dia x 15 ft tall. Last used as glycerin coalescer	Used - Good	
		Mississippi	
HP Vertical Column Asset ID: C-210 EnerFab	Hydrolis Column - EnerFab 6000 gallon vessel. MAWP Interior 3000 psig @ 750F, MAWP Exterior 165 psig @ 750F, MDMT - 20 F @ 3000 psig, Jacket MAWP 150 psig @ 750F, MDMT -20F @ 150 psig, S/N 1410086-1. 2 ft I.D. Jacket and 50 ft 6 in OAL	Used - Good	
		Illinois	
HP Vertical Column Asset ID: C-310 EnerFab	EnerFab 400 gallon vessel. MAWP Interior 3000 psig @ 750F, MAWP Exterior 165 psig @ 750F, MDMT - 20 F @ 3000 psig, Jacket MAWP 150 psig @ 750F, MDMT -20F @ 150 psig, S/N 1410086-2. 2 ft I.D. Jacket and 35 ft 6 in OAL	Used - Good	
		Illinois	
HP Vertical Column Asset ID: C-408 EnerFab	EnerFab 400 gallon vessel. MAWP Interior 3000 psig @ 750F, MAWP Exterior 165 psig @ 750F, MDMT - 20 F @ 3000 psig, Jacket MAWP 155 psig @ 750F, MDMT -20F @ 150 psig, S/N 1410085-1. 2 ft I.D. Jacket and 50 ft 6 in OAL	Used - Good	
		Illinois	
Methanol Distillation Column Asset ID: E-612X SRS	Methanol distillation system and structure for a 15 MGY biodiesel plant. Self Contained Skid and structure- Modular Distillation, by SRS. Structure is approx 12 ft x 12 ft x 40-45 ft tall. Specs unknown	Used - Fair	
		Mississippi	
Methanol Recovery Unit (MRU) Asset ID: X2048	Methanol recovery unit.for Biodiesel 15 MGY plant. Size estimated at 2 ft dia x 12 ft tall. No more information available. Specs unknown	Used - Fair	
		Mississippi	

S4M Asset Catalog

Listed in Category Order. Click on an Asset Name for more details.

<u>Packed Column Biodiesel Distillation</u> Asset ID: C-805 Fenix	Packed Column - Fenix Column 8500 gallon, 5.6 ft dia x 79.6 ft SS, SN E-412 (330412.01.13), Design pressure FV/2.0 KG @ 250C. Last used as Biodiesel Distillation Column	Used - Very Good
		Illinois
<u>Packed Column Methanol Distillation</u> Asset ID: C-704 Fenix	Packed Column - Fenix Column 5400 gallon, 4 ft x 76 ft SS. Last used as Methanol Distillation Column	Used - Very Good
		Illinois

Columns/Scrubber		2 Items
<u>Scrubber</u> Asset ID: X2050	Scrubber. Specs unknown	Unrated
		Mississippi
<u>Wet Scrubber, Chemical</u> Asset ID: FB-51 Viron	Acid scrubber. Chemical scrubber, vertical, Sits on reservoir 34" x 60" rectangular with pump. Scrubber is 2 ft dia x 15 ft tall. Designed for vacuum. Mfg is Viron International, Model VCA-36-FRP-0.3-36 Carbon. Serial 13352. Designed for 300 cfm. Has EchoSpan level indicator transmitter and FRP mist eliminator pad at packing depth 28"	Used - Good
		Illinois

Emissions Control/Electrostatic Precipitator		1 Items
<u>Wet Electrostatic Precipitator</u> Asset ID: 8234 Lundberg	Lundberg Wet ESP (WESP) A wet electrostatic precipitator (wet ESP) or (WESP) uses electrostatic forces to remove particulate matter emissions in exhaust gas streams. It is a particulate matter control device that functions by employing an intense electric field to ionize/charge and capture particles and droplets onto a collection surface. A.H. Lundberg's Wet Electrostatic Precipitators can achieve up to 99% collection efficiency, and outlet loading of less than 10 mg/Nm ³ . The collection of fine particulate emissions is often one of the most difficult environmental control problems faced by industry. These sub-micron particles (e.g. PM 2.5) present a significant threat to human health and are one of the leading causes of smog. As regulatory pressure to reduce the emission of these particles to the environment escalates, industrial operators must look for technologies to meet this challenge at reasonable capital and operating costs.	Unrated
		PA

Farming		1 Items
<u>Harvester for Tobacco / Hemp</u> Asset ID: 8563 Kirpy	Kirpy Harvester. Model RMTD capable of cutting 1800 to 2200 stalks per hour, cuts and loads directly onto a trailer with no manual intervention.. The RMTD harvester makes quick work of large scale hemp harvests. The PTO powered harvester can process plants up to 5' tall and a 2.5" inches in diameter at a rate of up to 2200 stalk/hour. Last used for hemp harvesting. Working width 3.85 m : Conveyance width 2.50 m : Total weight 850 kg : Use with tractor 3-point hitch with PTO speed 540 rpm :Tractor power to be at least 50-60 hp :Cutting height 3-6 cm : Drive Hydraulic	Used - Good
		Colorado

Machining		1 Items
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Waterjet Cutting Unit Asset ID: 2727 KMT	<p>KMT Hydrobrasive Waterjet Cutting Unit - Low Hours - Like NEW</p> <p>Specifically designed for either high pressure pure waterjet cutting and Hydrobrasive waterjet cutting. This sale includes the following:</p> <ul style="list-style-type: none"> • Streamline VI 40 Intensifier 480v w/ 40 HP pump and starter • IDE Abrasive System Kit 10/30 w Xfer/Feedline V • Nozzles, adapters, tubing kit, HP gauge 100k psi, extended life diamond orifice • Basic spares kit and tool kit <p>The STREAMLINE VI intensifier standard features:</p> <ul style="list-style-type: none"> • Completely self-contained, minimum-footprint unit with built-in controls and motor starter • Microprocessor control offers intelligent diagnostics • Digital, color touch screen panel with choice of eleven languages • Low voltage (24VDC) internal controls for safety • Standard dual-pressure control to facilitate piercing and kiss cut applications- Standard high-pressure fluid or water leak detection • Variable displacement, pressure-compensated hydraulic pump technology • 60,000 psi design pressure • Exclusive long, slow stroke to minimize cycling fatigue. Electronic reversing • HYPERLIFE seals with superior 4-piece design • Cartridge-type hydraulic seal that can be extracted from the outside to minimize down time • Ceramic plungers. Patented "Quick Plunger Removal" without disassembly of the hydraulic cylinder • Built-in, adjustable inlet water booster pump and filtration system with 10-micron double-length filter • inlet water pressure sensors • High efficiency, heat exchanger in recirculating pump circuit. Conveniently located Dump valve • Enhanced maintenance features includes a separate hour counter, manual piston jog and alarm history • Maximum orifice size .012" <p>Used only for testing. Unit only has 10-20 hours of use. Idle since 2016</p>	<p>Used - Excellent</p> <p>South Dakota</p>
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Plants/Biodiesel		7 Items
Biodiesel Plant 10 MGY Asset ID: PK-2800	<p>Continuous Biodiesel Plant rated at 10 MGY for sale as a complete Asset Sale. Ready to Run - very little CapEx needed. Sale includes 6.7 acres land and buildings approximately 9600 sf under roof. Includes truck scale, loadout system, (10) tanks for 330,000 gallons + process tanks. Equipment and systems are maintained and ready to start, trained plant manager on site. Power and all utilities have remained on and plant has been maintained since being idled. Ready to start immediately. Continuous design with all new or renewed equipment. All stainless steel construction including piping. (except reactors). Brand new Goulds pumps and glycerin distillation system. Automatic operation through Allen Bradley plc and HMI control. No rail on site but there is a spur rail next door fed by Norfolk & Southern. Will require a renovation of existing track. The plant can handle RB and clean oils to 3% ffa. Plant was built in 2007, sold and completely renovated in 2016, operated until 2018 when idled. It has also had limited runs in May-June 2022.</p>	<p>Used - Excellent</p> <p>Moberly, MO</p>

<p>Biodiesel Plant 15 MGY Asset ID: PK-5200</p>	<p>Biodiesel Plant 15 MGY</p> <p>Biodiesel plant with nameplate rating at 15 MGY (million gallons per year). Was designed to run soybean oil and was in operation on crude degummed oil. Complete plant is available - must be relocated. Does not include electrical. The entire plant is inside in a protected building except for the methanol distillation column. Allen Bradley plc controls. Still installed. Plant never met nameplate capacity but average rate was between 6 to 8.7 MGY. In operation from 2020 to late 2021. Includes all in-process tanks, The 18 outside storage tanks are available on Asset 2365 and Asset 2366.</p> <p>We have details and drawings in our Virtual Data Room (VDR) - available upon invitation.</p> <ul style="list-style-type: none"> • (3) biodiesel reactors • (3) horizontal settling tanks • Glycerin coalescer distillation column • Biodiesel coalescer distillation • MRU methanol recovery unit distillation column & system • Cold soak filtration system - Vertical pressure leaf filter and (2) plate and frame filters including slurry and earth handing systems • (2) Hydrasep oil water separators • Air compressors, pumps, heat exchangers • Allen Bradley controls, HMI 	<p>Used - Good</p> <p>Greenwood, MS</p>
<p>Biodiesel Plant 15 MGY Asset ID: PK-2620</p>	<p>Biodiesel Plant nameplate capacity 15 MGY</p> <p>Idle biodiesel plant, idled in 2010. Has 750,000 gallons of feedstock storage, 750,000 gallons of finished product storage, and a 100,000 gallon methanol tank. Rail spur holds well over 50 cars and probably closer to 95.</p> <p>The plant has 1.5-million-gallons of feedstock and refined product storage and is well-situated to access the abundant animal fats market in the area, which provides a cheap feedstock for biodiesel production. With its direct rail link to the CSX national railroad and proximity to the port of Savannah, the plant has robust access to major biodiesel and fuel markets. The Property is currently developed with multiple structures and infrastructure associated with a former biodiesel production facility, including a biodiesel refinery building, large methanol and glycerin recovery columns, a boiler house, an aboveground storage tank (AST) farm, a former maintenance shop, multiple covered storage areas, a large exterior concrete storage area, a retention pond, overhead piping, a boiler scrubber pond, and a rail spur. The site is comprised of roughly 6.5 acres within an 18.7-acre parcel.</p> <p>Note: This is not a complete plant - some equipment has been removed. Details will be in the Virtual Data Room (VDR)</p>	<p>Unrated</p> <p>Southeast</p>

<p><u>Biodiesel Plant 15 MGY</u> Asset ID: 7410 Greenline</p>	<p>Biodiesel plant rated for 15 MGY (million gallons per year)</p> <ul style="list-style-type: none"> • Complete plant including land, rail siding, rail & truck loading, 13 tanks. • Rail ties to BN on one end and UP on other end - BN does the switching. • Two separate complete biodiesel trains capable of operating independently on different feedstocks - a 5 MGY system and a 10MGY system. • All electrical, lab, utilities, and auxiliaries. • All automatic - Allen Bradley plc controls and HMI • Can be run in place. If moved, removal is extra • Land size is approx. 6.52 acres. <p>Plant is a Greenline design capable of running multi feedstocks. It ran animal fat during its production. The 10MGY train was added new in 2008 - plant was idled in 2010, then ran again in 2018 and 2019. Now idle. Much more information available in our Virtual Data Room (VDR). Please ask for an invitation. This plant can be used as a terminal - has 12 rail spots, 2 truck spots, and 1.4 million gallons of storage</p>	<p>Used - Good</p> <p>Missouri</p>
<p><u>Biodiesel Plant 3 MGY</u> Asset ID: PK-1900 Greenline</p>	<p>Biodiesel Plant - 3 MGY (million gallons per year)</p> <p>Manufactured by Greenline, this plant ran cottonseed oil in a continuous flow, water free, transesterification reaction and separation modules.</p> <ul style="list-style-type: none"> • On skids and includes in-process tanks. • Fully automatic with plc control; all controls are still there and intact except for the HMI. • No tank farm • No air compressor • This plant was just inspected by the manufacturer in Dec 2021 and all pieces are still there except for some water piping. • The manufacturer notes that this plant is in good condition and very little CapEx will be needed to start the equipment back up. Customer will have to make its own determination. • Plant must move. • Approx space is occupies now is 75 ft x 100 ft <p>Started in 2008 - idled in 2010. We can offer two further options at an additional price: 1. Greenline refurbish all equipment and make ready for start-up. 2. Greenline install and start-up equipment at new location. See information in Links; more data in our Virtual Data Room (VDR).</p>	<p>Used - Good</p> <p>Texas</p>
<p><u>Biodiesel Plant 5 MGY</u> Asset ID: PK-2200 Greenline</p>	<p>Greenline 5 MGY plant complete. Very good condition, built in 2007 and just idled in Sept 2021. In all 15 years of production, this plant did not have more than 3 weeks downtime - designed very well. Production was all animal fat at <4% ffa. It could also run Choice white grease, lard, tallow, brown grease. The front end operation has an Alfa Laval PX centrifuge. Includes an extensive spare parts inventory with spares for every major piece of equipment in the plant. Has an enclosed load out area and a chiller/filter press to meet cold soak requirements for biodiesel,</p> <p>NOTE: This is an orderly negotiated asset sale - all assets must move. Land and buildings are not included. Tanks are not included.</p>	<p>Used - Very Good</p> <p>Hayti, MO</p>

Listed in Category Order. Click on an Asset Name for more details.

<u>Biodiesel Plant 5 MGY</u> Asset ID: PK-1777 Jatro Renewables	Biodiesel Plant nameplate capacity 5 MGY (million gallons per year). Design is super critical reactor type, developed by Jatro Renewables. This design technology allows this plant to handle very dirty high ffa feedstock while operating cheaper than a conventional catalyst biodiesel plant. No toxic catalyst. Output biodiesel is much clearer than conventional biodiesel. See our marketing deck for lengthier explanations. No license fees. All assets are for sale as an entity - must be relocated. All structure included - building is not included. Includes lab equipment. See Marketing Deck general arrangement in Link. Operated from Nov 2015 to 2019 - now idle.	Used - Very Good Illinois
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Plants/BioRefinery and Edible Oil

2 Items

<u>BioRefinery Plant 200 TPD</u> Asset ID: PK-2610	<p>Bio Oil Refining & Pretreatment Plant 200 TPD (18 MGY) - OR - Biodiesel Plant</p> <p>Stainless Steel Plant</p> <p>Plant is still in operation. The plant (originally a stainless steel biodiesel plant), has added capability to clean up vegetable oil by refining for the renewable diesel industry, and by using enzymatic hydrolysis to create fatty acids. Most of process is stainless steel. Information and photos available in Virtual Data Room (VDR) - please ask for invitation.</p> <p>Includes</p> <ul style="list-style-type: none"> • (5) 7000 gallon ss reactors • (2) 2500 gallon ss reactors • (2) 22,000 gallon ss reactors • Glycerin evaporative dryer • Methanol Distillation rectifier column • 240,000 gallons of tank storage • Rail Access (direct Norfolk Southern) • 26 acres of land - plant is on 5 acres fenced, rest is for expansion <p>This plant is currently operating and is set up very well to refine and clean up oils for other value added products such as renewable diesel. It can handle any lipid including animal fats. SEE Marketing Deck and Virtual Tour in Links below.</p> <p>Overview</p> <ul style="list-style-type: none"> • This plant started acid esterification and transesterification biodiesel production in 2006 demonstrating capacity of approximately 14MM GPY on multi feedstocks, chosen based on economics of each at the time. Feedstocks included UCO, poultry, animal fats, soy and corn oils. Purchased specs were 15 % FFA, 2 % MIU, 1 % Moisture MAX. Finished biodiesel product met or exceeded ASTM D6751 • In 2022 the facility switched to enzymatic hydrolysis of soybean oil for the production of Fatty Acids operating at 10 gpm, and later to pretreatment of feedstock up to 18MM GPY. Soybean oil was purchased as a crude degummed specification and produced as produce Fatty Acid and pretreat feedstocks for use in Renewable Diesel facilities. 	Used - Very Good Rome, GA
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<p>BioRefinery Plant 550 TPD Asset ID: PK-2600</p>	<p>Bio Oil Refining Plant 550 TPD - OR - Biodiesel Plant 50 MGY</p> <p>On Mississippi River with Dock</p> <ul style="list-style-type: none"> • This plant has been recently idled - essential personnel are still there. • Land is on the Mississippi River with dock and 2.6 million gallons of storage. • Great for storage or transloading facility, for a renewable diesel feed plant, or other process/biodiesel plant with good infrastructure. Originally it was a biodiesel plant and then added capability for soybean refining and enzymatic degumming. Mainly automatic with plc controls. Plant is currently idle but Plant Manager, Lead Operator, and Logistics Manager are still there maintaining the equipment including turning large motors. Electricity still on and most permits are current. Data room available upon request after signed NDA. SEE Marketing Deck in Links below. <p>Includes</p> <ul style="list-style-type: none"> • 2.6 million gallons of tank storage (62,000 bbl) • Barge dock on Mississippi River • Automatic with PLC controls • Full Lab • 53 acres of land • Rail access (CN) <p>Overview</p> <ul style="list-style-type: none"> • This plant started transesterification biodiesel production 2007 with a name plate capacity of 72 million gallons per year and demonstrated production of 50 million gallons per year. Feedstock was solely Crude Degummed soybean oil, and finished product met or exceeded ASTM D6751. • In 2022 the plant was converted to refine soybean oil from crude or crude degummed soybean oil. The refining process was designed for 144,000 gallons per day (100 gpm) (550 TPD). The operation was limited by feedstock supply chain so the max demonstrated production was 86,000 gallons per day. Refined soy oil processed was sold to Renewable Diesel producers, The refined oil met or exceeded all parties' required specifications. The actual COA's are in the virtual data room • In August 2023, production ceased and the plant was shut down. Critical operations team still in place. 	<p>Used - Good</p> <p>Natchez, MS</p>
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Plants/Crush & Edible Oil		3 Items
<p>Canola Crush Plant 48 TPD Asset ID: PK-1400</p>	<p>Canola Crush Extraction Plant 48 TPD</p> <p>Complete cold-press mechanical crush plant with (4) Contrade ET 6160 oil presses at 500 kg/hr each</p> <p>Includes (4) Contrade presses at 500 kg/hr each, (4) PIAB grain vacuum cleaners, cake pelletizer, AMA pressure leaf filter 12.5 m2 with slurry mix tank system, (4) seed silos at 35 m3 each, (3) square cake silos at 30 m3 each, (3) oil tanks at 17,500 L each, pumps, electrical and motor control, material handling elevator leg and conveyors.</p> <p>See Equipment List in Links for details</p>	<p>Used - Good</p> <p>Ontario, Canada</p>

<p>Crush Plant 150 TPD + Refinery 50 TPD Asset ID: PK-2400</p>	<p>Crush Plant 150 TPD --- RBD Refinery 50 TPD</p> <p>This plant was designed to crush and refine organic soybeans from local farmers. Built in 2002 and idled in 2006. The overall refinery is designed to be a 150 T/D soybean processing plant and a 50 T/D refinery with a majority of the technology provided by the Chinese engineering company Wuhan Friendship Food Engineering Co, LTD. The majority of equipment is of Chinese origin but also includes US manufacturers of major equipment (presses, centrifuge, chillers). Offering complete, for sale as a single entity. Most equipment is inside a building and is protected from weather. Crush includes (3) Dupps presses, cooker, hammermill at meal storage. Refinery includes Alfa Laval degumming and ww centrifuges, bleach, deodorization. Quoted as Complete Plant for run-in-place including land and buildings. See flyer brochure and video walkthrough in Links.</p>	<p>Used - Fair</p> <p>New York</p>
<p>Crush Plant, Mobile 40 TPD Asset ID: PK-6040</p>	<p>Crush Plant - Mobile. Capacity 40 TPD</p> <p>Crush Pant in a Trailer - ready to roll Capacity 40 TPD or 3600 pounds per hour mobile mechanical pressing/crushing plant built into semi-trailer. This unit has very few hours. Built June 2020 and ran until Aug 2021. The Processing unit extrudes and presses soybeans (or oilseeds) into soybean meal and oil. It is an operational self-contained unit with process controls in a 53' van trailer.</p> <ul style="list-style-type: none"> The unit has 2 InstaPro extruders model 2000R 4-head 100HP with soft start control panel, 2 Henan 20 ton presses model 6 YL-165 with 50 HP motor, a Tumble Cooler cooling drum 4' dia x 8 ft long with cyclone and airlock, Lonestar roller mill 6x8, oil recycling system, poly oil storage tank 1600 gallons, HMI touch screen controls with RS232 interface and data logging, and Walder oil foots recycle system conveyor and drive 2000 Kentucky semi trailer 53 ft step deck, insulated (tractor nor included) Power: 480 volt 3-phase 60 Hz for a connected load of 350 HP total; can use Generator or Grid power. <p>Sheds and silos shown are not included See flyer with Equipment List in Links</p> <p>Overview: The extruders are in the rear of the trailer, presses in the middle, then the cooling drum and roller mill going forward. Soybeans drop into the extruders from the top of the trailer. The meal exits the side after the roller mill. The oil storage tank is in the front of the trailer. Oil can be pumped straight out the side to a tanker or to the front storage tank. The storage tank was used in the winter and pumped straight into the tanker in the warmer months.</p>	<p>Used - Good</p> <p>North Dakota</p>

Listed in Category Order. Click on an Asset Name for more details.

<div><div><div>Oil Extraction System, Butane 1 TPD</div><div>Asset ID: PK-6030 SH Capital Holdings</div></div></div>	<div><div><div>Hydrocarbon Butane Natural Oil Extraction System</div><div><div>Rated at approximately 1 TPD (ton per day). Last used to extract CBD, can be used for essential oils. Complete continuous system. Installed NEW in 2020 and idled in 2021. It ran only 5 to 6 batches - very few hours.</div><div><div><div><div><div>• Batch Process designed for 1000 lbs of hemp per run lasting 6 to 8 hours.</div><div><div>(3) butane process pressure tanks 420 gallon horizontal insulated. ASME MAWP 250 psig at 100F with water jacket MAWP 15 psig.</div></div></div><div><div>• Chiller 10 tonR. Temtek BCD-10A air cooled water chiller. Motor 10 HP, refrigerant R-410A</div><div><div>• Alfa Laval plate heat exchanger 84 sf, model M6-Base</div><div><div>• Shell and tube heat exchanger Alleghany Bradford, MAWP shell/tube rated at 150 psig at 350F</div><div><div>• Rosedale ss cartridge filter, model SAN830</div><div><div>• Delta T Systems glycol cooling controls, Model EUW-36E. Heater 36 kw, pump 1.5 HP 230v 3/60</div><div><div>(2) stainless steel jacketed tanks, Lee Tank 40 gallon capacity. MAWP tank 45 psig at 350F, Jacket 100 psi at 350F. Full vacuum vessel internal.</div></div></div><div><div>• Transformer 75 kva MGM. 3-phase 480v to 240v/120 CT</div><div><div>• Process pump, piping</div><div><div>• Most equipment is Like New - Purchased new in 2020. See equipment list</div></div></div></div></div><div><div>We have many photos of this system. Please ask for an invitation to our VDR (Virtual Data Room) to view.</div></div></div></div></div></div></div></div></div></div></div>	<div>Used - Excellent</div>
	<div>California</div>	

Plants/Grain Milling	1 Items
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<p>Grain Milling Plant Asset ID: PK-5106 Agrex S.p.A</p>	<h2>Grain Milling Plant</h2> <p>Agrex grain milling plant rated at 125 bu/hr (85 tons/day). Capabilities: Corn, Wheat, Barley, Oats, Rye, Soybeans, Grain Sorghum - was milling corn for an ethanol plant. Plant is fully automated using Allen Bradley PanelView Plus 1250 controls, 480v 3/60. Built in 2008 and ran through mid 2010 then idled. Stored in a protected warehouse. This plant occupies an area approx 55 ft x 22.5 ft and tallest piece (hopper) is 15 ft. Sold as a complete milling system. For more information and photos of the components, ask for an invitation to the Virtual Data Room (VDR).</p> <h3>Very Good Condition. Ran less than 1000 hours - Fully Automated</h3> <p>Equipment is removed, in a warehouse, and ready to load. Major Equipment --> See Equipment List in Documents</p> <ul style="list-style-type: none"> • Loading hopper • Grain seed cleaner sieve • Destoner • Degerminator • Classifier • Blender • Byproduct collecting beam and filter • Rolling mills • Purifier and filter • Grits and flour transport line • Pneumatic clamp tissue tightener <h3>Operation</h3> <ul style="list-style-type: none"> • Very low hours: Less than 1000 hours. (Paint is still on the augers) • Built 2008, ran through mid 2010 • Briefly started again in 2013/2014 but never was operational - idled again • Started again in 2022 to check out operation. Ran some corn to verify good working condition • No major issues known 	<p>Used - Excellent</p> <p>Illinois</p>
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Plants/Hydrogen		7 Items
<p>Hydrogen Gas Plant 25,000 scfh Asset ID: 5350 Hydro Chem</p>	<p>Hydro Chem hydrogen generating gas plant, pressure swing adsorption type. Capacity is 25,000 SCFH. Reformer designed with 8 tubes (6 installed and 2 available) and a ground mounted waste heat boiler. There are 4 psa columns. The waste heat boiler provides approximately 1 ton/hr of steam export at 230 psig. The high pressure gas compressor is a 60HP Gardner Denver. System is still installed. Does not include control panel or plc - does include instruments, valves, pipes. Built 1977 - Plant idled in 2015.</p>	<p>Used - Good</p> <p>Mexico</p>

Hydrogen Gas plant 50,000 scfh Asset ID: PK-1717 Hydro-Chem	Hydrogen SMR Plant 50,000 scfh Hydrogen gas plant by Hydro-Chem designed to generate at 50,000 scfh (1.2 MMSCFD) at 99.9% purity. Has waste heat boiler, natural gas compressor, 4 psa units, FD fan & ID fan on reformer with space for 12 tubes - 8 reformer tubes were installed with 4 spare tubes to operate at 30,000 scfh to match plant operations capacities. The plant capacity is 50,000 scfh with all tubes installed. Built 1981, relocated and rebuilt in 2005 adding a waste heat boiler system and expanding the footprint, shut down 2018 and mothballed under nitrogen until removed in 2021. There is no catalyst or fill in the reformer tubes, shift converter, desulfurizer, or the PSA's. Missing psa valve skid. Plant footprint is 70 ft x 40 ft. We have P&ID, PFD, GA, and equipment drawings. Much more in our Virtual Data Room - ask for an invitation. Photos show plant as it was installed - it has been removed and stored at a warehouse - ready to load	Used - Good
Hydrogen Gas Plant 80,000 scfh Asset ID: PK-6009 Hydro-Chem	Hydrogen SMR Plant 80,000 scfh Hydro-Chem hydrogen gas plant. Capacity 1.9 MMSCFD (80,000 scfh or 2100 Nm3/hr). Built 2004, in operation until 2021. Was idled with nitrogen blanket on gas side until removed in 2021. Has 20 tube reformer (tubes 3.75"), 4 PSA units, waste heat export boiler. Plant is in very good condition. Design is SMR type (steam methane reforming). Complete plant including controls, plc HMI, programming, manuals, all "as built" drawings. There is no catalyst or fill in the reformer tubes, shift converter, desulfurizer, or the PSA's. Plant designed for no natural gas compressor - fed by higher pressure pipeline. See flyer in links for equipment list. More photos and data available in the Virtual Data Room (VDR - ask for invitation). Photos show as it was installed - now removed and stored at a warehouse - ready for loading	Used - Very Good
Hydrogen Gas Plant 90,000 scfh (Partial) Asset ID: 6530 HydroChem	Hydrogen Generating Plant (partial) <ul style="list-style-type: none"> • Design capacity is 90,000 scfh at 200 psig with a purity of 99.99% pure hydrogen - was running on 10 of its 20 tubes for 45,000 scfh capacity. Burner has been changed out to run the 45,000 scfh capacity. • Reformer can be fired on natural gas or propane - same burner. • Waste heat boiler generating 3,000 to 5,000 #/hr export steam at 250 psig. • PSA plant (4 psa vessels replaced in 1998) with Jamesbury valves kept up to date, Quench pot design. • Plant is missing small natural gas compressor, heat exchangers, and pumps. • Has new tubes, new reformer, and new shift converter catalyst. • Five (5) spare tubes available. <p>Engineered by Hydro-Chem built in 1980. . Plant was shut down in mid 2012, and proper shutdown procedures were followed. Reformer tubes are 6.625" OD, 5.25" ID, 30.825" long and made of alloy HP50 (also known as 25/35)</p>	Used - Good
		Nebraska

<p>Hydrogen PSA System 1.3 MMSCFD Asset ID: 7251 Honeywell</p>	<p>PSA System (pressure swing adsorption)</p> <p>New, Never Installed</p> <ul style="list-style-type: none"> Built by Honeywell UOP in 2023 - New, never installed. Rated at 1.3 MMSCFD (million standard cubic feet per day). OUTPUT 1,534 Nm3/Hr. INPUT 2.05 MM SCFD PSA adsorber vessels rated at 235 psig at 34F / 168F. There are 5 PSA Vessels Plant footprint is 50 ft x 17 ft. Allen Bradley 1756 PLC control system. Two years of operation spare parts available. Unused Adsorbent available. <p>Hydrogen PSA system uses Honeywell UOP Polybed process to generate 99.99% hydrogen from feed gas (2.05 MMSCFD, 209.3psig at 100F, containing 75% of hydrogen) through 5-bed pressure swing absorption vessels. Hydrogen recovery rate from feed gas is 84.5%.</p> <p>Technical Specs and Drawings on Request</p>	<p>NEW</p> <p>Texas</p>
<p>Hydrogen PSA System 7 MM SCFD Asset ID: PK-5107</p>	<p>PSA system (pressure swing adsorption) NEW, Never Operated</p> <ul style="list-style-type: none"> Built by UOP in 1997 - never put in service. Rated at 12.1 MM SCFD flowrate infeed, 7 MM SCFD product output Hydrogen purity 99.9% System pressure 310 psig feed, Adsorber Vessels rated to 345 psig - 4 bed design Supply is Surge tank V-700 and (4) adsorbers and valve/piping skid Valves are Valtec Approx footprint is 20 ft x 37 ft. Weight PSA skid 21,000 lbs, EACH adsorber vessel 19,500 lbs each, Surge tank 62,500 lbs <p>See Links for P&ID and Arrangement. We have manual on request</p>	<p>New, Old Stock</p> <p>Alberta, Canada</p>
<p>Hydrogen PSA System 750K scfd Asset ID: PK-5103 HydroChem</p>	<p>PSA system (pressure swing adsorption)</p> <ul style="list-style-type: none"> Built by Hydrochem in 1998 - never put in service. Rated at 750,000 scfd (standard cubic feet per day) = 30,000 scfh. This is an 8-bed design using Valteck valves. Vessels all are ASME pressure vessels MAWP 270 psig at 150F. Includes Dresser Rand hydrogen compressor on skid - discharge pressure 400 psig - MAWP 440 psig. See all nameplate details transcribed in photo. Compressor cylinder type VIP, nominal bore 12.5 inch, 1250 rpm, serial number 3VC200 <p>Capable of purifying the gaseous composition of H2, CO2, CO, CH4, Ethane and Propane depending on the Mole% of each as long as there is NO Moisture/Condensate in those feed streams. This system can purify H2 better than 99.9%</p> <p>Adsorbents not included (we can furnish information on what the adsorbents were. This unit is now in warehouse storage ready to load</p>	<p>New, Old Stock</p> <p>New York</p>

Presses		1 Items
Fiber Filter Asset ID: 2118 Vincent	<p>Vincent Fiber Filter Sludge Press 300-1500 gpm</p> <p>Sludge Press manufactured by Vincent. Model EF-30. Stainless Steel, serial number 17590-8. 30HP with a capacity of 300-1500 gpm. Built in 2019 and is presently installed in operation. Serial 17590-8 (Se fiber filter model FF-30)</p> <p>Featuring fine filtration of high gpm throughputs, the Fiber Filter is a unique machine. It operates continuously with a fabric filter that is vibrated clean by the process flow, requiring only occasional back-flush cycles.</p> <p>Liquid flows with fiber contents ranging from 0.3% to 1.5% are thickened to a range of 4% to 14% solids with the Fiber Filter. The filtrate liquid is remarkably clear. The Fiber Filter can replace equipment ranging from pre-thickening screens to centrifuges. Fiber Filters can be used both to thicken flow ahead of a screw press and to remove fiber from press liquor. Mechanically the Fiber Filter has a rotating paddle impeller that whirls and pulses the incoming fluid against the inside of a cylindrical filter screen. The filter sleeve, held taught in a frame, is made of a woven polymer fabric. The fabric is available in meshes ranging from 25 microns (0.001") to 300 microns (0.012"). Fabric tension is adjusted from outside the machine, improving sanitation and facilitating operation.*</p>	Used - Very Good Washington
Systems & Packages		4 Items
Evap System Asset ID: PK-6045 Unitech Titanium	Evaporator system rated at 45,000 lbs/hr. Unitech Titanium falling film evaporator manufactured in 1993 but unused until 2008 then operated for approximately 9 months. Includes Incoloy 825 vapor body, 15,862 SqFt heat transfer section with 872 Grade 2 Titanium 2 inch OD tubes x 36 ft long; and MVR compressor driven by a 500HP motor. Design train capacity is 92 GPM, distillate flow 83.95 gpm. This converts to 44,457 lbs/hr water evaporation. Price includes manual valves and selected ss304 and ss316 piping manifolds, and structural foundation for evap vessel and deaerator. Ladders, grating, and access steel also available.	Used - Excellent Saskatchewan
Railcar Dumper System Asset ID: 1070 Heyl & Patterson	Heyl & Patterson Rotary Railcar Dumper System Designed to handle 3000 TPH. Can purchase outright to relocate. Included - Dumper, 309 ft conveyor, 2 control rooms, building over the dumper, all electrical, dust suppression system. Details - Inclined conveyor capacity 3000 TPH, 72" wide x 309' long at 476 fpm. Roller spacing 1'-0" with 450 HP motor drive. Inclined 16 degrees, length 309'-10-1/4" pulley centers. Also a feeder conveyor 96" wide x 16 ft long at capacity 3000 TPH, Size/Belt Speed 96"/110 FPM- Variable Speed Roller Spacing 1'0" Max HP 125 motor 16'0" Pulley Centers. Hoppers: Dims and Angles 24' W x 47' L x 35' Ht, 74.8 Min Slope, 70 degree Angles Lining 1/2" Tivar 88 Steel Thickness 3/8". Conveyor is all galvanized, aluminum conduit, walkway on one side, Paramax 9000 gearbox. Railcar Dumper is equipped with ventilation fans, dust suppression system, 5 ton hoist, Hazleton sump pump model 75-350 SHW, Cutler Hammer MCC rated at 2500A horizontal bus 480v 3/60. . Not Included: rotary stacker conveyor shown at end of run. Installed 2010 and idled in 2012 - used approx 2 years.. See videos in Link. The video showing operation is not this one but is typical.	Unrated Marissa, IL
Rotary Steam Tube Dryer System #1 Asset ID: PK-5410 Davenport	Complete rotary steam tube dryer system #1. Drum size is 11.75 ft dia x 70 ft long. Model RSTD. Ser num 33007. Designed for evap capacity 29,397 #/hr. Material 304L. Driven by 100HP motor. For dryer details and photos see Asset DR-5410. All ancillary equipment for the steam tube rotary dryer system. Includes single shaft paddle mixer, ss drag conveyors, screw conveyors, cyclones and rotary valves, main fan, ss stack. For a list of all these components, enter PK5410 in search box.	4 Canton, IL
Rotary Steam Tube Dryer System #2 Asset ID: PK-5420 Davenport Barr-Rosin	Davenport Rotary Steam Tube Dryer No. 2 Size 11.75 ft dia x 70 ft. Model RSTD. Designed for evap capacity 29,397 #/hr. Material 304L. Driven by 75HP motor,. For dryer details and photos see Asset DR-5420. All ancillary equipment for the #2 steam tube rotary dryer system. Includes pre-mixer, double shaft paddle mixer, ss drag conveyors, screw conveyors, cyclones and rotary valves, main fan, For a list of all these components, enter PK5420 in search box.	4 Canton, IL
Systems & Packages/CHP		1 Items

Listed in Category Order. Click on an Asset Name for more details.

<u>Biomass Boiler & Turbine GenSet 20MW</u> Asset ID: 2086 FSE Factory Sales & Engineering	Biomass Boiler & Turbine GenSet 20MW Equipment only - building not included FSE biomass boiler 1100 psig rated at 325,000 lb/hr Serial Number 11-2037, ASE Nat'l Board #51. Burning grindings from bales - fed by Detroit stokers. GE Generator	Unrated
		Kansas

Systems & Packages/Distillation		1 Items
<u>Brine Distillation System</u> Asset ID: 1725 RCC GE	GE brine crystallizer system for zero liquid discharge. Was originally RCC system built in 2006. Decommissioned in 2011. Complete system consisting of deaerator, crystallizer (approx 96 inches OD x 28 ft tall), rinse and waste tanks, APV plate heat exchanger, 5 Goulds pumps. Still installed. See links for drawings, P&ID and Process Flow Diagrams. We have drawings of major pieces of equipment on request. Price quoted includes contractor removal and loading estimate and is subject to change.	Used - Good
		MN

Systems & Packages/Edible Oil		2 Items
<u>Bleacher - 150 TPD Stainless</u> Asset ID: 5718 DeSmet	DeSmet stainless steel vacuum bleacher for continuous bleaching. Total capacity is 150 tons per day. Size 5' diameter with 3.5" insulation, 14' tall. Demister pad section 4' diameter x 5' tall. OAH 19 feet. Includes 2 Krohne stainless steel mechanical flowmeters, one 1" and one 2". Includes additional side mounted small vessel and RTD for level control. Small vessel dimensions 1' diameter x 8' tall with 2" inlet. Includes 2 Masoneilan stainless steel 2" pneumatic control valves. Vacuum unit not available. Includes operators manual. Idled 2014. We have quoted removed and loaded but removal is an estimate. If serious, we can get a quote.	
		Kingston, Jamaica

<p>Fractionation System 118 MTPD Asset ID: PK-1200 DeSmet</p>	<p>Fractionation Systems Pressure 30 bar</p> <p>TWO complete systems including all tanks, pumps, heat exchangers, fitters, piping and controls. Footprint of BOTH systems is 50 ft x 67 ft x 28 ft tall.</p> <p>78 MTPD System</p> <p>Fractionation system - DeSmet, rated at 30 bar (450 psig). Built 1997. Includes (18) vertical crystallizers and Industrieterren membrane filter with 69 plates polypropylene. Capacity 78 MTPD based on first fractionation soybean oil – OR - 18 MTPD OUTPUT based on 2nd Fractionation = 10.5 million pounds product + 3.5 million pounds by-product. Capacity will vary depending on type of operation and oil.</p> <ul style="list-style-type: none"> Membrane filter for fractionation, made by Industrieterrein Wijngaardveld AALST, Belgium. Serial 150 10. Type OGFP1500, rated at 30 bar. Has 69 plates, 1500mm x 1500mm. Filter cake volume = 2,875 liters (759.5 gallons). Filter area 255 sq m, with 25mm cake per cavity. Automatic with plc/HMI. Hydraulic system with dual acting cylinder. <p>40 MTPD System</p> <p>Fractionation system - DeSmet. System built 2000. Includes (6) vertical ss crystallizers and Filox membrane filter with 36 plates polypropylene. Capacity 40 MTPD based on 1st fractionation Soybean – OR - 5 MTPD OUTPUT based on 2nd Fractionation = 2.5 million pounds product + 1.5 million pounds by-product. Capacity will vary depending on type of operation and oil. Stainless steel trough and auger system. Includes all tanks, pumps, electrical, and control systems.</p> <ul style="list-style-type: none"> Filox membrane filter for fractionation, rated at 30 bar (450 psig). Made by Filox - Filtertechnik GmbH, Germany. Type MKF150-36-250H, serial 2117. Has 36 polypropylene plates, 1500mm section - cake volume 1500 liters, cake thickness 25mm, 40.5 sq m filter surface area. Automatic with plc/HMI. Hydraulic system with dual acting cylinder. Hydraulic unit 15HP. Size 6535mm lx 2820mm x 2610mm tall, weight empty 34,785 kg. J4744 FRAC1 <p>NOTE: Missing a 25 ton and an 80 ton chiller that will have to be replaced for a full system.</p>	<p>Used - Very Good</p> <p>Mexico</p>
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Systems & Packages/Slurry & Recirculation		1 Items
<p>Slurry Tank, Rectangular Asset ID: AF17</p>	<p>Slurry tank mixing and pumping system. TK-46 Backwater Tank. Stainless steel rectangular tank with 2 pumps at top. Size of tank is 4 ft x 4 ft x 3 ft tall. OAH 84". Two pumps are Penguin immersible pumps Model PX-15AK-HF driven by 15HP motor. Pump A has 15HP motor at 2850 rpm and pump B has 15HP motor at 3450 rpm.</p>	<p>Used - Very Good</p> <p>Illinois</p>