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



### Asset Catalog for New Equipment (17 Items)

Asset	Description	Condition Location
Boiler/HRSG & Gasifiers		1 Items
	Rentech Duct Fired HRSG System (Heat Recovery Steam Generator)	
	Price Just Reduced	
	This is a <i>brand new</i> HRSG - never used. Model Waterfall Type "O"	
<ul> <li>Rated at 200,000 pph at 400 psig saturated steam with economizer (can also run at 200 psig)</li> <li>Designed for feedwater flow 400 gpm at 439 psig and 228F INCUDES (also see pdf list in link)</li> <li>Natural gas duct burner system and fuel skid with gas train and flame supervision, rated at 136 MMBTU/h</li> <li>Steam Generator System (HRSG) Evaporator. "O" type tube arrangement with steam drum and mud drum, 2" tubes</li> <li>Bypass stack 50 ft x 76" diameter</li> <li>Exhaust stack 50 ft x 76" diameter</li> <li>Economizer - finned tube single pass</li> <li>Boiler Control System: BMS - plc controlled burner management system, CCS - combustion control system, HMI touch scr Allen Bradley plc and HMI</li> <li>Interconnecting duct work</li> <li>Ladders &amp; Gratings</li> </ul>	<ul> <li>Designed for feedwater flow 400 gpm at 439 psig and 228F INCUDES (also see pdf list in link)</li> <li>Natural gas duct burner system and fuel skid with gas train and flame supervision, rated at 136 MMBTU/h</li> <li>Steam Generator System (HRSG) Evaporator. "O" type tube arrangement with steam drum and mud drum, 2" tubes</li> </ul>	NEW
	Texas	
	Rentech had pre-fit all structural steel in the shop. Once they were assembled, photos were taken, and pieces were disassembled for shipment. Rentech will provide 3-D modeling of the complete boiler system including auxiliaries to assist in the system layout and to avoid costly interference and fit-up issues in the field.	
	System has been completed and is now stored in protected warehouse (never has been used)	

#### Centrifuge and Decanter/Centrifuge

1 Items

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



<u>Centrifuge VO 10 ss</u> Asset ID: 1931 Alfa Laval	<ul> <li>New Alfa Laval VO10 centrifuge</li> <li>NEW centrifuge still in original crate. Built in 2021 and never used. This Alfa Laval VO-10 disk centrifuge is aimed for gentle and cost- efficient refining of vegetable oils.</li> <li>Rated at hydraulic capacity 44 gpm for a nominal capacity of 100 MTPD (19 gpm).</li> <li>Direct drive 18.5 KW (25 HP) motor with VFD. 480v 3/60</li> <li>All wetted parts in contact with product are stainless steel 304</li> <li>Controls included</li> <li>Tools included</li> <li>Still in original crates</li> <li>We have the complete specifications in our Virtual Data Room - by invitation</li> <li>Available for immediate shipment</li> </ul>	NEW Colorado
Dryer/Flash Dryer		1 Items
	Vacuum Dehydration Unit	

Vacuum Dehydration Unit	Compact vacuum dehydration unit to remove free water, emulsified water, and minor impurities from oil. Designed for most lubricating,	NEW
Asset ID: 2087 IFS	EHC and hydraulic fluids down to 150 ppm. Possible to use for dewatering used cooking oil (UCO) upon proper testing and approval. Standard features: 300 gph process flow rate, 5kW heater with programmable temperature controller, dry seal vacuum pump,, adjustable flow controls, skid mounted with casters, controls. 440v 3/60. These units are built to order - allow 10-12 weeks ARO. Photo is a catalog photo.	Michigan

Dryer/Spray Dryer

1 Items

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



Spray Dryer, Pilot 22 lb/hr         Asset ID: 2110         Hemraj         Spray Dryer, Pilot 22 lb/hr         Asset ID: 2110         Hemraj         Stainless steel (316L) including the supporting structure         • Electrical heater 20 KW         • 20KW maximum heating power. Inlet temp. 200C, maximum 300C         • Dimensions given are for the spray dryer vessel.         NOTE: We have packing lists, crate sizes, wiring diagrams, and other information. Call or email us.	NEW Kentucky
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	New Filtration Skid - Pilot Size	
	Stainless Steel Skid mounted self contained filter skid. All wetted parts stainless steel 304 Leem Model 24-MVS-40 Vertical Tank, Vertical Leaf, Pressure Leaf Filter Skidded Unit. MAWP ASME and stamped - rated for 90 psig at 300F & Full Vacuum.	
<u>iltration Skid - Pilot Size</u> sset ID: 7467	• Filter vessel is 24" outside diameter with (6) 5-Ply Riveted filter leaves with PZ-80 outer filter cloth constructed of type 316ss on 3" spacing affixed to a common 304ss manifold pipe for 40 square feet (3.716 m2) of filter area. Constructed of type 304 stainless with top & bottom swing bolt closures, top to have a davit and hydraulic jack cover lift for ready access to the filter leaves and hinged bottom cover with a counterweight to facilitate filter cake removal.	NEW
Leem	<ul> <li>Includes all necessary ball valves, gaskets, and piping</li> <li>Slurry tank - 160 gallon pre-coat tank, motor &amp; pump unit: 1x2-8 pump, 3500 RPM, 5 HP; Agitator: Neptune model NO. JG-4.0, gear drive mixer</li> <li>Control panel mounted to skid.</li> <li>Entire assembly mounted to 304 SS support skid.</li> </ul>	New Jersey
	Depending on the product being filtered, the amount of solids, and temperature of the product, the flow rate can vary through the filter. With a typical veg oil product with little solids (maybe 1-2%) the flow rate can be as high as 3,000 to 4,000 PPH. If used for tallow or other fats and oils that may have larger amounts of solids, the flow rate can drop to 2,000 PPH through the filter. Please allow 14-16 weeks for delivery ARO. Note: We can offer this unit as a <b>Rental</b> on a per month basis, first come, first served.	

**Solutions 4 Manufacturing** 

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



Parshall Flume	Parshall Flume NEW	NEW
Asset ID: 1668	3 inch Parshall Flume flow measurement device. Can handle flow rates from 12.5 gpm up to 835 gpm with an accuracy of +/- 2-5%. The Parshall Flume is an economical and accurate way of measuring water flow in open channels and non-full pipes. Fiberglass. Was to be used for waste water treatment flow but never put into service. On pallet - ready to ship	Indiana

Material Handling		2 Items
<u>Compressor Oil Gas &amp;</u> Process	Gas & Process Fluid VG 32 compressor oil, Atlas Copco PN6970390628 fill date March 5, 2021. NEW 55 gallon drum. Only one barrel remaning.	NEW
Asset ID: B2096 Atlas Copco		Peoria, IL
Compressor Oil Turbo	Atlas Copco compressor oil, Turbo Oil Plus, PN6970298402, VG46 55 gallon drums. Fill date was Mar 26, 2021. New. Qty (8) - priced separately	NEW
Asset ID: B2095 Atlas Copco		Peoria, IL

Packaging/Vertical Form	Fill	1 Items
	Like New Vertical Form Fill & Seal Machine (VFFS)	
	by Prodo-Pak. Tested - never used in production. VFF.	
	One Model 4S 3P 320 line 3-lane with Laser etching printer. Fill rate at 150 to 180 pouches/minute.	
<u>Vertical Form Fill Machine</u> <u>VFFS</u> Asset ID: 1085 Prodo-Pak	<ul> <li>Machine Size 7.5 ft x 7.5 ft x 9 ft tall 5,000 pounds</li> <li>Fill volume 1.0 to 3.0 ml. Pouch width 1.5 inches, pouch length 3.0 inches</li> <li>Was set up for filling semi-viscous gel products 1,000 to 5,000 centipoise into four sided seal pouches. Last used for hand sanitizer packets or sachets.</li> </ul>	Like New New Jersey
	Includes the following additional pieces:	
	<ul> <li>Pump skid 80 inch x 48 inch x 60 inch tall 600 pounds</li> <li>Video Jet laser printer 7 ft x 7 ft x 77 inch tall 700 pounds.</li> <li>Video Jet fumes extractor 4 ft x 4 ft x 5 ft tall 300 pounds. See LINKS for specifications.</li> </ul>	

#### Plants/Hydrogen

1 Items

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



	PSA System (pressure swing adsorption)	
	New, Never Installed	
Hydrogen PSA System 1.3 MMSCFD Asset ID: 7251 Honeywell	<ul> <li>Built by Honeywell UOP in 2023 - New, never installed.</li> <li>Rated at 1.3 MMSCFD (million standard cubic feet per day). OUTPUT 1,534 Nm3/Hr. INPUT 2.05 MM SCFD</li> <li>PSA adsorber vessels rated at 235 psig at 34F / 168F. There are 5 PSA Vessels</li> <li>Plant footprint is 50 ft x 17 ft.</li> <li>Allen Bradley 1756 PLC control system.</li> <li>Two years of operation spare parts available.</li> <li>Unused Adsorbent available. 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%.</li> </ul> Technical Specs and Drawings on Request	NEW Texas

Presses/Expeller		1 Items
Press 60 to 95 MTPD	Shann Full Press Model 9-99RT Serial Numbers 3294-1 and 3294-2. Motor HP 370. Brand New - never used or installed. Capacity at Full Press rated to 60 MTPD on soybean - with extruder ahead of it can do 95 MTPD. All parts are there - complete press. RT design	NEW
Asset ID: 5450 Shann	allows the press to be reversed in case of an overload. Quantity (2) sold together as a lot.	Wisconsin

Process/CIP / COP		1 Items
<u>COP Tanks &amp; Systems</u> Asset ID: 1975	Clean Out of Place (C.O.P.) tanksAll stainless steel 304. These are all new tanks. The quote offered is for ONE tank in this configuration shown but we offer 4 different sizes and configurations. COP tank length 10 ft x width 24 " x depth 22 ". Overall height 40 ". Internal spray manifolds and external spray manifolds. Solution pump: 5 HP 3,500 rpm 230v 3/60. Includes (4) 6" caster wheels. See tank drawing in Document Link. • For 6 foot long COP tank subtract \$1,500 from quotation • For 8 foot long COP tank subtract \$600 from quotation • For 12 foot long COP tank, add \$1,350 to quotation • Note: a pipe draining rack can be provided, we can furnish COP tanks with or without recirculating pump	NEW
China	The above outlined Clean Out of Place (C.O.P.) Tanks may be available for shipment, from the manufacturer's factory (China) in an estimated 60 days from date of receipt of an order. Shipping time from the manufacturer's factory to a California Port of Disembarkation is currently erratic; however, believed to be 21-25 days. Terms of Payment: Fifty Percent (50%) deposit with your order Fifty Percent (50%) balance when ready for shipment	Long Beach, CA

#### Process/Reactor

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



	Velocys Fischer-Tropsch Reactors - NEW, Never Used	
	Capacity Design Rate at 175 bbl/day. New Reactors using Fischer-Tropsch technology.	
Fischer-Tropsch Reactors Asset ID: B-1012 Velocys	<ul> <li>Velocys has a patented catalyst and microchannel reactor system that enables production of SAF and Renewable Diesel from a vast range of sources.</li> <li>Microchannel reactor provides a compact modular and scalable solution</li> <li>Catalysts enable high volumetric productivity, 6-10 times that of traditional FT technology</li> <li>System can achieve high per-pass and overall CO conversion and maximize throughput at same fresh syngas to reduce c.5% OPEX</li> </ul>	NEW Houston,TX
	Quantity (4) reactors - priced separately Also available (6) charges of catalyst for these 4 reactors at an additional cost	
Reactor Hydrogenation Asset ID: 1751 DVC Process Technologies	Hydrogenation reactor stainless steel 304. NEW reactor - Volume 20 cu M for a 12.5 MT batch size. (5358 gallons) Has edible oil capacity of 42,000 pounds - designed to run 35,000 pound batches. Cylindrical tank with heating/cooling coils, nozzles for oil, sight glass, hydrogen ports, top mounted agitator. MAWP 90 psig at 500F. OD 2000 mm x height 8000 mm. Shipping dimensions L x W x H are	NEW
	8000 x 2300 x 2500. Will fit into a 40 ft HC container. NEW reactor so we can design to your needs - lead time 10-12 weeks. FOB India Port Nhava Sheva	India

Ultra-high Vacuum (UHV) system Vacuum system is designed to simulate the space environment of a geosynchronous satellite. This includes considerations for vacuum, temperature, radiation, and other factors. Base pressures 1 x 10(-9) to 1 x 10 (-10) torr. Main pieces listed below - See Details of each in Link. Features	Process/Vacuum 1 Iter			
Ultra High Vacuum System       • Vacuum Chamber. Out-High Vacuum Chamber. With all sensors / gadges to simulate the space environment of geosynchronos       Like New         System       • Pumping System, Pfeiffer molecular diffusion vacuum pump       • Temperature Control         • Monitoring and Control System       • Safety System, interlocks       Colorado         Capabilities       • Radiation Simulation       • Solar Simulation	-	<ul> <li>Vacuum system is designed to simulate the space environment of a geosynchronous satellite. This includes considerations for vacuum, temperature, radiation, and other factors. Base pressures 1 x 10(-9) to 1 x 10 (-10) torr. Main pieces listed below - See Details of each in Link.</li> <li>Features</li> <li>Vacuum Chamber: Ultra-high vacuum chamber with all sensors / gauges to simulate the space environment of geosynchronos satellites</li> <li>Pumping System, Pfeiffer molecular diffusion vacuum pump</li> <li>Temperature Control</li> <li>Monitoring and Control System</li> <li>Safety System, interlocks</li> <li>Capabilities</li> <li>Radiation Simulation</li> </ul>	Like New Colorado	

#### Pump/Sump

1 Items

Solutions 4 Manufacturing



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

Sump Pump Asset ID: 1945	Vertical sump pump by Pumpworks model 820. New - stored in warehouse as spare. Size 1.5 x 1 -8 with 8" impeller. Material carbon steel, heavy duty configuration. Rated capacity 25 gpm at 58 ft TDH. Pump serial number 18-23305-8-1. Motor is Baldor 2 HP 1755 rpm	NEW
Pumpworks	230/460v 3/60 TEFC Frame 145TC	Indiana
Tanks & Pressure Vessels/Pressure Vessel		

Vertical Tanks ss	Vertical insulated stainless steel tank, working capacity 5,548 gallons (21,000 liters). NEW - still at factory in China. Tank is stainless 316 with insulation and ss304 cladding. Tanks are designed for and built to ASME at an internal design pressure 7.5 bar (112.5 psig) and a working pressure of 6.5 bar (94.25 psig) although they are not certified by ASME. On legs for OAH 7892 mm (25.9 ft). Flange connections	NEW	
Asset ID: 1966 Tanks USA	are metric 200mm pipe RF flange. Side 500mm manhole. Tanks were for a project that wasn't built. On factory floor now as surplus, ready to ship. Priced as each tank. See tank drawing.	China	