

Complete Systems

Solutions 4 Manufacturing, Inc

Available from Solutions 4 Manufacturing
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System	Item No.	Description	Location
Bleach System 100TPD	4356	Bleach Plant System, Gianazza Built 1974. Capacity about 100TPD. Includes slurry tanks, Gianazza horizontal bleacher, (2) shock filters vertical, 3 stage steam ejector system. For a list of all components in this system, visit the web site www.s4mEquipment.com and enter <code>bleach1g</code> in the search term box.	Mexico
Bleach System 160TPD	4136	Complete bleaching plant with a capacity of 160 MTPD (15,000 #/hr). Includes vacuum bleacher, 2 stage ejector system, (2) Industrial 193 sq ft horizontal pressure leaf filters, slurry tanks, earth feeders, and pumps. Built 1981 - Very Good condition. Two more 425 sq ft filters can be added to raise capacity to 250-300 MTPD Part of 160 mtpd bleaching plant. Enter keyword <code>gble</code> for a complete listing	Mexico
Bleaching system	BL3	Complete bleaching system - continuous. Includes earth hopper with los in weight feeder, filter aid hopper with variable feed screw feeder, vacuum dryer, sihi vacuum pump, shell & tube heat exchanger, and an Industrial filter press. Instantaneous capacity 9,000 kg/hr. Still in operation - will be released May 2008. <code>Bleach3</code>	Toronto, Ontario
Bleaching system	BL2	Complete bleaching system - continuous. Includes earth hopper with los in weight feeder, filter aid hopper with variable feed screw feeder, vacuum dryer, sihi vacuum pump, shell & tube heat exchanger, and 2 Industrial filter presses. Instantaneous capacity 13,600 kg/hr. Still in operation - will be released May 2008. <code>Bleach2</code>	Toronto, Ontario
Bleaching system	BL1	Complete bleaching system - continuous. Includes earth hopper with los in weight feeder, filter aid hopper with variable feed screw feeder, vacuum dryer, sihi vacuum pump, shell & tube heat exchanger, and 2 Industrial filter presses. Instantaneous capacity 13,600 kg/hr. Still in operation - will be released May 2008. <code>Bleach1</code>	Toronto, Ontario
Deodorizer 60TPD Stainless Steel	4108	Stainless steel deodorizer and physical refining system rated for 60 mtpd (5,500 #/hr). Two deodorizing/refining units, deaerator, scrubber system. Designed by Electrotecnia del Caribe, Barranquilla, Colombia. Uses Thermal Fluid mineral oil for heating. Part of 60 mtpd deodorizer system. Enter keyword <code>jdeod</code> for a complete listing	Kingston, Jamaica
Deodorizer 150TPD (East)	3066	Votator deodorizer system rated at 15,000 pounds per hour - EAST system. Complete system including superstructure, valves, piping, and controls. Most controls are operated by a TI 575 plc - INCLUDED in price. 5 tray semi-continuous deodorizer system. Includes scrubber system and distillate recovery, new citric acid metering system. System used Dowtherm as heating media but can be converted to Food Safe Multitherm (Vaporizer not included). Vacuum system is a 3 stage steam ejector with vacuum pump assist for good vacuum. Built in 1975, but complete system underwent an extensive rebuild in 1995 and new style wafer drop valves were installed, The deodorizer is still installed, and was running until Dec 2003. Condition is very good. <code>bfwdeod</code>	Fort Worth, Texas

System	Item No.	Description	Location
Deodorizer 150TPD (West)	3115	Votator deodorizer system rated at 15,000 pounds per hour - WEST system. Complete system including superstructure, valves, piping, and controls. Most controls operated by a TI 575 plc (available but not included in price). 5 tray semi-continuous deodorizer system. Includes scrubber system and distillate recovery, new citric acid metering system. System uses Dowtherm as heating media (vaporizer not included) but can be converted to high pressure steam if desired. Vacuum system is a 3 stage steam ejector with vacuum pump assist for good vacuum. Built in 1975. The deodorizer is still installed, and was running until Dec 2003. bfwdeod	Fort Worth, Texas
Deodorizer 200 TPD Stainless Steel	4036	Deodorizer system 180 MT/day (16,530 pounds/hr), upgraded in 1997 to 200 tpd. Stainless steel shell and trays. Fratelli Gianazza S.p.A., Model Dovert CS-7 (upgraded to 200 mtpd). Vacuum pulls to 4 Torr (4mm Hg absolute). Has Multitherm thermal oil system for heating, and polish filters. Process was running until Aug 2003 - still installed. The entire system was repaired and maintained in very good condition upon shutdown.	Mexico
Deodorizer 300TPD	3499	Johnson Loft Deodorizer 300 Tons per day. Serial 0-581. Built in 1987. Has 4 Stainless steel trays. Carbon steel shell. External heater made for thermal fluid heating. External Cooler with 2 economizer Alfa Laval spiral interchangers. 4 stage steam ejector vacuum system capable of pulling down to 3mm Hg absolute. Designed to run 20,000 pounds/hour modified to run 40,000 pounds/hour. Currently runs 33,000-35,000 pounds/hour. Missing the thermal oil boiler although one can be supplied for a complete system. Process was running until Aug 2004 - still installed. Okcdeod	Oklahoma City
Deodorizer System 100 TPD	4771	Votator deodorizer system with vacuum system. Capacity 10,000 pounds per hour but can run up to 13,000 pounds per hour. Originally built in 1952 but retrofitted with a new deodorizer vessel and 316 stainless steel trays from Chemtron in 1980. Unit has 4 trays with a Super Tray deodorizing tray. It was in operation through July 2007 and in good condition. Shell and trays are in good shape. Vacuum system was upgraded to a 3 stage Kinema circa 1986 - pulls good vacuum. Heating tray is designed for Dowtherm heat medium, but can be retrofitted with coils for high pressure steam. For a listing of all components, please visit the web site www.s4mEquipment.com and enter jaxdeod2 under search terms	Jacksonville, IL
Deodorizer System 100 TPD	4772	Votator deodorizer system with vacuum system. Capacity 10,000 pounds per hour but can run up to 13,000 pounds per hour. Originally built in 1952 but retrofitted with a new deodorizer vessel and 316 stainless steel trays from Chemtron in 1978. Unit has 4 trays with a Super Tray deodorizing tray. It was in operation through July 2007 and in good condition. Shell and trays are in good shape. Vacuum system was upgraded to a 3 stage Kinema circa 1986 - pulls good vacuum. Heating tray is designed for Dowtherm heat medium, but can be retrofitted with coils for high pressure steam. For a listing of all components, please visit the web site www.s4mEquipment.com and enter jaxdeod3 under search terms	Jacksonville, IL
Deodorizer System 200 MTPD SS	G2	Votator Stainless Steel deodorizer system, 20,000 #/hr. Semi-continuous, Complete and in operation through May 2008. Built 1979. Has 5 ss trays. Includes 4 stage vacuum system with 3 steam ejectors and a vacuum pump. Scrubber. Dowtherm vaporizer, heat recovery. Set up for plc complete automation - Square D plc. All controls, automatic valves, instruments. Deodg2	Toronto, Ontario
Deodorizer System 300 MTPD SS	G1	Votator Stainless Steel deodorizer system, 30,000 #/hr. Semi-continuous, Complete and in operation through May 2008. Built 1986. Has 5 ss trays. Includes 4 stage vacuum system with 3 steam ejectors and a vacuum pump. Scrubber. Dowtherm vaporizer, heat recovery. Set up for plc complete automation - Square D plc. All controls, automatic valves, instruments. Deodg1	Toronto, Ontario

System	Item No.	Description	Location
Drum Filling Line	4500	Drum filling line designed to fill 4 drums on a pallet. PLC controlled pallet transfer system, room for 2 pallets staging, 1 pallet filling, and 3 full pallets. All automatic indexing. Filling station sits on a load cell and automatically cuts off at a preset weight. Fills one drum at a time, manually moved by operator. Has Nicol scale system	Fort Worth, Texas
Emulsifier System	4752	Emulsifier stainless steel reactor system complete with condensing system, vacuum system, and peripheral tanks. 6 MT capacity, 15 psig Still in operation - will be released May 2008. emultoronto	Toronto, Ontario
Filling Line, cube shortening-margarine	4450	Complete shortening filling line designed for bulk boxes from 25 pound to 50 pounds. Includes (2) Votator A and B units, a dual head Toledo electronic scale filling head system, in-line metal detector, bag inserter, bag closer, case sealer, and all interconnecting conveyor. This line ran a bag in the box automatically, generally at a rate of 7,500 pounds per hour. Margarine or harder formulation will result in a rate closer to 5,000 pounds/hr. The entire line was running until March 2006, and has been professionally removed and stored in a protected warehouse. For a listing of all components on this line, enter denver50 in the search terms box.	Denver, CO
Filling Line, cube shortening-margarine	4503	Complete filling line for 25 to 50# boxes of shortening or margarine. Includes case erector, bag inserter, dual head filler, hot melt case sealer, Kronos Cartina labeler, and Goring Kerr metal detector. Low level palletizer and 20,000 #/hr Votator also available as option. Line ran 15,000 pounds per hour shortening. Line was installed between 1982 and 1985. Laid out in straight line approx 85 feet long, but can be configured into a U design. For a complete listing of components and their photos, enter cube1 in the key word search box on web site www.s4mEquipment.com	Fort Worth, Texas
Filling Line, cube shortening-margarine	4507	Complete filling line for 25 to 50# boxes of shortening or margarine. Includes case erector, bag inserter, dual head filler, hot melt case sealer. Low level palletizer and 20,000 #/hr Votator also available as option. Laid out in straight line approx 85 feet long, but can be configured into a U design. Line ran 15,000 pounds per hour shortening. Line was installed between 1982 and 1985. For a complete listing of components and their photos, enter cube2 in the key word search box on web site www.s4mEquipment.com	Fort Worth, Texas
Flake System (Roll Type)	4490	Flake Roll. Drum is 4 ft dia x 9 ft long. Last used for flaked shortening - used until September 2006. Still installed. This flake roll was custom built, and was rebuilt and rechromed circa 1990. The frame and supports are carbon steel; it is chain/gear motor driven on the end, and the roll is chrome plated. No pits in flake roll - very good condition. 9 liquid feed nozzles. Includes roll, motor and gear/chain drive, platform and stairs, Durco feed pump (see item 4491), Central brand top taper (see item 4492), Toledo scale, and all controls and electrical panels. Overall platform size is 20 ft x 10 ft on 7 ft legs. Enter flake in key word search box on s4mEquipment.com for a list and photos of components	Fort Worth, Texas
Flaking System (Belt Type)	4756	Sandvik flaking belt #C7-2788 complete with Howe Richardson bagging scale model G17, bag conveyor, bag sewing machine, Orion floor stretch wrapper. Also has optional grinder Model 196S. For a listing and photos of all components, please visit website www.s4mEquipment.com and enter Flaking in key word search box	Toronto, Ontario
Fractionation System 15 MTPD	4747	Fractionation system - supplied by DeSmet. Includes (12) vertical crystallizers and Industrieterren membrane filter (made in Belgium) with 39 plates polypropylene. Built 1997. Capacity approx 35,000 #/hr on first fractionation, and 15,000 #/hr on 2nd frac. - veg oil frac1	Jacksonville, IL
Fractionation System 5 MTPD	4744	Fractionation system - supplied by DeSmet. Includes (6) vertical ss crystallizers and Filox membrane filter (made in Germany) with 18 plates polypropylene. Built 2000. Capacity 5TPD stearine fraction veg oil. Stainless steel trough and auger system. Includes all tanks, pumps, electrical, and control systems frac2	Jacksonville, IL

System	Item No.	Description	Location
Hydrogen Gas Plant 10,000 scfh	4064	Howe Baker hydrogen generating plant rated at 270 ncmh or 10,000 scfh. Type SAS III steam methane reforming plant. Waste heat boiler with steam superheater. Pressure swing adsorption type, 3 adsorber columns, purity 99.99%+, at 200 psig. Built in 1982. Includes all equipment - reformer and gas valves, shift converter and zinc oxide (sulfur knock out) tanks, natural gas compressor, and high pressure horizontal storage tank (bullet). Condition is Very Good - plant is ready to start up. Overall footprint 22 ft x 52 ft. We can offer inspection, reconditioning, relocation, and start-up services if desired.	Mexico
Hydrogenation system	3123	Complete hydrogenation system including (3) 60,000 pound converter reactors, (1) 35,000 pound converter reactor, catalyst recovery system, and post bleach system. Has (4) Hercules Filters with a slurry tank & pump each. Bfwhydro	Fort Worth, Texas
Hydrogenation System	4542	Hydrogenation system - batch at 40,000 pound reactor. Includes cs reactor, vacuum system, drop tank, (2) pumps, mineral oil seal for Lightnin sweep agitator, and plate heat exchanger economizer. Filtration system includes (2) Industrial horizontal pressure leaf filters with a spare set of filter leaves. (see items F6151A, F6151B, F6100C) conv151	Jacksonville, IL
Hydrogenation System	4667	Hydrogenation system - batch at 40,000 pound reactor. Includes cs reactor, vacuum system, drop tank, (2) pumps, new style Lightnin sweep agitator, and plate heat exchanger economizer. Filtration system includes (2) Industrial horizontal pressure leaf filters with a spare set of filter leaves. (see items F6154A, F6143B, F6100C) conv154	Jacksonville, IL
Hydrogenation System	4666	Hydrogenation system - batch at 40,000 pound reactor. Includes cs reactor, vacuum system, drop tank, (2) pumps, new style Lightnin sweep agitator, and plate heat exchanger economizer. Filtration system includes (2) Industrial horizontal pressure leaf filters with a spare set of filter leaves. (see items F6153A, F6153B, F6100C) conv153	Jacksonville, IL
Hydrogenation System	4665	Hydrogenation system - batch at 40,000 pound reactor. Includes cs reactor, vacuum system, drop tank, (2) pumps, new style Lightnin sweep agitator, and plate heat exchanger economizer. Filtration system includes (2) Industrial horizontal pressure leaf filters with a spare set of filter leaves. (see items F6152A, F6152B, F6100C) conv152	Jacksonville, IL
Hydrogenation System	4754	Batch hydrogenation system. 18 MT batch hydrogenation system, with drop tank, catalyst addition and removal system, Industrial filter press. Built 1986 Still in operation - will be released May 2008. batchhydro	Toronto, Ontario
Hydrogenation System	4753	Buss 50,000 pound per hour capacity hydrogenation system with heat recovery - continuous. Includes all pumps, heat exchangers, Industrial filter presses, catalyst addition and removal systems. Built 1986 Still in operation - will be released May 2008. busshydro	Toronto, Ontario
Hydrogenation System 100TPD	4355	Hydrogenation system 100TPD capacity, designed by Sullivan Systems. Built 1981. Includes reactor, hydrogen compressor system, post bleach system, and Industrial Filter cat press and heel presses. All instrumentation. Complete system including hydrogen recirculating compressor. Hydrogen use depends on degree of saturation, but this system was designed for 100 MTPD oil throughput in a batch process using 100 nm3/day hydrogen at 99.99% pure. For a list of all components, please visit www.s4mEquipment.com and enter ghydro in the search term box	Mexico
Hydrogenation System 200TPD	3513	Hydrogenation System single converter capacity. Capacity 30,000 pounds. Capacity ranges from 200TPD to 350TPD depending on degree of saturation desired. Carbon steel shell, top entering, sweep agitator. Industrial horizontal pressure leaf filters 300sf are also available in Jacksonville, IL. Complete system except for catalyst filtration system (another can be provided for a complete system. Highly automated with auto valves, sensors. System was running until Aug 2004 - still installed. Okchyd	Oklahoma City

System	Item No.	Description	Location
Hydrogenation System Post Bleach	3266	Hydrogenation, and Post bleach systems. Includes (2) Industrial pressure leaf 200 sf catalyst filters, catalyst handling system with (3) cat slurry tanks and pump systems, (2) vertical pressure leaf polish filters, post bleacher vessel and system, Earth hopper & handling and metering system for post bleach, (2) hydrogenation reactors, slurry tank, pumps, heat exchangers, (2) Kinney liquid ring vacuum pumps. Enter keyword bhydro to view all components	Pawtucket, RI
Margarine & Processing Plant	4814	<p>Complete plant that was producing margarine. The plant has shut down - many of these systems are new – never put into production.</p> <ul style="list-style-type: none"> •<input type="checkbox"/>Most of the equipment is SS316 or SS316L •<input type="checkbox"/>NGianazza continuous deodorizer SS316L rated at 108 MTPD – also capable of physical refining at a slightly slower rate. NEW •<input type="checkbox"/>Lurgi continuous deodorizer SS316L at 36 MTPD •<input type="checkbox"/>Gianazza batch deodorizer SS316L rated at 60 MTPD •<input type="checkbox"/>Bono-Milano steam boiler, 14 ton/hr at 35 kg/sqcm (500 psig). NEW •<input type="checkbox"/>Nickel lined reactors (3) originally used for hydrogenation – capacity 20 ton each. Whole system available •<input type="checkbox"/> (2) G&A crystallizers for margarine •<input type="checkbox"/> (2) complete margarine packaging lines •<input type="checkbox"/> (4) high pressure piston pumps – for margarine crystallization •<input type="checkbox"/>Margarine mix system •<input type="checkbox"/>Wastewater DAF system. SS316L NEW •<input type="checkbox"/>ThComplete lab <p>The complete plant is available and will be disassembled to containers available at Port of Rome, Italy. Partial systems can be purchased as well.</p>	Italy
Nitrogen Generating Plant	4295	Nitrogen generating plant, capacity 2,000 scfh or 55 ncmh. Discharge pressure 70 psi at 100F. Made by C.M. Kemp Mfg. model PSA 595-2 OV3876. Built in 1986. Condition Excellent. Includes oxygen compress, pressure swing adsorption module, and hydrogen catalytic reaction module to produce nitrogen with a 5 ppm max oxygen content. Unit has 77,192 hours. Overall footprint size for the 2 skids is 8 ft wide x 17 ft long for the 2 modules which included 3 feet clearance between the two skidded modules. The accumulators are on a pad that measures approx 8 ft x 8 ft. Part of Nitrogen generating plant 4295. Enter keyword gnit for a listing of all major components	Mexico
Physical Refinery System 70TPD SS	3177	Complete physical refining system by Wurster & Sanger, located in Malaysia. Capacity is 70 tons per day (TPD) and was last used for physically refining palm oil. Originally completed in 1976, it was overhauled in 1984, and mothballed in the mid 90's. The plant is in serviceable shape and includes all equipment necessary to run the process. Major items are Wurster & Sanger deodorizer, vacuum system and scrubber, all intermediate tanks and receivers, intermediate heat exchangers & mixers, pumps, Wurster & Sanger continuous bleaching system and earth handling system & filters. Has a pneumatic control system. We will dismantle and load this plant for you in about 3 to 4 weeks and load it into 40 foot containers - approximately 5 to 7 containers are required. For a complete list of components, please visit www.s4mEquipment.com and enter keyword setref into the search box.	Malaysia
Pouch Packaging System	4303	Shortening pouch packaging system. Includes (2) bag pouch filling machines running at 10,000 #/hr total. Also ammonia compressors (2), ammonia receivers. System runs at 26/min on liter and 30/min on 1/2 liter pouches. For detailed listing of all components, enter gpkg in keyword search on website.	Mexico

System	Item No.	Description	Location
Powder Handling System	4757	Bulk powder handling system - last used for diatomaceous earth (density 10# per cf). Includes silo with 95MT capacity, cone bottom. Designed for unloading from rail or truck into silo, and then blowing powder to (3) day bins in the process. Design to blow into silo, vacuum out to day bins. Bag houses and filters. Still in operation - will be released May 2008. Earthsilo	Toronto, Ontario
Winterizer System 100 TPD	4366	Winterizing System. Designed by Gianazza, capacity 100 TPD. Includes a pre-cooling tank, (3) 45 MT winterizing cells with top entering agitators, (2) 1600 sq ft pressure leaf presses, ammonia refrigeration system. Designed to produce 100MTPD of winterized soybean oil, and 11.1 MTPD of stearine. Filter upgrade in 1991. Structural steel shed and catwalks also available if wanted. For a list of all components, please visit web site www.s4mEquipment.com and enter <code>gwint</code> in the search term box.	Mexico
Winterizer System 50TPD	4121	Fractionation system rated at 50 MTPD. Can be increased to 100 MTPD with more crystallizers. Includes two crystallizer vessels, pump, and membrane filter. This system was used to fractionate palm oil. It is designed for chilled water cooling using a 40 ton Freon chilling system (not included). For a complete listing of each component Enter keyword <code>jfrac</code> in search term box at www.s4mEquipment.com	Kingston, Jamaica

Terms: All equipment is sold As Is Where Is, subject to availability and prior sale. The Bill of Sale will be between Seller and the buyer. 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 Bill of Sale. 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.