SUGAR CAPABILITIES

For Sugar Beet & Sugar Cane

Conveying
Washing/Classifying
Cutting/Milling
Dying
Power Generation
Clarification / Purification
Filtering / Thickening
Carbonization
Lime Furnace / Fans
Evaporation
Crystallization

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Inventory
We maintain large inventories to ensure superior service to all customers.

That Personal Touch
When you call Martin a person answers your call every time.

Complete Manufacturer
We manufacture what we sell, which means we control the quality, inventory levels, deliveries, and cost of our products.

Point-of-Sale Service
We have built our inventories, services, and capabilities to meet the demands of the market areas each of our locations serve.

After-Hour Emergencies
Each of our locations have people on-call for stock, altered, and made-to-order products, 24 hours a day, 7 days a week, 365 days a year.

Superior Field Support
We have field professionals who understand our products, processes, and services. They are available to help better match our offerings with your specific needs.
1a. RECEIVING, MILLING & EXTRACTION OF JUICE
- Sugar Cane: The sugar cane is delivered to the plant by trucks and is unloaded by cranes or other hydraulic mechanisms to a Cone Carrier, which is a row of several MTO engineered class chains, that carry the cane to the plant.
- Products used: Engineering Class Sprockets, Roller Chain Sprockets, Sheaves, Bushings & Couplings, Screw Conveyors, Turn-Over Gear, Screw Classifier, Drum Washer, Cutter, Pulp Dryer, Extraction Tower, Pulp Filter Cake, Thickening Filter.

1b. POWER GENERATION (ELECTRICITY & STEAM)
- Products used: Screw Conveyors, Roller Chain Sprockets, Sheaves, Bushings & Couplings, Vibrating Screen, Screw Classifier, Belt Conveyor, Screw Conveyor, Conveyor Pulley Components, Idlers, Idler Components, Conveyor Pulley Components, Idlers, Idler Components, Screw Conveyors, Drag Conveyors, Conveyor Pulley Components, Idlers, Idler Components, Screw Conveyors, Bagging / Packaging.

2a. JUICE PURIFICATION
- Purification/Clarification: The lime milk helps to prevent sucrose from decaying into glucose and fructose. The milk is then heated and left to cool to saturation temperature; this process precipitates impurities which get held up in the calcium carbonate crystals.
- Products used: Sprockets, Sheaves, Gears, Bushings & Couplings, MTO Gears, Sprockets, Sheaves, Gears, Bushings & Couplings, Drum Washers, Belt Conveyor, Screw Conveyor, Bagging / Packaging.

2b. LIME MILK PRODUCTION
- Lime Milk: The lime milk is recovered through a clarification process which separates the two sugars.
- Products used: Drum Washer, Drum Washers, Belt Conveyor, Screw Conveyor, Bagging / Packaging.

3a. EVAPORATION & CRYSTALLIZATION
- Evaporation: The thin juice goes to the evaporators. In this step, all the water is removed from this juice, resulting in syrup.
- Products used: Drum Conveyors, Screw Conveyors, Drum Conveyors, Bagging / Packaging.

4. DRYING & PACKAGING
- Drying & Cooling: The already refined sugar is washed with condensed vapor, dried with hot air, and classified by the size of the crystals (refined sugar or regular sugar).
- Products used: Screw Conveyors, Sprockets, Sheaves, Bushings & Couplings.

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