ENGINEERING PRODUCTS - SUGAR INDUSTRIES

CHAINS:

1. **Cane Harvesting Chains:**
- *Applications:* Used in sugarcane harvesters to cut and transport sugarcane from the fields.
- *Chain Pitch:* Typically ranges from 6 inches to 12 inches.

2. **Cane Carrier Chains:**
- *Applications:* Transport chopped sugarcane from the harvester to the sugar mill for processing.
- *Chain Pitch:* Varies based on the conveyor system, usually between 4 inches to 12 inches.

3. **Cane Washing Chains:**
- *Applications:* Used in the washing process to remove dirt and debris from harvested sugarcane.
- *Chain Pitch:* Typically around 6 inches to 8 inches.

4. **Cane Cutting Chains:**
- *Applications:* Employed in cane cutting machines to slice sugarcane into manageable pieces for processing.
- *Chain Pitch:* Can vary but commonly around 4 inches to 6 inches.

5. **Cane Carrier Elevator Chains:**
- *Applications:* Lift and transport sugarcane within the sugar mill, facilitating the processing stages.
- *Chain Pitch:* Typically ranges from 6 inches to 12 inches.

6. **Conveyor Chains:**
- *Applications:* Used in various conveyor systems for transporting sugar cane, sugar beets, or processed sugar within the mill.
- *Chain Pitch:* Can vary widely depending on the specific conveyor design and requirements.

7. **Bagasse Conveyor Chains:**
- *Applications:* Transport bagasse, the fibrous residue left after extracting juice from sugarcane, for further processing or disposal.
- *Chain Pitch:* Typically around 8 inches to 12 inches.

8. **Slat Conveyor Chains:**
- *Applications:* Used in slat conveyors for moving sugar bags or bulk sugar during packaging and transportation.
- *Chain Pitch:* Varies based on the conveyor design and load requirements.

9. **Bucket Elevator Chains:**
- *Applications:* Transport bulk sugar vertically within the sugar mill or processing facility.
- *Chain Pitch:* Generally larger, around 12 inches to 18 inches or more, depending on the capacity and height of the elevator.

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10. **Pan Conveyor Chains:**
- *Applications:* Transport sugar crystals within the sugar processing plant during crystallization and drying stages.
- *Chain Pitch:* Typically around 6 inches to 8 inches.

11. **Apron Feeder Chains:**
- *Applications:* Used to feed bulk materials, such as sugar beets or bagasse, into processing equipment.
- *Chain Pitch:* Depends on feeder size and capacity, typically between 6 inches to 12 inches.

12. **Scraper Chains:**
- *Applications:* Clean conveyor belts or remove debris from equipment in sugar processing plants.
- *Chain Pitch:* Varies based on the scraper design and application requirements.

13. **Crystallizer Chains:**
- *Applications:* Move sugar syrup through crystallization tanks for the formation of sugar crystals.
- *Chain Pitch:* Typically around 6 inches to 10 inches, depending on the crystallizer design and capacity.

14. **Bag Handling Chains:**
- *Applications:* Transport filled sugar bags within the packaging area or warehouse.
- *Chain Pitch:* Usually smaller, around 3 inches to 6 inches, to accommodate bag sizes and conveyor layouts.

15. **Cooling Conveyor Chains:**
- *Applications:* Transport hot sugar products through cooling tunnels or rooms to lower their temperature.
- *Chain Pitch:* Depends on conveyor speed and product size, typically ranging from 4 inches to 8 inches.

16. **Pallet Conveyor Chains:**
- *Applications:* Move palletized sugar products within the warehouse or distribution center.
- *Chain Pitch:* Varies based on pallet size and conveyor specifications, commonly between 4 inches to 8 inches.

17. **Molasses Pump Chains:**
- *Applications:* Drive pumps for transferring molasses within the sugar refinery or storage tanks.
- *Chain Pitch:* Depends on pump size and application requirements, usually larger, around 10 inches to 16 inches.

18. **Screw Conveyor Chains:**
- *Applications:* Transport bulk sugar or granulated sugar products through inclined or vertical screw conveyors.
- *Chain Pitch:* Depends on the screw conveyor diameter and pitch, typically ranging from 4 inches to 12 inches.

19. **Clarifier Chains:**
- *Applications:* Used in clarifiers to separate impurities from sugar juice during the clarification process.
- *Chain Pitch:* Typically around 8 inches to 12 inches, depending on the clarifier design and capacity.

20. **Filter Press Chains:**
- *Applications:* Operate filter presses to remove moisture from sugar mud or filter the juice during processing.
- *Chain Pitch:* Varies based on the filter press size and capacity, typically between 6 inches to 10 inches.

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SPROCKETS:

1. **Cane Harvesting Sprockets:**
- *Applications:* Used in sugarcane harvesters to drive the chains that cut and transport sugarcane from the fields.
- *Number of Teeth:* Varies depending on the specific harvester model and chain configuration.

2. **Cane Carrier Sprockets:**
- *Applications:* Drive the chains that transport chopped sugarcane from the harvester to the sugar mill for processing.
- *Number of Teeth:* Typically matched to the pitch and length of the conveyor chain.

3. **Cane Washing Sprockets:**
- *Applications:* Drive the chains that move harvested sugarcane through the washing process to remove dirt and debris.
- *Number of Teeth:* Matched to the pitch of the conveyor chain and the speed of the washing equipment.

4. **Cane Cutting Sprockets:**
- *Applications:* Drive the chains that power cane cutting machines to slice sugarcane into manageable pieces.
- *Number of Teeth:* Matched to the pitch and length of the cutting chain, depending on the machine design.

5. **Cane Carrier Elevator Sprockets:**
- *Applications:* Drive the chains that lift and transport sugarcane within the sugar mill, facilitating the processing stages.
- *Number of Teeth:* Corresponds to the pitch and length of the elevator chain and the lift height.

6. **Conveyor Sprockets:**
- *Applications:* Drive the chains in various conveyor systems for transporting sugarcane, sugar beets, or processed sugar within the mill.
- *Number of Teeth:* Matched to the pitch and length of the conveyor chain, depending on the conveyor design and load requirements.

7. **Bagasse Conveyor Sprockets:**
- *Applications:* Drive the chains that transport bagasse (fibrous residue) for further processing or disposal.
- *Number of Teeth:* Matched to the pitch and length of the bagasse conveyor chain, depending on the conveyor design and load requirements.

8. **Slat Conveyor Sprockets:**
- *Applications:* Drive the chains in slat conveyors for moving sugar bags or bulk sugar during packaging and transportation.
- *Number of Teeth:* Matched to the pitch and length of the slat conveyor chain, depending on the conveyor design and load requirements.

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9. **Bucket Elevator Sprockets:**
- *Applications:* Drive the chains in bucket elevators to vertically transport bulk sugar within the sugar mill or processing facility.
- *Number of Teeth:* Corresponds to the pitch and length of the elevator chain and the lift height.

10. **Pan Conveyor Sprockets:**
- *Applications:* Drive the chains in pan conveyors to transport sugar crystals during crystallization and drying stages.
- *Number of Teeth:* Matched to the pitch and length of the pan conveyor chain, depending on the conveyor design and load requirements.

11. **Apron Feeder Sprockets:**
- *Applications:* Drive the chains in apron feeders to feed bulk materials, such as sugar beets or bagasse, into processing equipment.
- *Number of Teeth:* Corresponds to the pitch and length of the feeder chain and the feeder size.

12. **Scraper Sprockets:**
- *Applications:* Drive the chains in scraper conveyors to clean conveyor belts or remove debris from equipment in sugar processing plants.
- *Number of Teeth:* Matched to the pitch and length of the scraper chain, depending on the conveyor design and application requirements.

13. **Crystallizer Sprockets:**
- *Applications:* Drive the chains in crystallizers to move sugar syrup through tanks for the formation of sugar crystals.
- *Number of Teeth:* Matched to the pitch and length of the crystallizer chain, depending on the crystallizer design and capacity.

14. **Bag Handling Sprockets:**
- *Applications:* Drive the chains in bag handling systems to transport filled sugar bags within the packaging area or warehouse.
- *Number of Teeth:* Matched to the pitch and length of the bag handling chain, depending on the conveyor design and load requirements.

15. **Cooling Conveyor Sprockets:**
- *Applications:* Drive the chains in cooling conveyors to transport hot sugar products through cooling tunnels or rooms.
- *Number of Teeth:* Matched to the pitch and length of the cooling conveyor chain, depending on the conveyor speed and product size.

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16. **Pallet Conveyor Sprockets:**
- *Applications:* Drive the chains in pallet conveyors to move palletized sugar products within the warehouse or distribution center.
- *Number of Teeth:* Matched to the pitch and length of the pallet conveyor chain, depending on the pallet size and conveyor specifications.

17. **Molasses Pump Sprockets:**
- *Applications:* Drive the chains in pumps for transferring molasses within the sugar refinery or storage tanks.
- *Number of Teeth:* Matched to the pitch and length of the pump chain, depending on the pump size and application requirements.

18. **Screw Conveyor Sprockets:**
- *Applications:* Drive the chains in screw conveyors to transport bulk sugar or granulated sugar products through inclined or vertical conveyors.
- *Number of Teeth:* Corresponds to the pitch and length of the screw conveyor chain and the screw diameter.

19. **Clarifier Sprockets:**
- *Applications:* Drive the chains in clarifiers to separate impurities from sugar juice during the clarification process.
- *Number of Teeth:* Matched to the pitch and length of the clarifier chain, depending on the clarifier design and capacity.

20. **Filter Press Sprockets:**
- *Applications:* Drive the chains in filter presses to remove moisture from sugar mud or filter the juice during processing.
- *Number of Teeth:* Matched to the pitch and length of the filter press chain, depending on the filter press size and capacity.

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PULLEYS:

1. **Drive Pulleys:**
- *Applications:* These pulleys are connected to the drive motor and transmit power to conveyor belts or chains used in various sugar processing equipment such as conveyors, elevators, and crushers.

2. **Conveyor Tail Pulleys:**
- *Applications:* Located at the opposite end of the drive pulleys, conveyor tail pulleys provide tension to the return side of conveyor belts and help maintain proper belt tracking.

3. **Take-Up Pulleys:**
- *Applications:* Take-up pulleys are used to adjust and maintain the tension of conveyor belts, ensuring proper belt alignment and preventing slippage.

4. **Snub Pulleys:**
- *Applications:* Snub pulleys are positioned to increase the wrap angle of conveyor belts around drive and tail pulleys, enhancing traction and reducing belt slipping.

5. **Bend Pulleys:**
- *Applications:* Bend pulleys are used to redirect conveyor belts around corners or obstacles, maintaining proper belt tension and preventing belt damage.

6. **Idler Pulleys:**
- *Applications:* Idler pulleys support and guide conveyor belts along their path, reducing friction and wear on the belts and providing additional belt support.

7. **Deflection Pulleys:**
- *Applications:* Deflection pulleys are used to change the direction of belts or chains in sugar processing equipment such as bagasse conveyors and sugar bag handling systems.

8. **Crusher Pulleys:**
- *Applications:* Crusher pulleys are used in sugar cane crushers to transmit power from motors to crusher rollers, facilitating the crushing of sugarcane to extract juice.

9. **Mixer Pulleys:**
- *Applications:* Mixer pulleys are used in sugar processing equipment such as mixers and blenders to agitate and mix sugar with other ingredients or additives.

10. **Centrifuge Pulleys:**
- *Applications:* Centrifuge pulleys are used in sugar centrifuges to rotate the centrifuge basket or drum at high speeds, separating sugar crystals from molasses.

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11. **Dryer Pulleys:**
- *Applications:* Dryer pulleys are used in sugar processing equipment such as rotary dryers to rotate drying drums or cylinders, removing moisture from sugar products.

12. **Cooler Pulleys:**
- *Applications:* Cooler pulleys are used in sugar processing equipment such as sugar coolers to rotate cooling drums or cylinders, lowering the temperature of sugar products.

13. **Bagging Machine Pulleys:**
- *Applications:* Bagging machine pulleys are used in sugar packaging equipment to drive conveyor belts or chains that transport sugar bags for filling and sealing.

14. **Weighing Scale Pulleys:**
- *Applications:* Weighing scale pulleys are used in sugar packaging lines to drive conveyor belts or chains that transport sugar bags to weighing scales for accurate measurement.

15. **Labeling Machine Pulleys:**
- *Applications:* Labeling machine pulleys are used in sugar packaging lines to drive conveyor belts or chains that transport labeled sugar bags for packaging and distribution.

16. **Palletizing Machine Pulleys:**
- *Applications:* Palletizing machine pulleys are used in sugar packaging lines to drive conveyor belts or chains that transport palletized sugar bags for storage or transportation.

17. **Wrapper Machine Pulleys:**
- *Applications:* Wrapper machine pulleys are used in sugar packaging lines to drive conveyor belts or chains that transport wrapped sugar bags for palletizing and shipping.

18. **Carton Sealing Machine Pulleys:**
- *Applications:* Carton sealing machine pulleys are used in sugar packaging lines to drive conveyor belts or chains that transport cartons of sugar bags for sealing and palletizing.

19. **Bulk Sugar Loading Pulleys:**
- *Applications:* Bulk sugar loading pulleys are used in sugar terminals and ports to drive conveyor belts or chains that load bulk sugar onto ships or trucks for transportation.

20. **Bulk Sugar Unloading Pulleys:**
- *Applications:* Bulk sugar unloading pulleys are used in sugar terminals and ports to drive conveyor belts or chains that unload bulk sugar from ships or trucks for storage or processing.

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