

ENGINEERING PRODUCTS - FERTILIZER INDUSTRIES

CHAINS:

1. Drag Chain Conveyor:

- Application: Horizontal or inclined transportation of bulk materials such as granular fertilizers.
- Proper Chain Pitch: Typically ranges from 2 to 6 inches based on capacity and material characteristics.

2. Bucket Elevator Chain:

- Application: Vertical transportation of granular or powdered materials within fertilizer plants.
- Proper Chain Pitch: Varies based on elevator size and capacity, commonly between 4 to 12 inches.

3. Slat Conveyor Chain:

- Application: Movement of heavy loads like bags or containers of fertilizers on a flat surface or inclined path.
- Proper Chain Pitch: Generally between 4 to 8 inches, depending on load requirements.

4. Apron Feeder Chain:

- Application: Feeding bulk materials from storage to processing equipment like crushers or mixers.
- Proper Chain Pitch: Typically larger, ranging from 6 to 12 inches based on feeder capacity.

5. Paddle Conveyor Chain:

- Application: Mixing or blending materials in fertilizer production processes.
- Proper Chain Pitch: Can vary widely based on equipment size and material characteristics, typically between 4 to 12 inches.

6. Drop Forged Chain:

- Application: Heavy-duty applications such as pelletizing or drying processes.
- Proper Chain Pitch: Varies based on specific application requirements, typically between 4 to 8 inches.

7. Roller Conveyor Chain:

- Application: Smooth transportation of materials on rollers within the production line.
- Proper Chain Pitch: Depends on roller diameter and spacing, typically ranging from 6 to 12 inches.

8. Leaf Chain:

- Application: Used in lifting applications such as hoists or elevators within fertilizer plants.
- Proper Chain Pitch: Depends on load requirements and equipment design.

9. Engineered Steel Chain:

- Application: For demanding applications requiring high strength and durability in fertilizer processing.
- Proper Chain Pitch: Customizable based on specific application requirements.

10. Round Link Chain:

- Application: Used in conveyor systems for heavy-duty applications within fertilizer production facilities.
- Proper Chain Pitch: Depends on conveyor size and load requirements.

11. Wire Mesh Conveyor Chain:

- Application: Handling granular materials or products on a wire mesh belt within fertilizer plants.
- Proper Chain Pitch: Varies based on mesh belt design and load characteristics.

12. Belt Conveyor Chain:

- Application: Transporting bulk materials or products on a conveyor belt within fertilizer production lines.
- Proper Chain Pitch: Depends on belt width and load requirements.

13. Welded Steel Chain:

- Application: Heavy-duty applications such as conveying or lifting heavy loads in fertilizer manufacturing.
- Proper Chain Pitch: Varies based on load capacity and equipment design.

14. Forged Link Chain:

- Application: Used in conveying or lifting applications where high strength and reliability are required.
- Proper Chain Pitch: Depends on load capacity and equipment specifications.

15. Hollow Pin Chain:

- Application: Conveying or transferring materials in fertilizer plants where frequent shaft access is needed.
- Proper Chain Pitch: Depends on the size and load requirements of the equipment.

SPROCKETS:**1. Drive Sprocket:**

- Application: Primary sprocket connected to the drive motor to transmit power to conveyor chains.
- Number of Teeth: Varies based on motor speed, conveyor size, and power transmission requirements.

2. Idler Sprocket:

- Application: Used to support and guide conveyor chains, typically placed at the end of conveyor sections or at chain tensioning points.
- Number of Teeth: Usually smaller than drive sprockets, depending on chain pitch and tensioning requirements.

3. Tensioning Sprocket:

- Application: Adjusts and maintains proper tension in conveyor chains to prevent slack and ensure smooth operation.
- Number of Teeth: Typically smaller than drive sprockets, designed to provide adequate tensioning force.

4. Split Sprocket:

- Application: Allows for easy installation and removal without disassembling shafts or equipment.
- Number of Teeth: Varies based on application and chain pitch, commonly available with standard tooth counts

5. Double Pitch Sprocket:

- Application: Used with double-pitch conveyor chains for applications requiring longer pitches and lower speeds.
- Number of Teeth: Generally larger than standard sprockets due to the longer chain pitch.

6. Conveyor Sprocket:

- Application: Specifically designed for use with conveyor chains in fertilizer production lines.
- Number of Teeth: Depends on conveyor speed, chain pitch, and load requirements.

7. Weld-On Sprocket:

- Application: Welded directly onto shafts or hubs for applications where a permanent sprocket installation is required.
- Number of Teeth: Varies based on application and sprocket size, typically customized to fit specific requirements.

8. Plain Bore Sprocket:

- Application: Used with shafts equipped with keyways or set screws for secure attachment.
- Number of Teeth: Depends on application requirements and shaft size, typically available in standard tooth counts.

9. Flanged Sprocket:

- Application: Provides additional support and guidance to conveyor chains, especially in applications with lateral loads.
- Number of Teeth: Varies based on chain pitch and load requirements, commonly available in standard tooth counts.

10. Hubless Sprocket:

- Application: Designed for use with shaft-mounted sprockets or sprockets requiring custom hub configurations.
- Number of Teeth: Depends on application requirements and sprocket size, typically customized to fit specific applications.

11. Plate Sprocket:

- Application: Commonly used in roller chain applications within fertilizer plants for power transmission or conveying.
- Number of Teeth: Varies based on chain pitch and power transmission requirements, available in standard tooth counts.

12. Crank Sprocket:

- Application: Used in conjunction with crankshaft assemblies for driving rotating equipment within fertilizer processing machinery.
- Number of Teeth: Depends on crankshaft design and equipment specifications, typically available in standard tooth counts.

13. Timing Sprocket:

- Application: Used in timing belt or chain drive systems for precise motion control in fertilizer production equipment.
- Number of Teeth: Depends on timing belt or chain pitch and desired gear ratio, available in standard tooth counts.

14. Taper Lock Sprocket:

- Application: Secured to shafts using taper lock bushings for easy installation and removal.
- Number of Teeth: Varies based on application requirements and sprocket size, commonly available in standard tooth counts.

PULLEYS:

1. Drive Pulley:

- Application: Connected to the drive motor to transmit power to conveyor belts or ropes for moving materials within fertilizer plants.
- Number of Teeth: Not applicable for belt-driven systems; for rope-driven systems, the number of grooves corresponds to the number of ropes.

2. Idler Pulley:

- Application: Supports and guides conveyor belts, typically placed at the end of conveyor sections or along the conveyor path to provide belt support.
- Number of Teeth: Not applicable; idler pulleys typically have smooth surfaces to minimize belt wear.

3. Tensioning Pulley:

- Application: Adjusts and maintains proper tension in conveyor belts to prevent slack and ensure smooth operation.
- Number of Teeth: Not applicable; tensioning pulleys typically have smooth surfaces for belt contact.

4. Split Pulley:

- Application: Allows for easy installation and removal without disassembling shafts or equipment, commonly used in maintenance-friendly conveyor systems.
- Number of Teeth: Not applicable; split pulleys typically have grooved or V-shaped surfaces for belt contact.

5. Crowned Pulley:

- Application: Corrects belt tracking issues by providing a crowned surface that helps center the belt during operation, reducing the risk of belt misalignment.
- Number of Teeth: Not applicable; crowned pulleys have a convex or crowned surface.

6. Wing Pulley:

- Application: Provides additional belt support and reduces belt wear by guiding the belt along its edges, commonly used in conveyor systems handling abrasive materials.
- Number of Teeth: Not applicable; wing pulleys have wing-shaped protrusions on their sides.

7. Dead Shaft Pulley:

- Application: Features a fixed shaft that rotates with the pulley, providing support and reducing friction in conveyor systems.
- Number of Teeth: Not applicable; dead shaft pulleys have smooth surfaces for belt contact.

8. Motorized Pulley:

- Application: Integrates a motor and gearbox within the pulley, providing a compact and efficient power transmission solution for conveyor systems.
- Number of Teeth: Not applicable; motorized pulleys have integrated motors and do not require external teeth.

9. Snub Pulley:

- Application: Increases the wrap angle of the conveyor belt around the drive pulley, improving traction and reducing slippage in high-torque applications.
- Number of Teeth: Not applicable; snub pulleys typically have smooth surfaces for belt contact.

10. Drum Pulley:

- Application: Provides the driving force to move the conveyor belt, commonly used in heavy-duty applications requiring high torque transmission.
- Number of Teeth: Not applicable; drum pulleys have smooth surfaces for belt contact.

11. Take-Up Pulley:

- Application: Adjusts and maintains proper tension in conveyor belts to accommodate changes in belt length due to stretching or belt wear.
- Number of Teeth: Not applicable; take-up pulleys typically have smooth surfaces for belt contact.

12. Lagged Pulley:

- Application: Features a rubber lagging covering the pulley surface to increase friction between the pulley and the belt, improving traction and reducing belt slippage.
- Number of Teeth: Not applicable; lagged pulleys have a rubber lagging covering the surface.

13. Weld-On Pulley:

- Application: Welded directly onto shafts for permanent installation in conveyor systems, providing a reliable and durable belt drive solution.
- Number of Teeth: Not applicable; weld-on pulleys are typically customized to fit specific shaft sizes and do not have external teeth.

14. V-Groove Pulley:

- Application: Designed to accommodate V-belts for power transmission in machinery and equipment within fertilizer production plants.
- Number of Teeth: Not applicable; V-groove pulleys have grooved surfaces to match the profile of V-belts.