

One Stop Solution For All Your Engineering Needs..

## **ENGINEERING PRODUCTS - LPG INDUSTRIES**

## CHAINS:

## 1. Conveyor Chains:

- Applications: Used for conveying LPG cylinders or tanks during filling, transportation, and packaging processes.
- *Pitch Size*: Varies depending on the specific conveyor system and load requirements.

### 2. Lift Chains:

- *Applications*: Used in equipment such as LPG cylinder filling machines for lifting and positioning cylinders during the filling process.
- Pitch Size: Determined by the load capacity and design of the equipment.

### 3. Drive Chains:

- Applications: Employed in pumps, compressors, and other machinery within LPG facilities for power transmission.
- *Pitch Size*: Depends on the power transmission requirements and equipment design.

#### 4. Roller Chains:

- Applications: Utilized in roller conveyors for moving LPG cylinders or tanks in storage and transportation systems.
- Pitch Size: Varied based on the conveyor system specifications.

### 5. Attachment Chains:

- *Applications*: Found in specialized LPG handling equipment like palletizers for gripping and manipulating LPG cylinders.
- Pitch Size: Corresponds to the design of the attachment points.

#### 6. Leaf Chains:

- Applications: Commonly used in LPG tank trucks and trailers for suspension and lifting purposes.
- Pitch Size: Depends on the load capacity and operating conditions.

#### 7. Sprockets:

- Applications: Essential components in chain-driven systems, used in conjunction with various types of chains.
- Pitch Size: Matches the pitch size of the corresponding chain.

## 8. Drag Chains:

- *Applications*: Used in LPG liquefaction and vaporization processes for dragging equipment like heat exchangers and condensers.
- *Pitch Size*: Depends on the specific application and equipment design.

#### 9. Tension Chains:

- Applications: Employed to maintain tension in LPG pipeline systems to prevent sagging or excess slack.
- *Pitch Size*: Determined by the tension requirements and pipeline specifications.



### 10. Safety Chains:

- *Applications*: Used as a safety measure in LPG transportation, storage, and handling equipment to prevent accidents or equipment failure.
- *Pitch Size*: Depends on the application and safety standards.

### 11. Hoist Chains:

- Applications: Found in hoisting equipment used for lifting and lowering heavy LPG cylinders or equipment.
- *Pitch Size*: Determined by the load capacity and hoisting requirements.

### 12. Anchor Chains:

- Applications: Used in marine vessels transporting LPG, serving as anchor lines to secure the vessel.
- Pitch Size: Varied based on vessel size and anchor requirements.

Pg No: 2



## **SPROCKETS:**

## 1. Conveyor Sprockets:

- *Applications*: Used in conveyor systems for transporting LPG cylinders or tanks during filling, packaging, and distribution processes.
- *Number of Teeth*: Varies based on conveyor speed and load requirements.

## 2. Drive Sprockets:

- Applications: Found in pumps, compressors, and other machinery for power transmission through chain drives.
- Number of Teeth: Determined by gear ratio and torque requirements.

### 3. Roller Conveyor Sprockets:

- *Applications*: Used in roller conveyor systems for moving LPG cylinders or tanks in storage and transportation facilities.
- Number of Teeth: Corresponds to the pitch diameter and roller spacing.

### 4. Attachment Sprockets:

- Applications: Found in specialized LPG handling equipment such as palletizers for gripping and manipulating LPG cylinders.
- Number of Teeth: Dependent on attachment configuration and design.

#### 5. Hoist Sprockets:

- Applications: Found in hoisting equipment for lifting and lowering heavy LPG cylinders or equipment.
- *Number of Teeth*: Determined by load capacity and hoisting requirements.

## 6. Leaf Chain Sprockets:

- Applications: Used with leaf chains in LPG tank trucks and trailers for suspension and lifting.
- *Number of Teeth*: Matches the pitch diameter and design of the leaf chain.

## 7. Motorized Sprockets:

- *Applications*: Found in motorized equipment like pumps and compressors for converting rotational motion into linear motion.
- *Number of Teeth*: Determined by gear ratio and speed requirements.

## 8. Tensioner Sprockets:

- *Applications*: Used in chain tensioning systems to maintain proper tension and alignment in LPG pipeline systems.
- *Number of Teeth*: Varies based on tensioning mechanism and system requirements.



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## 9. Indexing Sprockets:

- Applications: Found in indexing mechanisms for precise positioning and control in filling and packaging machines.
- *Number of Teeth*: Determined by indexing ratio and accuracy requirements.

## 10. Idler Sprockets:

- Applications: Used as idle rollers in chain drives to guide and support the chain in LPG handling equipment.
- Number of Teeth: Typically fewer teeth than driving sprockets for tensioning.



## PULLEYS:

- 1. Drive Pulleys:
- *Applications*: Drive pulleys are used in conveyor systems to provide power transmission and drive motion for moving LPG cylinders or tanks during filling, packaging, and distribution processes.

## 2. Idler Pulleys:

• *Applications*: Idler pulleys are used to guide and support the conveyor belt or chain in conveyor systems, ensuring proper alignment and tension while reducing friction and wear.

### 3. Tensioner Pulleys:

• *Applications*: Tensioner pulleys are employed in conveyor systems to maintain proper tension in the conveyor belt or chain, preventing slack and ensuring smooth operation.

### 4. Deflection Pulleys:

• *Applications*: Deflection pulleys are used to change the direction of the conveyor belt or chain in conveyor systems, facilitating material flow around corners and obstacles.

### 5. Snub Pulleys:

• *Applications*: Snub pulleys are used to increase the angle of wrap around the drive pulley in conveyor systems, improving traction and reducing slippage.

#### 6. Take-Up Pulleys:

• *Applications*: Take-up pulleys are used to adjust the tension in conveyor belts or chains, compensating for stretching or shrinking over time and ensuring consistent performance.

## 7. Split Pulleys:

• *Applications*: Split pulleys are used in situations where it's impractical to disassemble the entire conveyor system for pulley installation or replacement. They allow for easy installation or removal by splitting into two halves.

#### 8. Head Pulleys:

• *Applications*: Head pulleys are positioned at the discharge end of conveyor systems and are responsible for driving the conveyor belt or chain, moving LPG cylinders or tanks towards the next stage of the process.

## 9. Tail Pulleys:

• *Applications*: Tail pulleys are located at the loading end of conveyor systems and provide a point of tension for the conveyor belt or chain, ensuring smooth material discharge and preventing slippage.

#### 10. Wing Pulleys:

• *Applications*: Wing pulleys are designed with protruding wings on either side to improve belt tracking and reduce material buildup, especially in applications where the conveyor belt tends to wander or mistrack.



## 11. Crowned Pulleys:

• Applications: Crowned pulleys have a slightly curved profile to facilitate self-centering of the conveyor belt or chain, improving tracking and reducing the risk of off-center loading or mistracking.

## 12. Timing Pulleys:

• *Applications*: Timing pulleys are used in timing belt drives to provide precise synchronization of shafts and components in LPG equipment such as pumps, compressors, and engines.

### 13. Variable Speed Pulleys:

• *Applications*: Variable speed pulleys, also known as adjustable or variable pitch pulleys, are used to vary the speed of driven equipment by adjusting the effective diameter of the pulley, commonly used in equipment requiring variable speed control like fans and blowers.

### 14. Wire Rope Pulleys:

• *Applications*: Wire rope pulleys are used in lifting and hoisting equipment, such as cranes and hoists, for guiding and supporting wire ropes used in lifting LPG cylinders or equipment.

### 15. Sheave Pulleys:

• *Applications*: Sheave pulleys are used in conjunction with ropes or cables for lifting and rigging applications, providing support and guidance for the ropes while distributing load forces evenly.