



Floating Shaft Mounted  
Gear Reducer

## Torque Arm Trough End

KWS Torque Arm Trough Ends are uniquely designed for use with shaft-mounted drive units. Customer preference or application requirements can sometimes dictate the use of shaft-mounted drives with torque arm arrangements. With the KWS Torque Arm Trough End, the shaft mounted gear reducer is allowed freedom to move with the run out of the driveshaft, reducing radial loads on the gear reducer and increasing the overall reliability of the screw conveyor.

The design for a KWS Torque Arm Trough End incorporates the use of a pillow block roller bearing that supports the screw and acts as a thrust bearing. Utilizing a pillow block bearing allows for the use of a variety of shaft seals. The pillow block bearing is rigidly mounted to an isolated base to ensure that the bearing is not exposed to bulk materials being conveyed that could be hot, corrosive or hazardous.

KWS Torque Arm Trough Ends are also ideal when the driveshaft is welded into the screw. Since the shaft mounted gear reducer is allowed to "float" on the drive shaft, any binding caused by the rigid welded connection is eliminated.

KWS Torque Arm Trough Ends provide an innovative solution to many complex conveying problems. The heavy duty design decreases downtime and keeps even the most complex processes operating reliably and efficiently.

### Features

**Wide Variety of Construction Materials** – Torque arm trough ends can be constructed out of a variety of materials, including carbon steel, stainless steel or high-nickel alloys for corrosion resistance and high temperature applications.

**Wide Variety of Seal Options** – Torque arm trough ends are designed to accept almost any type of shaft seal, including flanged gland seals with multiple rings of packing, split gland packing seals with a single ring of packing, waste pack seals, air or nitrogen purged seals, food grade seals, mechanical seals, or even custom designed seals.

**Wide Variety of Gear Reducer Options** – The torque arm trough end can be designed to accept any shaft mounted gear reducer, including Dodge Quantis, Nord and SEW. In addition, both parallel and right angle gear reducer configurations can be utilized to maximize customization and layout options.



Floating Shaft Mounted  
Gear Reducer - Top View



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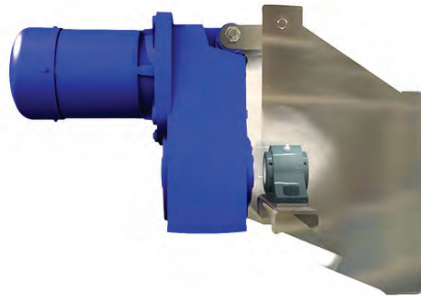
## Torque Arm Trough End

### Benefits

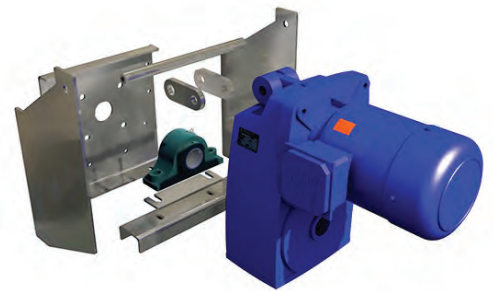
**Increased Mechanical Reliability** – The torque arm trough end design allows the gear reducer and bearing to be spaced away from the trough end, creating a barrier to the corrosive, abrasive, and/or high temperature bulk materials being conveyed.

**Ease of Maintenance** – The shaft seal, pillow block bearing and gear reducer are all independently mounted, making access easy for maintenance or replacement.

**Economical Design** – Compact, integrated construction of the torque arm trough end creates a cost effective, heavy duty structure.



Floating Shaft Mounted Gear Reducer - Side View



Floating Shaft Mounted Gear Reducer - Exploded View



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