GENERAL SPECIFICATIONS for DODGE TORQUE-ARM Shaft Mount Speed Reducers

The speed reducer shall be a belt driven enclosed shaft mount type unit with a single or double reduction ratio. The reducer shall mount directly on the driven shaft and utilize an adjustable torque arm that attaches from the gear case to the support structure or foundation. Optional all steel motor mount adjusts to various belt center distances and supports the motor.

Castings
The reducer housing shall be constructed of two-piece corrosion resistant, class 30 gray iron. All housings shall be doweled and precision machined to assure accurate alignment for all gear sets.

Gearing
All gearing shall be of helical design, case carburized and precision finished to insure a high surface durability with a resilient tooth core for impact resistance and optimum service life. Gears shall be supported between bearings to maintain proper alignment of gear meshes, to maximize load carrying capabilities, and to eliminate overhung loads imposed on bearings. Design meets or exceeds AGMA standards.

Bearings
Reducer bearings shall be of the ball or tapered roller type, and provide a 25,000 hour minimum average life, 5,000 L-10 AGMA Class I standard.

Sealing
All seals shall be of the lip, spring loaded type, made of nitrile rubber or HNBR.

Mounting
Reducer installation shall be accomplished by using ductile iron, fully split, two bushing system. Reducer removal shall be accomplished by providing jack screw holes in the bushing flanges to mechanically remove the tapered assembly.
TORQUE-ARM Screw Conveyor Drives

The drive shall be a belt driven enclosed, adapter mounted unit with a single or double reduction ratio. The drive shall consist of a standard speed reducer; a cast iron, bolt on, four bolt mounting adapter with double lip seals on both ends, an optional bolt on adjustable packing kit, and a drive shaft machined from a high quality alloy steel. The drive shall conform to Conveyor Equipment Manufacturers Association (CEMA) standards. Optional all steel motor mount adjusts to various belt center distances and supports the motor.

**Castings**
The reducer housing shall be constructed of two-piece corrosion resistant, class 30 gray iron. All housings shall be doweled and precision machined to assure accurate alignment of all gear sets.

**Gearing**
All gearing shall be of helical design, case carburized and precision finished to insure a high surface durability with a resilient tooth core for impact resistance and optimum service life. Gears shall be supported between bearings to maintain proper alignment of gear meshes, to maximize load carrying capabilities, and to eliminate overhung loads imposed on bearings. Design meets or exceeds AGMA standards.

**Bearings**
Reducer output bearings shall be of the tapered roller type, to absorb thrust loads from the screw conveyor. All bearings shall provide 25,000 hour minimum average life, 5,000 L-10 AGMA Class I standard.

**Sealing**
All seals shall be of the lip, spring loaded type, made of nitrile rubber or HNBR.
TORQUE-ARM Hydroil Drives

The speed reducer shall be a hydraulically powered enclosed shaft mount type unit with a single or double reduction ratio. The reducer shall mount directly on the driven shaft and utilize an adjustable torque arm that attaches from the gear case to the support structure or foundation.

The reducer shall be powered using a Hydroil single stage vane type fluid motor. The reducer shall be provided with a cast iron SAE mounting flange adaptor and splined input shaft to allow an integral fit with the splined hydraulic motor shaft.

Castings

The reducer housing shall be constructed of two-piece corrosion resistant, class 30 gray iron. All housings shall be doweled and precision machined to assure accurate alignment for all gear sets.

Gearing

All gearing shall be of helical design, case carburized and precision finished to insure a high surface durability with a resilient tooth core for impact resistance and optimum service life. Gears shall be supported between bearings to maintain proper alignment of gear meshes, to maximize load carrying capabilities, and to eliminate overhung loads imposed on bearings. Design meets or exceeds AGMA standards.

Bearings

Reducer bearings shall be of the ball or tapered roller type and provide a 25,000 hour minimum average life, 5,000 L-10 AGMA Class I standard.

Sealing

All seals shall be of the lip, spring loaded type, made of nitrile rubber or HNBR.

Mounting

Reducer installation shall be accomplished by using ductile iron, fully split, two bushing system. Reducer removal shall be accomplished by providing jack screw holes in the bushing flanges to mechanically remove the tapered assembly.

Screw Conveyor Drives

The drive shall consist of a standard speed reducer; a cast iron, bolt on, four bolt mounting adapter with double lip seals on both ends, an optional bolt on adjustable packing kit, and a drive shaft machined from high quality alloy steel.