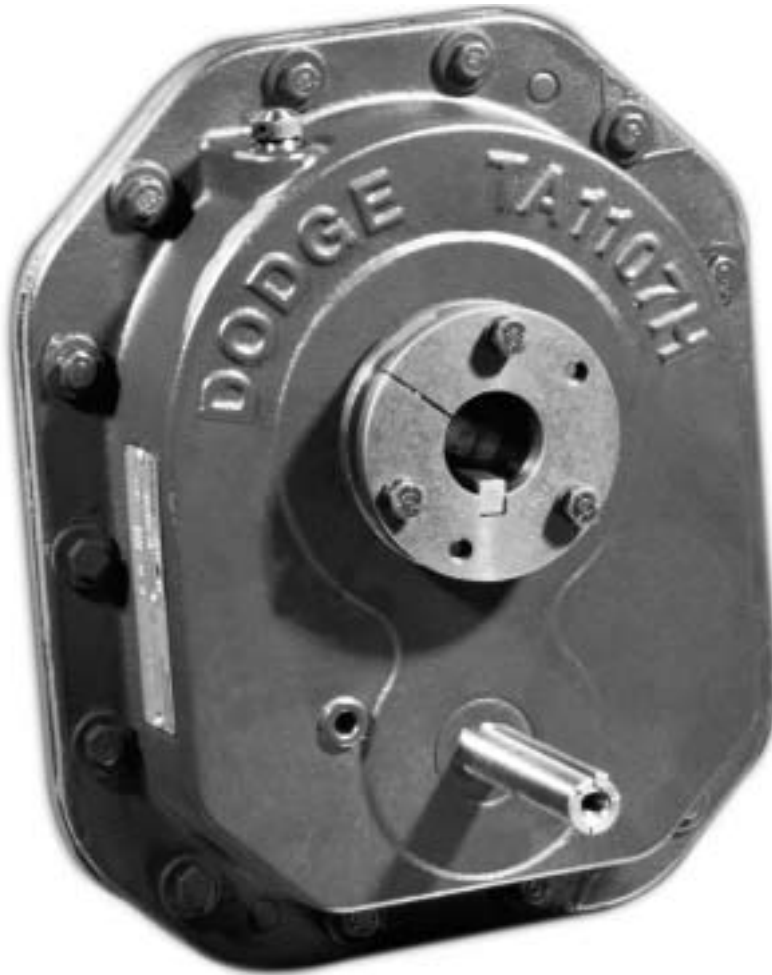


FEATURES/BENEFITS



TORQUE-ARM II Shaft Mount Speed Reducers THE LEGACY CONTINUES



With 50 years of proven dependability and more than 1.5 million units in service throughout the world, DODGE TORQUE-ARM speed reducers are the standard of the industry. Now, that legacy continues with the newest generation in shaft mounted speed reducers - TORQUE-ARM II - offering patented innovations, new features, plus increased torque and horsepower ratings.

Gearing Reference Guide

TORQUE-ARM II

TORQUE-ARM

MAXIMUM Concentric Reducer

TIGEAR-2

FEATURES/BENEFITS

DODGE



TORQUE-ARM II Shaft Mount Speed Reducers

THE LEGACY CONTINUES



Its industry proven design and new patented features are why the new DODGE TORQUE-ARM II surpasses all other reducers on the market.

This completely new line of shaft mounted speed reducers - in 12 case sizes through 700 horsepower (HP) - offers unparalleled torque ratings. An all-new backstop concept. A new patented sealing system. A totally new steel motor mount system. A state-of-the-art, totally modular design with an expanded ratio range to 40:1. And a new patented twin tapered bushing system.

The increased ratings in the new TORQUE-ARM II line are comparable to the next larger sized TXT reducer and are the result of the extended gear centers, wider gear faces, and optimized tooth geometry. The new backstop design features centrifugal lift-off sprags for extended life and can be used with lubricants containing EP additives.

In addition, the new TORQUE-ARM II line has a patent pending, premium sealing system that uses a standard lip, spring-loaded, rubber-coated oil seal protected by a patented metal excluder seal with rubbing lip.

The totally new steel motor mount adjusts to multiple center distances and mounts in shaft mount and screw conveyor positions.

The new twin tapered bushing system in standard length, patented short shaft, and metric versions offers all the features of our standard twin tapered TORQUE-ARM bushing design (unique to DODGE). An insertable tapered wedge allows the optional extended tapered bushing to mount on shorter shaft lengths.

New Modular Concept

Shaft mounted reducer with twin tapered bushing and motor mount



Screw conveyor drive with adapter, drive shaft and motor mount



PRODUCT CAPABILITIES

Twelve new reducer sizes with modular accessories

All reducers can be shaft mounted, screw conveyor, vertical and flange mounted

HP through 400, and torque ratings through 500,000 lb. in

Standard 5, 9, 15, 25 and up to 40:1 gear ratios

Nearly 300:1 speed reduction with V belt drives

Bushing bores 1 inch through 7 inches

All new highly efficient helical gearing design

Meets or exceeds AGMA standards including 5,000 hour L-10 bearing life, 25,000 average life

Smooth, rugged class 30 cast iron housings with pry slots

New 36 month - 18 month warranty protection

Complete Metric TA II product line available - see catalog RAPS-679-1

Three view CAD templates available - request RAPS-949-1

FEATURES/BENEFITS



TORQUE-ARM II Shaft Mount Speed Reducers

THE LEGACY CONTINUES

The new-generation DODGE TORQUE-ARM II has been engineered throughout with features designed to improve performance, extend service life, and reduce or simplify maintenance.

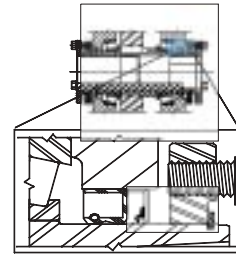
Three large pry slots make rebuilding easy.

Proven, AGMA-rated, case-carburized gear design ensures high efficiency. Has Class I starting load capability of 200%.

Totally modular construction, one reducer for shaft mount, screw conveyor, vertical and flange mount applications.



Standard metal reinforced, lip, spring-loaded oil seals are protected by patented labyrinth metal shield and excluder lip auxiliary seal on all shafts. No lubrication required. Factory tested.



100% cast iron housing (Class 30) eliminates bearing cap leak paths and maximizes surface area for heat dissipation.

New twin tapered bushings are available in standard, patented short shaft, and metric versions.

Heavy duty tapered roller bearings provide 25,000 hours average life and 5,000 L-10 minimum hours life—even in the heaviest load conditions.

Extended gear centers and increased gear tooth contact provide dramatically increased torque and horsepower ratings.

Magnetic drain plug and baffled air breather are standard.



Gearing Reference Guide

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FEATURES/BENEFITS

TORQUE-ARM II Shaft Mount Speed Reducers

THE LEGACY CONTINUES MODULAR ACCESSORIES

Shaft Mounted



STANDARD TWIN TAPERED BUSHING SYSTEM is an easy on, easy off, no-wobble bushing system featuring a fully split, ductile iron 8° taper and reliable twin support. Available in inch

and metric bores. Increased bore capability in many sizes.



Our new **SHORT-SHAFT TWIN-TAPERED BUSHING KITS** eliminate the need for full-length shafts. Constructed with ductile iron, it has all the features of our standard

bushing system. Available in both inch and metric bores.



This new **MODULAR MOTOR MOUNT** is attached and supported by two angle iron brackets with equally spaced holes, which align with the spacing of the cast slots of the gear case. This way, the motor mount can be adjusted up or down depending on the customer's requirements. It can

also be mounted on the side of the reducer for screw conveyor applications.



This new **BACKSTOP** option helps prevent reverse rotation in high stop-start loads, and results in less wear and longer life. Its centrifugal throw-out design eliminates sprag sliding and reduces wear. It operates with standard and EP lubricants and requires no external lubrication.



Ruggedly constructed, the **TA ROD KIT** includes standard brackets, functions as a belt-tensioning device, and offers universal mounting options.

Screw Conveyor

The new **CEMA BOLT-ON ADAPTER** features double-lip seals on both surfaces. The adapter center is open for contaminate drop out for optimized sealing.

An optional **ADJUSTABLE PACKING KIT** bolts to the standard adapter and provides a proven sealing option for hostile environments. Packing can be retightened.



The **SCREW CONVEYOR DRIVE SHAFTS** are made from high alloy steel and engineered to CEMA dimensions. They are three-bolt drilled and their tapered fit ensures simple installation.

The rugged locking plate (patent pending) also provides a mechanical shaft removal feature. #316 Stainless Steel drive shafts also available.



This complete **BOLT-ON BELT GUARD PACKAGE** requires no drilling or straps. It allows multiple height adjustments, features lift-off cover construction, and has an open metal inspection feature.



Other accessories include cooling fans and vertical breather kits.