

# Geareducer insight

#### **Overview**

An industry leader in gearboxes since the 1940s, the Marley Geareducer\* sets the standard for excellence.

# **Primary Benefits**

- Gear quality, providing over 5% lower sound and longer life compared to lower class gear sets
- Premium bearings, offering half the bearing maintenance costs
- System 5 Geareducer warranty with five times the coverage duration on new tower installations
- Easy maintenance with half the maintenance of belt drive systems

## **Benefit Detail**

#### Lower Sound / Longer Life:

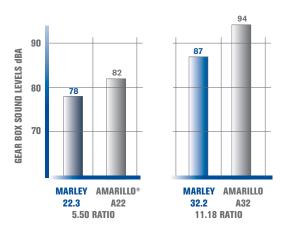
- Fine gear mesh minimizes sound levels to produce a quieter gearbox
- Gear Sets are AGMA Quality Class 9 to 11, increasing gear life compared to lower quality class gear sets

#### Lower Bearing Maintenance:

- Bearings with twice the L<sub>10A</sub> service life for input and intermediate shafts require half the maintenance costs
- High thrust load capability allows for greater fan weight and higher air loads for a given box size







Gear box sound level tests conducted by National Technical Systems (NTS) in accordance with SAE J2101 under fully loaded conditions

Marley Geareducer		Amarillo
Input Shaft Bearings	100,000 hr	50,000 hr
Intermediate Shaft* Bearings	100,000 hr	50,000 hr
Output Shaft Bearings	100,000 hr	100,000 hr

\*Intermediate shaft on double reduction gear boxes

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#### **Benefit Detail**

## Better Warranty:

- Warranty covers the entire unit, even bearings and seals
- System 5 Geareducer (models 10.1 through 3000) warranty for new towers is five times Amarillo warranty—one year warranty for aftermarket

#### Easy Maintenance:

- Five year oil change interval with System 5
  Geareducer can save \$7,630 in maintenance
  costs compared to belt drive
- Output shaft sealed with maintenance-free labyrinth ring
- Proven splash lubrication oil pump not required
- Runs cool no auxiliary fan or oil cooler required
- Rebuild kits available single consolidated shipment for everything needed to repair

#### **Features**

- Nitrile lip seal on input shaft
- Heavy duty gray cast iron castings
- Epoxy paint (minimum of two coats) on all external surfaces
- Factory run-in under load, with inspection
- Locking mechanism on support feet limits vibration to a minimum
- Short aftermarket lead-time (often same day/ next day shipment for common sizes and ratios)

# **Application Range**

- Horsepower up to 300+
- Ratios from 2.13 to 19.72

Marley System 5 Geareducer		Amarillo
Warranty	5 years	1 year
Includes Bearings	yes	no
Includes Seals	yes	no

No Hassle System 5 Geareducer		belt drive
Annual Maintenance	\$624	\$2,380
5 Year Maintenance	\$4,270	\$11,900
example savings	\$7,630	

# **Options**

- Premium input/output seals (Inpro, Chesterton, etc)
- Triple epoxy paint for even further corrosion protection
- Low oil level switch
- Temperature switch / RTD
- Oil heater with thermostat
- Vibration transducer mounting
- Anti-reversing device
  - External S316 stop-bracket style
  - Internal sprag clutch backstop
- Wide range of output shafts (tapered or straight)
- Oil mist fittings
- Engineered retrofit mounting kits for other manufacturer's gear boxes
- Other custom engineering solutions



7401 WEST 129 STREET

OVERLAND PARK, KS 66213 USA
913 664 7400 | spxcooling@spx.com

spxcooling.com



