New Generation Drum Motor Addresses Efficiency and Reliability of Belt Conveyors Operating in Extreme Environments.

Van der Graaf *- Matt Lepp*

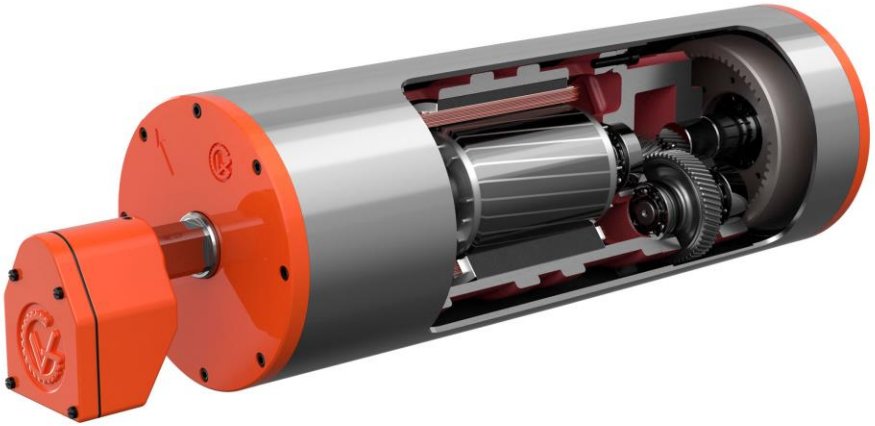
Who We Are

- Manufacturing drum motors since 1985
- Worldwide offices and manufacturing space in US, Canada and Europe.
- Advanced manufacturing capabilities, utilizing the latest technologies and CNC equipment

What is a Drum Motor?

One component conveyor drive where the motor, gear drive and all moving parts are enclosed inside the drum.

Available from 4” diameter, fractional hp to 42” diameter, 500 hp.



Application Benefits

- Increase safety
- Increase space utilization
- Lower cost of ownership
- Increase energy savings
- Premium materials
- No external maintenance

Test 1: 75 ft-lbs of Torque

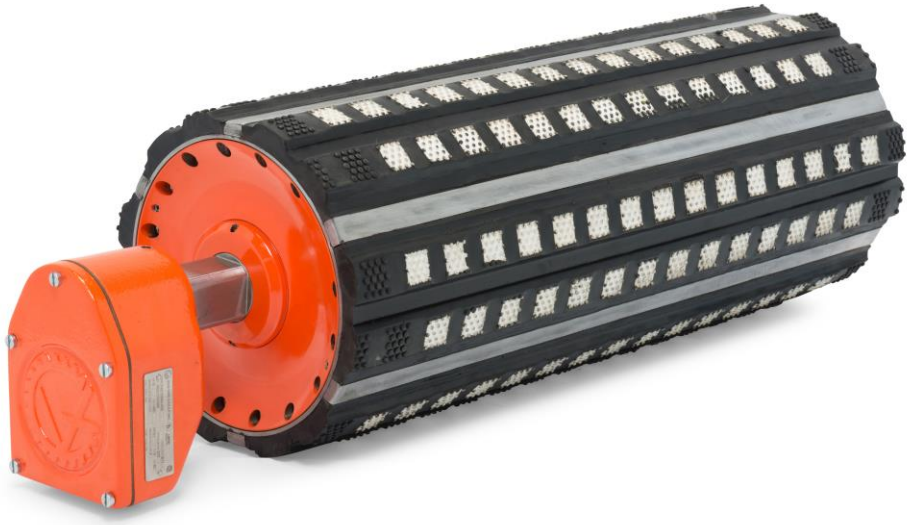
DRUM MOTOR:	MOTOR/GEARBOX:
Energy Consumption = **577 Watts**	Energy Consumption = **721 Watts**
Energy Cost = **$612/yr**	Energy Cost = **$755/yr**
Motor Load = **12%**	Motor Load = **22%**

Test 2: 125 ft-lbs of Torque

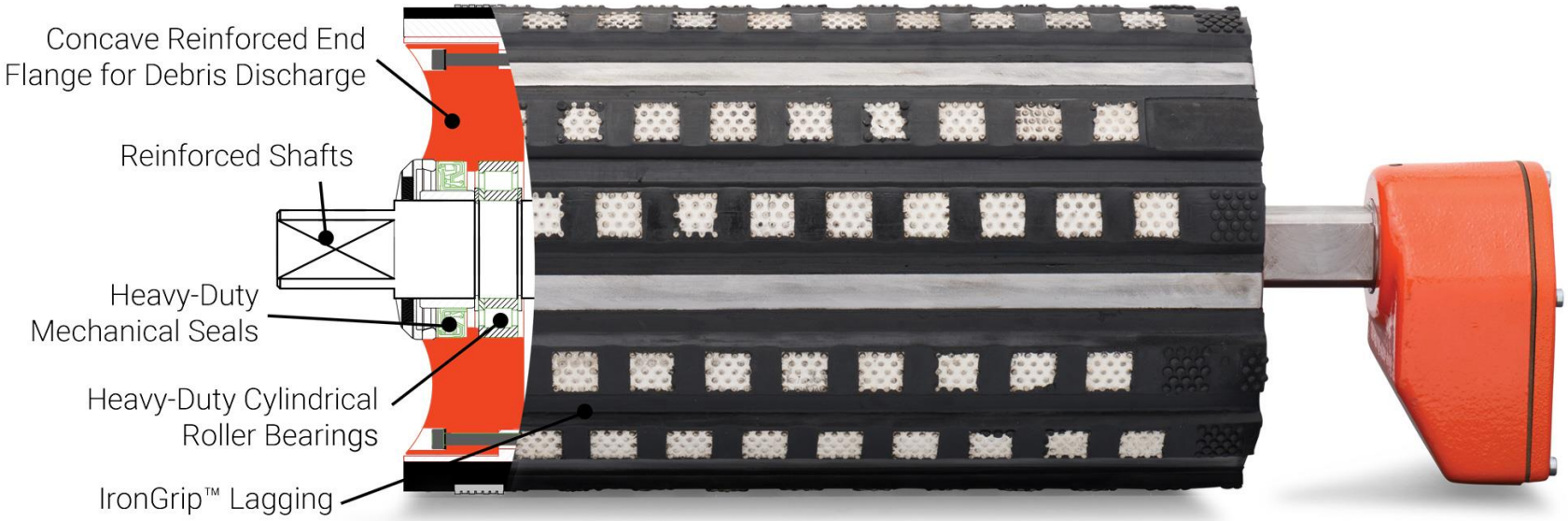
DRUM MOTOR:	MOTOR/GEARBOX:
Energy Consumption = **657 Watts**	Energy Consumption = **810 Watts**
Energy Cost = **$691/yr**	Energy Cost = **$852/yr**
Motor Load = **47%**	Motor Load = **100%**

GrizzlyDrive®

Designed specifically to drive conveyor belts required to reliably perform under abrasive, dusty and high vibration conditions.

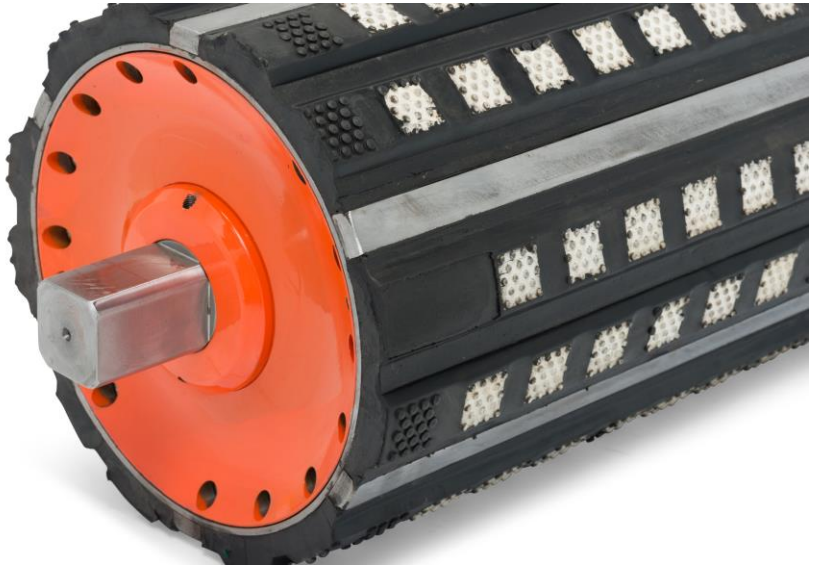


GrizzlyDrive®



Concave Reinforced End Flange

End flanges are constructed with a concave profile to allow discharge of dust build-up and debris between the conveyor frame, protecting the drive.



Reinforced Shafts

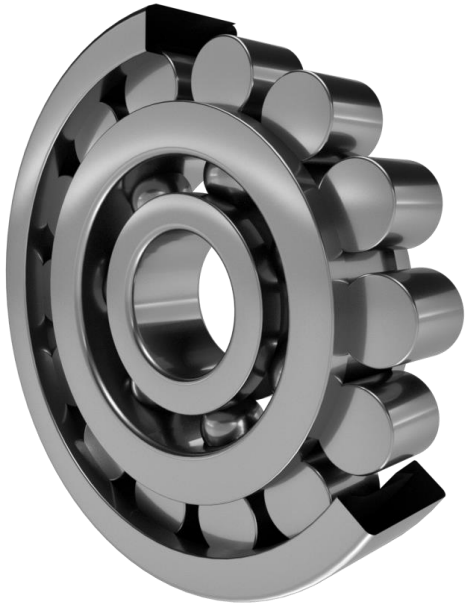
Heavy-duty shafts are used to combat heavy belt tension and shock loads, minimizing deflection.

Heavy-duty Mechanical Seals

All drum motors in this series are equipped with mechanical seals, preventing abrasive materials from penetrating the drive.

Heavy-duty Cylindrical Roller Bearings

High resistance to heavy axial and radial shock loads, increasing life over standard pillow block bearings.



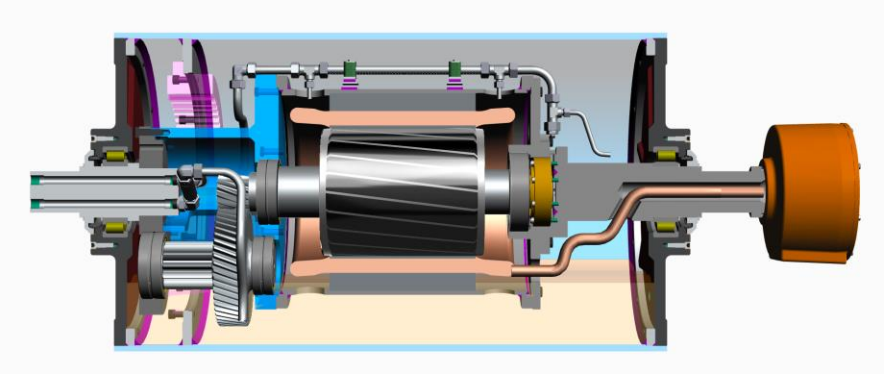
IronGrip™ Lagging

IronGrip™ lagging has sections of welded metal bars, either straight or chevron pattern, located between the vulcanized rubber segments (with or without ceramic embedded tiles), eliminating shear force, increasing durability and lifespan.

Lubrication and Cooling

Our unique oil delivery system ensures proper lubricating and cooling of key components.

No regular lubrication is required except for an oil change every 50,000 hours*



Summary

Drum motor technology increases system efficiency by:

- Increased safety
- Significantly reduced maintenance
- Increased space saving
- Lower energy usage
- Lower cost of ownership

The GrizzlyDrive®:

- Designed specifically for extreme environments
- Concave end flange prevents dust and debris build-up
- IronGrip™ lagging increases durability and lifespan

Questions?

Thank You

For more information, contact:

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