PISTA® Grit Removal System

Synchronous Belt Drive

Smith & Loveless Inc.

New PISTA® Grit Chamber Drive Design Decreases O&M Time and Cost

On-going innovation and development drives the world's leading **PISTA**® Grit Chamber technology—now with the introduction of the new **PISTA**® Synchronous Belt Drive option. It eliminates the need for managing or changing out oil in the otherwise easy-to-maintain traditional **PISTA**® Grit Chamber drive. Retrofittable to all older drives with the same anchor bolt pattern, it also incorporates new viewing ports for inspection and operator-friendly features for routine O&M, which will be standard on all new **PISTA**® Grit Chamber drive units.

*The new **PISTA**® Synchronous Belt Drive easily retrofits existing gear boxes using the same exact anchor bolt pattern.*

Reduced Maintenance for all PISTA® Grit Chamber Models

The shift from a gear-driven "oil bath" to the **PISTA**® Synchronous Belt Drive provides three primary maintenance advantages:

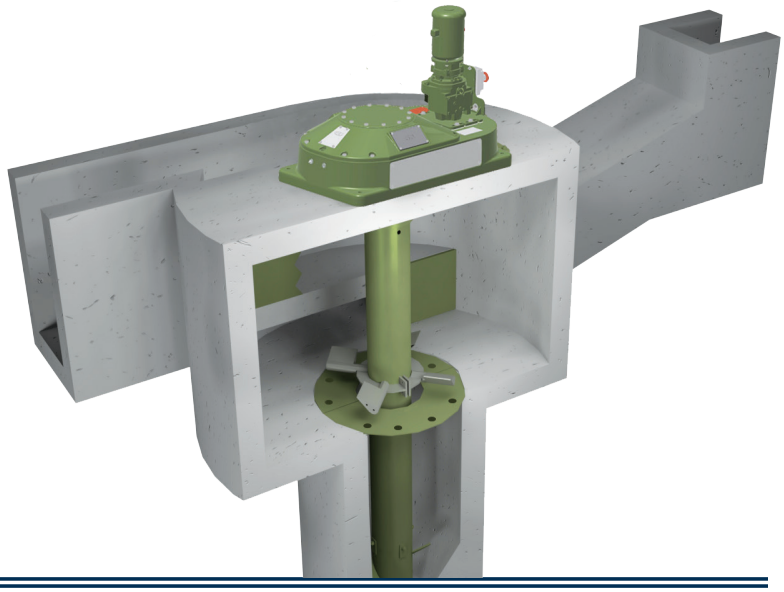
- **No Oil Management:** The synchonous belt drive is a grease lubricated system.
- **Reduced Inspection Frequency** with new "toothed" HNBR rubber + carbon cord design.
- **Simplified Replacement:** occurs in a fraction of time to refill/replace oil.

PISTA INVORSOR

PISTA VIO™

PISTA 360 WITH V-FORCE BAFFLE

OPTIFLOW 270® Baffle System



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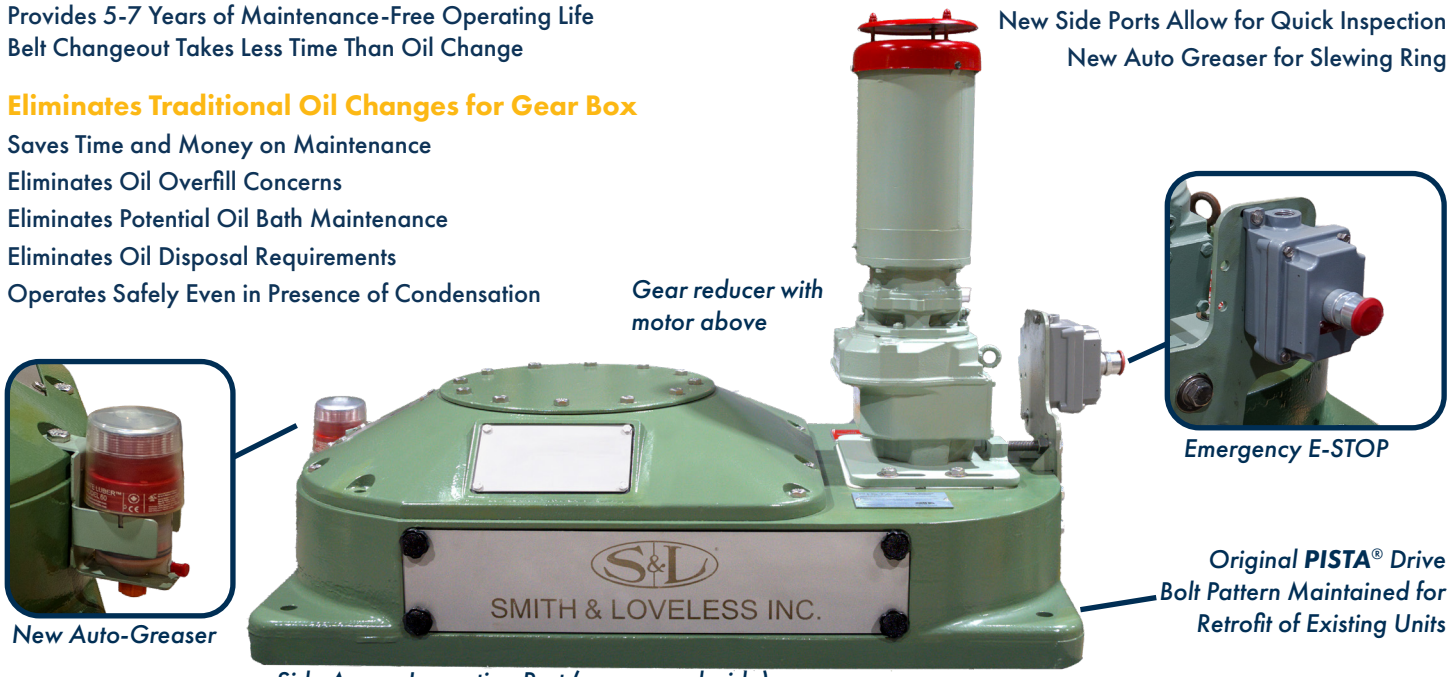
PISTA® Synchronous Belt Drive Features & Benefits

Durable Synchronous Power Transmission Toothed Belt
Provides 5-7 Years of Maintenance-Free Operating Life
Belt Changeout Takes Less Time Than Oil Change

Eliminates Traditional Oil Changes for Gear Box
Saves Time and Money on Maintenance
Eliminates Oil Overfill Concerns
Eliminates Potential Oil Bath Maintenance
Eliminates Oil Disposal Requirements
Operates Safely Even in Presence of Condensation

Updated Design Features
New Side Ports Allow for Quick Inspection
New Auto Greaser for Slewing Ring



Gear reducer with motor above

Emergency E-STOP

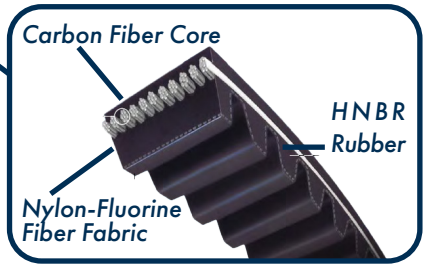
New Auto-Greaser

*Original **PISTA**® Drive Bolt Pattern Maintained for Retrofit of Existing Units*

Side Access Inspection Port (one on each side)

Easy Retrofit of Oil-Based Gear Units
Offers Same Anchor Bolt Pattern, Allowing for Simple Replacement
Facilitates Top and Bottom-Mount Functionality with Compatible Drive Tubes

Belt Design Composition



Robust Belt Material and Composition
High-Tensile Strength Carbon Fiber Core
Abrasion-Resistant, Low Friction Tooth Fabric
High Hardness HNBR Rubber

Made in the USA
AIS and BABA Compliant

Comparison: Traditional Gear Drive vs. PISTA® Synchronous Belt Drive

Factor	Traditional Gear Drive	PISTA® Synchronous Belt Drive
Lubrication	Required (oil bath)	No Lubrication except Auto-Greaser for bearing
Efficiency /	95-97% / 3-5% loss gradually with gear wear	98-99% / < 2% loss
Primary O&M	Oil changes and motor maintenance	Visual belt inspection, lube bearing, and motor maint.
20-Year Life-Cycle Comparison Factors		
Oil Lubrication	~40 gallons synthetic oil (changes/top-offs).	No synthetic oil required; cost of gear lubrication
Labor	120 Hours (inspections,oil changes, disposal)	~ 20 Hours (Annual visual belt check & refill Auto-greaser)
Overhaul	Gearbox seal/bearing replacement (Yr 10-15)	Single belt replacement (year 5-7)
Disposal Fees	Hazmat fees for industrial oil	$0 for any industrial oil

*Integrating the **PISTA**® Synchronous Belt Drive into a 20-year Life-Cycle Cost (LCC) analysis reveals that the savings extend far beyond simple oil costs. For a municipal utility, this transition represents a shift from "preventative" maintenance to "predictive" maintenance (simple observation).*