

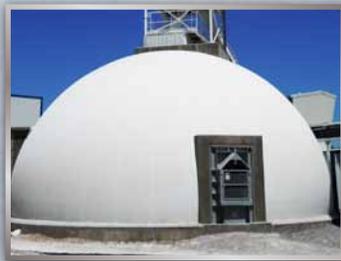


PLANETAIRE™

Models PL433, PL443, PL833



*High-Volume Storage and Reclaim of
High-Density or Abrasive Materials*



TOTAL ACCESS - EVEN IN A FULL SILO!

THE LAIDIG PLANETAIRE™ FEATURES

- State-of-the-art engineering to meet the toughest material challenges
- Total access to reclaim equipment, even in a full silo
- Engineered for heavy-duty, rugged 24/7 applications
- Fully-automated, dependable, push-button operation
- Promotes first-in-first-out (FIFO) material management
- Diameters up to 80' (24 m) with full-diameter access beam
- Free access to Laidig's lifetime technical support



TOTAL ACCESS IN A FULL SILO

The Laidig **Planetaire** reclaimers offer superior performance and dependability for applications with high-density or abrasive materials. Laidig's **Planetaire** system is engineered to provide completely automated, near-total clean out, encouraging first-in-first-out material distribution for processing to strict quality-control standards.

The **Planetaire** provides an access beam which spans the entire diameter of the storage vessel. This beam offers complete access to all components of the **Planetaire**, even under a full head-height of material. Serviceable components would include motors, gearboxes, reducers, and the auger cutter blades. Even the entire auger can be removed from a full silo through one of the auger access doors at the end of the beam.

Since the access beam bears the material load and shields the auger from high compressive forces during both the fill and subsequent operation, the **Planetaire** is usually the system of choice for high-density materials. Coal, dense powders, and heavy or coarse granular materials are ideal applications for the **Planetaire**.

PERSONNEL ACCESS

All reclaim drive components can be accessed and replaced via the beam, even in a full silo.



AUGER REMOVAL

The auger may be removed through either of the two access doors without emptying the silo.



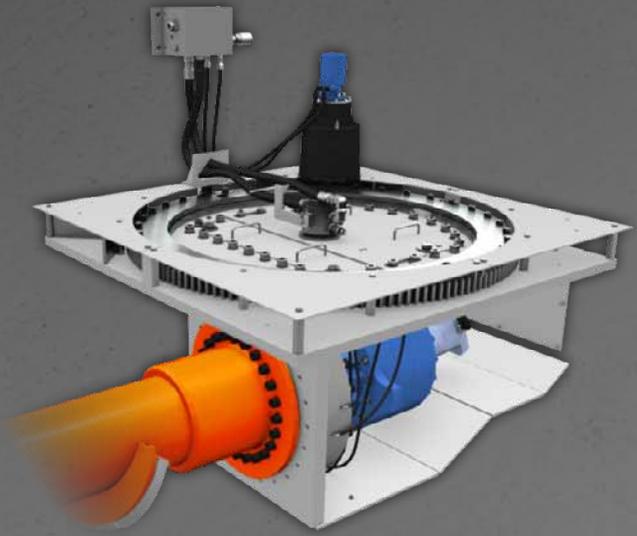
RUGGED DESIGN

Laidig's **Planetaire™** reclaim systems are designed for durability and longevity. Hydraulic advance components are utilized to provide ultimate control sensitivity of the **Planetaire**, increasing running efficiencies and reducing wear on the auger and drive components. All conveying surfaces have been optimized to accommodate highly-abrasive materials, greatly reducing wear. The tapered auger design, together with the load bearing access beam make the **Planetaire** ideal for dense, heavy materials that other reclaim systems cannot handle effectively.



CUSTOM CONTROLS

The Laidig **Planetaire** system offers fully-automated, push-button operation utilizing Laidig's LMI™ (Laidig Machine Interface). The LMI provides unprecedented control and monitoring of the reclaimer's status and operation. Its graphic-rich display gives the operator all the information needed to easily operate or monitor the Laidig equipment. The LMI control system is also designed to allow full operation of the Laidig reclaim system via Ethernet interface, and can include remote access capability for monitoring or troubleshooting the system off-site.



*Cover removed for clarity

TROLLEY SYSTEM

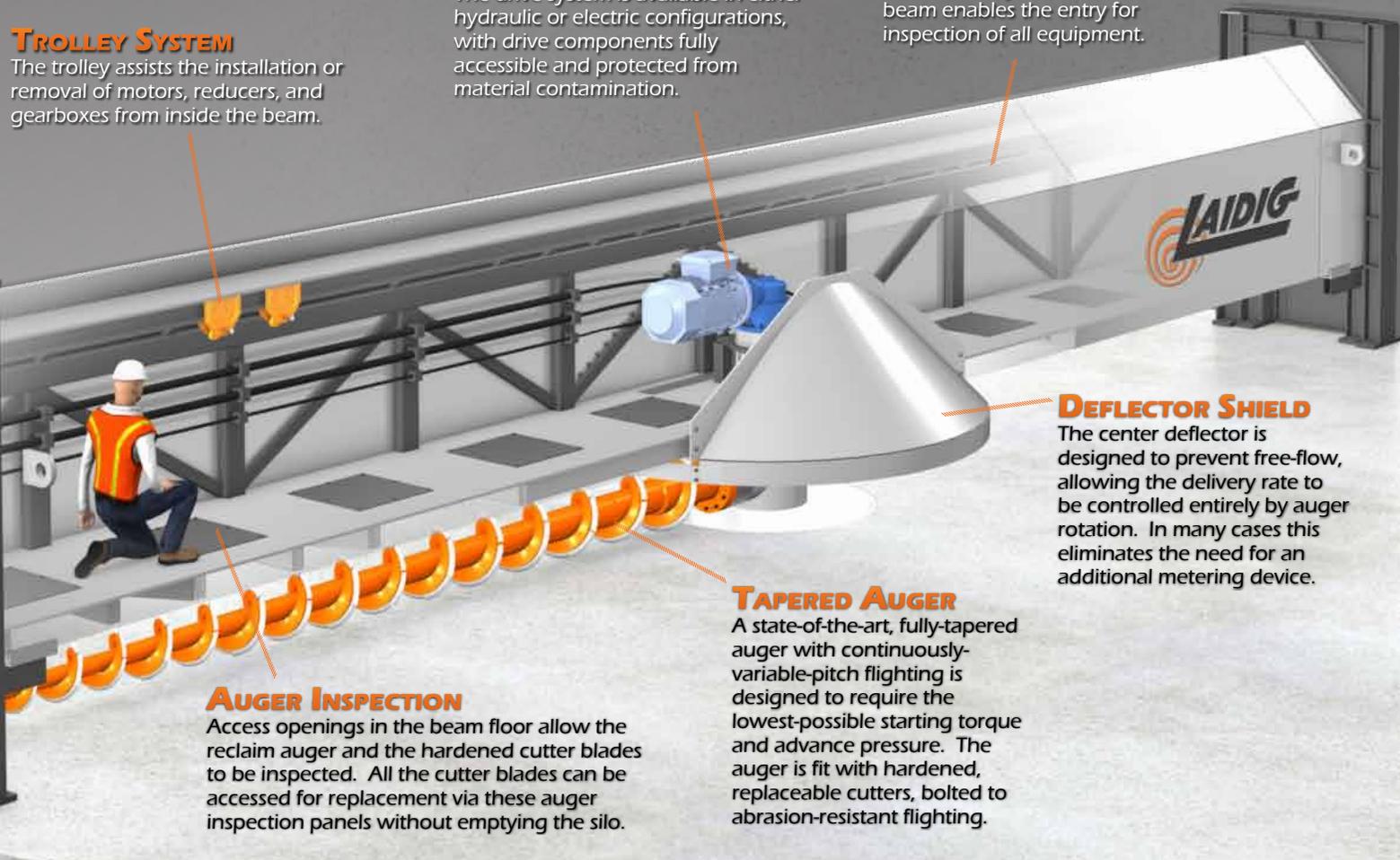
The trolley assists the installation or removal of motors, reducers, and gearboxes from inside the beam.

DRIVE SYSTEM

The drive system is available in either hydraulic or electric configurations, with drive components fully accessible and protected from material contamination.

ACCESS BEAM

The access beam shields reclaim components in dense materials, allowing them to operate smoothly and efficiently. In addition, the beam enables the entry for inspection of all equipment.



AUGER INSPECTION

Access openings in the beam floor allow the reclaim auger and the hardened cutter blades to be inspected. All the cutter blades can be accessed for replacement via these auger inspection panels without emptying the silo.

TAPERED AUGER

A state-of-the-art, fully-tapered auger with continuously-variable-pitch flighting is designed to require the lowest-possible starting torque and advance pressure. The auger is fit with hardened, replaceable cutters, bolted to abrasion-resistant flighting.

DEFLECTOR SHIELD

The center deflector is designed to prevent free-flow, allowing the delivery rate to be controlled entirely by auger rotation. In many cases this eliminates the need for an additional metering device.

HEAVY-DUTY STORAGE AND RECLAIM SOLUTIONS

For TOTAL ACCESS even in a full silo!

Laidig's **Planetaire™** reclaim systems are designed specifically for heavy-duty, industrial applications requiring reclamation of high-density, abrasive materials with poor flow characteristics or other properties which make them difficult to handle. Laidig's turnkey installations typically include concrete or bolted silos or monolithic concrete domes.



Laidig Planetaire Specifications

Specifications*	Model PL433 All Hydraulic	Model PL443	Model PL833 All Hydraulic
Storage Diameter	45' (14 m)	45' (14 m)	80' (24 m)
Auger Cutting Diameter	18" Diameter (45.7 cm)	18" Diameter (45.7 cm)	26" Diameter (66 cm)
Auger Delivery Rate†	100 CFM (2.8 m³/min)	100 CFM (2.8 m³/min)	200 CFM (5.6 m³/min)
Expected Delivery Rate‡	70 CFM (2.0 m³/min)	70 CFM (2.0 m³/min)	140 CFM (4.0 m³/min)
Auger Rotation	50 RPM	50 RPM	35 RPM
Discharge Opening	9.33 ft² (0.86 m)	9.33 ft² (0.86 m)	9.33 ft² (0.86 m)
Reclaim Torque	(Base)	1 x (Base)	4.2 x (Base)
Reclaim Drive HP	-	40 HP	-
Hydraulic Power Unit	50 HP	1.5HP	100 HP

*All specifications are approximate. Systems are customized according to application specific requirements and the flow characteristics of the stored material. Consult a Laidig applications engineer for design parameters appropriate to your application.

† At 100% efficiency

‡ 70% efficient dependent on material size & flow characteristics

Additional Options:

- Automatic Variable-Speed Drives
- Discharge Conveyor Systems
- PLC Control Systems
- Hydraulic Fluid Immersion Heater
- Ultra-Wear AR Design
- Stainless Steel Fabrication
- Hazardous-Environment Design
- Retrofits to Existing Silos Possible



WITH LAIDIG YOU GET MORE THAN STEEL

The Storage Structure

Designed specifically for the dynamic-load requirements of bottom-reclaim systems.

The Reclaim System

Custom engineered for high delivery rates with a wide range of material applications.

The Laidig Guarantee

If we design and install your storage and reclaim system, we guarantee it will work.

WE DON'T JUST SELL EQUIPMENT, WE PROVIDE SOLUTIONS



Laidig Systems, Inc.

14535 Dragoon Trail
Mishawaka, IN 46544

(574)-256-0204
sales@laidig.com

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