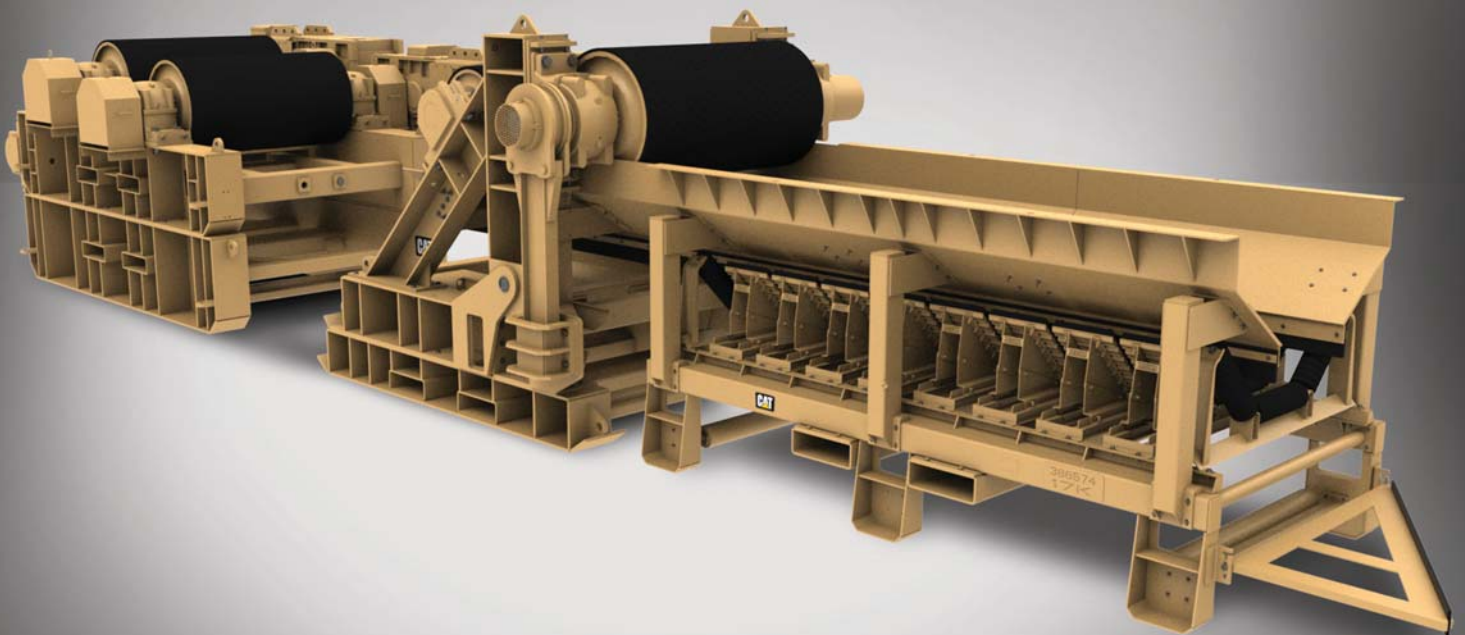


Engineered Belt Terminal Groups



Engineered Solutions



Contents

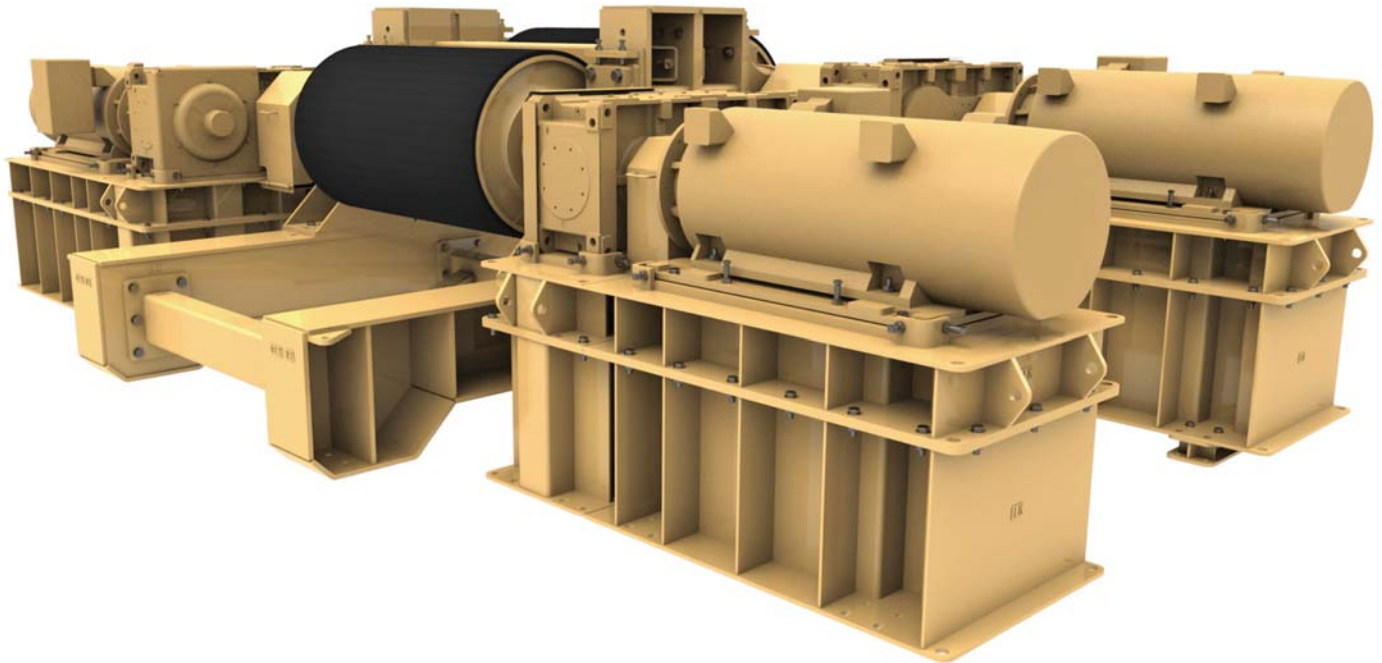
Conveyor Drives	4
Remote Discharges	5
Belt Take-Ups/Storage Units.....	5
Loading Sections.....	6
Engineered Class Pulleys	6
Custom Designed Equipment.....	8
Specifications.....	10



Caterpillar offers custom-designed, heavy-duty engineered conveyor systems solutions and conveyor products to handle the most demanding bulk-material handling requirements in both underground and surface applications. Cat® belt terminal groups are precision engineered to meet each customer's requirements, and experienced technicians are available to supervise the installation and ensure a smooth startup.

Conveyor Drives

Move more with power and precision



- Alignment free or parallel shaft design options
- Alignment-free design gives the following benefits
 - Ease of setup and installation
 - Ease of transportation in and around site
 - Narrower overall drive width
 - Universal mounting – left-hand or right-hand mounting
 - Reduced operating maintenance
 - Up to 447 kW (600 hp) per motor
- Parallel shaft benefit: accommodates larger motor sizes
- Supports both mechanical and electrical technologies (Fluid Couplings or Variable Frequency Drive [VFD], etc.)
- Engineered class pulleys

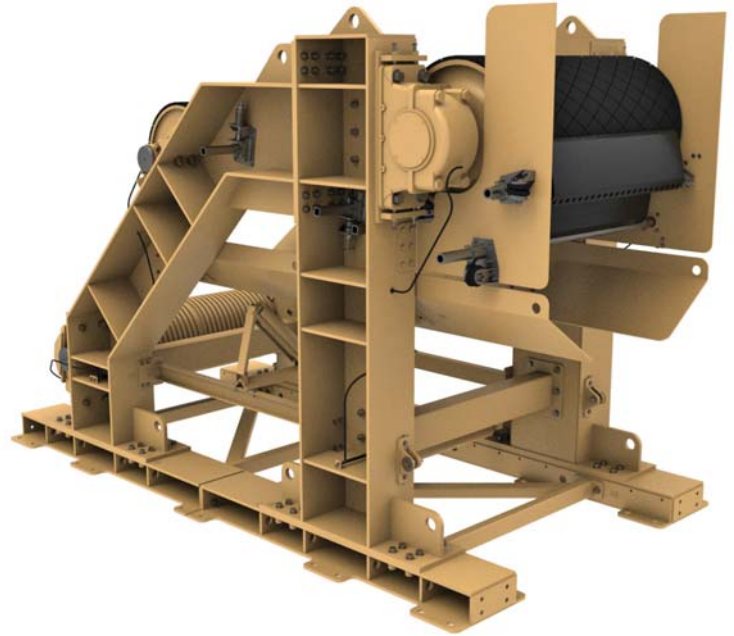


Engineered Belt Terminal Group

Remote Discharges

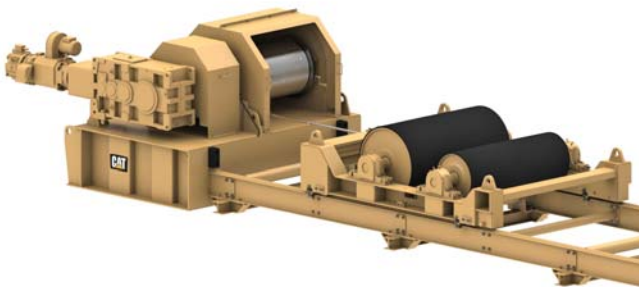
Designed for your transfer needs

- Floor-mounted or roof-hung configurations
- Remote A-frame design
- Adjustable boom design
- Designed for multiple transfer points
- Includes engineered class pulley(s)
- Can be used with backstop for uphill applications
- Can incorporate driven discharge pulley
- Can be used with uni-directional transfer chute



Belt Take-Ups/Storage Units

Responsive belt tensioning



- Cat take-ups/storage units apply accurate and very responsive belt tension
- Various designs available to meet customer needs
 - Electric winch design
 - Hydraulic cylinder design
 - Active travel length/belt storage per design requirements
- Each take-up pulley is a tension-specific, engineered class pulley
 - Designed for the maximum force each cylinder or winch can provide
 - Eliminates any weak links in the entire take-up system

Loading Sections

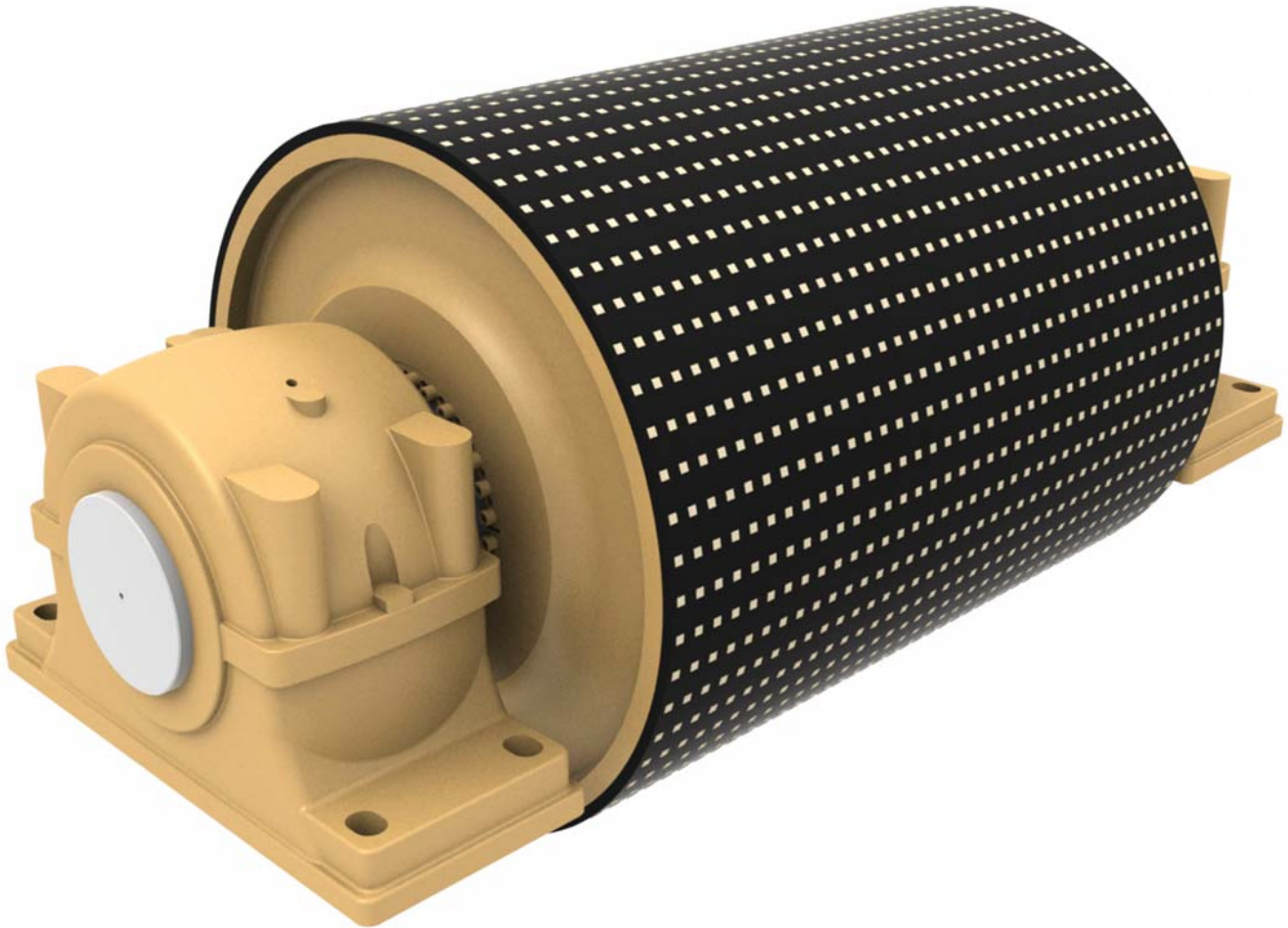
Improve your material transfer



- Cat loading sections are designed and built for efficient transfer of extracted materials
- Two impact idler designs: in-line and off-set
- Intermediate and tail loading sections offer either impact idlers or impact slider beds
- Rigid, heavy-duty engineered loading frame

Engineered Class Pulleys

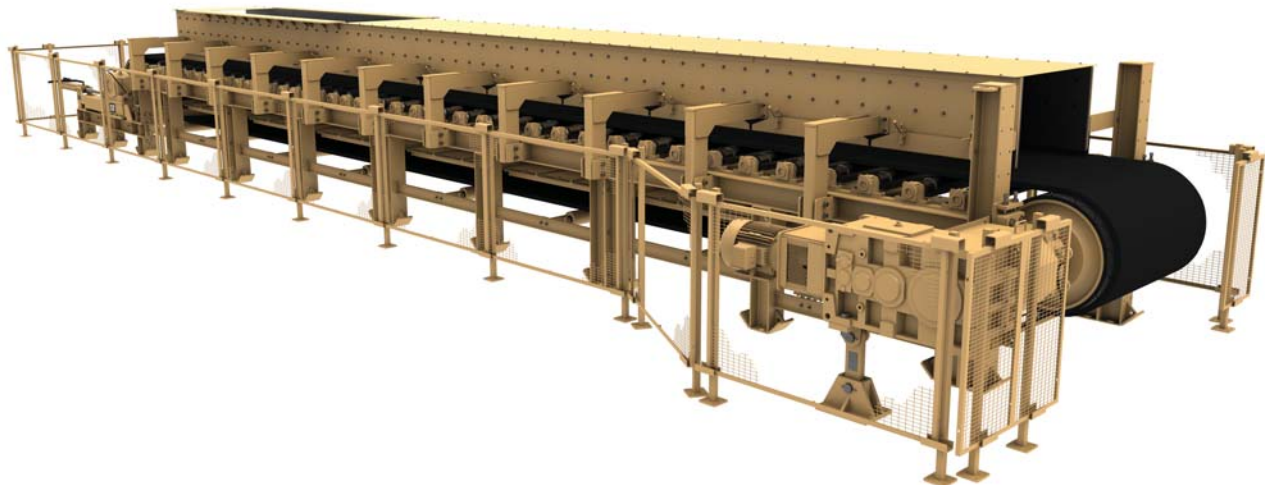
Designed for the specific power and tension requirements of your conveyor system



- Cat engineered class pulleys are each designed to meet the specific power and tension needs of the conveyor system
- Two design options: Turbo-Disc and T-Bottom
- Design features:
 - Profiled end-discs machined from solid steel plate eliminating all welds in areas of high-stress concentrations
 - Keyless locking elements eliminate the undesirable hub-to-disc weld and pre-stressing of the end-disc during assembly
 - Proprietary welding techniques ensuring complete penetration and fewer fields
 - Rim machined to achieve target concentricity
 - Static balancing
 - Standard three year pulley warranty

Custom Designed Equipment

Specialized systems for your unique applications





Working closely with our customers and dealer teams, Caterpillar engineers are able to provide solutions for whatever your material transportation needs may be. Caterpillar engineering excellence allows for the accommodation of many unique applications. We offer a low cost per ton material transportation solution for various industries, including surface and underground mining, tunneling, construction aggregates, and more.

Advanced Tailpiece for TBM (Tunnel Boring Machine) Tunnel System

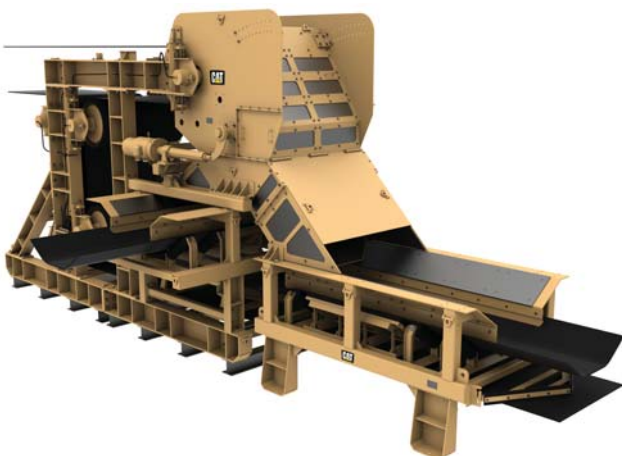
- Accommodates multiple belt widths and tonnage rates
- Integrated directly to customer or tunnel TBM

Bi-Directional Material Handling Tripper Transfer

- Allows for bi-directional material flow
- PLC controlled for smooth operation with electric, pneumatic, or hydraulic operation
- Can accommodate multiple belt widths and tonnage rates

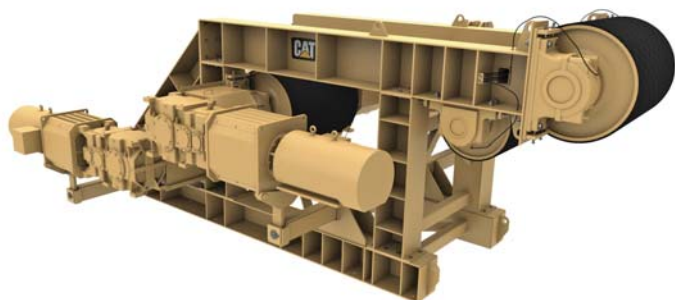
Material Handling Feeder

- PLC driven allowing for metering and control of belt speed and tonnage rate onto the main belt
- Modular for customer shoot integration
- Can accommodate multiple belt widths and tonnage rates



Engineered Belt Terminal Groups Specifications

Engineered Belt Terminal Groups for Surface and Underground



Drives

Installed Power – Maximum	3728 kW	5,000 hp
Belt Width – Maximum	2200 mm	84 in
Belt Speed – Maximum	5.08 m/sec	1,000 ft/min
Capacity – Maximum	9072 tonne/hr	10,000 ton/hr
Configuration	Right Angle Alignment-free, Parallel Shaft	
Drive Technology	VFD, Fluid Coupling Drives	



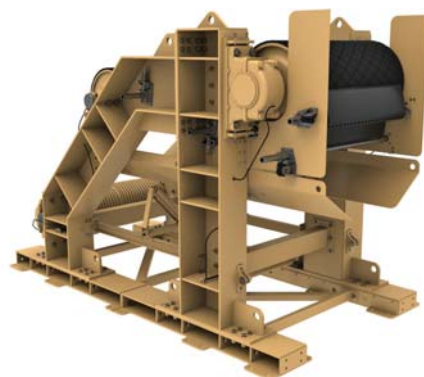
Take-Ups

Belt Width – Maximum	2200 mm	84 in
Carriage Travel – Maximum	43 m	140 ft
Design	Hydraulic Cylinder, Electric Constant Tension Winch, Gravity	



Storage Units

Belt Width – Maximum	2200 mm	84 in
Belt Storage – Maximum	490 m	1,600 ft
Design	Electric Constant Tension Winch	



Remote Discharges

Belt Width – Maximum	2200 mm	84 in
Design	Remote A-frame, Remote Adjustable Boom	



Loading Sections

Belt Width – Maximum	2200 mm	84 in
Design	Tail, Intermediate	
Belt Plow	V-plow, Diagonal	

For more complete information on Cat products, dealer services,
and industry solutions, visit us on the web at **www.cat.com**

AEHQ7159 (03-2014)

© 2014 Caterpillar
All rights reserved

Materials and specifications are subject to change without notice.
Featured machines in photos may include additional equipment.
See your Cat dealer for available options.

CAT, CATERPILLAR, SAFETY.CAT.COM, their respective logos,
“Caterpillar Yellow” and the “Power Edge” trade dress, as well
as corporate and product identity used herein, are trademarks
of Caterpillar and may not be used without permission.

