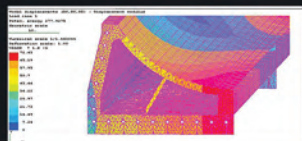




Advantages of the HudcoAir® Conveyor

- Dust-Free Material Conveying**
 The top covers on the **HudcoAir®** Conveyor are sealed to the plenum flange with a rubber gasket, a feature not possible with roller-supported conveyors. Material load points are sealed to the top covers, eliminating dust at transfers. *There is simply no clean up required* as a result of spillage and dust emissions from a **HudcoAir** Conveyor.
- Eliminates Maintenance**
 The **HudcoAir** Conveyor requires minimum maintenance on the drive mechanisms, head and tail pulleys and return idlers. By eliminating the troughing idlers, maintenance – including lubrication and replacement – is eliminated.
- Eliminates Spillage**
 The **HudcoAir** Load Zone uses no rubber or plastic skirt seals. When load containment is necessary, permanent **Wearsparn®** Skirts are installed providing *years of maintenance free service*.
- Easily Adaptable Vertical Curves**
 The **HudcoAir** can be configured with concave and convex vertical curves in accordance with CEMA standards.
- Inherently Safe**
 With the belt enclosed and no moving parts exposed, the **HudcoAir** offers *unmatched safety*.
- Higher Inclination Angles**
 By eliminating the “wave” action inherent to roller-supported conveyors, materials transported on a **HudcoAir** Conveyor are very stable. This characteristic allows the use of higher inclination angles without product rollback. Shorter conveyor lengths can be used to facilitate product lifts. This saves belt length, horsepower and space.
- Eliminates Tracking Problems**
 Tracking of the **HudcoAir** Conveyor is principally determined by the load position. When product is loaded on to the center of the belt, gravity insures proper belt tracking. There are no provisions needed for tracking adjustments on the load side of the **HudcoAir**.
- Reversible Travel**
 The **HudcoAir** does not suffer from the temperamental influence of rollers so it can be reversed easily with no adverse effects. Since tracking is assured by center loading, the belt configuration is highly symmetrical and subject to being easily reversible.
- Increased Belt Life**
 By reducing the friction and flexing normally experienced with roller based conveyors, belt tension is reduced and allows the **HudcoAir** to operate with less expensive belts. Less friction and tension translates to longer belt life.
- Easy Installation**
 Fully trained Hudco technicians are available to install the **HudcoAir** Conveyor anywhere in the world. We can supply all the structural and civil engineering for your project and install and startup the system.



Guaranteed Performance

The **HudcoAir®** Conveyor is custom designed for your application to insure perfect performance. Before shipment, every **HudcoAir** Conveyor is assembled in our facility and tested. When your conveyor arrives, each component is match marked for fast, efficient assembly. Additionally, we both know your **HudcoAir** will work properly *because we floated a belt on it before we shipped it to you!*

Retrofit Existing Conveyors

The **HudcoAir®** Conveyor can be retrofitted to existing conveyor structures. Simply remove the troughing idlers and install the **HudcoAir** Plenum to the existing structure and reuse the existing drive and return system. The **HudcoAir** Retrofit is designed to be completely compatible with CEMA conveyor idlers.

Partial Retrofit

Since the **The HudcoAir** is CEMA compatible, you can retrofit any section of your existing conveyor. Start at either end or in the middle and install the **HudcoAir** where you need it most. Later, the balance of the conveyor can be retrofitted. Standard **HudcoAir** plenums are manufactured in lengths up to 20 feet.

Solves Conventional Load Zone Issues

The **HudcoAir** Load Zone eliminates the high cost of rubber or urethane skirt seals, slider beds, impact rollers and other needless components while eliminating spillage, dust and belt damage caused by debris trapped under flexible seals.

Customized for Your Application

The **HudcoAir** Conveyor is the only conveyor available with a truly airtight seal between plenum segments. Hudco's patented design and precise manufacturing method assures proper alignment and highly consistent belt tracking and support.



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Unique Features of the HudcoAir® Conveyor

- Load Cells** – The HudcoAir Conveyor can be modified with load cells to accurately weigh transported product.
- Sample Systems** – The HudcoAir is designed to accept product-sampling systems.
- Coating** – Hudco offers a variety of coating options, including epoxy /urethane, powder coating, Zinga* and hot dip galvanizing.
- Stainless Steel Construction** – For highly corrosive environments, Hudco can manufacture every component of the HudcoAir from select grades of stainless steel.
- Fire Detection and Elimination** – The HudcoAir Conveyor can be fitted with fire detection and elimination technology. Once detected, a signal activates a sequence of water or chemical spray to eliminate the potential fire or explosion. Fire Breaks also are designed into the system at strategic locations.

* Zinga is a one-component anti-corrosion zinc coating system. Its unique formula provides environmentally safe cathodic protection to steel comparable with hot-dip galvanizing.

HudcoAir® Size Chart

Belt Widths	Trough Angles	Conveyor Lengths
18"	The HudcoAir® is Available in All CEMA Trough Angles	The HudcoAir® is Available in Lengths From 10' to 5,000'
24"		
30"		
36"		
42"		
48"		
60"		
72"		
84"		
96"		

All conveyor configurations capable of transporting loads exceeding 250 pounds per cubic foot of product density.

This reference guide is not intended as a substitute for the product manual for the products referenced herein. Product manuals for the above products contain important precautions, directions for use and product warranty and liability limitations that must be read before using the product. Always read and follow all manual directions and precautions. Certain design features of the HudcoAir® Conveyor System are protected by U.S. Patent No. 6,491,156.

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HudcoAir®
*The World's Most Advanced
 Air Supported Belt Conveyor!*

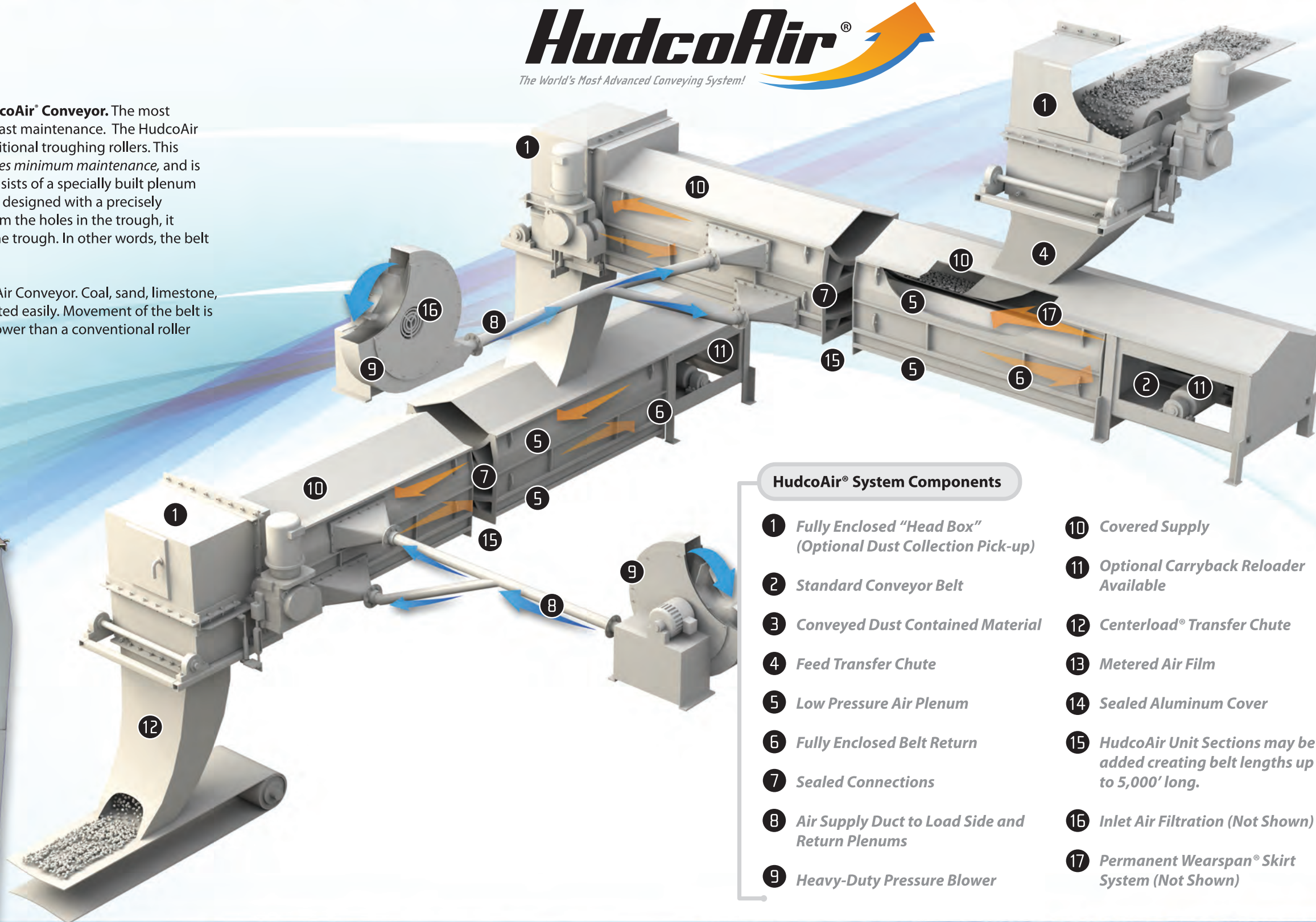




HudcoAir® Air Supported Conveyor System

Hudco Industrial Products, Inc. is delighted to offer the revolutionary **HudcoAir® Conveyor**. The most efficient belt conveyor in the world is also the cleanest and requires the least maintenance. The HudcoAir Conveyor uses low-pressure air to support the loaded belt in place of traditional troughing rollers. This revolutionary concept *minimizes friction, lowers power consumption, requires minimum maintenance, and is remarkably quiet and environmentally friendly*. The HudcoAir Conveyor consists of a specially built plenum pressurized by a low horsepower blower. The top surface of the plenum is designed with a precisely perforated trough to "cradle" the belt. As the pressurized air is released from the holes in the trough, it creates a film that actually levitates the belt from frictional contact with the trough. In other words, the belt literally **floats on air!**

There is *no limit* to the bulk products that can be transported on a HudcoAir Conveyor. Coal, sand, limestone, woodchips, fly ash, phosphate, cement and even iron ore can be transported easily. Movement of the belt is extremely smooth, quiet, safe and dust free, while using less total horsepower than a conventional roller supported conveyor.



HudcoAir® The World's Most Advanced Conveying System!

HudcoAir® System Components

- | | |
|----------------------------------------------------------------|---------------------------------------------------------------------------------|
| 1 Fully Enclosed "Head Box" (Optional Dust Collection Pick-up) | 10 Covered Supply |
| 2 Standard Conveyor Belt | 11 Optional Carryback Reloader Available |
| 3 Conveyed Dust Contained Material | 12 Centerload® Transfer Chute |
| 4 Feed Transfer Chute | 13 Metered Air Film |
| 5 Low Pressure Air Plenum | 14 Sealed Aluminum Cover |
| 6 Fully Enclosed Belt Return | 15 HudcoAir Unit Sections may be added creating belt lengths up to 5,000' long. |
| 7 Sealed Connections | 16 Inlet Air Filtration (Not Shown) |
| 8 Air Supply Duct to Load Side and Return Plenums | 17 Permanent Wearsan® Skirt System (Not Shown) |
| 9 Heavy-Duty Pressure Blower | |



Case Histories

Case #1: A major (PRB) coal fired power generation facility in the Midwest was faced with replacing a worn out conventional conveyor. The unit was 507 feet long, 42" belt width with a 69' vertical rise. The design capacity was 750 tons per hour. Spillage and dust from 7 vibrating feeders generated significant housekeeping chores. After a comprehensive cost study, the plant decided to install a HudcoAir® to retrofit their existing conveyor. Hudco Industrial Products, Inc. handled the entire project including installation and start up.

The project was completed on time and the performance of the conveyor has been spectacular. After observing the HudcoAir® perform through one of the coldest winters in 25 years, the plant had Hudco install a second HudcoAir®. These HudcoAir® Conveyors have reliably supported the entire fuel requirements for the 1,100 megawatt plant since 2001 with the following operational improvements.

- Daily clean up has been reduced by over 75%.
- There are no spillage or dust emissions from any point on the conveyors, including the 14 vibrating feeders.
- The HudcoAir® Conveyors deliver 1,500-tons per hour using approximately 30% less horsepower per ton. The electricity the plant saves on material handling can now be sold. Every kilowatt saved on power consumption is translated directly into company profits!
- Eliminated roller inventory
- Minimized fire and explosion risks
- Improved workplace safety

Case #2: Dust and spillage problems at a large (PRB) coal fired generation facility in Southeast were improved with the installation of a HudcoAir® Reclaim Conveyor. The 48" wide x 432' HudcoAir® was installed to replace a conventional system receiving PRB coal from 28 vibratory feeders. The conventional idler supported system required the use of over 800' of skirt and belt seals that required constant maintenance and replacement. In addition to the HudcoAir® Conveyor, each vibratory feeder was fitted with a Wearsan® Lined CenterLoad® Chute. This arrangement totally eliminated the need for over 800' of skirts and seals! The Hudco CenterLoad® Chute places the PRB coal onto the center of the belt without dust or spillage. Operational improvements include:

- Drastic reduction in daily clean-up duties related to the HudcoAir® System
- Elimination of coal spillage and dust emissions
- Elimination of seal skirt maintenance and replacement
- Elimination of idler maintenance and replacement
- Minimized fire and explosion risks
- Improved workplace safety