

Fast and Effective  
Cleaning Capability

Open Frame  
Tool-less Design

Innovative Staggered  
Sidewall Belts

Quick Belt  
Change



*Aqua***Pruf**<sup>®</sup>  
VBT

**VERTICAL BELT  
TECHNOLOGY**

Sanitary Vertical Belt Conveyors  
for Elevating Bulk Products

**DORNER**<sup>®</sup>  
*MOVE FAST. MOVE SMART.*

## AquaPruf Vertical Belt Technology is best for:

Elevating bulk product such as:

- Vegetables
- Fruits, Grains and Nuts
- Popcorn
- Pet Foods
- Pharmaceuticals
- Small packages

Industries:

- Food
- Pharmaceutical
- Chemical

Applications:

- Elevation for walk-thru
- Hopper feeding
- Weigh scale feeding
- General bulk handling
- Sanitary environments

## Sizes

- Lengths – Infeed and Exit
  - Minimum length = 20"
  - Maximum length = 72"
  - Length increments = 1/8"
- Heights
  - Minimum infeed TOB = 16"
  - Maximum outfeed TOB = 240"
  - Height increments = 1/8"

| Belt Width (in) | Pocket Width (in) | Full Pocket Capacity (cubic ft) | ½ Full Pocket Capacity (cubic ft) |
|-----------------|-------------------|---------------------------------|-----------------------------------|
| 12"             | 6.3               | 0.022                           | 0.011                             |
| 14"             | 8.3               | 0.029                           | 0.014                             |
| 16"             | 10.3              | 0.036                           | 0.018                             |
| 18"             | 12.3              | 0.043                           | 0.022                             |
| 20"             | 14.3              | 0.051                           | 0.025                             |
| 22"             | 16.3              | 0.058                           | 0.029                             |
| 24"             | 18.3              | 0.065                           | 0.033                             |

## Speeds

- Belt Speed up to 100 ft/min

## Belting

- Solid Urethane Belting with 2" pitch positive drive lugs
- 3.5" Tall RF welded scoop cleat
- 3.5" tall RF welded staggered sidewall
- Pocket Spacing
  - Minimum = 6"
  - Maximum = 18"
  - Spacing Increments = 2"



## Maximum Product Capacity

| Belt Width (in) | Pocket Width (in) | At 50 ft/min Belt Speed and 6" Spacing: |                                 |                                 | At 100 ft/min Belt Speed and 6" Spacing: |                                 |                                 |
|-----------------|-------------------|---|---------------------------------|---------------------------------|--|---------------------------------|---------------------------------|
|                 |                   | Full Pocket (cubic ft/hour)             | 2/3 Full Pocket (cubic ft/hour) | 1/2 Full Pocket (cubic ft/hour) | Full Pocket (cubic ft/hour)              | 2/3 Full Pocket (cubic ft/hour) | 1/2 Full Pocket (cubic ft/hour) |
| 12"             | 6.3               | 130                                     | 86                              | 65                              | 260                                      | 173                             | 130                             |
| 14"             | 8.3               | 173                                     | 115                             | 86                              | 347                                      | 231                             | 173                             |
| 16"             | 10.3              | 217                                     | 144                             | 108                             | 434                                      | 289                             | 217                             |
| 18"             | 12.3              | 260                                     | 173                             | 130                             | 520                                      | 347                             | 260                             |
| 20"             | 14.3              | 303                                     | 202                             | 151                             | 607                                      | 405                             | 303                             |
| 22"             | 16.3              | 347                                     | 231                             | 173                             | 694                                      | 463                             | 347                             |
| 24"             | 18.3              | 390                                     | 260                             | 195                             | 781                                      | 520                             | 390                             |

## Open Frame/Tool-Less Sanitary Design

- Continuous TIG welded 304 stainless steel frame
- #4 Polish on all surfaces
- Open frame and tool-less design for ease of cleaning
- Drive Gearmotor located on main column outside food drop zone



## Staggered Sidewall Belt

- Staggered Sidewall Belt provides 15% more pocket capacity than a traditional sidewall belt
- Self-Releasing Sidewall improves product release
- Consistent RF Bonded Staggered Sidewall with 80% less bond area
- Staggered Sidewalls can be individually and easily repaired if damaged
- Clean through Side Wall Design improves clean-ability and reduces cleaning time and water usage



## Quick Belt Change

- Quick Change open frame design allows belt change in approximately 20 minutes
- Tool-less removal of idlers and belt supports
- Loose belt drops down main column
- No belt tensioning needed



## The Benefits of a Dorner AquaPruf Vertical Belt Technology

- **Innovative Offering**
  - Open frame design for quick cleaning and more effective product changeover
  - New, unique staggered sidewall belt improves pocket capacity
  - Quick belt change in approximately 20 minutes
- **Delivers Fast**
  - Dorner sets the industry standard for rapid delivery
  - Customizable product sizes available in 25 days or less
- **Industry Ready**
  - Designed and manufactured to food equipment standards
  - FDA Approved and USDA Certified Food Safe belt material
  - Motor located on main column outside of food drop zone

At Dorner we make it our mission to provide you with a system that you can depend on to move your product from point A to point B with precision and speed. It's that commitment and history of proven excellence that has made the Dorner Brand a recognized leader in precision conveyors for nearly 50 years. With our complete line of customizable conveyor systems we have the perfect solution for you!



## 1X Series

The 1X Series Line is designed for small part handling and transfers where space is a premium.

### 1X Series Family:

- Flat Belt
- Aluminum Frame
- Widths to 10"
- Loads to 15 lbs
- Speeds up to 80 fpm



## 2X Series

The 2X Series Line is engineered for small to medium sized parts, precision applications and flexible layouts.

### 2X Series Family:

- Flat Belt
- Cleated Belt
- Modular Belt
- Precision Move
- SmartFlex®
- Aluminum Frame
- Widths to 24"
- Loads to 200 lbs
- Speeds up to 400 fpm
- Curves



## 3X Series

The 3X Series Line is designed for medium to heavy sized parts, precision applications, bulk handling and flexible layouts.

### 3X Series Family:

- Flat Belt
- Cleated Belt
- Modular Belt
- Flexible Chain
- Precision Move
- Aluminum Frame
- Widths to 60"
- Loads to 1000 lbs
- Speeds up to 600 fpm
- Curves
- Z-Frame Elevators



## 7X Series

The 7X Series Stainless Steel Line is engineered for small to heavy product requiring various levels of sanitary design and flexible layouts.

### 7X Series Family:

- AquaPruf® + AquaGuard®
- Flat Belt
- Cleated Belt
- Modular Belt
- Flexible Chain
- Vertical Belt Technology
- Stainless Steel Frame
- Widths to 52"
- Loads to 750 lbs
- Speeds up to 400 fpm
- Curves
- Z-Frame Elevators

### NEED SOMETHING DIFFERENT?

DORNER'S **ENGINEERED SOLUTIONS GROUP** PROVIDES EXACTLY WHAT YOU NEED FOR YOUR SPECIFIC APPLICATION. FROM MODIFIED STANDARD CONVEYORS TO COMPLETE CUSTOM DESIGNS.

### LOOKING FOR AFTER SALE SUPPORT?

DORNER'S **SERVICES TEAM** PROVIDES COMPLETE SUPPORT FROM REPLACEMENT PARTS TO INSTALLATION AND MAINTENANCE SERVICES.



DORNER MFG. CORP.  
PO Box 20 • 975 Cottonwood Ave.  
Hartland, WI 53029 USA

INSIDE THE USA  
TEL: 800.397.8664  
FAX: 800.369.2440

OUTSIDE THE USA  
TEL: 262.367.7600  
FAX: 262.367.5827

[www.dorner.com](http://www.dorner.com)  
[info@dorner.com](mailto:info@dorner.com)

