

# CONVEYOR PULLEYS

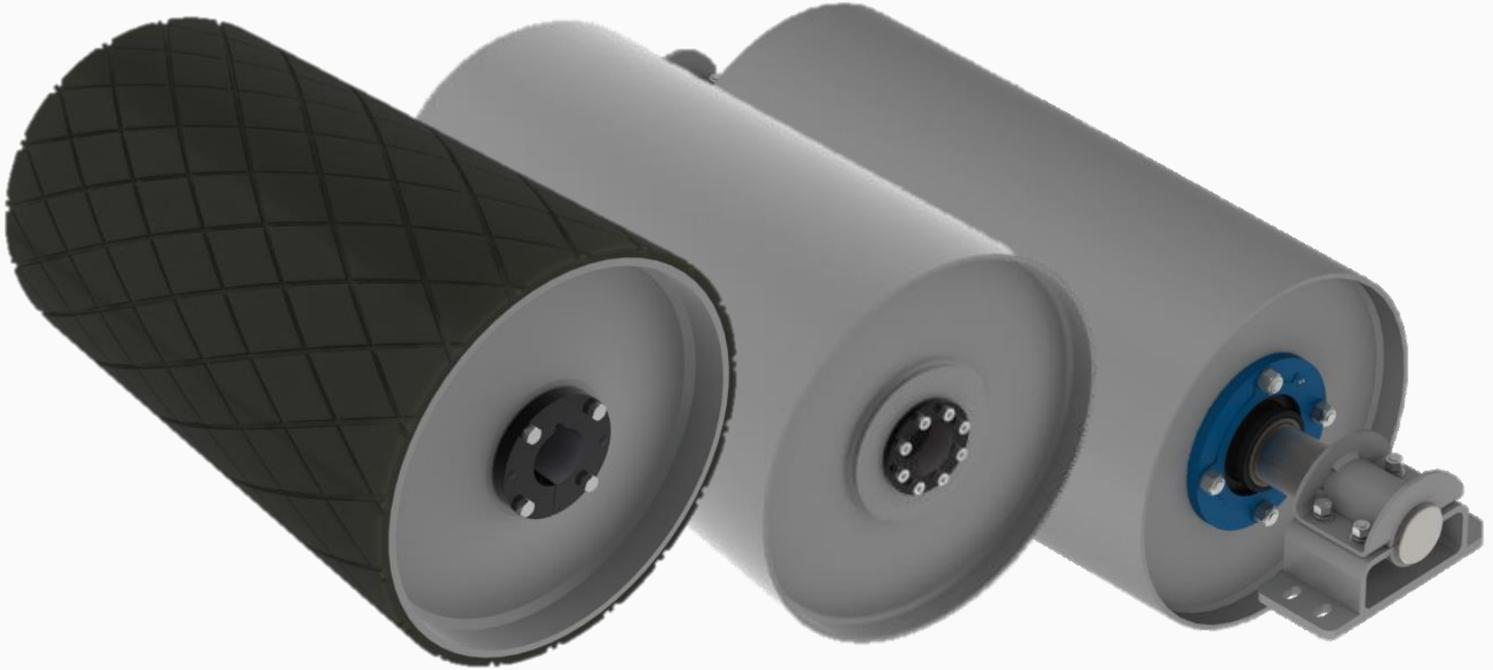


989.358.6149

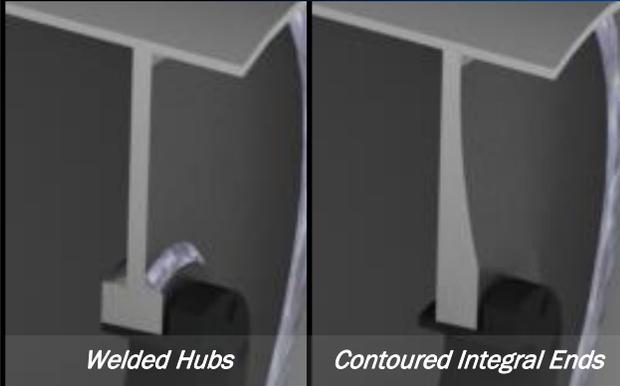
www.pcimfg.com

## Drum Pulleys - Heavy Duty & Mine Duty

PCI® Heavy Duty and Mine Duty drum conveyor pulleys are designed to meet or exceed CEMA construction standards for belt conveyor applications where packaged or bulk goods are being conveyed.



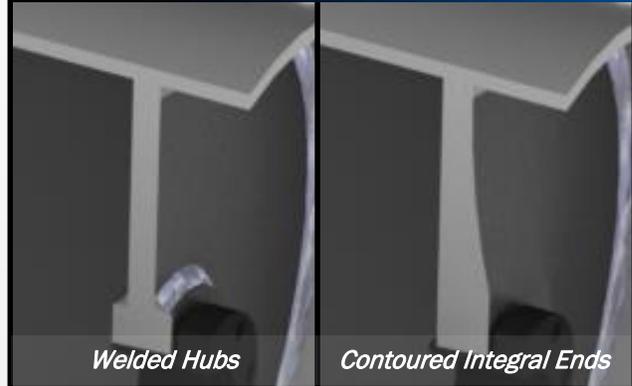
### HEAVY DUTY



Welded Hubs

Contoured Integral Ends

### MINE DUTY



Welded Hubs

Contoured Integral Ends

#### DIAMETERS AVAILABLE

14" through 60"

THICKNESSES	WALL	END DISKS
Heavy Duty	1/4" (min)	1/4" (min)
Mine Duty	5/16" (min)	5/8" (min)

#### HUB STYLES AVAILABLE

- \*Plain Bore or Welded Shaft (Type 1/Type A)
- \*Keyed Hubs (Type 2/Type B/Type D)
- Welded Compression Hubs/Bushings (Type 4)
- Contoured Integral End Disks/Bushings
- Keyless Locking Devices
- Dead Shaft Assembly

\*Available in Heavy Duty Only

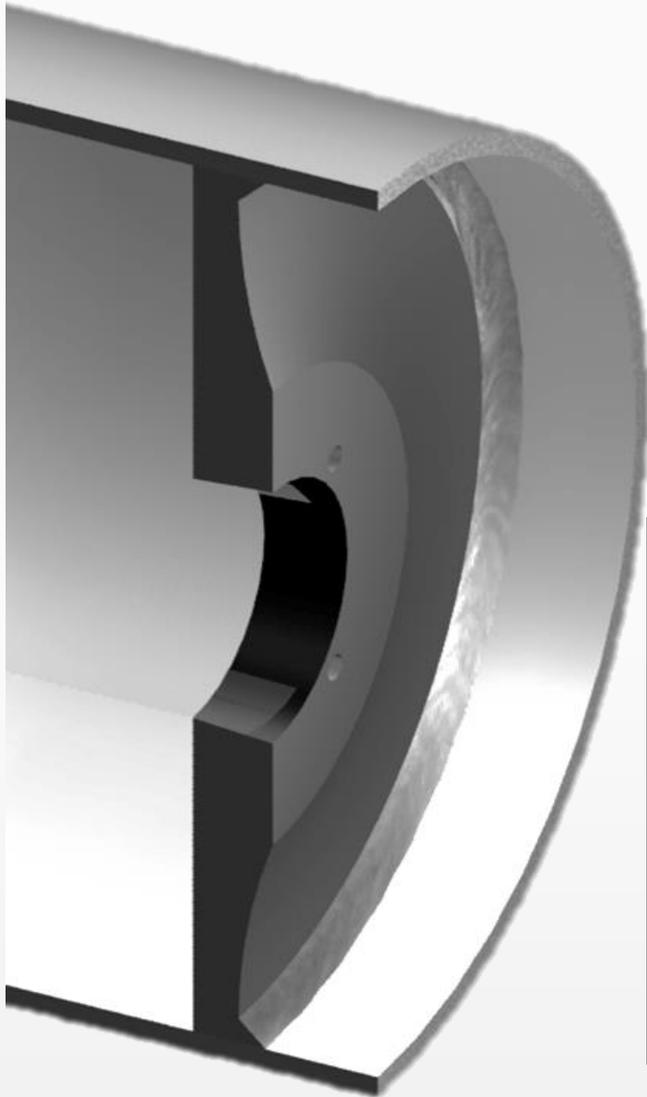
# CONVEYOR PULLEYS



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## Focus Flyer - Contoured Integral End Disks [www.pcimfg.com](http://www.pcimfg.com)

PCI® Contoured Integral End Disks are designed to maximize conveyor pulley life by reducing the risk of failure from end disk fatigue. PCI's design eliminates the need for a hub-to-disk weld by machining a hub directly into the surface of the end disk. In addition, PCI's special contour optimizes the surface stress of the end disk by allowing for adequate flexibility not provided by flat disk designs.



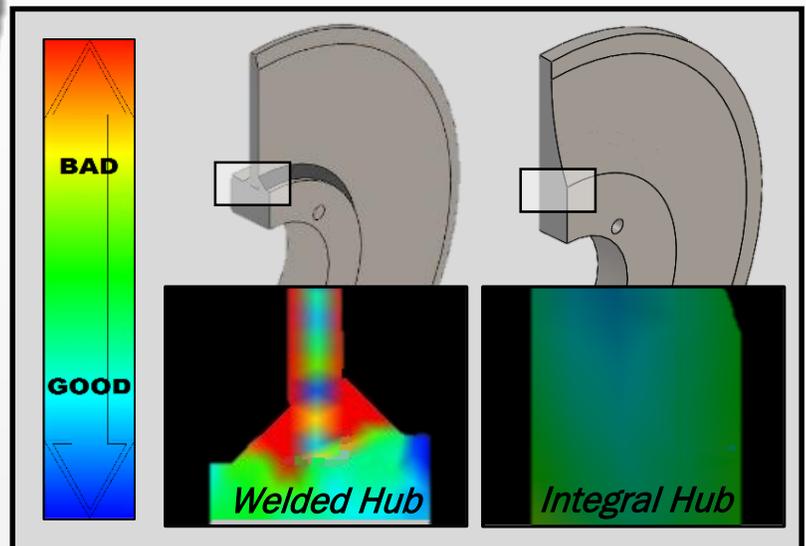
### **DESIGN BENEFITS**

*Even Distribution of Stress*

*Improved Bore Alignment*

*Eliminates Weld Stresses*

*Optimized Flexibility*



**Machined Integral Hub:** The leading cause of premature pulley failure is end disk fatigue. End disk fatigue causes a pulley to fail at the weakest point on the end disk, the area near the weld between the hub and disk. The sudden change in geometry between the flat disk and the cylindrical hub produces an area of increased stress concentration. Additionally, welding also distorts the end disk causing hub bores to misalign from end to end. An integral style hub machined directly into the end disk eliminates the need for a weld between a hub and disk, thereby greatly reducing the risk of premature pulley failure.

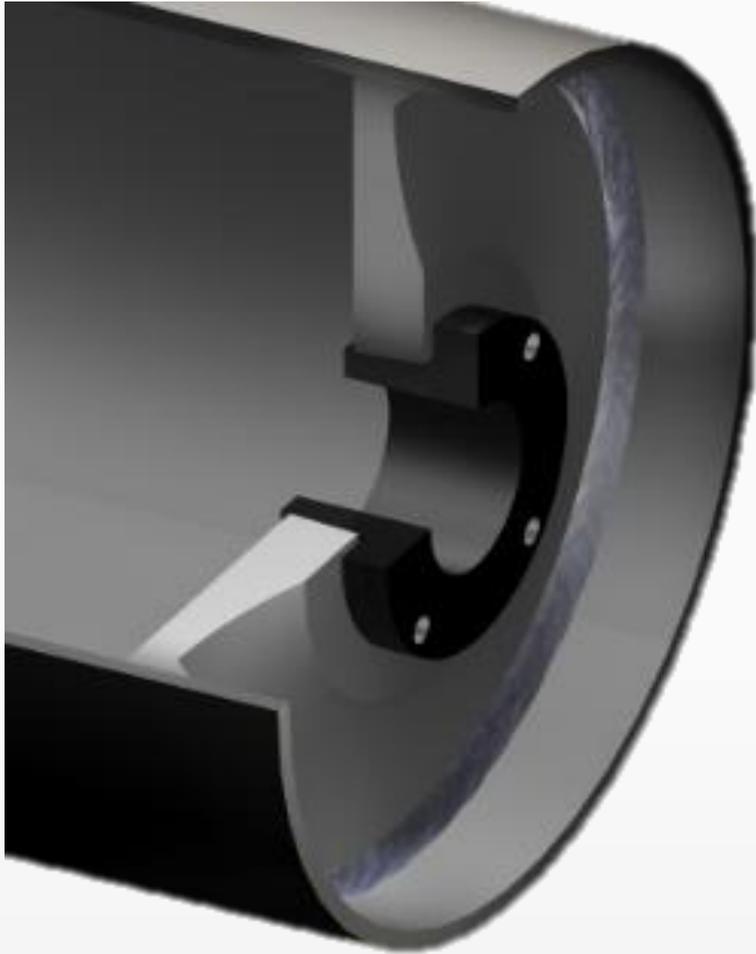
**Contoured Profile:** Flat end disk designs discourage proper flexing of the end disk, thereby increasing the amount of stress induced in vulnerable areas. PCI's contoured profile allows for adequate flexibility under load by increasing thickness where it benefits load accommodation and decreasing thickness where the disk should be allowed to flex.

# CONVEYOR PULLEYS

## Focus Flyer – Drum Pulleys with XT® Style Contoured Integral End Disks

**PCI**®  
989.358.6149  
www.pcimfg.com

PCI® drum pulleys are designed to withstand the most rugged of bulk handling applications by incorporating several life enhancing features into product construction. These features minimize stress and fatigue in the critical load bearing components, ensuring maximum life and dependable performance.



### **DESIGN BENEFITS...**

#### **CONTOURED PROFILE**

*Even Distribution of Stress*

*Optimized Flexibility*

#### **MACHINED INTEGRAL HUB**

*Eliminates Welded Hub Stresses*

*Improved Bore Alignment*

#### **XT® BUSHINGS**

*Optimized Taper Minimizes Stress*

*Self-Locking & Easy to Install*

#### **CONTOURED PROFILE**

Flat end disk designs discourage proper flexing of the end disk, thereby increasing the amount of stress induced in vulnerable areas. PCI's contoured profile allows for adequate flexibility under load by increasing thickness where it benefits load accommodation and decreasing thickness where the disk should be allowed to flex.

#### **MACHINED INTEGRAL STYLE HUB**

The leading cause of premature pulley failure is end disk fatigue. End disk fatigue causes a pulley to fail at the weakest point on the end disk, the area near the weld between the hub and disk. The sudden change in geometry between the flat disk and the cylindrical hub produces an area of increased stress concentration. Additionally, welding also distorts the end disk causing hub bores to misalign from end to end. An integral style hub machined directly into the end disk eliminates the need for a weld between a hub and disk, thereby greatly reducing the risk of premature pulley failure.

#### **XT® BUSHINGS**

The steep taper angle of the XT® compression hub and bushing system reduces the risk of premature failure from end disk fatigue and the self-locking, 4-bolt design simplifies installation procedures. These design specifications make it an ideal choice for use in conveyor pulley applications.

*XT® is a trademark of Van Gorp Corp.*