

## Built to Last, Built to Perform

PCI has been manufacturing conveyor pulleys with quality and reliability at the forefront. Our Drum Pulleys are designed with selective weight distribution to ensure that you receive the optimum value for your purchase. This means you're getting the right amount of strength...in the right places.



# CONVEYOR PULLEYS

## Drum Pulleys – Package Handling FC & MC Series



Drum pulleys from 2" to 12" in diameter are available in FC and MD Series construction. FC Series pulleys are manufactured from gauge wall or light duty tubing and feature PCI's unique Trapezoidal Crown package. PCI's proprietary crowning process provides the consistency, performance, and dependability of a Trapezoidal Crown profile in an economic gauge wall construction. MC Series drum pulleys are manufactured from medium or heavy wall tube or pipe and receive a machined crown when a crown is specified.



### ***SURFACE OPTIONS INCLUDE...*** MACHINING, LAGGING & KNURLING

#### DIAMETERS AVAILABLE

2" through 12.75"

#### WALL THICKNESSES

**FC:** 11 gauge (.120"), 10 gauge (.134"), 3/16"

**MC:** Multiple Options 1/4" through 3/8"

#### END DISK THICKNESSES

1/4" - 5/16" - 3/8" - 1/2"

#### HUB STYLES AVAILABLE

Plain Bore or Welded Shaft (*Type 1/Type A*)

Keyed Hubs (*Type 2/ Type B / Type D*)

Internal Bearings (*Type 3 / Type C*)

Welded Compression Hubs/Bushings (*Type 4*)

Contoured Integral End Disks/Bushings

Keyless Locking Devices (*Type 5*)

Welded Stub Shaft

Dead Shaft Assembly

*Hub style availability  
will vary based on  
pulley construction.*



(989)358-6149

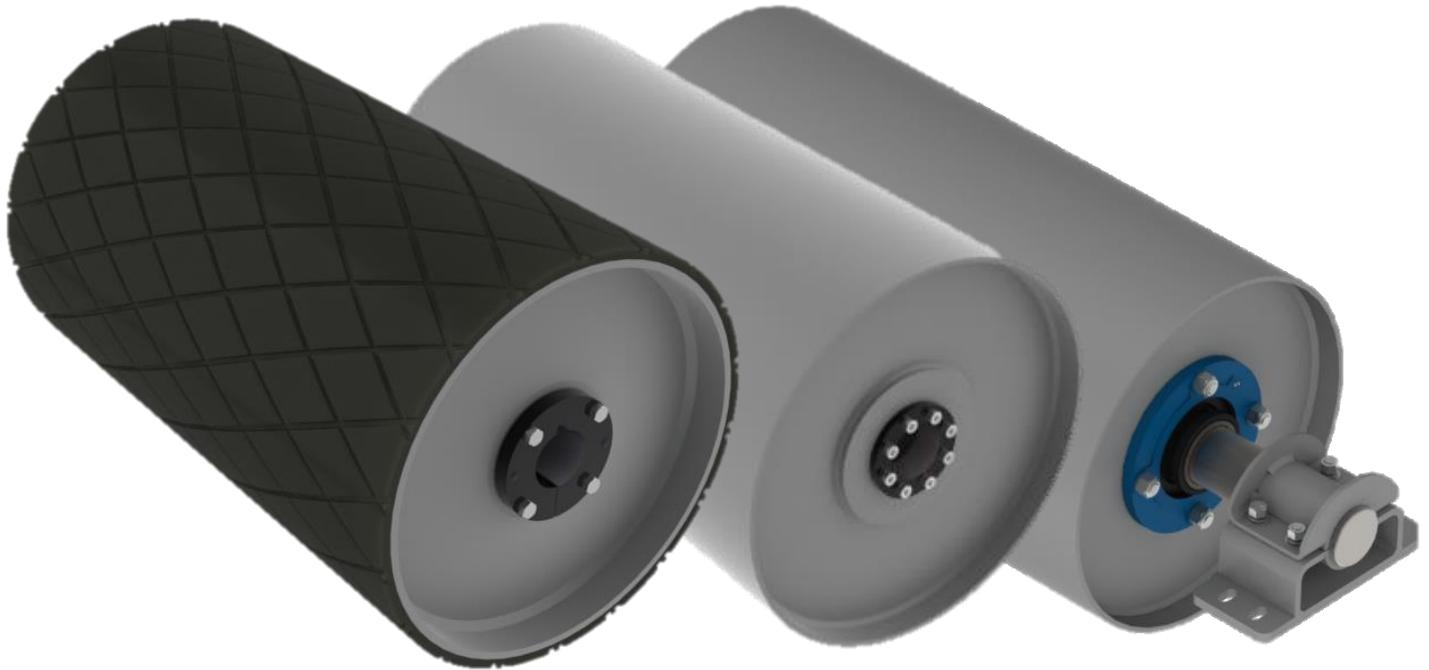
[www.pcimfg.com](http://www.pcimfg.com)

# CONVEYOR PULLEYS

## Drum Pulleys – Bulk Handling Heavy / 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 bulk goods are being conveyed. PCI Heavy & Mine Duty drum pulleys feature PCI's Contoured Integral End Disks, which maximize pulley life by reducing the risk of failure from end disk fatigue



**DIAMETERS AVAILABLE**  
Standards up to 60"

**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

*Hub style availability will vary based on pulley construction.*

*\*Available in Heavy Duty Only*



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# CONVEYOR PULLEYS

Focus Flyer

Contoured Integral End Disks



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*

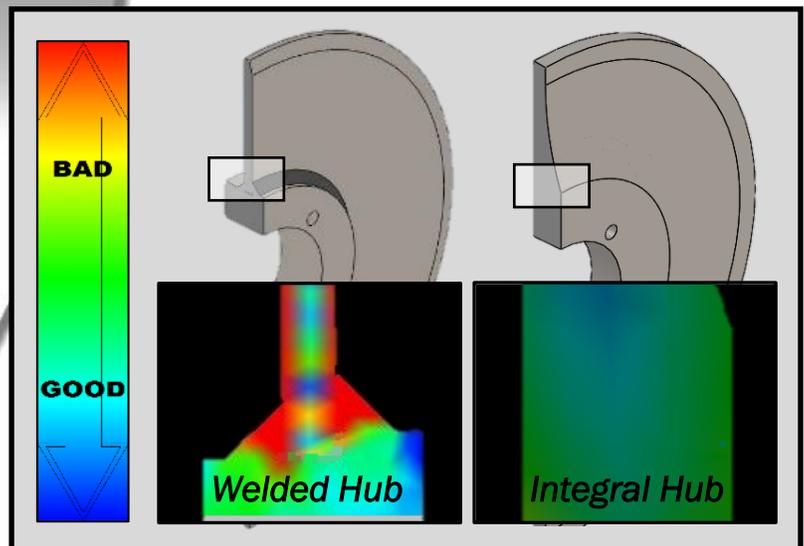
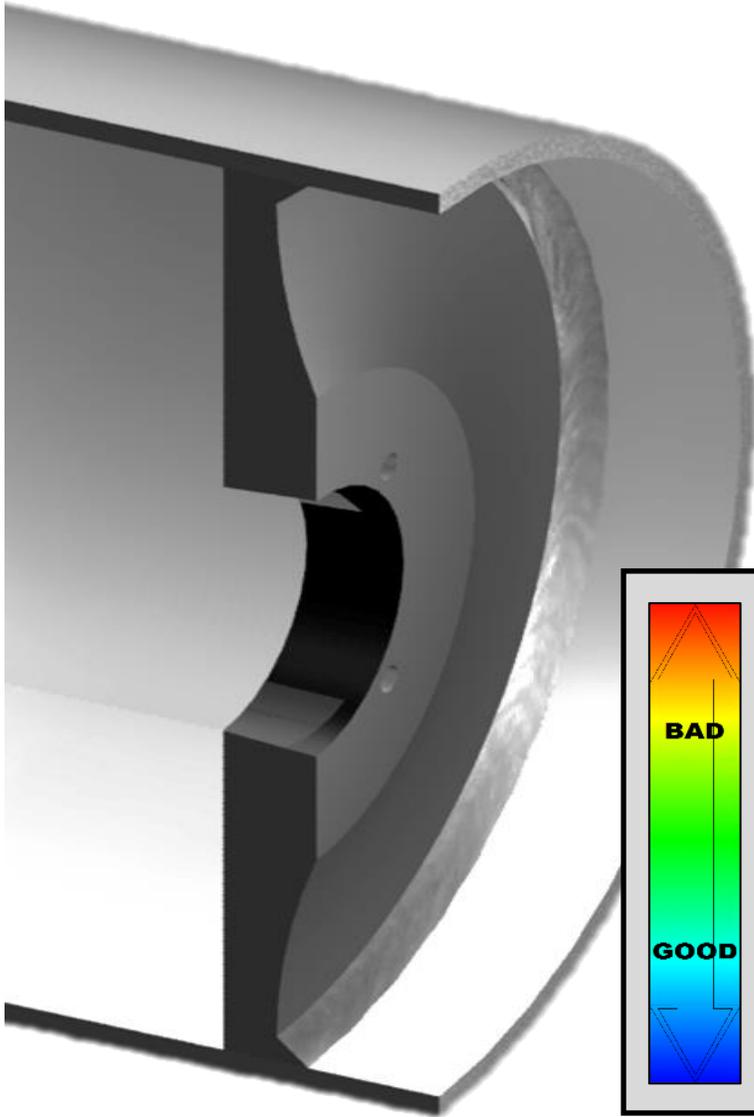
*Improved Bore Alignment*

*Eliminates Weld Stresses*

*Optimized Flexibility*

## **FAILURE FREE**

## **SINCE 2011**



**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.