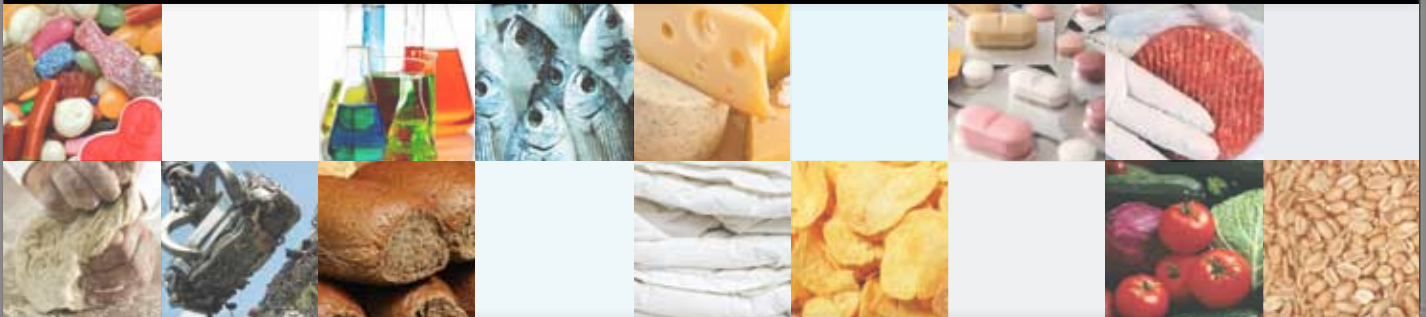




PCI® Stainless Steel Conveyor Pulleys
Stainless Steel Selection & Solutions Simplified

PRODUCT SHOWCASE



PCI®, ProCal Inc.
www.pcimfg.com
Toll Free 800.323.0966

STAINLESS STEEL CONVEYOR PULLEYS

Selection of appropriate components plays a critical role in achieving ultimate success in conveyor design. Without the use of proper tools and training, this selection process can be cumbersome and time consuming for environments requiring stainless steel materials. To help simplify your selection process, PCI has developed four distinct classes of stainless steel conveyor pulleys that are designed to meet the requirements of a variety of applications. Our unique approach to stainless steel conveyor pulley design provides you with: stainless steel selection & solutions simplified.

◆ **What applications will benefit from the features of stainless steel pulley designs?**

The unique features of stainless steel material make it desirable in product construction for use in a variety of applications. PCI stainless steel conveyor pulleys are designed to benefit the following applications:

Description of Potential Application

Conveyor located in a corrosive environment
Conveyor magnetically removes metal particulate
Conveyed product/debris must be removed from conveyor component surfaces
Conveyed product is sensitive to bacterial contamination

Desired Benefit

Extend service life over that of a carbon steel pulley
Reduce magnetic properties of the pulley
Improve ability to clean pulley surfaces (HACCP Guidelines)
Conform to USDA/FDA regulations

◆ **What are the proper surface finish requirements for the intended application?**

The surface finish of a conveyor pulley can drastically impact its performance in application. The finish provided on the surfaces of the conveyor pulley will impact the amount of work required to fully eradicate contaminants from its surfaces. Generally speaking, the smoother the surface finish, the easier it will be to remove material from the surface. Because of the variance in available finishes and the work required to achieve them, surface finish should be carefully selected to ensure you receive the correct product at the optimum price. The following is a listing of typical environments and the surface finish rating commonly associated with those environments:

Environment

Conveyor not handling food products
Direct contact with food is not a primary concern
Contact with food is not a sanitary hazard
3A sanitary compliance required

Surface Finish Required

"As Fabricated"
250 Micro-Inches
125 Micro-Inches
32 Micro-Inches



32 Micro-Inches



125 Micro-Inches



250 Micro-Inches



Standard Finishes
(media treated surfaces pictured)

STAINLESS STEEL CONVEYOR PULLEYS

◆ What is the proper pulley construction for the intended application?

The means by which a conveyor pulley is constructed can play a pivotal role in achieving performance success in an application. The construction of a stainless steel conveyor pulley should be carefully selected to ensure that the desired level of maintenance and sanitary compliance is achieved. The following is a listing of construction specifications and their individual influence on performance in the desired application:

Specification

Location of End Plates
Hub Style
Axle Details

Influence on the Application

Impacts allowance for material buildup
Impacts access of contaminants to internal cavities
Impacts compliance with sanitary regulations

For Stainless Selection and Solutions Simplified, choose from the following PCI classes:

Sanitary



Super Clean



Easy Clean



Extra Value



Class – X

PCI's dedication to creating a solution for every application drives our Class X product offering. The finish, construction and features of a Class X pulley are custom designed every time to meet the individual needs of your unique application. If PCI hasn't already designed your solution, ask for a Class X solution.

Class X Examples:

For your convenience, PCI provides the following value-added services:

- ◆ Food Grade Lagging
- ◆ De-Magnetization



SANITARY CLASS

Manufactured to meet 3A, USDA and FDA requirements for cleanliness, PCI Sanitary Class pulleys offer a premium surface finish and intelligent construction for application success in strict sanitary environments. All steel surfaces are manufactured to a finish of 32 micro-inches (or better) and are free of imperfections such as scratches, nicks, or pits. Pulley construction is designed with flush end disks to deter buildup of harmful bacteria and axles are welded to prohibit access of contaminants to internal cavities. Extreme care is taken to avoid cross-contamination of stainless steel surfaces with ferrous metals during the entire manufacturing process.

The design, construction and care taken while manufacturing a PCI Sanitary Class pulley make it the highest grade and most expensive of the PCI stainless steel conveyor pulley classes.

TARGET APPLICATIONS

Food processing applications where 3A, FDA or USDA requirements are most stringent.

TARGET MARKETS

Beef	Baked Goods
Poultry	Pasta
Seafood	Confectionary
Dairy	

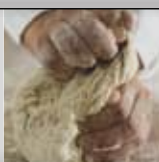
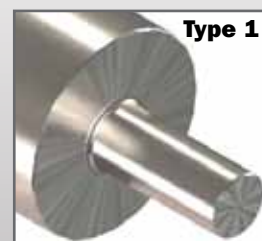
PRODUCT SPECIFICATIONS

Construction Materials:	304 Stainless Steel
Steel Surface Finishes:	32 Micro-Inches (or better)
Lagged Surface Finishes:	64 Micro-Inches (or better)
End Plate Location:	Flush with Pulley Ends

Additional Standard Features:	No Surface Imperfections Cross Contaminant Free Shaft Center Drills Removed All Surfaces Machined Aesthetically Pleasing
--------------------------------------	--

Hub Styles

Type 1: Welded Shaft



SUPER-CLEAN CLASS



Manufactured to provide maximum cleaning efficiency and general aesthetics to the intended application, PCI Super-Clean Class pulleys are intended for conveyor applications requiring the benefits of a fully machined pulley where USDA or FDA sanitary compliance is not required. Super-Clean pulleys are designed with a 125 micro-inch (or better) surface finish on all surfaces including weld fillets to improve removal of debris and end plates flush with the pulley ends to minimize buildup of debris. Although offering a high grade finish, surfaces of a Super-Clean pulley may include imperfections such as pits, scratches or small pockets. Super-Clean pulleys are available in Type 1: Welded Shaft or Type 2: Keyed Hub configurations to allow for fixed or removable axles. Super-Clean pulleys offer an economical alternative to achieve the benefits of the fully machined surfaces of a sanitary class pulley.

TARGET APPLICATIONS

Food processing applications with strict HACCP requirements where sanitary compliance to 3A, FDA or USDA regulations is not required.

TARGET MARKETS

Baked Goods
Pasta
Confectionary

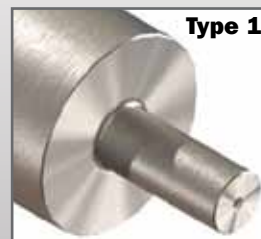
Pharmaceutical
Chemical

PRODUCT SPECIFICATIONS

Construction Materials: 304 Stainless Steel
All Surface Finishes: 125 Micro-Inches (or better)
End Plate Location: Flush with Ends
Additional Standard Features: All Surfaces Machined
Aesthetically Pleasing

Hub Styles

Type 1: Welded Shaft
Type 2: Keyed Hubs



EASY-CLEAN CLASS

Manufactured to provide benefits in cleaning efficiency to the intended application, PCI Easy-Clean Class pulleys are intended for conveyor applications where direct food contact is not a primary concern. Easy-Clean pulleys offer a 250 micro-inch (or better) surface finish on all surfaces including weld fillets to allow for easy removal of material from pulley surfaces. Because of their intended use, surfaces may include imperfections such as pits, scratches or small pockets. To minimize material buildup, end plates are designed flush with pulley ends and are offered in a few hub configurations allowing for fixed or removable axles. Easy-Clean Class pulleys offer an economical solution for applications desiring some level of cleaning efficiency.

TARGET APPLICATIONS

Food conveyor applications where sanitary requirements are not a concern but some degree of cleaning efficiency is desired.

TARGET MARKETS

Vegetables

Grain

Snack Foods

Chemicals

Pharmaceuticals

PRODUCT SPECIFICATIONS

Construction Materials:	304 Stainless Steel
All Surface Finishes:	250 Micro-Inches (or better)
End Plate Location:	Flush with Pulley Ends
Additional Standard Features:	Media Treated Surfaces

Hub Styles

- Type 1: Welded Shaft
- Type 2: Keyed Hubs
- Type 3: Internal Bearing (Carbon/Stainless)



EXTRA-VALUE CLASS

Designed to provide corrosion resistance and reduced magnetic properties to the intended application, PCI Extra-Value Class pulleys are intended for conveyor applications where sanitary requirements are not a concern. Because of their intended use, this class of pulleys offers a minimum grade surface finish, welds in "as-welded" condition and end-plates recessed in the pulley ends. Pulleys in this class may have slight surface imperfections including pits, scratches, and small pockets however, surfaces are media treated to provide a uniform visual appearance. Extra-Value class pulleys are available in all standard hub configurations and are the most economical of the PCI stainless steel conveyor pulley classes.

TARGET APPLICATIONS

Conveyor applications requiring a stainless steel pulley for corrosion resistance or non-magnetic purposes.

TARGET MARKETS

Food Processing
Agricultural
Recycling

Industrial Laundry
Amusement Parks

PRODUCT SPECIFICATIONS

Construction Materials: 304 Stainless Steel
All Surface Finishes: "As Fabricated"
End Plate Location: Recessed
Additional Standard Features: Media Treated Surfaces

Hub Styles

Type 1: Welded Shaft
Type 1: Plain Bore
Type 2: Keyed Hubs
Type 3: Internal Bearing (Carbon/Stainless)
Type 4: Compression Hub/Bushing (Carbon/Stainless)

