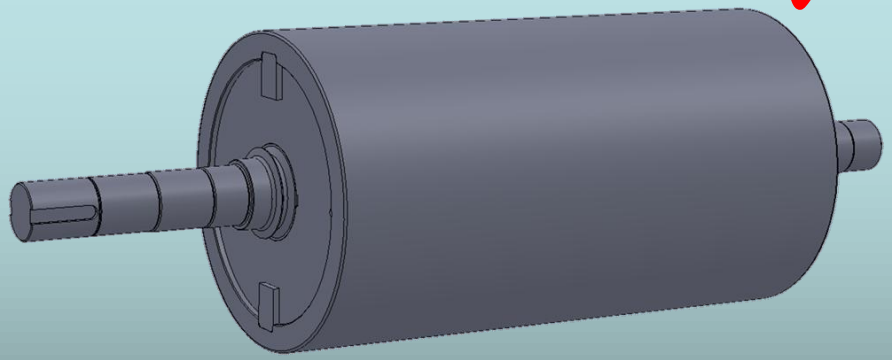
Xtek

Bemcalloy

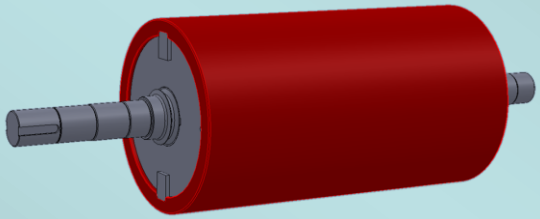


Pinch Rolls

Design

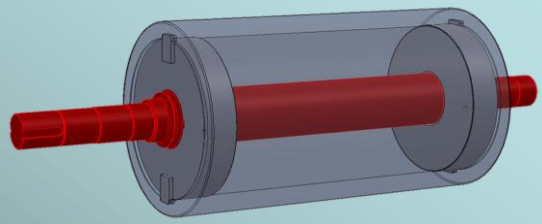
Xtek Bemcalloy Pinch Rolls

Sleeve



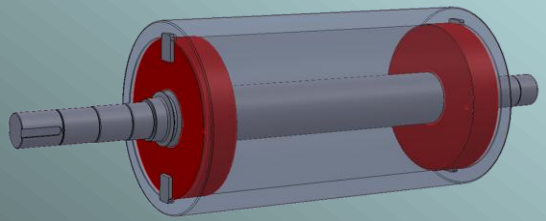
- Horizontally-oriented centrifugally cast
- Diameter range is 26” (660mm) to 36.15” (918mm)
- Length range is 48” (1219mm) to 120” (3050mm)
- Maximum weight of casting is 18,000 lbs. (8165 kg)

Shaft



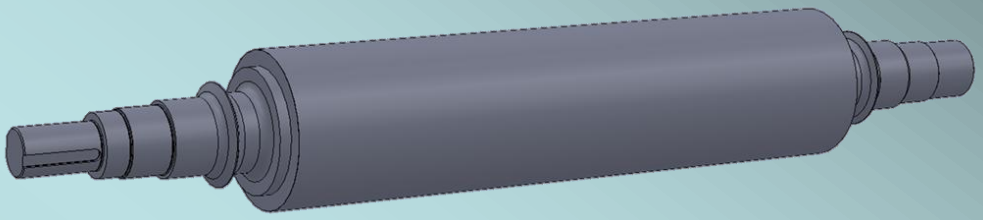
- High quality alloy steel
- Open-die forging or forged bar
- Alloy and heat-treatment tailored for application
- Available in all sizes to fit all OEM designs

Hubs & Hardware



- High quality alloy steel
- Disc forgings (Hubs) and plate (Hardware)
- Hubs are welded and keyed to shaft
- Hubs provide the base for shrink fitting of sleeve

Design



Bemcalloy
Bottom Pinch Rolls

- Engineered for optimal performance and a value-added solution
- Standard designs available for use in nearly all OEM coilers
- Hardened forged steel roll option available (standard Roll Alloys)
- Xtek exclusive design includes several integrated components

Sleeve ~ Shaft ~ Retainer Ring ~ Hardware

Resistance to Pickup

Pickup is a condition whereby foreign material becomes adhered to the surface of the pinch roll during service. The condition causes mill downtime for pickup removal from the pinch rolls and/or scrapped coils due to poor surface quality.

Bemcalloy completely resists Pickup!

The inherent lubrication properties of graphite in Bemcalloy along with the natural resistance to adhesion of dissimilar metals is the basis of the pickup resistance of Bemcalloy.

- ***Using Xtek Bemcalloy pinch rolls reduces mill downtime!***
- ***Using Xtek Bemcalloy pinch rolls reduces coil rejections!***

Wear Resistance

Two wear mechanisms, abrasion and adhesion (frictional), occur in the pinch roll application. Abrasive wear results when a harder material removes particles from a softer surface. Adhesive, or frictional wear, results from the scuffing action between two surfaces that come into contact. Both mechanisms cause pinch roll wear.

Bemcalloy resists both adhesive and abrasive wear!

The specific chemistry and heat-treatment process used at Xtek metallurgically tailors the Bemcalloy microstructure to resist both.

- ***Xtek Bemcalloy pinch rolls withstand longer mill campaigns!***
- ***Xtek Bemcalloy pinch rolls require less stock removal at regrind!***