

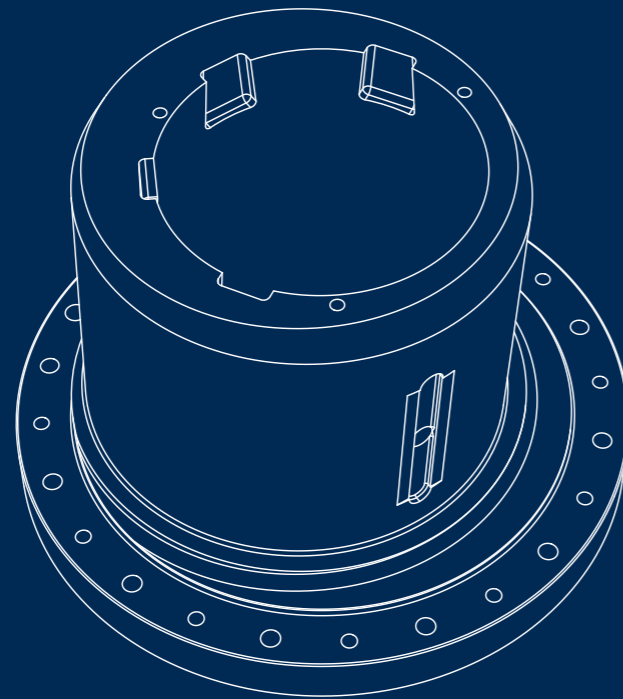
# EXCEL™ Replacement parts for Omnicone® cone crushers Reliable high quality parts



**FLS**

# Improve performance with our spare parts for Omnicone® Cone Crushers

Discover the difference our re-engineered spare wear parts can make in your existing crusher to increase performance and decrease maintenance.



## Key benefits

- Increase durability
- Increase longevity
- Consistent high quality
- Reduce maintenance and downtime

# Extraordinary components do not happen by accident

EXCEL™ bronze bushings and components perform better because our standards are higher.

## Higher tensile strength

Tin is the most expensive ingredient in the metallurgy of bronze alloys, but it creates tougher bushings that last longer. We use the maximum percentage of tin to increase your profits. We certify our crusher bronze to the top end of the CDA specification for tin.

## Uniform lead distribution

During casting, we use an innovative technique that distributes lead and other alloy grains uniformly. We then use a unique chilling process that ensures the uniform distribution is locked in. Our dedication to lead distribution means that when you use EXCEL™ cast alloys, there is less friction and more defense against heat build-up. In short, our bushings and other cast parts last longer and have fewer problems.



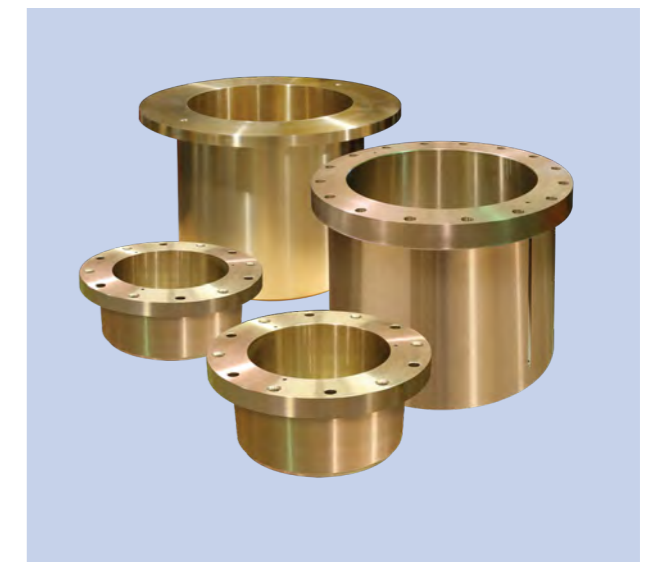
Standard bronze pour from furnace to ladle in our foundry for EXCEL™ parts, located in Pekin, Illinois, USA

## Optimum concentricity

Our competitors are content with bushings that are close enough to concentric. We create perfectly concentric bushings using a unique pinch turning method during machining and cut the inside and outside diameters simultaneously. This process guarantees that your bushings are concentric with no weak spots or deformities and lowers the risk of hot spots.

## Porosity-free/uniform grain structure

We begin preparing for casting by selecting the highest grade pure raw materials. The unique centrifugal casting technique that we use produces a tighter, denser grain structure in the alloy and eliminates nearly all gas pockets. What does this mean to you? The cast alloys you buy from us last longer and have significantly fewer defects.



XL40 bronze components

# Omnicone<sup>®</sup> series cone crushers

937TM, 1144TM, 1352TM, 1560TM

## Component identification

### Bowl assembly

- Adjustment Cap
- Bowl
- Adapter Ring
- Bowl Hardware

### Hydraulic components

- Bowl Adjustment Ram
- Clamping Cylinder
- Tramp Release Cylinder

### Liner & hopper components

- Hopper Assembly
- Bowl Liner
- Mantle

### Head & socket assembly

- Head Ball
- Socket Liner
- Socket
- T-Seal
- Head
- Head Bushing

### Eccentric assembly

- Counterweight
- Eccentric Bushing
- Eccentric
- Thrust Bearing
- Gear

### Feed plate assembly

- Feed Plate
- Cover
- Locking Nut
- Torch Ring

### Adjustment ring assembly

- Dust Shell Seal
- Dust Shell
- Adjustment Ring Bushing
- Adjustment Ring
- Dust Collar
- Dust Collar Seal

### Mainframe assembly

- Mainframe Pin
- Mainframe
- Mainframe Liner
- Mainshaft
- Thrust Washer
- U-Seal

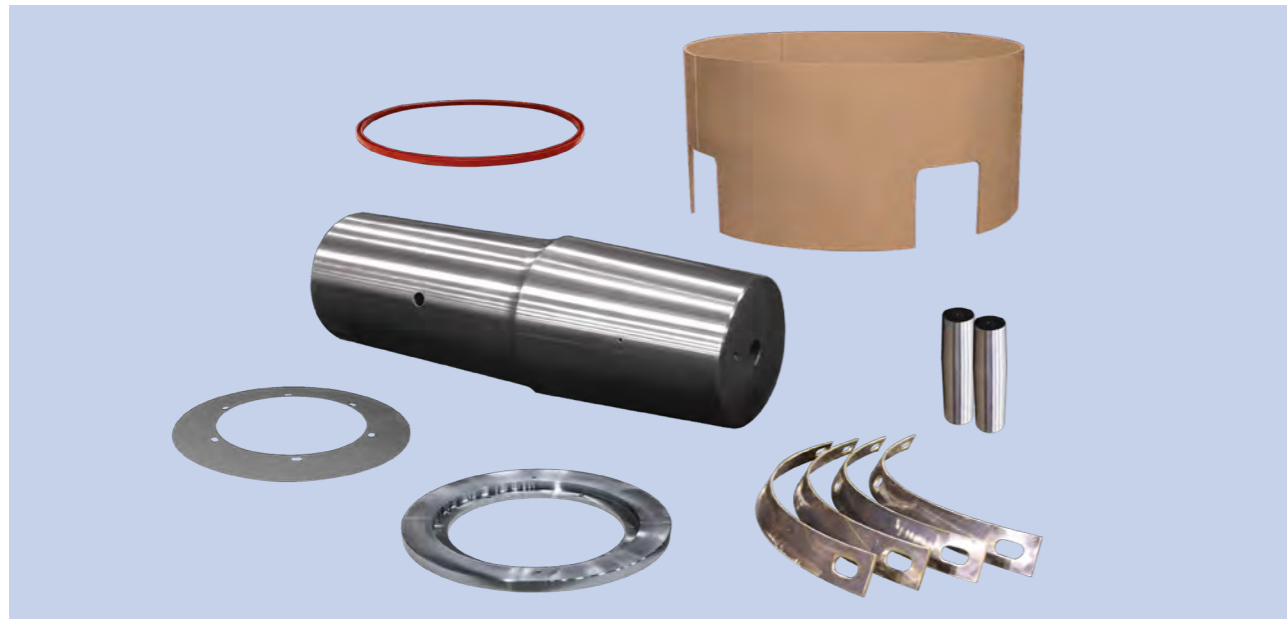
### Countershaft assembly

- Countershaft Box
- Countershaft Box Guard
- Flinger Housing
- Oil Flinger
- Countershaft Bushing
- Countershaft
- Pinion

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# Invest in the right spare parts for your cone crusher

These improved parts provide better throughput and increased revenue for your business. Better replacement parts mean longer periods of operation between maintenance downtimes.



Mainframe assembly



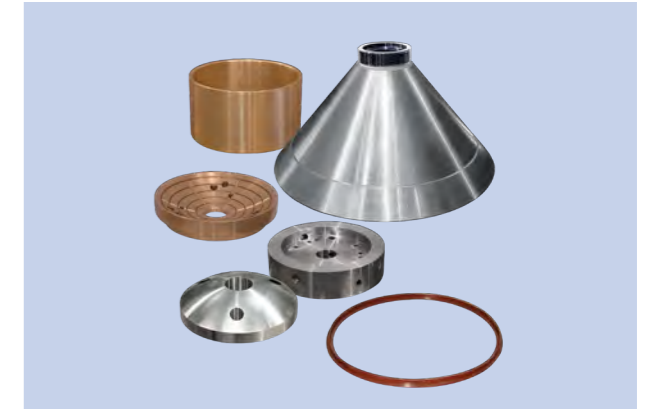
Countershaft assembly



Bowl assembly



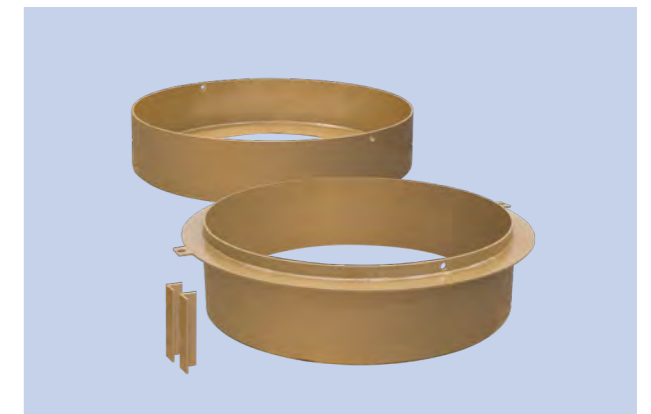
Eccentric assembly



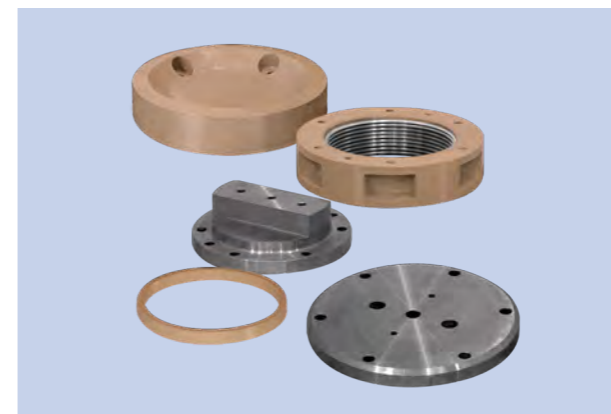
Head and socket assembly



Adjustment ring assembly



Hopper assembly



Feed plate assembly



Hydraulic components

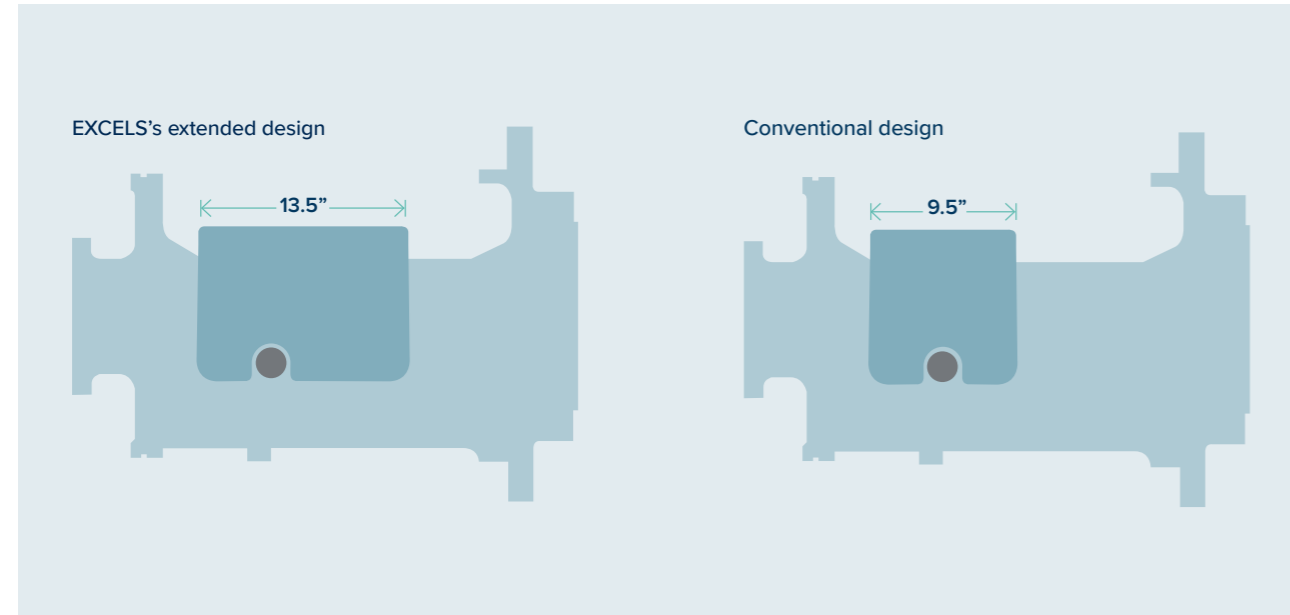
## Component assemblies produced for HP® Cone Crushers

- Adjustment ring
- Bottom shell
- Bowl
- Countershaft
- Eccentric
- Feed plate
- Head
- Hydraulic
- Liner hardware
- Main frame
- Main shaft
- Pinionshaft box
- Socket
- Spider
- Step plate
- Top shell

### Extended countershaft box guard for 1560™

The countershaft box is too critical to trust a lower-quality guard for protection. We have developed an improved guard design to minimise countershaft box wear and damage at a lower cost.

We extended the conventional model an extra 100 mm (4 in) toward the drive sheave, providing over 40% more surface protection without any modifications to the crusher. With the help of our extended, higher-quality guard, your countershaft box will last longer.



### Excel bronze bushings... Simply the best!

A bushing may seem like a simple part, but we have earned our reputation for superior bronze bushings because of our innovative manufacturing process and dedication to providing the highest quality components.

Our Quality Assurance Department scrutinizes every dimension with exacting tolerances to be sure your bushing is perfect in every way, giving your operation an unbelievable value. Our bushings are less expensive than the OEM, and the highest quality in the business.

### Feed distribution plate for 1560™

#### Improved fit

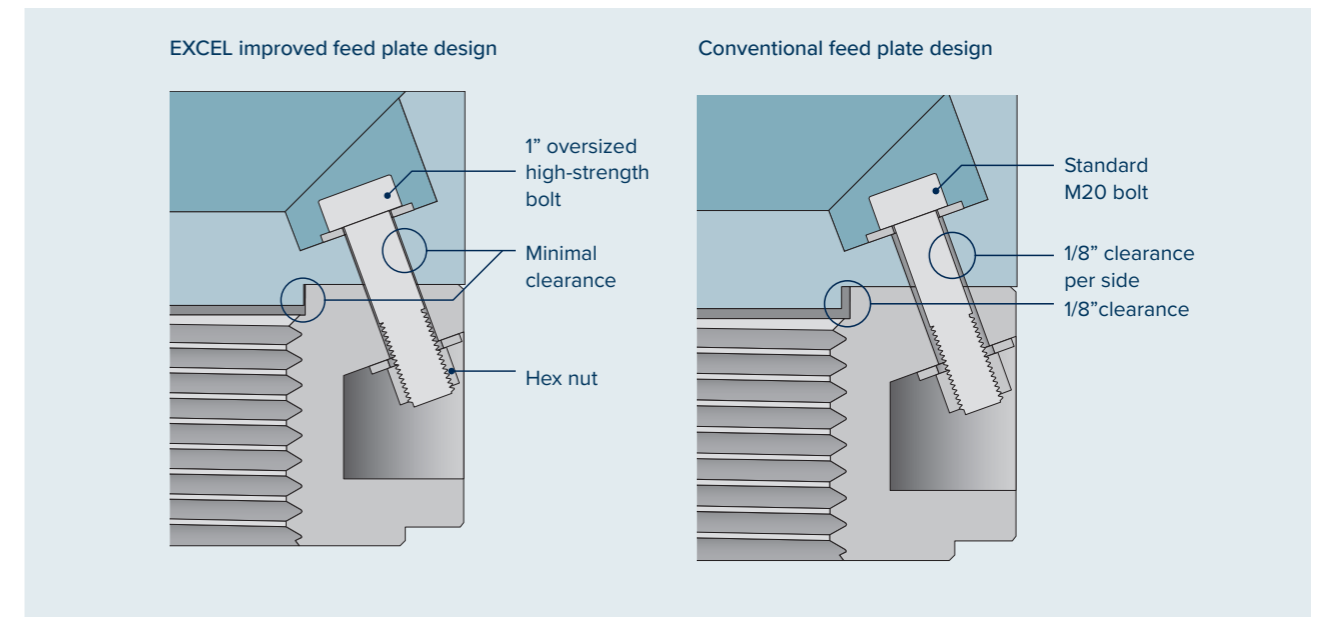
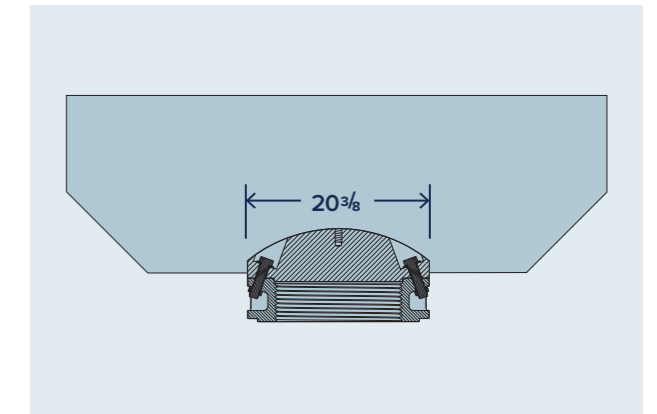
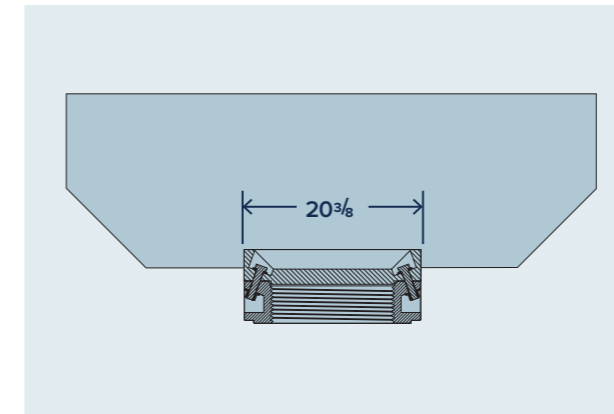
Excess clearance in the fit of the feed plates can cause them to come loose and even move out of position during operation, potentially resulting in serious damage to the crusher. We have eliminated this safety concern by using oversized bolts and minimal clearances to hold the feed plates securely in place.

#### Deadbed feed plates

Shutting down operations to replace wear parts is expensive, so we focus on increasing wear life. We make our deadbed feed plates out of manganese steel and design them to work-harden during use. When your feed plates get stronger as you operate, you can get more crushing done between each maintenance shutdown.

#### Domed feed plates

We created a domed feed plate that clears the feed opening to improve feed distribution and simultaneously decrease the occurrence of bridging and wedging. When your material reliably enters the crushing chamber in a well-distributed manner without large pieces getting stuck, the performance of the entire operation increases. These high-performing feed plates will accept hard surfacing with minimal risk of cracking or other damage because they are made of medium carbon steel.



# We provide top-quality, reliable replacement parts

Don't accept anything less than the high quality that we provide.



## Quality redefined

We know that your success depends on our quality control so we dedicate more time and people to our inspections than any of our competitors. From our strict metallurgical standards and precision machining processes to our exacting inspections, our quality assurance protocols align our processes to produce quality and dependable results. We are ISO 9001 certified, and our program is managed here along with our traceability and record retention. Our procedures allow us to trace any part that we produce, even years later. For each part, we can confirm any possible production details that are needed.

## High-value spare part solutions to repair and optimise your cone crushers

Our top-quality, reliable spare parts won't break the bank. Our spare parts offer durability and dependability, along with top value.

## Consistent and reliable precision gears

The contact pattern is the most important feature of crusher gears and pinions. Our manufacturing expertise and attention to quality creates gears with better field performance and longer wear life. We keep a high-quality set of master gears, and every gear and pinion that we produce is contact-tested against the master. No gear leaves our foundry unless it meets our exacting contact specifications.

## Enhanced performance

Let your part replacement improve your existing aggregate or rock crusher by using our high quality EXCEL™ replacement parts. Our parts provide better, more efficient performance to keep your business going strong.



"Our customers need replacement parts that operate in harsh environments. For this reason, we demand metallurgically sound castings produced through the careful control of chemistry and processing parameters for our replacement parts. Our promise is to provide our customers with the highest quality components."

**MIKE BERGERHOUSE**  
Senior Metallurgical Engineer  
FLSmidth Inc. - Pekin Operations

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