

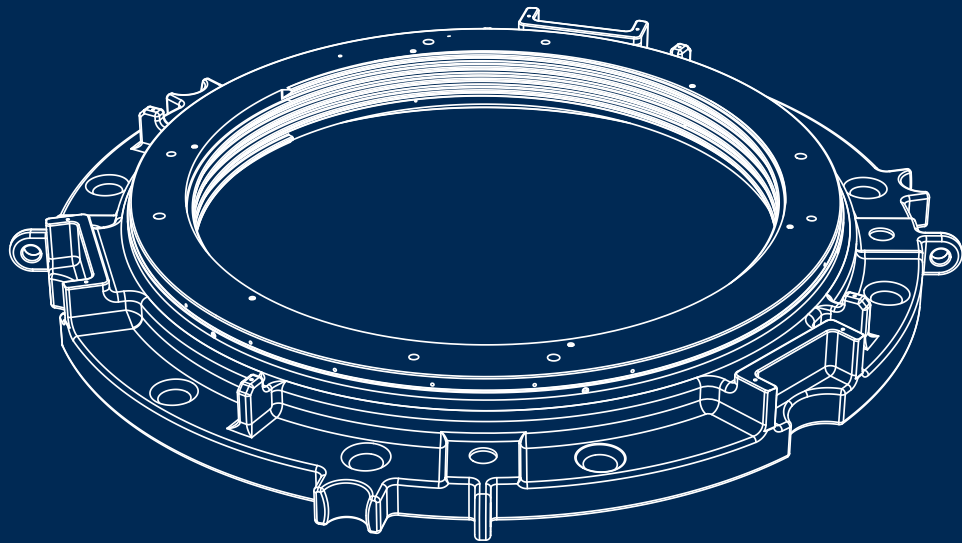
# EXCEL™ Replacement parts for HP® cone crushers Reliable high quality parts



**FLS**

# Improve performance with EXCEL™ spare parts for HP® rock 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.



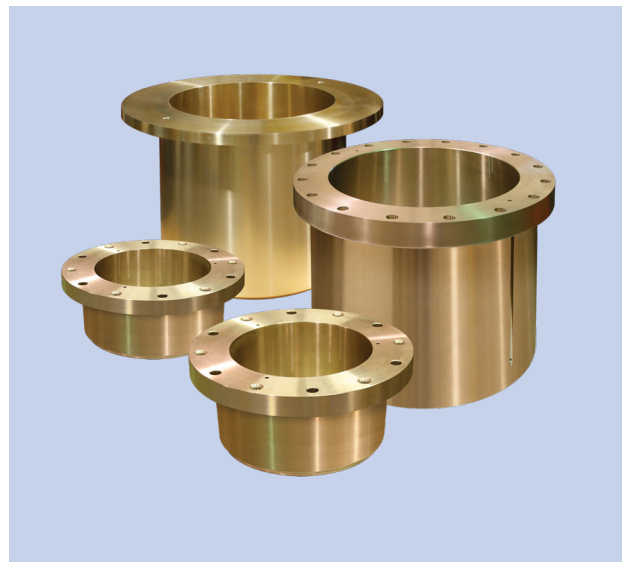
Standard bronze pour from furnace to ladle in our foundry for EXCEL™ parts, located in Pekin, Illinois, USA

## 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

# HP<sup>®</sup> series cone crushers

HP200™, HP300™, HP400™, HP500™, HP700™, HP800™

## Component identification

### Bowl assembly

- Adjustment Cap
- Bowl
- Drive Ring

### Liner & hopper components

- Hopper Assembly
- Bowl Liner
- Hardware
- Adapter Ring
- Seat Liner

### Hydraulic components

- Hydraulic Drive Assembly
- Clamping Cylinder
- Tramp Release Cylinder

### Head assembly

- Pin
- Head Ball
- Mantle
- Head
- Upper Head Bushing
- T-Seal
- Lower Head Bushing

### Mainframe assembly

- Mainframe Liner
- Arm Guard
- U-Seal
- Lower Thrust Bearing
- Mainshaft
- Mainframe

### Feed plate assembly

- Feed Plate
- Cap Screw
- Torch Ring
- Locking Bolt

### Adjustment ring assembly

- Dust Shell Seal
- Clamping Ring
- Dust Shell
- Adjustment Ring
- Mainframe Pin

### Socket assembly

- Socket Liner
- Socket

### Eccentric assembly

- Eccentric
- Eccentric Bushing
- Counterweight
- Counterweight Guard
- Upper Thrust Bearing
- Gear

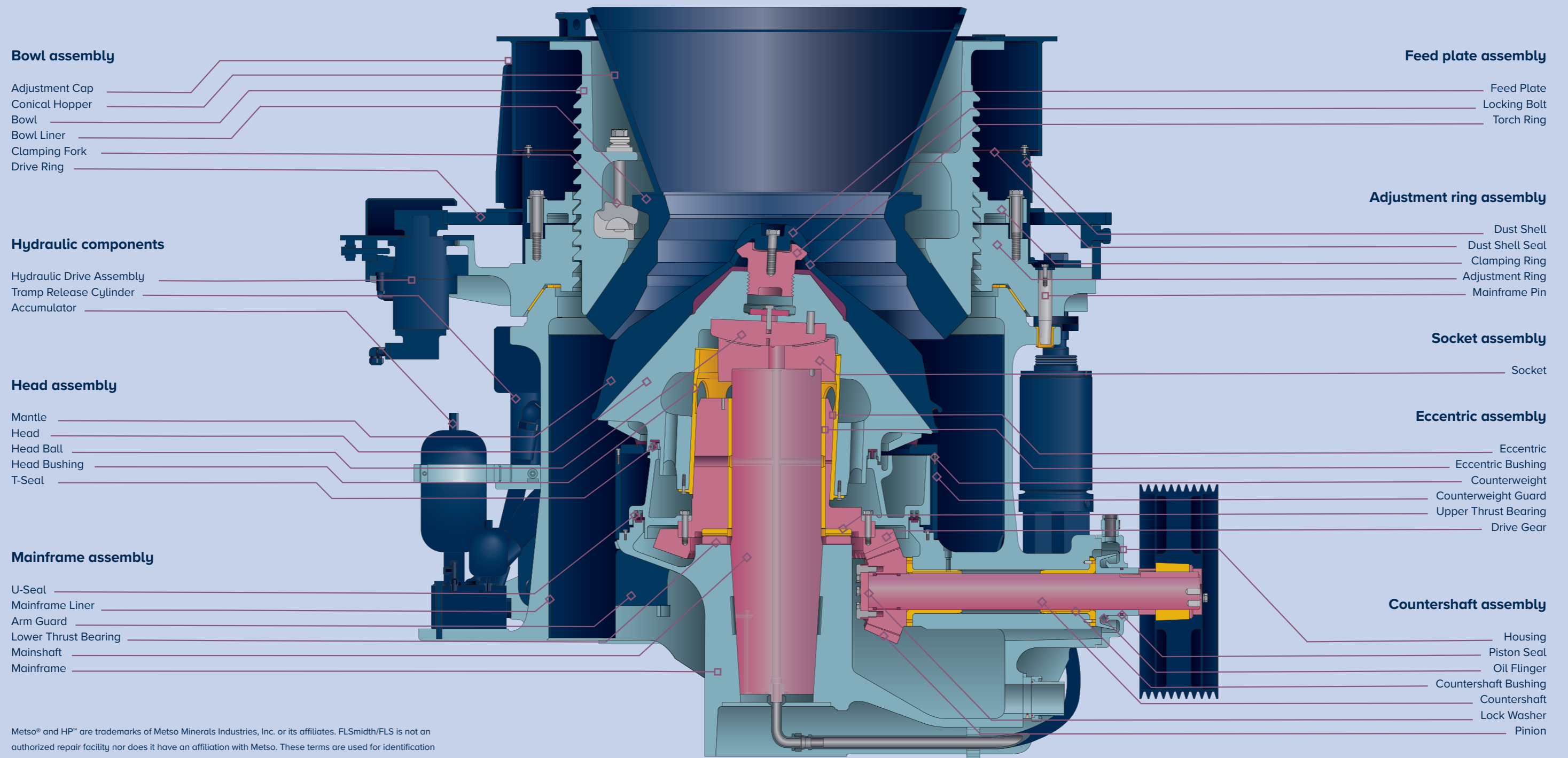
### Countershaft assembly

- Countershaft Box
- Countershaft Box Guard
- Oil Flinger Cover
- Oil flinger
- Countershaft Bushing
- Countershaft
- Pinion

# HP<sup>®</sup> series cone crushers

HP4<sup>™</sup>, HP5<sup>™</sup>

## Component identification



### Bowl assembly

- Adjustment Cap
- Conical Hopper
- Bowl
- Bowl Liner
- Clamping Fork
- Drive Ring

### Hydraulic components

- Hydraulic Drive Assembly
- Tramp Release Cylinder
- Accumulator

### Head assembly

- Mantle
- Head
- Head Ball
- Head Bushing
- T-Seal

### Mainframe assembly

- U-Seal
- Mainframe Liner
- Arm Guard
- Lower Thrust Bearing
- Mainshaft
- Mainframe

### Feed plate assembly

- Feed Plate
- Locking Bolt
- Torch Ring

### Adjustment ring assembly

- Dust Shell
- Dust Shell Seal
- Clamping Ring
- Adjustment Ring
- Mainframe Pin

### Socket assembly

- Socket

### Eccentric assembly

- Eccentric
- Eccentric Bushing
- Counterweight
- Counterweight Guard
- Upper Thrust Bearing
- Drive Gear

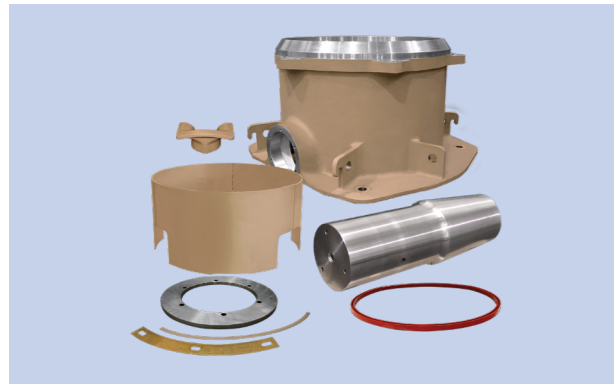
### Countershaft assembly

- Housing
- Piston Seal
- Oil Flinger
- Countershaft Bushing
- Countershaft
- Lock Washer
- Pinion

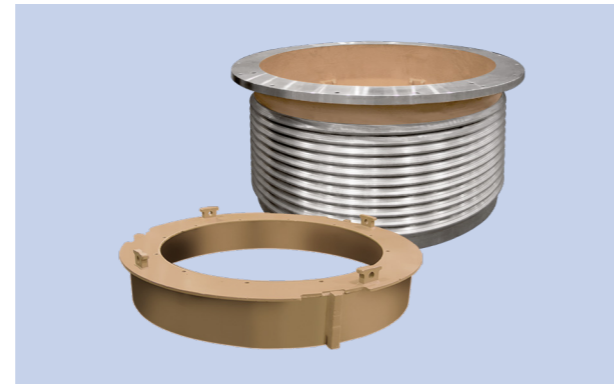
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# Invest in the right spare parts for your cone crusher

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



Bowl assembly



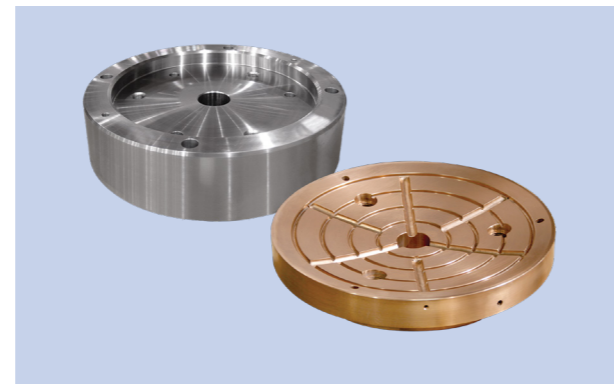
Countershaft box assembly



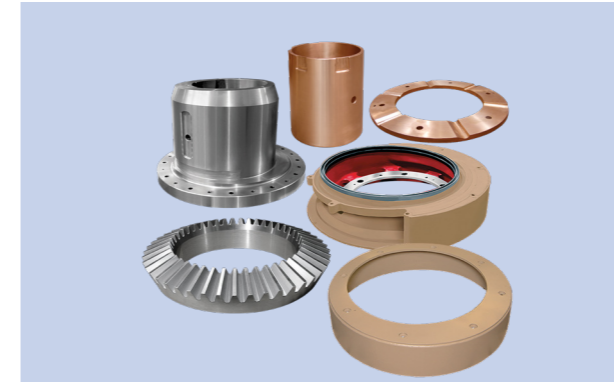
Adjustment ring assembly



Hydraulic components. Hydraulic adjustment also available



Socket assembly



Eccentric assembly



Head assembly



Feed plate assembly



Hopper and consumables

## Component assemblies produced for HP® Cone Crushers

- Adjustment ring
- Bowl
- Countershaft
- Countershaft box
- Eccentric
- Feed plate
- Head
- Hydraulic
- Liner hardware
- Mainframe
- Mainshaft
- Pinionshaft box
- Socket
- Thrust plate

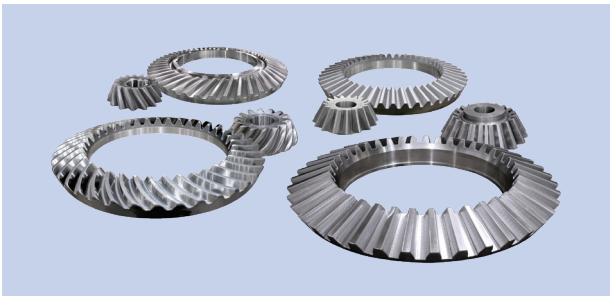
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# Innovating across industries; offering you world-class products

We are continually innovating and improving our technology to provide the best solutions for quality optimisation. For example, our gear contact testing process ensures Excel™ gears are manufactured to a level above the OEM.

## 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

Improve your existing rock crusher by using our high quality EXCEL replacement parts. Our parts provide better, more efficient performance to keep your business going strong.



## 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.



"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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