Excel Premium Components
MP® Series Cone Crushers
MP800™ | MP1000™ | MP1250™

BOOWL ASSEMBLY
Hopper Assembly
Adjustment Cap
Bowl
Drive Ring

ADJUSTMENT RING ASSEMBLY
Dust Shell Seal
Dust Shell Cap
Clamp Ring
Clamping Cylinder
Adjustment Ring
Tramp Release Cylinder

HEAD ASSEMBLY
Pin
Head Ball
Head
Upper Head Bushing
T-Seal
Lower Head Bushing

MAINFRAME ASSEMBLY
Mainframe Liner
Stationary Guard
U-Seal
Arm Guard
Mainshaft
Thrust Washer
Mainframe

FEED PLATE ASSEMBLY
Feed Plate
Locking Nut
Torch Ring

LINER & HOPPER COMPONENTS
Mantle
Bowl Liner
Bowl Adapter Ring
Hardware

SOCKET ASSEMBLY
Socket Liner
Socket

ECCENTRIC ASSEMBLY
Eccentric
Eccentric Bushing
U-Seal
Counterweight
Counterweight Guard
Thrust Bearing
T-Seal
Gear

COUNTERSHAFT ASSEMBLY
Countershaft Box
Countershaft Box Guard
Flinger Housing
Oil Flinger
Countershaft Bushing
Countershaft
Pinion
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Mainframe Assembly
Bowl Assembly
Eccentric Assembly
Head Assembly
Countershaft Assembly
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Feed Plate Assembly

Hydraulic Components

Liner & Hopper Components

Socket Assembly

Excel Foundry
Conventional Design Excel

**Lower Head Bushing Retention System**
Halts Downward Migration Commonly Found with Conventional Head Designs.

Bushing migration is the result of failed retention cap screws or broken webs in the counterbore of the bronze bushing flange.

- Steel retainer ring at the bottom of the head keeps the bushing from moving downward and rotating in the bore.
- Segmented flanges on the lower head bushing keep the bushing from climbing up into the bore and rotating.
- Excel uses heavy-duty cap screws in head assemblies (M24 HHCS vs M20 in MP1000™, upgraded M16 HHCS in MP800™).
- Excel employs partial-thread cap screws, allowing a threadless section in the shear zone at the interface of the head and steel retainer ring.

**UltraNut™ Jack Bolt Tensioning Locking Nut**
These specially designed nuts and locking bolts ensure precise, uniform preload and eliminate the need for a torch ring. Our engineering group has created a solution that makes liner changes faster, easier, and safer. These unique designs offer protection of the threads on the locking nut and the head.

- Faster, safer, cost-effective
- Uniform preload
- Rebuildable with Excel replacement components
- AR400 sleeve protects locking nut/bolt from wear
- Silicone seal protects head threads from dust
- Eliminates “slug wrench” installation & removal
- Safer than cutting the torch ring
- Easier assembly and disassembly
- Quicker mantle changes

An Excel Feed Plate is required for the Excel UltraNut.
Excel Bronze Bushings... Simply the Best!

Fit, Form, and Function - that’s what we guarantee in every replacement part we deliver. 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. Less expensive than the OEM, with the highest quality in the business... sounds too good to be true, doesn’t it?

Higher Tensile Strength
Metallurgical Consistency Yields High-Strength Components

In order to maximize tensile strength, Excel certifies our crusher bronze to the top end of the CDA specification for tin. Tougher bushings mean less down-time and fewer replacement cycles. Tin is the most expensive ingredient in the metallurgy of crusher bronze alloys.

Uniform Lead Dispersion
Unique Chilling Process Stops Migration

Our foundry utilizes a unique chilling process that assures even dispersion of lead throughout the casting. Standard foundry molding techniques allow uneven, non-directional cooling that can cause lead migration. Even dispersion of lead provides consistent lubricity and heat dissipation which increase bushing life and reduce unexpected failures.

Optimum Concentricity
Simultaneous “4-Axis” Turning Ensures Concentricity

Extensive investment in our equipment, our people, and our process gives Excel many unique capabilities, including a special “pinch turning” method in the machining of our crusher bushings which simultaneously cuts the OD and ID. Using this technology guarantees absolute concentricity.

Porosity-Free/
Uniform Grain Structure

Centrifugal Casting Technique Ensures Alloy Integrity

The purity of our raw materials, coupled with controlled, directional solidification during the casting process creates a tighter, denser grain structure in our alloys while eliminating 99.9% of the gas pockets that produce porosity. The integrity of Excel’s grain structure ensure strong, long lasting replacement parts.

Excel Gears and Pinions
Excel Uses the Latest Technology

From straight bevel teeth to spiral bevel teeth, Excel offers direct replacement gearing that exceeds OEM quality, starting with the highest quality steel forgings. Our gear “gasher” mill at the beginning of the process and the gear checking center at the end of the process help ensure that Excel delivers high quality gears and pinions efficiently and consistently.

It’s All About the Contact Pattern

The contact pattern is the single most important factor to control when manufacturing crusher gears. Without good tooth-to-tooth contact, the load transfer can point-load the tooth face and result in premature or uneven wear or tooth breakage. Poor contact also creates excessive noise. The load must be distributed properly on the tooth face, and Excel rigorously assures this condition is met through contact-testing with our master gears.

Correct Contact
Incorrect Contact

Master Gears and Bluing Process

We ensure field performance and wear life when it comes to gear manufacturing by retaining a high quality set of “master gears” to be used in the production process. Each gear or pinion made is contact-tested against the master and must meet the precise specifications of the gear’s contact criteria. Simply put, the benefit to our customer is consistency.
Dedicated to Outstanding Customer Support

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