

# AIR CLASSIFYING MILL WEAR PROTECTION

**CUSTOM TUNGSTEN CARBIDE CUT MAINTENANCE COSTS BY 97%**

## CHALLENGE

The OEM wear parts on a dry chemical manufacturer's Air Classifying Mill (ACM) were failing so fast that shutdown and **component replacement was needed daily**, if not hourly. Since this specialized grinding equipment is crucial to proper particle size reduction and classification, the chronic wear failures were crippling the company's productivity.

## SOLUTION

Good Earth Tools proposed **adding solid tungsten carbide to the wear surfaces of each vulnerable component in the ACM**, with a goal of substantially extending wear life and uptime. After evaluating the application, the Good Earth Tools team engineered, built, tested, and implemented custom StarCarb-protected solutions.

## RESULTS

After processing more than 569,000 LBS of product—a 24x improvement from the previous 24,000 LBS—the StarCarb-protected wear parts from Good Earth Tools continued to perform at their peak. By maximizing uptime and minimizing replacement parts and labor, **our tungsten carbide solutions helped bring maintenance costs down from \$2m TO \$70K, a nearly 97% cut.**



**PRODUCTION POWER-UP**  
**+2,271%**

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**GOOD EARTH TOOLS**

### OEM

**AFTER 24,000 LBS**

OEM parts show heavy wear.



**CLASSIFIER CAGE**

### STARCARB

**AFTER 569,000 LBS**

StarCarb-protected parts show no wear.



**PERIPHERY LINER**



### STARCARB

**BEFORE**

StarCarb-protected part before installation.



**BAFFLE ASSEMBLY**

**AFTER**

Starcarb-protected part after 569,000 lbs with minor wear.



MAXIMUM DURABILITY. MAXIMUM EFFICIENCY.

# CUSTOM TUNGSTEN CARBIDE CONQUERS THE TOUGHEST WEAR PROBLEMS.

With tungsten carbide-protected equipment and parts, wear-life problems are solvable — and profitability goals are reachable — even in the most extreme applications.

## We tailor solutions to the precise needs of your operation.

Using advanced 3D scanning capabilities, Good Earth Tools captures the exact specifications of your existing parts on site at your facility, for maximum accuracy and minimal downtime. With these precise measurements, our engineers develop custom wear solutions, from patch repairs to full replacements, that guarantee optimal performance and lasting value.

## A blueprint for wear-life excellence, 60+ years strong:

### EXPERT ENGINEERS

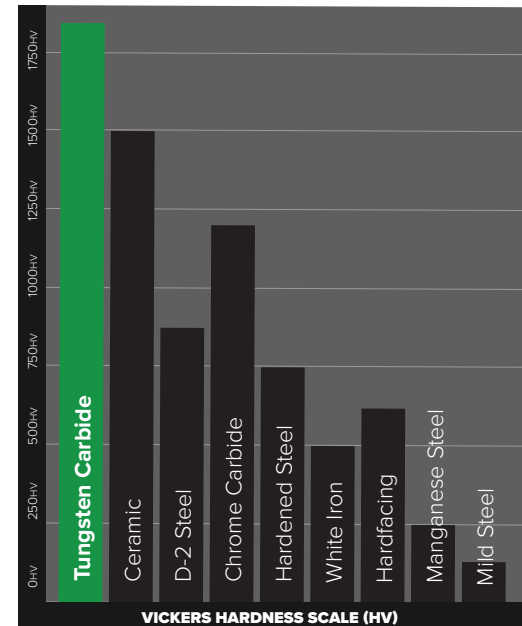
Leveraging decades of product design experience

### CUSTOM CAPABILITIES

Creating turnkey solutions for every wear-life problem

### DEDICATED TEAM

Ready to partner with our customers to deliver the very best



### TUNGSTEN CARBIDE > STEEL

- 10x harder than mild steel
- Lasts 25x longer
- Resists up to 1000°



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