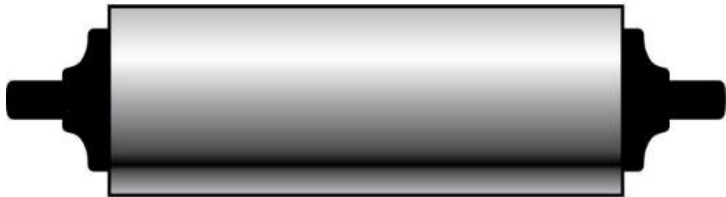


PRECISION ROLL GRINDERS

PRECISION



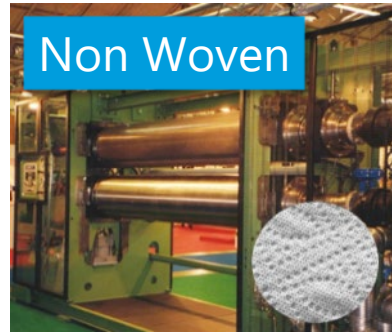
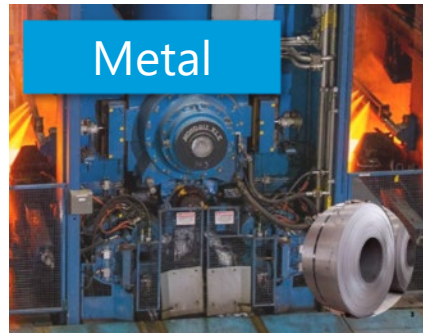
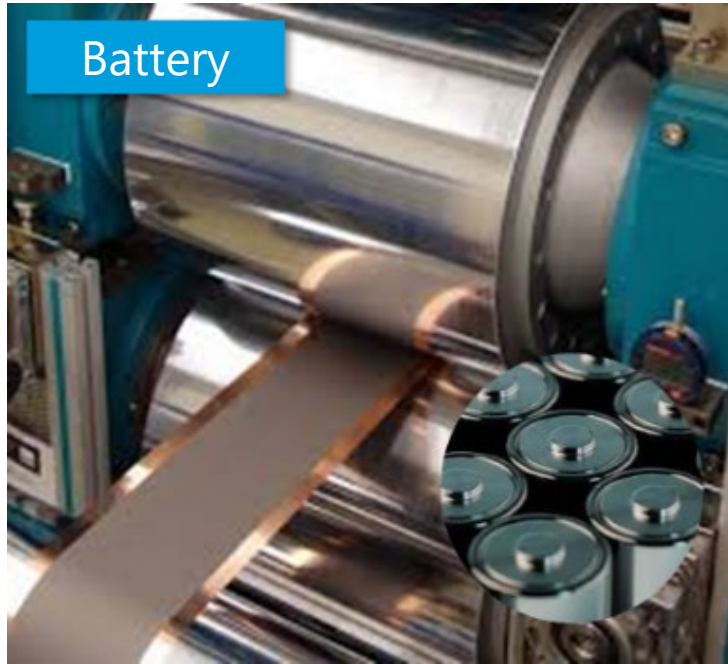
ROLL GRINDERS

COMPANY OVERVIEW

*WORLD-CLASS PROVIDER OF
ROLL GRINDING AND SERVICING
SOLUTIONS*



GLOBAL PARTNERS



55+ years Calender Roll Grinding Experience and 35+ years of Battery Roll Grinding Experience



We partner with world leading companies to provide value by maintaining critical equipment and process tolerances

FOUR CENTRAL LOCATIONS



Four locations central to planned battery production

Allentown, PA
6,000 m² (65,000 ft²)

Carrollton, GA
2,800 m² (30,000 ft²)

Lewisport, KY
2,800 m² (30,000 ft²)

Texarkana, AR
2,800 m² (30,000 ft²)

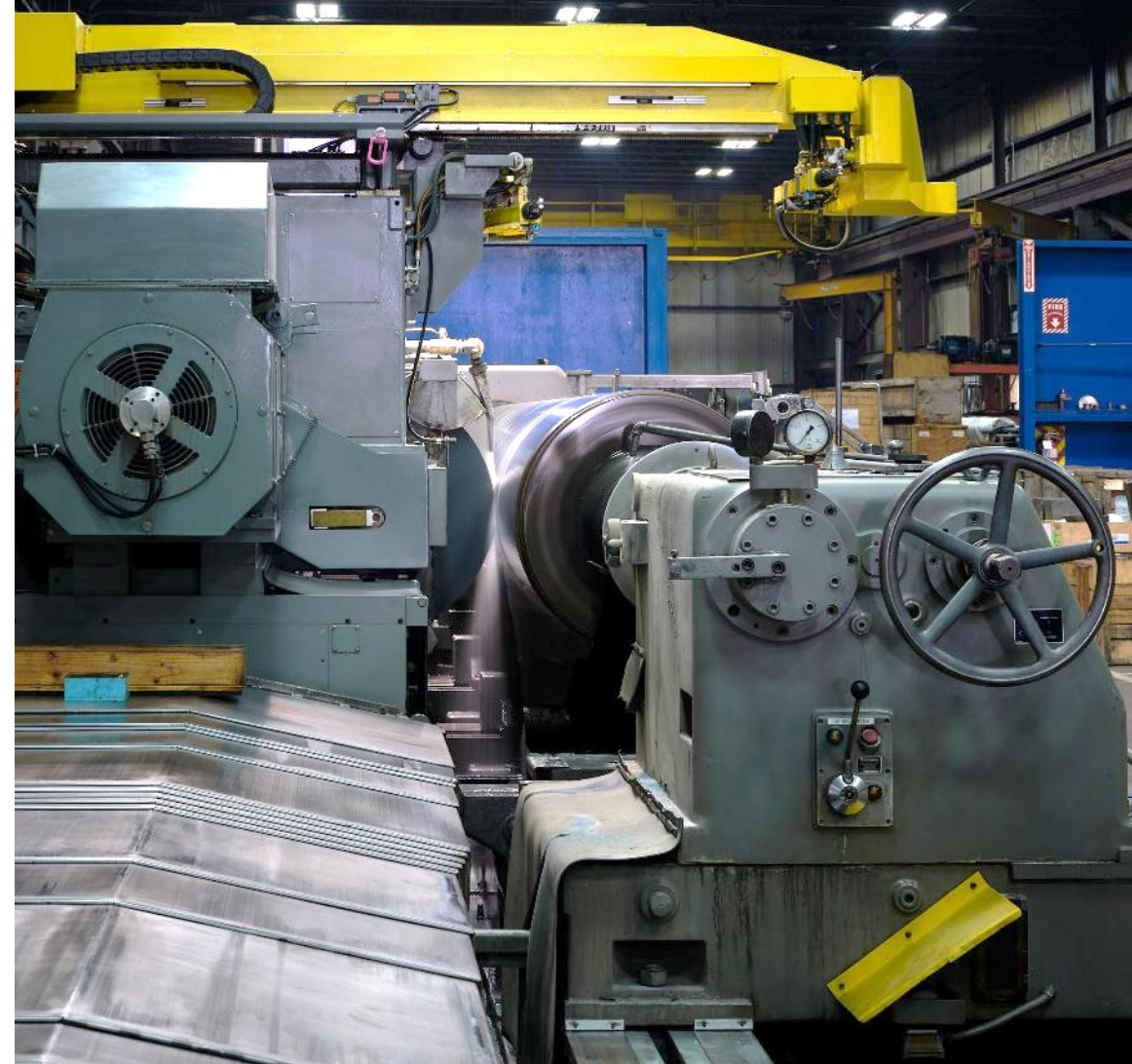


11 Roll Grinders

- Custom designed for PRG
- Maximum Length: 15.2m (600")
- Maximum Diameter: 2.6m (102")

Highly Trained Operators

- 5-year Apprenticeship Training Program
- Average 15+ Years of Service

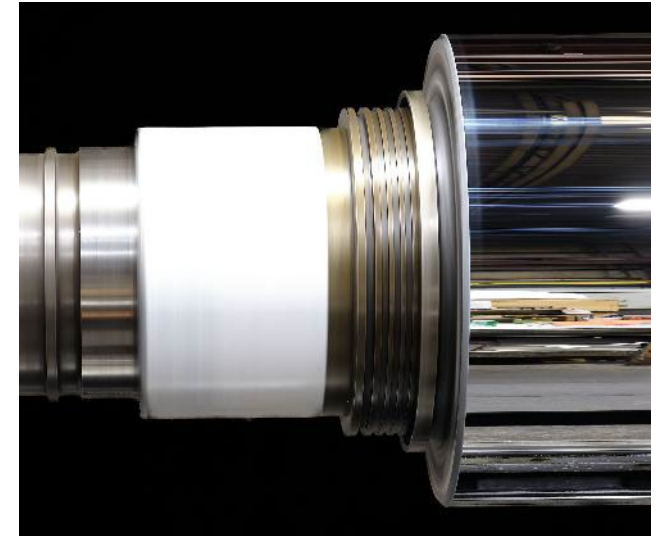


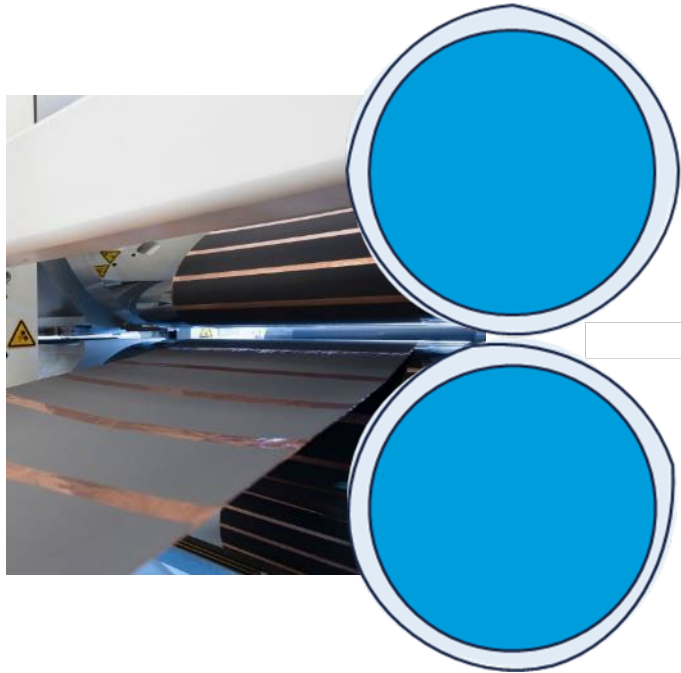


Industry	Diameter		Face Length		TIR Tolerance		Finish	
	mm	in	mm	in	μ	in	μRa	Ra
Battery	320mm	12.6"	280mm	11.0"	2μ	0.000080"	0.050μRa	2Ra
Battery	880mm	34.6"	1016mm	40.0"	1μ	0.000040"	0.100μRa	4Ra
Coating	305mm	12.0"	460mm	18.1"	1μ	0.000040"	0.150μRa	6Ra
Plastics	721mm	28.4"	2690mm	105.9"	2μ	0.000080"	0.020μRa	0.8Ra

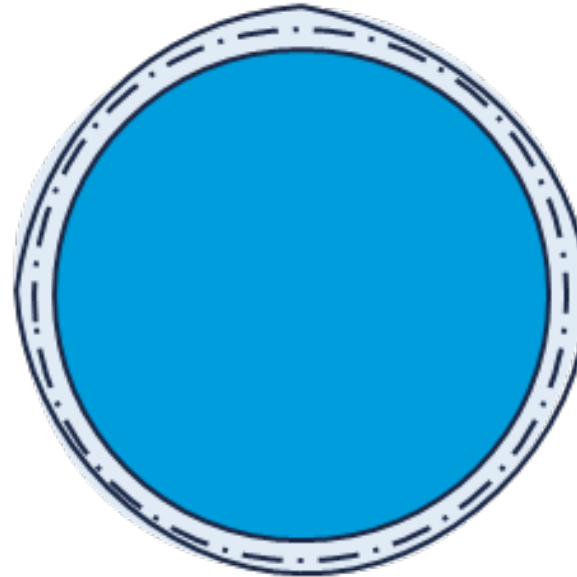
Information Systems

- Database for Individual Rolls
- Roll Service History
- Data Permanently Maintained

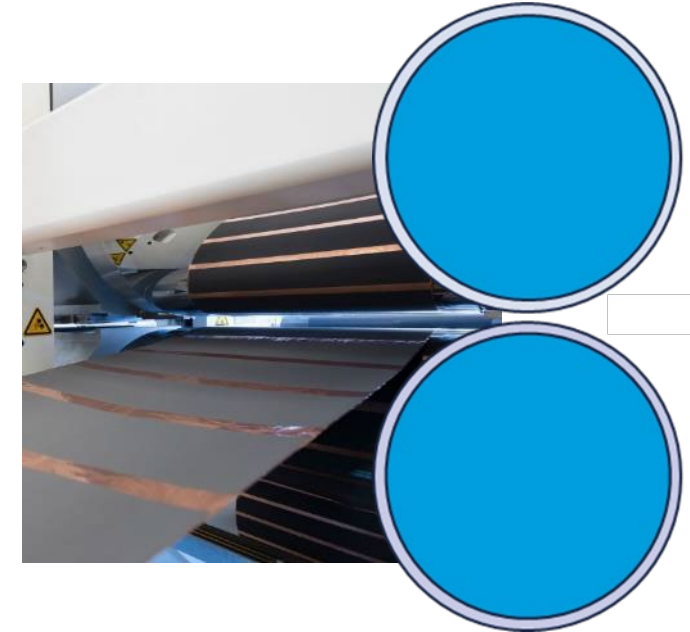




- Roll wear leads to
- Increased TIR
 - Poor Concentricity
 - Increased Electrode Variation



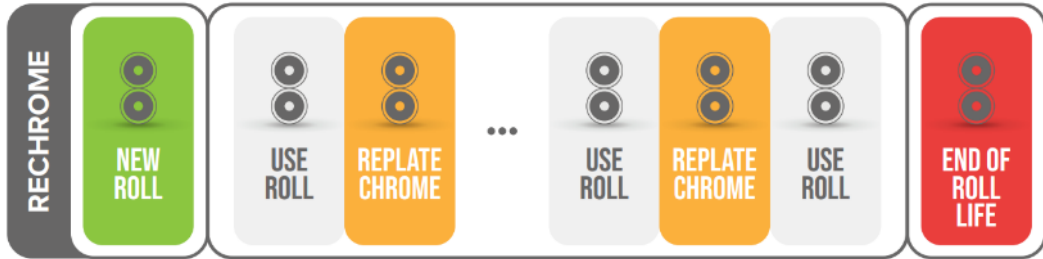
- PRG Grind to Save
- Removes minimal material
 - Does not require new chrome
 - Reduces lead time to repair



- PRG Grinds
- Improve TIR
 - Improve Concentricity
 - Improve Electrode Variation

Grind to Save is **Environmentally Friendly and Cost Competitive**

EXTEND ROLL LIFE

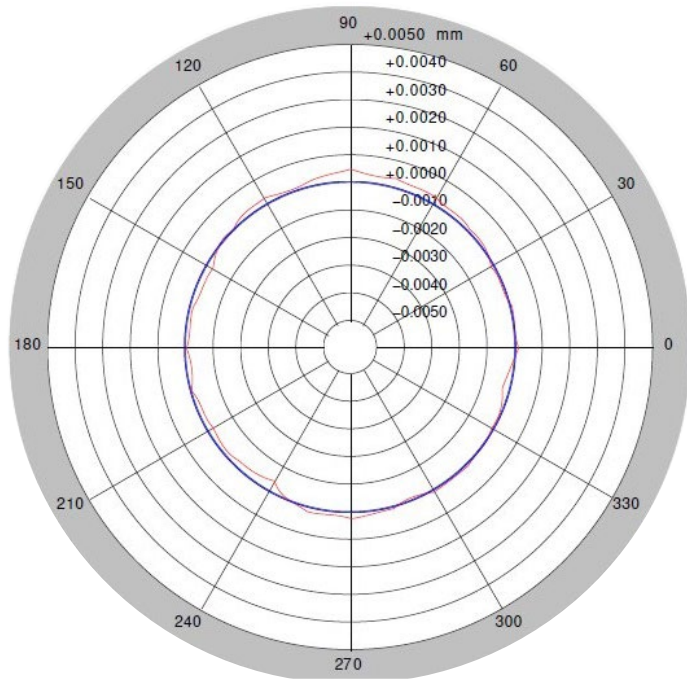


3X ROLL LIFE



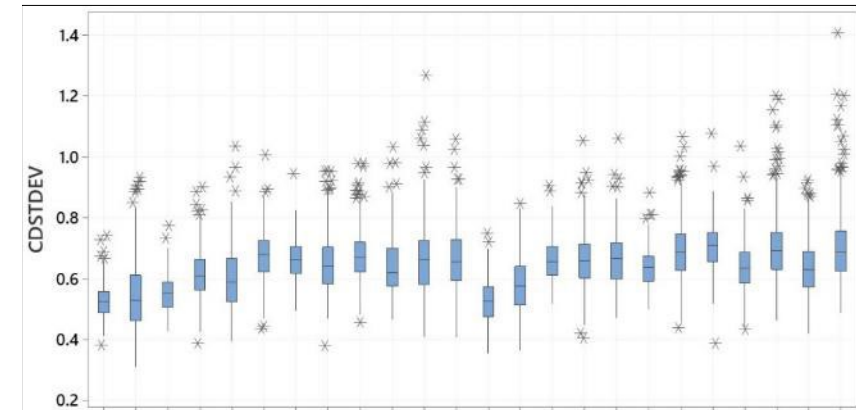
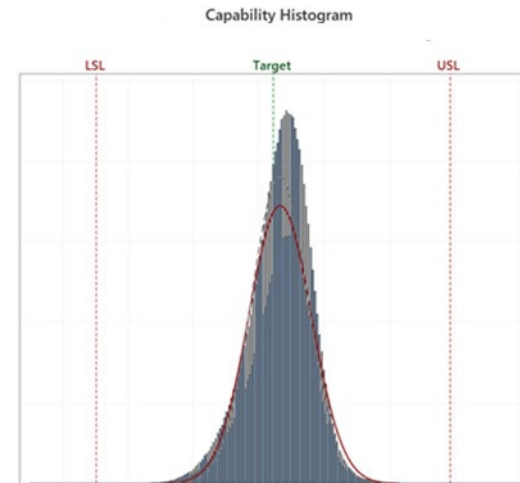


PRG Ground Rolls



Rolls ground to a tolerance of 0.00004" or 1 micron

Process Capability



Over 2.4 million data points

- Achieved a Cpk of 2.01
- STDEV of less than 1 micron



Electrode Calendering

- Improve caliper variation
- Grind to save chrome on calender rolls
- Increase calender roll life between grinds

Stacking

- Improve electrode thickness variation
- Improve overall stack thickness variation

Electrolyte Fill

- Improve compaction and active material porosity variation
- Improve wetting
- Improve fill time

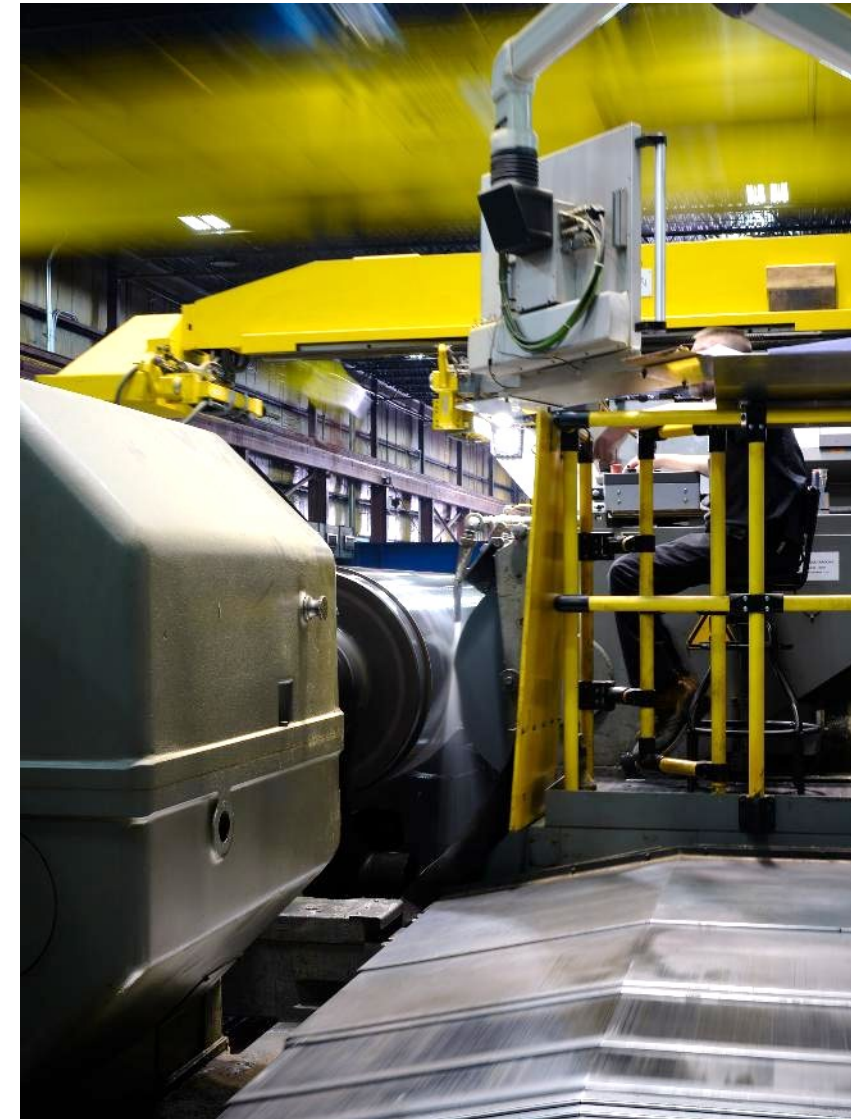


- Expedite Services
- Advanced Coatings (Carbide, Chrome)
- Precision Bearing Assembly
- Hot Grinding and 3D Grinding
- Superfinishing
- Diameter Match





- 55+ years grinding experience
- 35+ years adding value to Battery manufacturing
- Four locations central to planned Battery production
- Statistical Engineering support
- Grind to Save chrome
- Hot Grinding and 3D Grinding
- Expedite services



PRECISION

ROLL GRINDERS

THANK YOU

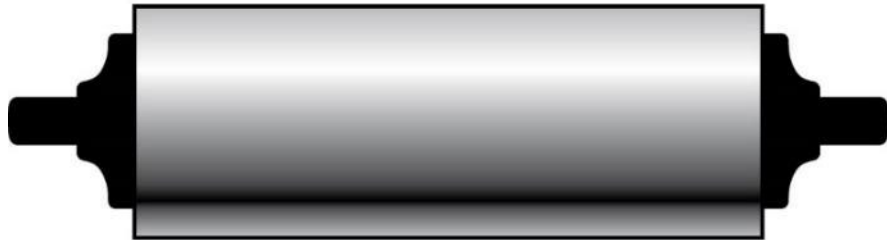


PRECISION



ROLL GRINDERS

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CONTACT US

If you have questions or would like to request a quote, give us a call or contact us through our website.

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