



# DOUBLE DISC GRINDING WHEELS

 **abrasive  
technology**  
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## CONTROLLED STRUCTURE HYBRID BOND WHEELS

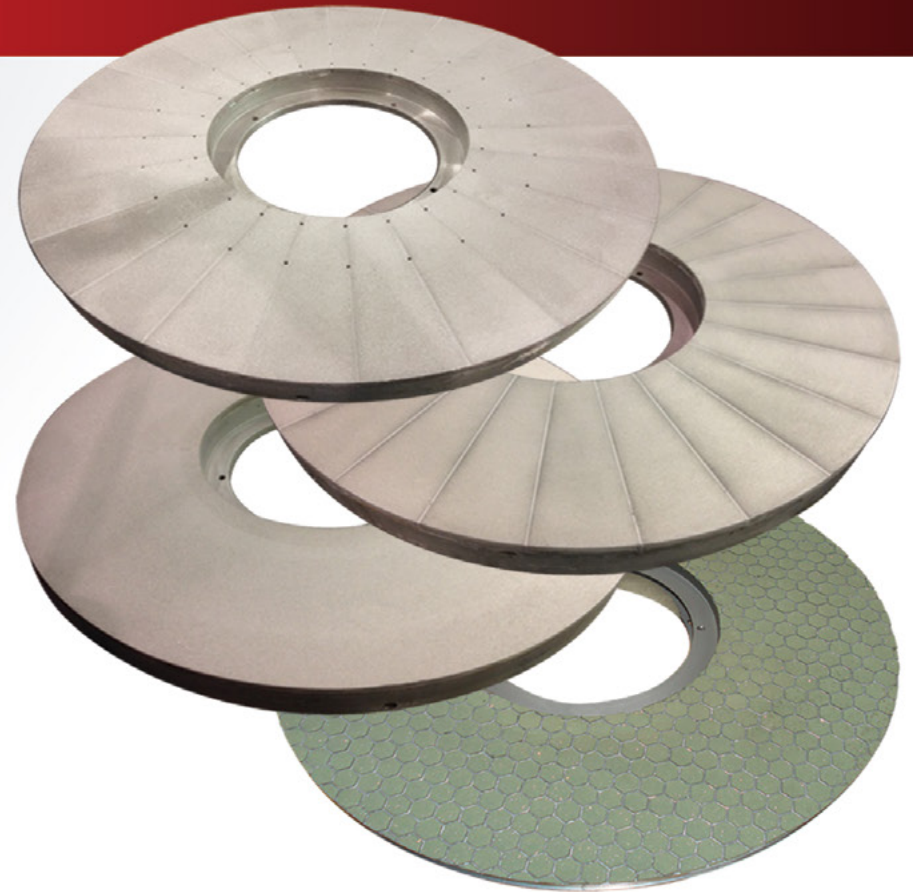
Our innovative DualForce™ technology is a controlled structure process for manufacturing hybrid bond wheels that creates space between the abrasive particles, resulting in a freer cutting wheel that withstands cutting forces from high-speed applications.

### **BENEFITS:**

- Faster grinding for continuous production.
- Significantly reduced dressing.
- Drastically reduced cycle times.
- Material removal rates up to 1,500 microns/min (0.05905”).

### **FEATURES:**

- Holds flatness to 1 micron (0.00004”).
- Ideal for carbide and ceramic inserts.
- Compatible with double disc grinding machines including Stahli, Lapmaster and Peter Wolters.
- Custom configurations.






# PERFORMANCE OPTIMIZATION

## CERAMIC INSERTS

**Grades:** Various ( All Grades Ceramic & Silicon)

**Parts per load:** 48-64 (Depending on Size)

**Case Study Focus:** Reduce Cost Per Part

Product	Down Force	Grind Cycle Time Per Load	Dress Frequency	Grind Cost Per Part
Competitor Wheel	1000-3000 LBS	20-40 MINUTES	EVERY 5 LOADS	\$2.00
	500-900 LBS	2-3 MINUTES	1 LOAD PER DAY (150 LOADS)	\$0.02


## CARBIDE MILLING INSERTS

**Grades:** All carbide varieties

**Parts per load:** 120-200 (Depending on Size)

Total inserts per set of wheels = 1,000,000

**Case Study Focus:** Reduce Dressing and Cycle Time


Product	Down Force	Grind Cycle Time Per Load	Dress Frequency	Grind Cost Per Part
Competitor Wheel	300-500 LBS	3-4 MINUTES	2-3 TIMES PER DAY	\$0.05
	300-500 LBS	2-3 MINUTES	1 TIME PER DAY	\$0.01

## CERAMIC PARTS

**Grades:** Various ( All Grades Ceramic & Silicon)

**Parts per load:** 72

**Case Study Focus:** Drastically Reduce Dressing

Product	Competitor Wheel	
Wheel Speed		
Top	100 RPM	100 RPM
Bottom	275 RPM	275 RPM
Force LBS	700	700
Parts Per Load	72	72
Cycle Time, Sec	80	66
Cycles Run	364	291
Dress Required	4	1
Rate Control	ON	OFF

**\* ALL PERFORMANCE CASE STUDIES PERFORMED ON STAHLI 705 MACHINES**