

MAXIMIZER VITRIFIED CBN PUNCH GRINDING CASE STUDY

For over 30 years, SuperAbrasives has focused on providing our customers with top quality, high performance products all while delivering a high level of responsiveness and customer service. We pride ourselves on our Continuous Improvement Program and effectively providing our customers with the most costefficient solutions for the job.

What can we do for your business? Help bring your grinding processes to the next level while lowering your grinding costs!

MAXIMIZER CBN VITRIFIED PRODUCTS

The Maximizer product line includes vitrified CBN grinding wheels designed for use in both rotary and single point technology dressing applications. The unique characteristics of this bond structure produce a product that is flexible and versatile allowing for seamless integration into Job Shop, Tool Room and Production run environments.

Surface

- Horizontal Reciprocating
- Horizontal Rotating
- Vertical Reciprocating
- Hob Sharpening
- Manual NC and CNC

OD-Straight/Angle Head

- Thread
- Traverse and Plunge
- Manual NC & CNC

Centerless

- Through Feed
- Straight Plunge
- Manual NC & CNC

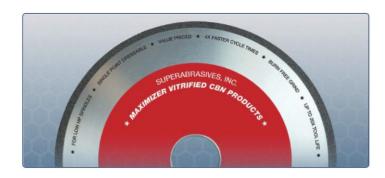
Types That Maximizer

Can Grind

TECHNICAL SUPPORT AND CUSTOM SERVICES

At SuperAbrasives we also provide application support to our customers by working with you to optimize your grinding process. We use the following steps to walk through your applications to achieve the success you require.

- Application Evaluation
- Application Analysis
- Application Recommendations
- Product Development
- Product Implementation









MAXIMIZER VITRIFIED CBN - PUNCH GRINDING CASE STUDY

DOUBLE DISC GRINDING APPLICATION:

Machine: Unison Macine

Material: D2/M2 Steel

Finish Requirements: 0.3 to 0.5 Ra

Wheel Size: 20 x 2 x 8 mounted on Aluminum Core with 1/2" Radius One side

Wheel Cutting Speed: 42 - 50 m/s

Coolant: Synthetic



TOOL LIFE OF INCUMBENT WHEEL VS **SUPERABRASIVES WHEEL**:

<u>PARAMETERS</u>	INCUMBENT WHEEL	SUPERABRASIVES WHEEL
Parts per dress	1 Rough & 1Finish Pass	150
Total per Dress	0.025	0.010mm

ADDITIONAL SAVINGS:

- Reduced Cycle time by over 30 seconds per part
- 30 times the tool life
- Increased Daily production by 10 times
- Improved Part Finish and Form

