

ZAPP TOOLING ALLOYS, INC.

Z-TUFF PM CASE STUDY EMBOSSING PUNCH

ZAPP

TOOL TYPE

Embossing Punch

WORK MATERIAL

Dual Phase HSLA (980 Mpa)

PROBLEM IDENTIFICATION

D2 punches failed prematurely because of excessive wear and chipping resulting in the need to produce 831 punches / year and excessive downtime on the press.

SOLUTION

Z-Tuff PM with TiCN PVD Coating at Rc 60

RESULTS

Reduction from 831 punches per year to 330 Z-Tuff PM punches for an annual savings of \$251,000. Additional increases in production resulted from higher uptime on the press. Z-Tuff PM was the perfect substrate for the TiCN coating based upon excellent impact resistance at Rc 60 in combination with good compressive strength.



TOOLING ALLOYS

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Further information regarding our products and locations are available in our image brochure and under www.zapp.com

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