

DuraTough Significantly Outperforms Hard Steel in Highly Abrasive Environment

The production of Diatomaceous Earth involves pneumatic conveyance of extremely abrasive materials using high speed blowers and fans. This client in Nevada – part of a large international group – was having great difficulty keeping their fans running due to this abrasive material eroding the fan blades. The fans had to be replaced every 1 - 2 weeks. The entire plant needed to be shut down every time the blades had to be replaced.

The plant engineers devised a special protection plate made from very hard (500 Brinell) steel that was mounted in front of the fan blades in an effort to

extend the life of the high speed fans. This hard steel wear plate extended the life of the fans to **4 weeks** but the plant engineers wanted to find an even better solution.

They called their local ENECON Engineering Team in Nevada who recommended an application of DuraTough DP applied 5/8 inch thick over the face and edges of the wear plate. This was then topped with a 1/8 inch layer of DuraTough DL.

The **FLEXICLAD DuraTough system doubled the life of the fans to 8 weeks** and the plant engineers are very satisfied with the results.



A special mold was created to allow consistent thickness of the trowel applied DuraTough DP.



The wear plate after the application of DuraTough DL with the mold removed.



The finished wear plate.