



Devcon® Protective Coatings Take the Hits for Cyclones

Problem:

Using recycled wood to create the feet of wooden pallets, the OEM customer processes wood chips and dust through large steel cyclones. The impact and sliding abrasion from the raw materials against the unprotected cyclones caused extreme internal wear after just 3 months in service. With unexpected high replacement costs as one potential solution, the customer searched for a protective coating that could be layered onto the cyclone interior walls as an alternative.



Cyclones

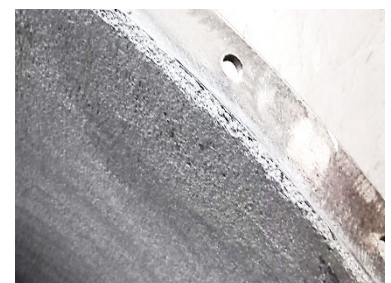
Solution:

The OEM chose Devcon DFense Blok®, Devcon Wear Guard™ 300RTC, and Devcon Wear Guard Fine Load industrial strength epoxy coating having used these products before to repair & protect metal equipment.

- Because the cyclones had a range of wear problems in the process, the three Devcon products were chosen to work together for an optimal solution. Where one system may have provided very suitable results, the chosen combination maximized protection, taking advantage of the added benefits of each one.
- The cyclone was taken offline and all materials causing abrasive wear were removed. The cyclone interior was abraded to further clean the surface and promote proper adhesion between the coatings and the cyclone surface.
- Different steps in the process required different wear resistance protection: Devcon DFense Blok coated the areas with the highest impact, allowing for better abrasion resistance. Devcon Wear Guard Fine Load coated the areas where aggregate smaller than 1/8" make contact. Devcon Wear Guard 300RTC coated high wear, wet/dry areas prone to high temperatures. The wide offering of Devcon products provided the right tailored solution for each process step.
- With the convenient packaged kits and the coatings efficient functional cure times, the cyclone was back in service within 3 days.



Devcon Wear Guard 300RTC



Devcon Wear Guard Fine Load



Project Outcome:

Lasting Protection

By using Devcon industrial strength epoxy coatings and wear protection products, the OEM avoided replacement cost and extended downtime of the cyclones. The Devcon DFense Blok, Devcon Wear Guard Fine Load, and Devcon Wear Guard 300RTC epoxy coatings will act as sacrificial layers and protect the wood processing equipment with controlled wear rates. Because the application process was so easy, reapplication once needed, will be scheduled.

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