

Challenge

Issue

Severe abrasion to internals of combi mixer required annual removal of the mixer to maintenance shop where welding repairs were carried out.

Goal (or Goals)

To reduce or eliminate requirements to weld repair mixer and carry out any future repairs on site by using an FDA compliant wear-resistant liner.

Root Cause

Severe abrasion from corn milling residues used in animal feed processing result in severe abrasion to mixer internals.



Signs of abrasive wear to internals of mixer.

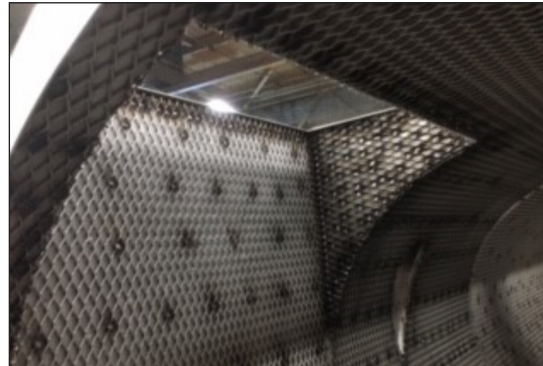
Solution

Preparation

Decontaminate and abrasive grit blast to SP10 cleanliness with 3 – 5 mil angular profile.

Application

ARC MX FG was trowel applied between 6 – 9mm (.25 – .325") and then two alternating color coats of ARC S1PW were applied as a smoothing coat and a wear indicator coat to identify when the top 20 – 30 mils of coating have been removed.



Tack welding expanded metal mesh for increased structural integrity.

Results

Client Reported

After 90 days in service client inspected and noted minimal wear to ARC S1PW coat and no sign of any wear to ARC MX FG layer.

Client has initiated steps to add ARC coatings to future combi mixer repairs to their worldwide operations.



ARC MX FG coated mixer internals.