

FROM 2 MONTHS TO 5-6 YEARS

What HFW 512 reveals about disciplined coating problem-solving

THE RELIABILITY PROBLEM

A chemical processor came to HFW in the 1980s with rolls lasting only 2 months. Standard thermal spray processes extended service to 4-5 months. Working with the customer's metallurgist, HFW applied its proprietary nickel-based alloy HFW 512 by HVOF thermal spray, without effect on the parent material. Reported service life reached 5-6 years. HFW offers this problem-solving and coatings expertise as part of our one-source workflow. We can machine your part to spec, apply a thermal spray coating, finish grind, and inspect — all in one facility.

2 mo.

Original service life

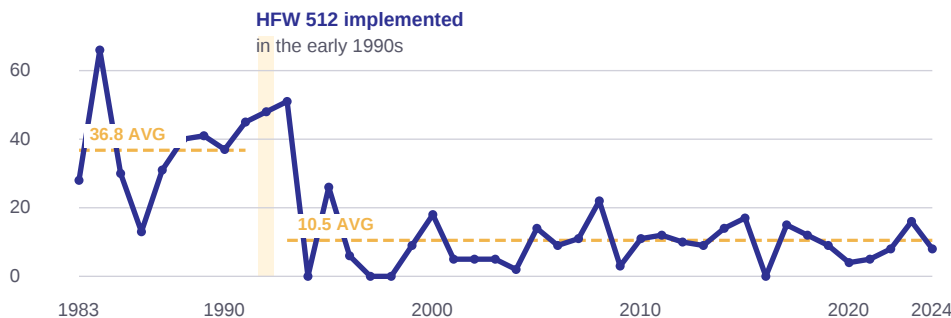
5-6 yr.

Reported service life with HFW 512

HFW 512 COATING PROPERTIES

HARDNESS	CORROSION RESISTANCE	POROSITY	SURFACE FINISH
Equivalent to 45-50 Rc	Excellent	Less than 2%	As applied: 200 AA As ground: 16-24 AA Superfinished: 4-8 AA

DOCUMENTED REBUILD HISTORY: ANNUAL ROLLS REBUILT


36.8

average rolls rebuilt per year, 1983-1991

10.5

average rolls rebuilt per year, 1993-2024

71%

lower annual rebuild volume across the two periods

TYPICAL APPLICATIONS

PROCESS ROLLS

Paper, specialty fiber, and printing industries

MIXING EQUIPMENT

Chemical mixers and agitators

WEAR + CORROSION

Applications involving abrasion, mechanical wear, and corrosion

ONE-SOURCE RELIABILITY AT HFW

HFW combines manufacturing engineering support, thermal spraying, hardface welding, machining, and precision grinding to serve as a turnkey repair and manufacturing services provider, backed by more than 75 years of industrial experience.

DISCUSS YOUR APPLICATION

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