



ON-SITE MACHINING & WELDING FAN SHAFT RESTORATION

With more than five decades of combined experience in industrial fan restoration, repair, and modification, Orbital Energy Services continues to effectively utilize its unique stationary shaft and journal restoration process to restore all types of industrial fan shafting to OEM specifications.

Speed, affordability, and safety are the reasons so many demand Orbital Energy Services for fan shaft repairs. We have proven again and again that we can restore fan shafts more cost effectively and with considerably shorter lead time than replacing the shaft with new.

Utilizing the Orbital Energy Services stationary machining process, our technicians are able to restore or modify virtually any industrial fan shaft to precise OEM specifications. All shafting is restored to straight, round, and concentric conditions to within ± 0.001 inch final machine tolerances with finishes to 16 RMS or better. The entire process is completed in-situ without shaft rotation, in any position or environment, including but not limited to journals and thrust runner faces, tapered or straight.



Applications Serviced

AXIAL FAN SHAFTING

FD Fans
ID Fans
FGD Booster Fans
Mine Ventilation Fans
Highway Tunnel Exhaust Fans

CENTRIFUGAL FAN SHAFTING

Boiler Fans
Induced Draught Fans
Sinter Waste Rotor Fans
Steel Mill Fans
Impeller Shafting

HEAT EXCHANGES

Horizontal Preheater Shafts
FGD Gas Reheater Shafting
Air Preheater Shafting
Boiler Feed Pumps
Feed Water Heaters

INDUSTRIAL FANS

Mixed Flow Fans
Ventilation Fans
Air Handling Systems

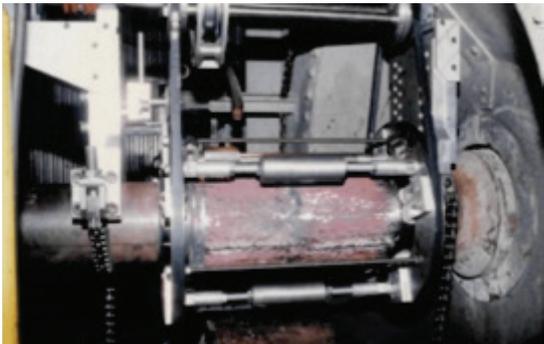
Overview of OES Fan Restoration Process



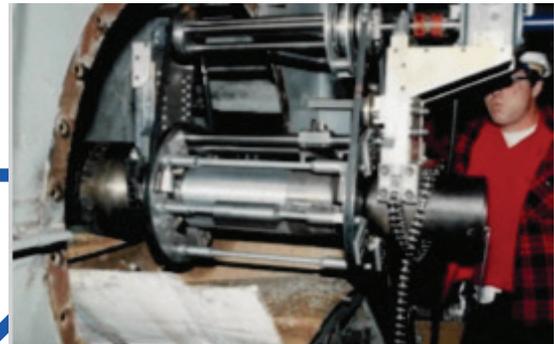
STEP 1 - Pre-machining for weld overlay or sleeving of fan shaft



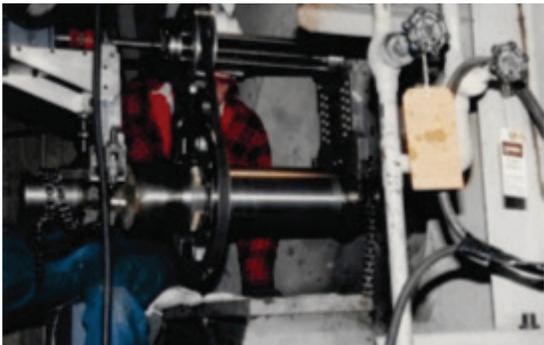
STEP 2 - Preparation of weld for final machining



STEP 3 - Stationary machining to return the fan shaft to straight, round, and concentric conditions



STEP 4 - Shafting restored to within +/-0.0005" final machining tolerances



STEP 5 - Final OD honing of fan shaft to restore OEM finish requirements