



IPM's Innovative On-Site Machining "Leaves" Nothing to Chance

New Fabrication of Dam Components assisted by IPM's Close Tolerance Machining

Pacific Northwest— In-Place Machining Company was recently contracted by Thompson Metal Fab in Vancouver, WA to perform precision machining on two large closure leaf assemblies for use at the McNary Dam, which allow for the passing of migrating juvenile salmon. These massive leaves are approximately 17' high by 53' wide and weigh approximately 120,000 lbs. The close tolerance requirements required for the guide rollers, lock pins and lifting lugs necessitated machining after fabrication had been completed, and the leaves were much too large to fit on routine shop machining equipment.



New Fabrication - McNary Dam Closure Leaves (Photo Credit TMF)

Thompson Metal Fab called upon the expertise and unique abilities of In-Place Machining Company to help in close tolerance **on-site machining** of these specialized components. Through collaboration between TMF and IPM, the team was able to complete the project on time, on budget, and with all features to print.



Optical Alignment of Line-Bore Bearings for Guide Wheel Bores



Line Boring Guide Wheel Bores

Precision Optical Inspection & Alignment— IPM used **precision optical telescope alignment** technology to accurately set and measure the co-axiality and parallelism of the (6) guide wheels to within 0.010". The bore machining was also tightly controlled, holding a size tolerance of +0.0012" - 0" using custom designed micro-adjust boring heads.

About Thompson Metal Fab— Thompson Metal Fab is a heavy structural steel and plate fabricator in Vancouver, Washington. Their facility has over 300,000 square feet of indoor fabrication space in addition to a 15 acre yard for assembly and fit-up. They have access to the Pacific Ocean via their deep-water port on the Columbia River, as well as

ground, rail and air access. They are AISC certified to multiple categories, in addition to ASME and API certified (4F-0087). Through those certifications they serve the following markets: Marine & Hydro, Bridge, Oil & Gas, Tanks/Vessels, Modular/Structural.



Line Boring Guide Wheel Bores

Contact Us Today— For more information on In-Place Machining Company's unsurpassed **on-site machining** services, **Call IPM at 414-562-2000** or visit inplace.com.

QUALITY MACHINING
IN-PLACE... ANY PLACE
IN THE WORLD