

FOCUSSED + PRECISION + CLEANING



CASE STUDY

JRI CLEANING APPLICATIONS AND INNOVATIONS

EXHAUST MANIFOLD COMPONENTS ROBOTIC LOADED INDEXING CONVEYOR SYSTEM

THE CHALLENGE: TO WASH CAST IRON EXHAUST MANIFOLDS AT A RATE OF 1 EVERY 30 SECONDS AND TO MEET A GRAVIMETRIC CLEANLINESS LEVEL AS WELL AS MAXIMUM PARTICLE SIZE. SYSTEM NEEDED TO BE ROBOTIC LOADED AND ALL SURFACES THOROUGHLY CLEANED.

THE SOLUTION: JRI PROPOSED AN INLINE INDEXING CONVEYOR SYSTEM THAT USED FIXTURES MOUNTED TO DUAL STRANDS OF CHAIN. THE ROBOT LOADED THE PART INTO THE LOAD FIXTURE AND THE PARTS INDEXED THROUGH THE WASH, RINSE, AND HEATED BLOW-OFF SYSTEM. A 300PSI, 150 GPM PUMP WAS USED TO FLUSH THE INTERNAL AND EXTERNAL SURFACES OF THE CASTING.



CASTING LOADED
IN FIXTURE



INDEXING CONVEYOR
AND CHAIN



30 HP
MAIN WASH
PUMP



PRECISION
FIXTURE AND SPRAY
NOZZLE ALIGNMENT



DUAL DUPLEX
FILTRATION



ROBOT LOADING
CLEANING SYSTEM