

Just-In-Time V-Packing

Reducing maintenance downtime by planning ahead.

A large forging company in Worcester, Massachusetts that supplies parts to the aerospace industry was experiencing oil leakage from multiple rams on one of their forging presses. The company was losing \$10,000 per month in lost oil, as the decade-old V-packing sets were running dangerously close to total failure.

The plant planned for a four-day shutdown that would cost \$300,000 in lost productivity. When planning for the shutdown, a larger problem surfaced: the maintenance managers had limited information about the actual size of the ram. To verify the dimensions, they would need to disassemble the press, and V-packing usually take four weeks to produce ship and deliver.

Extending the shutdown for an additional month would cost more than \$2 million dollars in lost productivity. Plant managers considered leaving the old packing in place, despite the cost of oil, the risk of catastrophic failure, and potential damage to the press. System Seals, however, presented a different approach.

To ensure the press could be rebuilt within the four-day shutdown, System Seals designed a special version of our Elite Packing with the ability to cover a wide range of variable diameters and heights. The Elite packing is a combination of different sealing ring profiles and materials which provides a leak-free solution that typically lasts twice as long as standard rubber/fabric packing.

When the installation day came, the packing was already on-site, along with one of our application engineers. Once the ram and housing sizes were confirmed, we were able to make adjustments to the length and height of the packing and install without issue. Operations were resumed on time, with a significantly improves, leak-free solution. This innovative approach saved the company approximately \$2.5 million in lost opportunity as well as eliminating the threat of damaging the press by reusing old packing.



CHALLENGE

A forging company was leaking approximately \$10,000 worth of oil each month, and needed a replacement packing that could be sized, produced and shipped within a four-day maintenance window.

SOLUTION

System Seals designed an adjustable V-packing that eliminated the need to pre-measure the ram. This was manufactured and shipped to the forge prior to the outage.

RESULT

The forge avoided a month long outage, saving saving \$2.5 million in lost productivity and stopped the \$10,000 monthly oil loss.