

In Place HVAC Shaft Repair



PROBLEM

This Children's Hospital had a large shaft that was damaged with extreme wear. They were looking at a high-cost project that would take weeks or months to execute. Large holes in the walls or roof would have been created (and then fixed!) to lift out the damaged part and bring in a long-lead replacement. They consulted the USI Team for an unconventional solution to repair the shaft in place, saving time and money, instead of initiating a full replacement project.

SUBSTRATE

Steel

PRODUCTS USED

[USI Universal Cleaner](#)

[MBX Bristle Blaster](#)

[Resimetal 101 Metal Repair Paste](#)

[Resimac 904 Release Agent](#)

SOLUTION

The shaft was cleaned and degreased with [USI Universal Cleaner](#). The damaged area was abraded with an [MBX Bristle Blaster](#) to create a "clean and rough" finish with a 2.5 4mil anchor pattern. [Resimetal 101 Metal Repair Paste](#) was applied with a spatula. A form was clamped on to keep the shape and compress the material to prevent voids. [Resimac 904 Release Agent](#) keeps the paste from adhering to the form for easy removal. Emory cloth was used to smooth the surface and remove the parting lines after only 2 hours of set time. The shaft repair cured to full hardness and was ready to be put back into service in 72 hours.