1. Impeller shaft in bad condition after years in service needs to be repaired.

2. Corrosion and wear to the shaft rendered it unusable.

3. The shaft was manually prepared to remove any corrosion.

4. The shaft is undercut and threaded on a lathe to optimize DurAlloy’s adhesion.

5. DurAlloy is applied to the shaft in the worn areas to build up the shaft’s diameter.

6. The shaft’s damaged areas repaired after application of DurAlloy.

7. The shaft being machined to the proper diameter before being put back into service.

Located at a wastewater treatment facility in Romania, the shaft of this impeller was badly worn after years in service. The facility’s engineers purchased a new shaft/impeller for $8,500 and were going to discard the old shaft/impeller. ENECON Romania suggested to the engineers that they repair the old shaft instead of discarding it.

The shaft was prepared and undercut to allow DurAlloy to adhere to its surface. The DurAlloy repairs were machined to the proper diameter and this impeller was put back into service immediately.

The new impeller sits on the shelf after 6 months of the repaired shaft being in service. The cost to repair this shaft was under $1,000.