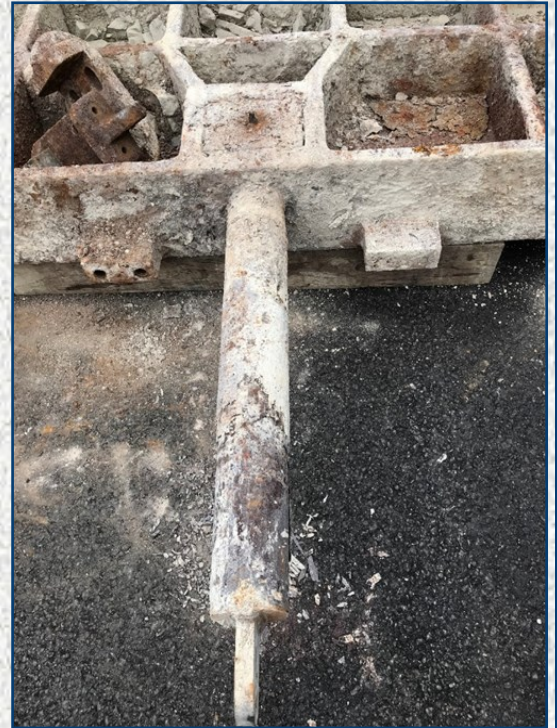


Project: Sluice gate rehabilitation for City of Buffalo

Quabbin rehabilitated the two 100-year-old 72" x 135" sluice gate assemblies at Colonel Ward Pumping Station in Buffalo, NY. The gates' frames, guides and discs were removed and inspected for corrosion and structural issues. A written evaluation of each gate assembly was provided, along with a list of recommended rehabilitation work. The gates were then disassembled and shipped to Quabbin's facility, where the work was completed.

Components requiring replacement:

- One of four top wedges
- Tongue covers on both discs
- Thrust nuts
- Operator stems (4.50" dia X 307" long, Acme threaded 164" long)
- Stem guide brackets
- Bronze split stem guides
- IB13/AS6 Rotork operators with hand cranks
- Stainless steel pedestals
- Stem covers
- Stop collars
- All hardware



Original disc, stub shaft and thrust nut before rehabilitation.



Condition of bottom wedge upon arrival at Quabbin.



A broken top wedge required replacement.



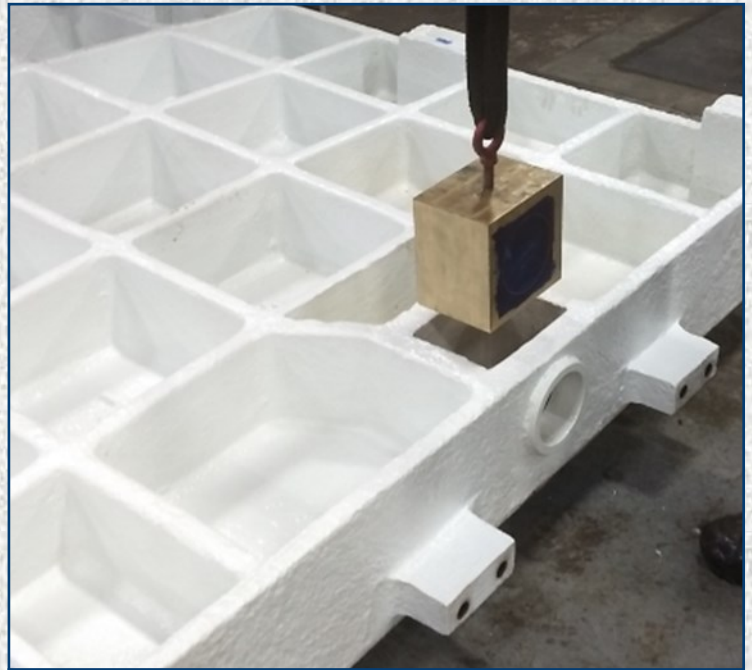
Gate disc and guides upon arrival at Quabbin.



Gate top wedges (three refurbished and one new) after coating.

Refurbished components:

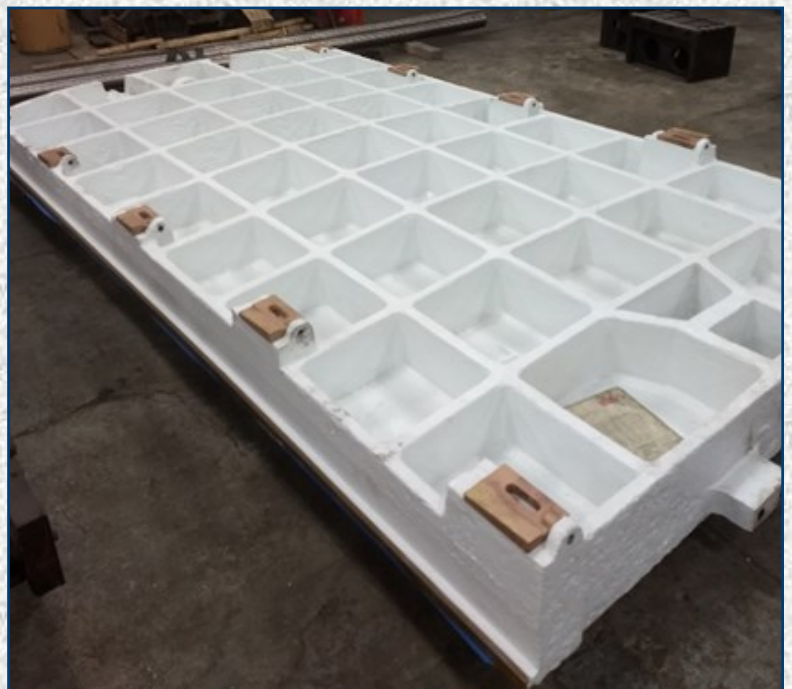
- Discs and guides were blasted, reinspected, then coated
- Original seats/seat facing were lightly sanded, then checked for flatness
- Gate guides and liners
- Wedges were blasted to remove scale; contact surfaces were machined to provide a smooth mating surface



Refurbished gate disc and new thrust nut.



Pedestals, gear boxes, stop nuts, operator stems and stem covers after installation.



Refurbished gate disc and side wedges.