

Two of thirteen leaf disc slide gates and their associated lifting equipment were replaced on Derby Dam, located on the Truckee River approximately 20 miles east of Reno, NV.

Two sets of the following components were provided:

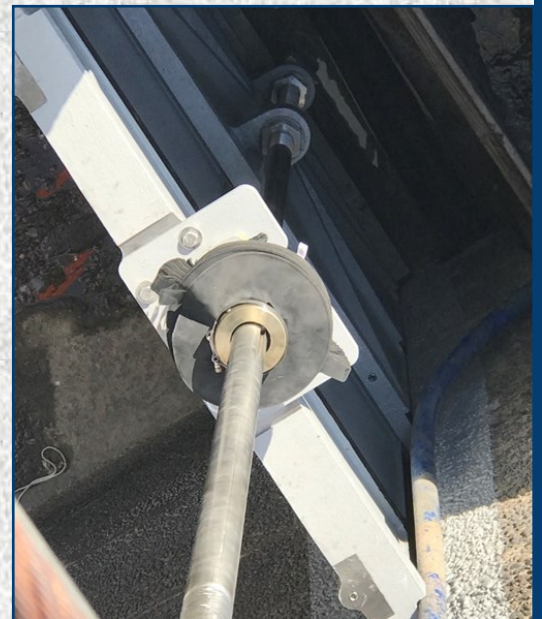
- Operator stem (2.50" Dia x 17' Long, 12' of thread)
- Upper and lower gate discs
- Extension stem (9.5' Long)
- Threaded operator nut
- Stop nut
- Couplings
- Electronically controlled oilers
- Split stem guide bracket, bushings
- Bronze anti-rotation blocks
- Invert seal
- Sewn round bellows
- Brackets and hardware



New gates prior to installation and painting. New patterns and castings were required for the upper and lower ductile iron leaf discs to have the same look as the original gates installed in 1905.



The downstream side of the two new leaf gates (third and fourth from left) after installation.



Lower bellows shield the operator stem below the hoist.



Qualifications

Quabbin is an **ISO 9001-**, **AS9100-** and **ISO 13485-**certified gate component manufacturing company located in a 40,000-square foot facility in Wilton, NH. Quality parts, short lead times and broad capabilities have made the company a single-source parts supplier for the water, wastewater, hydroelectric and power industries for more than 25 years.

- Manufactured components for Rodney Hunt-Fontaine from 1996 to 2016 (when they closed).
- Make replacement parts for Armco, Chapman, Coffin, Coldwell-Wilcox, Craft gates and others.
- Supply stems and components to gate manufacturers in the US and Canada.

Recently-completed jobs:

- **Bureau of Reclamation Lower Colorado Dams:** Year 1 of Intake tower cylinder gate stem assemblies for upstream Nevada tower; supplied 1,000' of 6.5" Dia stems, 600' of 10" Dia stems, *Hoover Dam, Clark County, NV*
- **TVA:** Extension stems for six 24" gate valves, over 360' of stem, couplings, stem guides, operators and pedestals, *Raccoon Mountain Pumped Storage Plant, Marion County, TN*
- **Black River WWTP:** Two Rodney Hunt 6020 manual gear boxes, *Baltimore, MD*
- **City of Detroit:** Four top wedges on a 100-year-old 72" x 120" sluice gate manufactured by Michigan Valve, *Springwells Filtration Plant, Detroit, MI*
- **Abingdon WTP:** Stem for 42" x 42" sluice gate, *Hartford County, MD*
- **TVA:** Four 8" gate valve extension stems, couplings, stem guides and operators, *Wilson Dam, Muscle Shoals, AL*
- **Louisville Metropolitan Sewer District:** Stem, coupling and stop nut for flood gate, *Louisville, KY*
- **DC Water:** Three stems for 60" x 66" sluice gate in the grit removal chamber; also stem, coupling, operator nut and pedestal on a 36" x 36" sluice gate, *Blue Plains Advanced WWTP, Washington, DC*
- **City of New York:** Hinge posts for four 78" x 96" tide gates, *Hunt's Point Wastewater Treatment Plant, Bronx, NY*
- **Northern Indiana Public Service Co.:** Four 7" Dia x 38' L stems with 34' of thread, operator nut and stop nut for two flood gates, *Oakdale Dam, Carroll County, IN*
- **Whitewater WWTP:** Stems stop collar, operator nut, thrust nut, stem guides, *Whitewater, WI*
- **Paducah Levee System:** Stems, stem guides, operators, pedestals, stem covers, stop nuts on three 60" x 60 and three 48" x 48" sluice gates, *Paducah, KY*
- **Milwaukee Metropolitan Sewerage District:** Stems, thrust nuts, stem guides, couplings on two 108" Dia and one 84" x 144" sluice gate, *Milwaukee, WI*
- **Saukville WWTP:** Stems and seals for three 42" x 42" slide gates, *Village of Saukville, WI*
- **Tonawanda Water and Sewer Dept.:** Stems, pedestals, stem guides, stop collars, stem covers, wedges, invert seals, thrust nuts, couplings and electric operators, *Amherst, NY*
- **Allied Technical Services:** 28 split stem guides, *Apple Valley, OH*
- **Syracuse Levee:** Stem, stop collar, thrust nuts, stem guides, stem cover, pedestal and Limitorque operator, *New York State Dept. of Environmental Conservation, Kirkwood, NY*
- **Mari Corps, USA:** 72 jack stands designed to raise and lower the dock at Dangling Rope Marina on Lake Powell, *Kane County, UT*
- **Bureau of Reclamation:** Extension stems, couplings, operator stems, operator nuts, stem nuts, stop collars, thrust nuts, stem bellows nuts, *Derby Dam, Sparks, NV*
- **Green Mountain Power Corp.:** Stems (4.5" x 250" L, 220" thread), operator, operator nuts, pedestals, bellows, interconnecting shafts, stop collars for two 229.5" x 76" dual stem slide gates, *Marshfield Service Spillway, Marshfield, VT*