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FEATURED

## Knight Foundry Pours it On

Jack Mitchell Jun 8, 2021

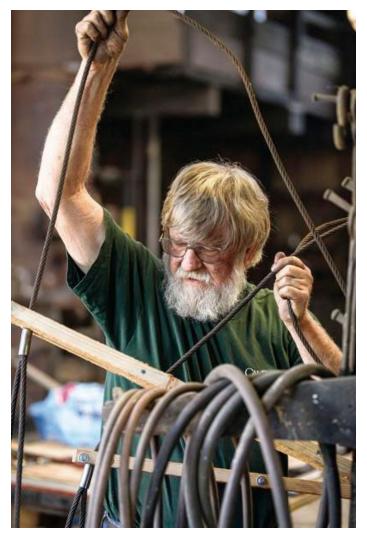


*Ed Arata, Langdon Van Der Veen (pouring), Russ Johnson (on the crane), Robin Peters (pouring), Steve Davies (slagging) — a group effort that is astounding to watch, at a foundry unlike any other — Knight Foundry.* 

LEDGER/Michael Cozad

Knight Foundry, the last water-powered foundry and machine shop in America, and one of the nation's best preserved 19th-century industrial complexes was busy on Saturday, May 29, 2021, pouring lead and showcasing Sutter Creek's Historic, Industrial Crown Jewel.

"The pour went pretty well," said Ed Arata, Knight Foundry Founding Board Member. "We poured five boiler grates for the Nevada Northern Railway in Ely and the Amador High School alumni have a project going on at the school and needed a cast iron "A", so a student made the pattern and we molded it. It was like old times; we were still molding when the iron was coming down."



*Ed Arata finds the right tools for the job at Knight Foundry.* LEDGER/Michael Cozad

The boiler grates for the Nevada Northern Railway were a bit of a trick, but after some trial and error, Knight Foundry members learned the best way to make the grates.

"The resin bonded sand that we used for the grates is pretty amazing," said Erata. "If you look at the castings, you will see that very little clean-up is required. Sam Knight, Dan Ramazzotti, Herman Nelson and Carl Borgh would be using resin bonded sand if it had been available in their day. **We'll pour the remaining five grates ordered on Saturday, June 26**."

One issue with the pour, air supply.

"We are still learning about our small cupola; we had a problem with the air supply and thus melting was slow and we were fighting cold iron all day," said Erata. "The guys are working on it and the air supply will be corrected by the next pour."

For those unfamiliar with Knight Foundry, set in the heart of Sutter Creek at 81 Eureka Street, is America's last waterpowered foundry and machine shop. Established in 1873 by Samuel Knight, this



extraordinary facility includes the unique historic equipment and machinery, still in place in its original context, just as it was during its Gold Rush-era heyday.

Knight Foundry is nationally recognized as a National Historic Mechanical Engineering Landmark and a California Registered Historical Landmark. The Foundry is listed on the National Register of Historic Places and was named by the National Trust for Historic Preservation as one of America's eleven most endangered historic places.

As a part of Amador County's industrial heritage corridor, the Knight Foundry joins the Kennedy Mine, Kennedy Tailing Wheels, Central Eureka Mine, and Miners' Bend Park to tell the story of how local industry created, and then contributed to, the viability of the Mother Lode communities of Sutter Creek, Amador City, Jackson, and others. The Foundry serves as an educational resource that provides a unique window into Amador's history and heritage.

Self guided tours take place the second Saturday of every month, so visitors can spend all the time they want in the Foundry complex, talking with docents and marveling at the magnificent machinery that's still intact and operating.

Knight Foundry opens at 10 a.m. and the



John Henry MacDonald from Nevada Northern Railway pouring one of his grates with Robin Peters and Steve Davies slagging. COURTESY PHOTO



*Five boiler grates were poured for Nevada Northern Railway.* COURTESY PHOTO

last tour tickets are sold at 3 p.m. Admission is \$15 for adults 18 and older, \$5 for students age 5-17, and free for children under 5. Private tours for families, groups and organizations can be arranged, call (209) 560-6160.

Join the Knight Foundry mailing list for future Foundry classes including Pattern Making, Introduction to Sand Casting, and recently added, an Introduction to Blacksmithing.

For more information and to keep up to date on all the activities at Knight Foundry visit knightfoundry.com.

Discover the compelling history that is historic Knight Foundry!



*The cast iron "A" for the Amador High School alumni project.* COURTESY PHOTO