

High-Capacity Flexible Fabrication System for Major Water Heater Manufacturer

We recently shipped and are currently installing a new flexible fabrication system for a major water heater manufacturer in Michigan. The system can handle 30,000 lb. coils of surface-critical CRS up to 60" wide and 0.125" thick in blanks up to 84" long.

The system includes a 30,000 lb. stock reel and coil car and includes options like a spring-set safety brake, automatic brake tension control, a clock-spring guard, and automatic coil centering on the coil car via a laser sensor.



The (11) roll heavy-duty D series straightener includes chrome plated rolls, back-up flights on all work rolls, high rise upper rolls for access for cleaning, power to all straightener rolls, our powered hands-free cleaning system, and a hold-down peeler station for hands-free thread-up of coils. A set of powered pinch rolls pulls the strip through the customer's blast machine.



Our exclusive (4) roll servo feed guides the strip into our DieMation coil processor system, which includes (2) tooling stations servo controlled in both the X and Y axes and space to add more tooling stations in the future, and a scrap conveyor with scrap bin for the slugs. A second (4) roll feed is used to pull the strip through, and a hydraulic powered cutoff shear for blanking.



Parts exit the cutoff shear and drop onto a belt conveyor with a reject station that can drop parts into a scrap bin mounted under the conveyor. The direct drop stacker uses non-marking polyurethane fingers to support the parts and an air blower system for stacking light gauge materials, a scissor lift table with auto-down feature to minimize the drop distance, and end discharge conveyor with powered rollers to allow removal of stacks from either the end or the side of the conveyor



The line was installed by our Formtek-Maine Service Department, including integration with the new blast machine provided by a third party. The customer is currently awaiting start-up, training, and commissioning, scheduled for later this month.