

SCS Industry 4.0 (SCS I4.0)

The revolutionary **SCS Industry 4.0 (SCS I4.0)** system from Granco Clark empowers extruders to transform their extrusion equipment into intelligent, self-monitoring machines.

Extruders can expect to see:

- Greater process efficiency
- Less maintenance-related downtime
- Decreased equipment wear
- Fully customizable data reporting via
 - Email
 - SMS Text
 - Live webpages

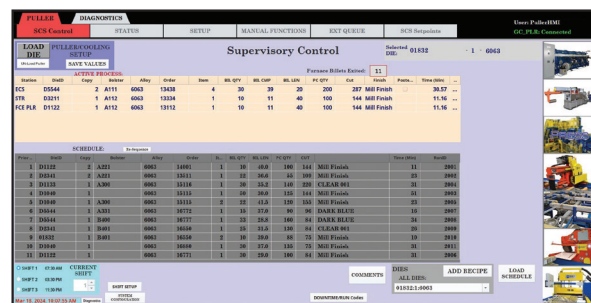
SCS I4.0 gives greater insight into process and equipment health than previously possible in aluminum extrusion operations. By combining process sensors with software developed specifically for the extrusion industry, data is recorded and analyzed automatically while the system is in normal operation. This real-time data analysis allows **SCS I4.0** to identify possible process deviations and notify personnel before quality is affected. Depending on the machine, the system can self-adjust to maintain ideal process parameters without needing user input. Furthermore, predictive analytics can identify components or systems that will require future attention by maintenance personnel and even generate customized PM schedules based on the needs of the equipment.

If the system is stopped for any reason, **SCS I4.0** will record the cause, duration, and frequency and notify the relevant personnel. This allows extruders to have the trust that the equipment will tell them where the potential process or equipment issues may exist. Rather than relying

on operations personnel to enter notes or pre-designated downtime codes that often need to be more specific or clear.

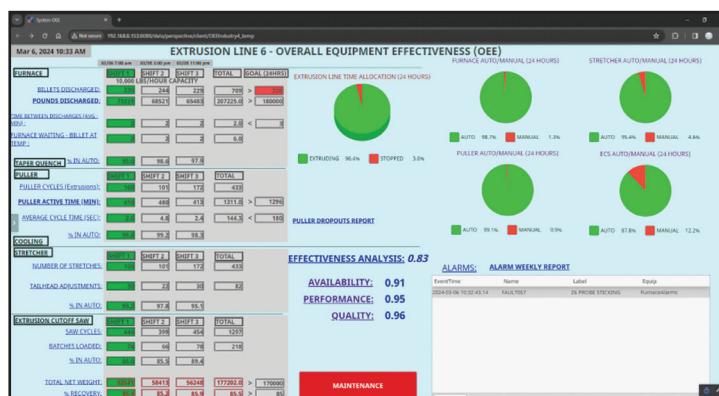
The automated reporting functions of **SCS I4.0** are fully customizable. The content, frequency, and method of reporting are tailored to the customer's needs during the system installation and can be further customized as the facility's needs evolve.

The benefits of **SCS I4.0** can be applied to any machine in the extrusion process, whether it's a brand-new full extrusion line or individual pieces of equipment with years of operation. Let Granco Clark make your equipment smart!



- Downloads and tracks press schedules and work orders. Enterprise visualization into the extrusion process.
- Manages equipment setup parameters (recipes).
- Setup equipment automatically with the optimal settings to maximize productivity and reduce scrap.
- Collect and report production data.

The SCS interfaces with the Foy Inc. EPICS extrusion software, to download press schedules and post extrusion production.



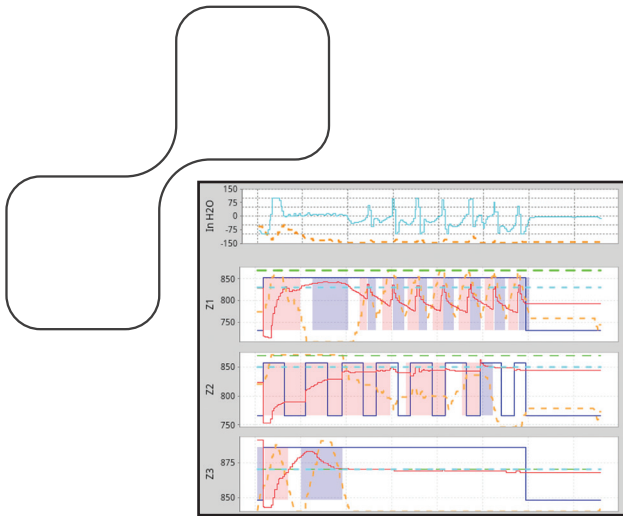
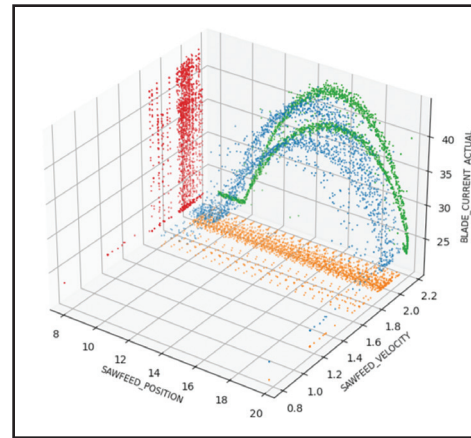
What Makes a 4.0 System?

Software:

- Bi-directional comms protocols
 - Ethernet/IP, Ethercat, Profinet
 - IO-link
- Data analysis software (SCADA)
- User interface software & reporting tools
 - Machine Health
 - Process efficiency
 - Historized data analysis

System Autonomy

- Detect anomalies or inefficiencies
- PLC-level decision-making
- If allowed, process parameters modified to improve efficiency
- Optimize energy consumption for current process
- Extend lifespan of equipment and consumables

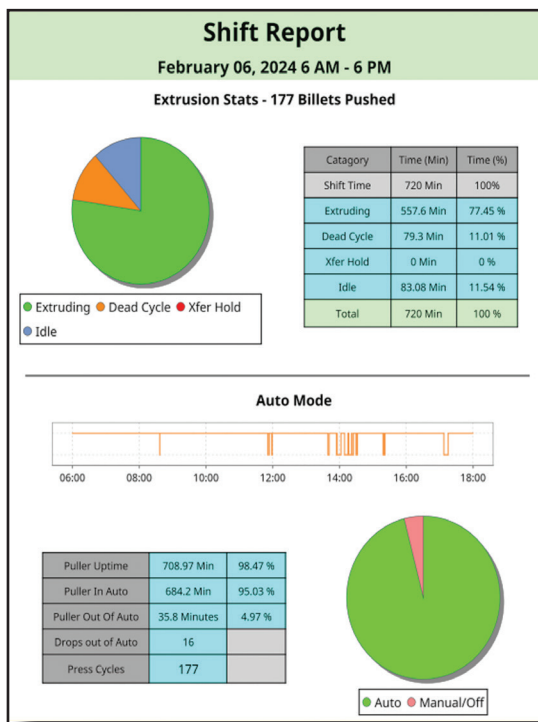


Predictive Analytics

Identifying Data Patterns

A successfully implemented **SCS I4.0** system will constantly monitor feedback data from the extrusion process.

The system will then identify patterns in this data autonomously and can either learn or be taught the optimal process parameters.



GRANCO CLARK®

100% Employee-owned



Global Contacts



UNITED STATES



AUSTRALIA



BRAZIL



INDIA



ITALY



THAILAND



U. A. E.



We offer 24-hour customer service to our customers anywhere in the world. Whether you're in need of technical advice over the phone or someone on your site, we are at your service.

- Technical support (phone and remote).
- Installation supervision.
- Complete installation services.
- Training.
- Preventative maintenance services.

Our customers can contact us anytime of the day, any day of the week to order the spare parts they need. Most parts will be available for next day delivery.

Service

Phone: +1-800-918+2600 (M-F 8 am - 4:45 pm Eastern)

After-hours Emergency Service: +1-616-522-2165

Email: service@grancoclark.com

Parts

Phone: +1-616-794-2600 (M-F 8 am - 4:45 pm Eastern)

After-hours and Weekends: +1-616-522-2165

Email: parts@grancoclark.com



Contact Us



GRANCO CLARK®

100% Employee-owned

