Features	Benefits
Production schedule execution	• Process control for on-time delivery, overall efficiency • Simplifies production schedule adjustments • Reproducible parameters stored for specific die applications • Tracking of production process throughout for internal review
Auto equipment setup	• Fast changeovers • Elimination of operator error, saving time and materials • Elimination of "tuning" time on dies that have recipes • More usable product
Data collection (billet-by-billet detail, billet temperatures, shear lengths, gross and net weight, etc.)	• Quality control • Ability to report information to third-party software systems
Complete process control	• Shorter delivery cycles • Stricter quality requirements can be met • More complex, challenging shapes can be run
Repeatable setups	• Operating parameters can be precisely duplicated
Advanced fault diagnostics	• Faults detected and diagnosed, and recommendations to correct the problems are displayed

Extrusion Expertise That's Always Within Reach

Granco Clark's commitment to assuring maximum equipment performance has earned us a record of more successful extrusion installations than any other company in North America.

First, we work with you to recommend the right equipment for your particular needs. Our highly experienced employees, together with our ISO-9001-certified quality assurance system, ensure a smooth acquisition from purchase order to up-and-running. Once equipment is installed, we adjust it, train your personnel to operate it, and get it into service quickly.

After installation, we follow up to make sure equipment is performing at peak efficiency and that you're completely satisfied. And we back all of our equipment with the industry's best warranty.

We never stop being your key resource. Need a part? Order replacement parts any day of the week, any time with our 24-hour parts hotline— more than 80% are available for delivery the next day or sooner.
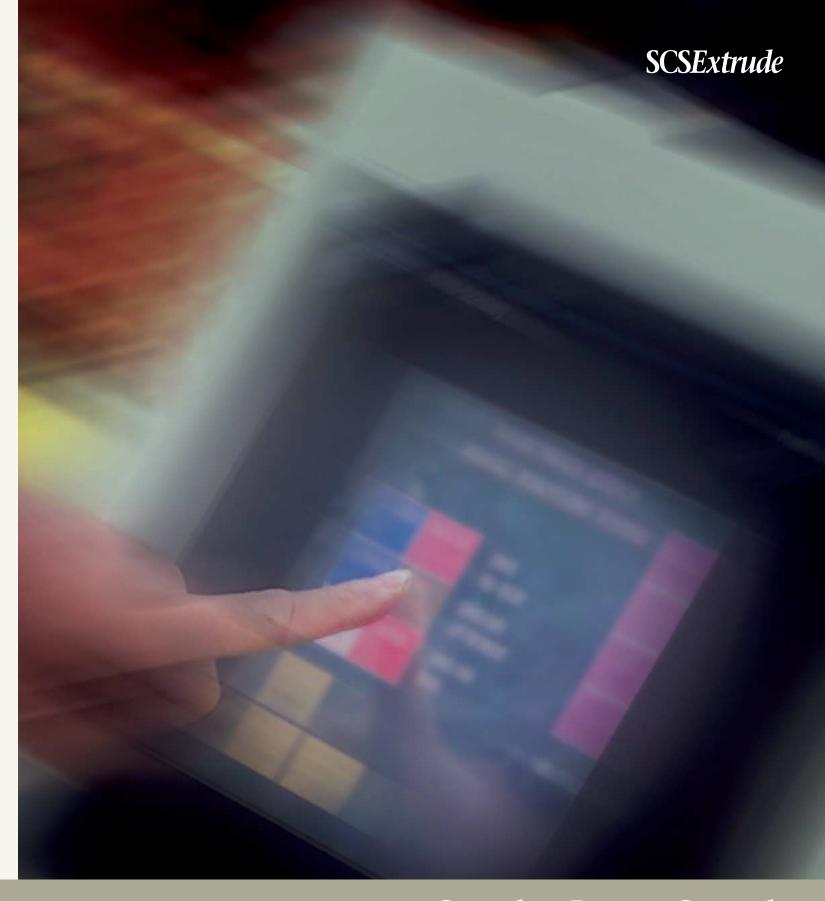
If equipment goes down, help is available immediately with Granco Clark's modem support. Service is free during standard business hours, with additional assistance available 24/7. We'll run diagnostics on your system via modem and walk you through any repairs.
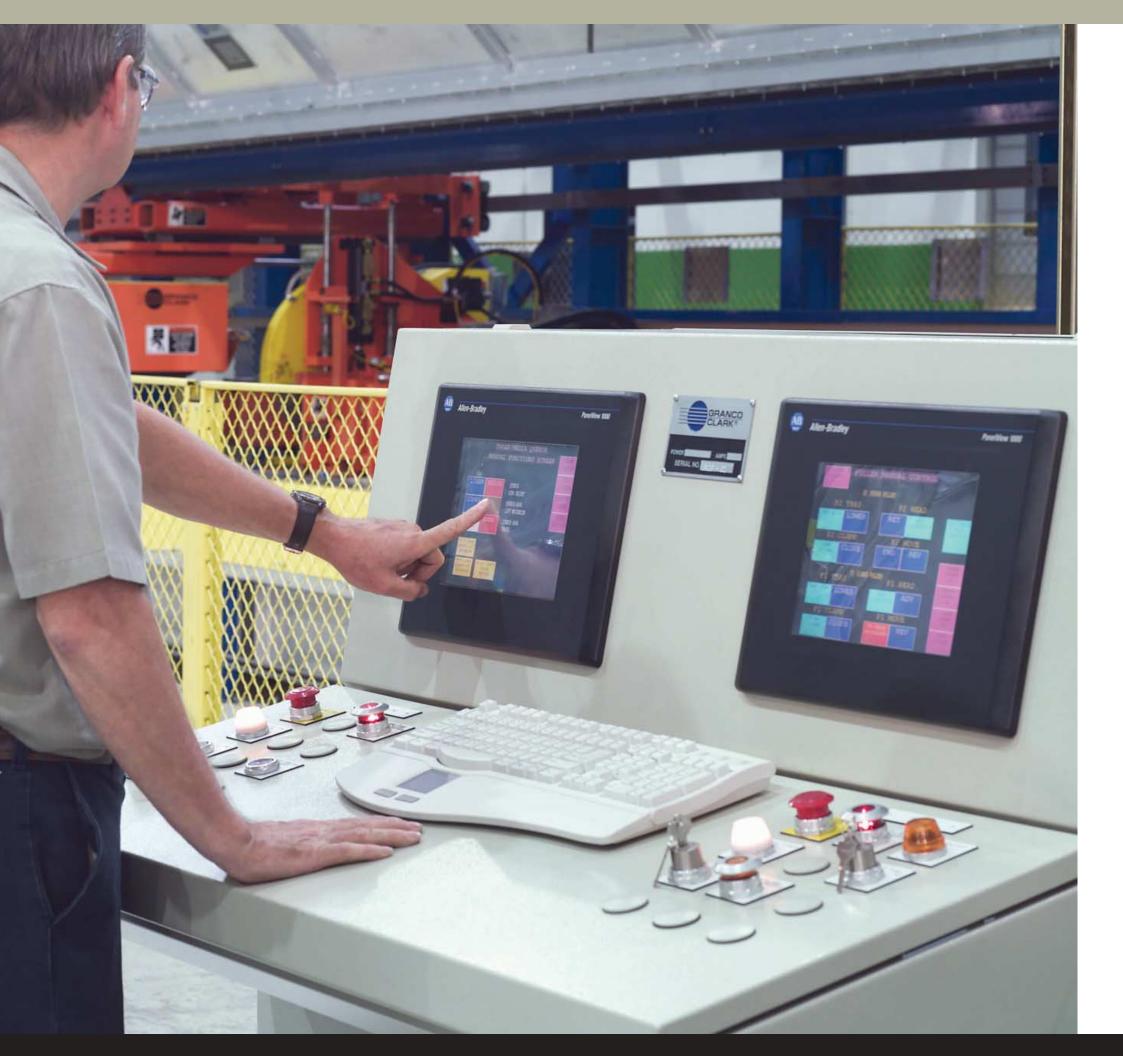
With Granco Clark, you have peace of mind that your extrusion line is delivering the highest possible performance and productivity. And you can count on us for continued service and support over the full life of your equipment.

GRANCO CLARK WORLDWIDE

Performance. Productivity. Peace of Mind.

For more information contact us by phone, e-mail, or visit our web site.

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Complete Process Control. Faster Changeovers. Fewer Errors.

SCS*Extrude* is a powerful software system that orchestrates the extrusion process, enabling communication among individual machines and providing the office with real-time information. It combines the production schedule, data collection, diagnostics, and equipment parameter settings under one control source, unifying these processes.

The system operates from a high-end industrial PC workstation mounted in the press area. It executes production schedules, automatically loads equipment parameters and recipes, tracks and diagnoses faults, and logs production and downtime data—all in the user-friendly environment of Microsoft Windows. And it cuts operator intervention—and human error— to the absolute minimum.

Everything's Under Control

SCS*Extrude* draws on information from a relational database. One of the key tables in this database contains all the setup information for the die, e.g., cooling requirements, puller tension, percent to stretch, and many other parameters. A second contains the production schedule table, which includes information like work order number, die number, cut length, and number of pieces needed. SCS*Extrude* correlates this information to send production- and die-related data to the extrusion line. Not only is this process faster than traditional control systems, but it's also far more accurate.

With SCS*Extrude* executing your production schedule, you have the kind of process control necessary for on-time delivery and overall efficiency. The parameters for a specific die application can be exactly reproduced every time it's run.

In-Depth Knowledge of Every Run…as It's Running

SCS*Extrude* provides you with a means of tracking the complete production process for internal review. All the production data the system collects (billet-by-billet detail, billet temperatures, shear lengths, gross and net weight, etc.) are stored, allowing for instant access to this information.

In addition, SCS*Extrude* provides sophisticated fault discovery and correction technology. The system detects and diagnoses problems, showing images of faulty parts and their area of installation; then recommends corrections. With advance warning, many conditions that would otherwise cause downtime can be corrected.

Seamless Interface with Third-Party Software Systems

Although SCS*Extrude* is a stand-alone solution, we build in interfaces to third-party software systems, if desired. This allows for seamless interchanges of data. For example, a press schedule from a third-party software system can be downloaded to SCS*Extrude* with just a push of a button; then SCS*Extrude* collects the data about the actual run and sends it to the other system.

SCSExtrude *coordinates the extrusion process, enabling communication among individual machines.*