

**Features****Benefits****Quick-Cycle Log Shear**

Billets sheared as needed	<ul style="list-style-type: none"><li>• Reduced inventory, greater liquidity</li></ul>
Multiple operating modes	<ul style="list-style-type: none"><li>• Greater flexibility, improved system control</li><li>• Maximized recovery</li></ul>
Selectable "no scrap" mode	<ul style="list-style-type: none"><li>• 100% of the log can be consumed</li></ul>
Specially designed precision clamping system	<ul style="list-style-type: none"><li>• Excellent squareness of cut</li></ul>
Innovative shear ring design	<ul style="list-style-type: none"><li>• Superior cut</li><li>• Minimal deformation</li></ul>
Engineered for quick cycles	<ul style="list-style-type: none"><li>• Increased throughput</li></ul>
Billet storage gear automatically transfers short, compensation-cut pieces back to furnace between shearing cycles	<ul style="list-style-type: none"><li>• Reduced scrap</li><li>• Increased productivity</li></ul>
Usable with pre-cut billets as well as one-piece and saw-face/sawface cycling	<ul style="list-style-type: none"><li>• Versatility</li></ul>

**Hot Saw**

Multiple operating modes	<ul style="list-style-type: none"><li>• Greater flexibility, improved system control</li><li>• Maximized recovery</li></ul>
Precision clamping system	<ul style="list-style-type: none"><li>• Excellent squareness of cut</li></ul>
Billets cut to size as needed	<ul style="list-style-type: none"><li>• Reduced inventory, greater liquidity</li></ul>
Engineered for quick cycles	<ul style="list-style-type: none"><li>• Increased throughput</li></ul>
Smooth sawing action	<ul style="list-style-type: none"><li>• Won't crack hard alloys</li></ul>
Billet storage gear automatically transfers short, compensation-cut pieces back to furnace between sawing cycles	<ul style="list-style-type: none"><li>• Reduced scrap</li><li>• Increased productivity</li></ul>
Low-pressure process	<ul style="list-style-type: none"><li>• Decreased maintenance</li><li>• Reduced incidence of leaks</li></ul>
Vacuum chip collection system	<ul style="list-style-type: none"><li>• Keeps cutting area clear</li><li>• Efficient recycling of chips</li></ul>

**Spinning Log Welder**

Elimination of two-piece billets	<ul style="list-style-type: none"><li>• Increases yield by 1-2%</li></ul>
Integrates with hot saw	<ul style="list-style-type: none"><li>• Removes oxidation at log ends</li></ul>
Pressure controlled rotation	<ul style="list-style-type: none"><li>• Produces a stronger bond compared to multi-point welds</li></ul>
Optional inert gas atmosphere	<ul style="list-style-type: none"><li>• Reduction of oxides</li></ul>

**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.



# Log Shear, Hot Saw, and Spinning Log Welder

**Billets Sheared or Sawn as Needed.  
Better Metal Management.**



Performance. Productivity. Peace of Mind.

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

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## Three excellent technology options to add extrusion efficiency.

Granco Clark offers three state-of-the-art technologies that help maximize your efficiency, productivity, and financial return while supplying billets to your extrusion line. They are the industry-standard Quick-Cycle Log Shear, the Granco Clark Hot Saw, and the new Granco Clark Spinning Log Welder.

Both the Log Shear and Hot Saw provide a major enhancement to consistent line throughput because electronically controlled

cuts deliver heated billets of the exact length needed just before they enter the press. It eliminates the need to maintain an expensive inventory of different length billets because you cut them as you go. And it prevents the possibility of a downstream problem leaving you with a furnace full of wrong-sized billets—billets you've already spent real money to heat. Add new Spinning Log Welder technology, and you also eliminate problems caused by two-piece billets. The Hot Saw

integrates with the new Spinning Log Welder technology, providing a precise cut and clean surface on log ends. The Spinning Log Welder then joins the pieces in a process that fuses them together into a virtually seamless single billet, reducing waste and dramatically increasing yield.

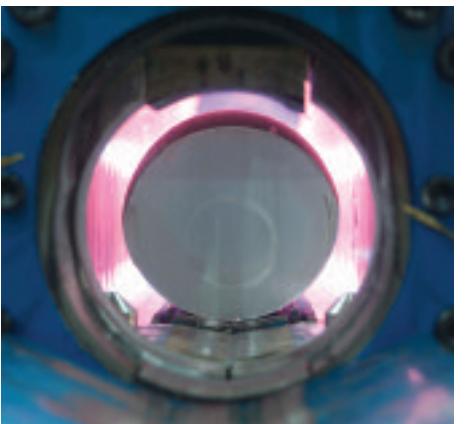
Which technology is right for you? Each has its unique benefits; the “right” choices depend upon your particular system, the types of profiles you run, and your personal preferences. But it's virtually certain that whichever technologies you choose, you will realize benefits on your bottom line.

### The Granco Clark Log Shear. Cut billets as needed, without scrap, consumables, or blade changes.

The Granco Clark Quick-Cycle Log Shear is a proven technology. For years countless extruders have used it in tandem with the Granco Clark Hot Jet Furnace to get the benefits of unmatched productivity. The shear features an innovative ring design: a wide opening permits fast loading, but cradles the log in a tighter ring during

cutting for an even, accurate cut with minimal deformation.

The Granco Clark Log Shear also features a “compensation cut” system. When it calculates an upcoming “too-short” log end destined for scrap, it automatically cuts a small piece to avoid it. A patented “billet storage gear” transfers that piece back to the furnace between shearing cycles for subsequent use in a two-piece billet. This permits 100% log consumption with NO scrap!



An innovative ring design speeds loading, but holds the billet tight for accurate cutting.



The Granco Clark Hot Saw delivers square, even cuts to ensure profile consistency.

### The Granco Clark Hot Saw. Perfectly square cuts ensure profile consistency from two-piece billets.

For many extrusion operations, the perfect, square cuts that result from a sawing action are critical to the delivery of more consistent profile results downstream. The Granco Clark Hot Saw is the ideal answer.

The Hot Saw makes smooth, accurate cuts with virtually no deformation and can be integrated with Spinning Log Welder technology to displace air between segments when joining two-piece billets. Eliminating trapped air helps maintain profile quality and reduces scrap by avoiding profile imperfections air bubbles can cause.

The Hot Saw also incorporates a compensation cut feature similar to that of the log shear. This allows the saw to “think ahead” to avoid too-short end segments that become instant scrap. The Granco Clark Hot Saw also works effectively for harder alloys that can present problems for log shears.

Because the saw operates on lower hydraulic pressures, the potential for leaks is reduced and many maintenance worries are eased. And it includes an efficient chip

collection system that removes swarf efficiently to keep the cutting area clear and make recycling simple.

### The Granco Clark Spinning Log Welder. Fuse two-piece billets into uniform, single billets.

Now integrate the Granco Clark Hot Saw with new Spinning Log Welder technology, and you can avoid the problems you often encounter with two-piece billets and the performance shortcomings of spot-welded billets.

As logs emerge from the furnace, the Granco Clark Hot Saw locates the junction and creates a precise, even cut, exposing fresh surfaces on the billet piece to be joined. In a process that takes less than 10 seconds, which reduces oxidation at the joint, the new Spinning Log Welder joins them together under pressure and controlled rotation. An alignment system ensures the billets are precisely centered. The entire process takes place after the furnace, where it can be done most efficiently.

The result is a stronger, more complete bond, fusing two-piece billets together into uniform, single billets—reducing scrap and improving your overall yield 1–2%!



Compensation cut feature “plans ahead” to avoid short end pieces that become scrap.



The new Granco Clark Spinning Log Welder increases yield 1–2%.