Features	Benefits
Single Puller	
Puller applies just the right amount of tension as the profile emerges from the die	<ul> <li>Even, twist-free, dimensional profiles</li> <li>Reduced manpower</li> <li>Enhanced safety</li> <li>3% less scrap over operation without a puller</li> <li>Increased line efficiency</li> </ul>
Suitable for use with under-table hot saw	Additional level of efficiency and automation
Double Puller	
Two puller heads on a single track	<ul><li>Continuous production</li><li>Highly efficient use of space</li></ul>
Ability to seek die mark/weld, cut profiles on the fly	<ul> <li>Increased production</li> <li>Ability to meet short press dead-cycle times</li> <li>Increased efficiency at finish saw</li> <li>2–3% less scrap than single puller and up to 6% over operation without a puller</li> </ul>
Multiple operational modes	• Flexibility, selection of sequence that best meets your needs
Built-in diagnostics	• Fast identification of faults
Ability to use longer billets	<ul> <li>Increased effectiveness of compensation-cut program on furnace/shear installations, reducing butt scrap</li> </ul>
Twin Puller	
Well-suited for use with double length systems	Ability to cut on die mark/weld during dead cycle
Multiple operational modes	Flexibility to select sequence that best meets your needs
Twin/Twin Puller	
Saws on each of the two puller heads	Ability to cut on the die mark on the fly, with no handover necessary
Multiple operational modes	Flexibility to select sequence that best meets your needs

# 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.





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

7298 N. Storey Road, Belding, MI 48809 Phone: (616) 794-2600 Toll-free: (800) 918-2600 Fax: (616) 794-2878 e-mail: gcinfo@grancoclark.com www.grancoclark.com Every bit of scrap you generate represents an equivalent loss in profitable product. While some scrap is inevitable, of course, reducing it just a few percent can significantly benefit your bottom line.

With a Granco Clark puller, you can convert more metal into profitable product. Granco Clark offers four types of pullers—double, twin, twin/twin, and single—in order to meet varying operational requirements and budget parameters. All our pullers deliver greater line efficiency and even, twist-free profiles.

#### Cut Profiles on the Fly

The Granco Clark Double Puller features two puller heads on the same track, allowing it to seek the die mark/weld and cut profiles on the fly. This enables it to meet short press dead-cycle times.

The Double Puller increases efficiency at the finish saw as well, because it eliminates the need to find the die mark and make cuts on both sides of the first profile. And the scrap savings with the Granco Clark Double Puller are considerable—an additional 2-3% over single pullers and up to 6% over operation without a puller.

#### Designed to Be Strong, Simple, and Economical

Lightweight and responsive, the Granco Clark Double Puller works well with lighter, highspeed extrusions. Its built-in diagnostics ensure that faults are identified and rectified fast, and its single hexagonal track features ball-bearing guides for strength, performance, and low friction. And, of course, the double puller represents a highly efficient use of space.

### Increased Flexibility with Multiple Operational Programs

Granco Clark's Double Puller comes equipped with multiple operational programs, giving you greater flexibility. In the most commonly utilized program, puller #2, which has been holding the profile during the dead cycle, pulls the profile along the runout conveyor as the press extrudes. Puller #1 waits at the press until the die mark appears, accelerates to match the profile speed, clamps the profile, and cuts it on the die mark. Puller #2 then transports



The Granco Clark Double Puller features two puller heads on the same track, allowing it to seek the die mark/weld and cut profiles on the fly.

the severed profile down the runout and returns toward the press to accept the handover of the next profile from puller #1.

In another operating mode—ideal for longer billets—puller #2 pulls the profile while puller #1 waits at the press until the die mark appears, then accelerates to make the cut. Puller #2 then positions the profile on the runout and returns to accept the handover from puller #1 before it returns to the press. When puller #2 reports the appropriate length, puller #1 accelerates, clamps the profile, and cuts it. This cycle may be repeated indefinitely until the billet is exhausted. The result is continuous production with fewer dead cycles and less scrap: only one butt end.

#### Twin Pullers

In addition to the Double Puller, Granco Clark also offers Twin and Twin/Twin Pullers equipped with multiple operational programs. The Twin Puller includes two heads on separate tracks and an adjustable hot saw that cuts the profile during the dead cycle. If installed in a double length system, it can be used to cut on the die mark.

On the Granco Clark Twin/Twin Puller, both puller heads feature a saw. This allows the profile to be cut on the die mark on the fly, as with a double puller, but no handover between the pullers is necessary. As with the Double Puller, Granco Clark's Twin and Twin/Twin Pullers reduce scrap an additional 2-3% over single pullers and up to 6% over operation without a puller.

## **Single Pullers**

If space or budget constraints don't allow for the use of double or twin pullers, Granco Clark Single Pullers can improve your productivity. They produce even, twist-free profiles and reduce scrap about 3% over operation without a puller. Line efficiency is further enhanced when you combine our single puller with a Granco Clark undertable hot saw.

# **Exceptional Operator Safety**

Guards make the moving parts of Granco Clark pullers inaccessible during operation. Infrared light curtains stop the cutting cycle if the light beams are interrupted. The result is an exceptional level of operator safety.



On the Granco Clark Twin Puller, an adjustable hot saw cuts the profile during the dead cycle.



The Granco Clark Twin Puller comes equipped with multiple operational programs to maximize flexibility.