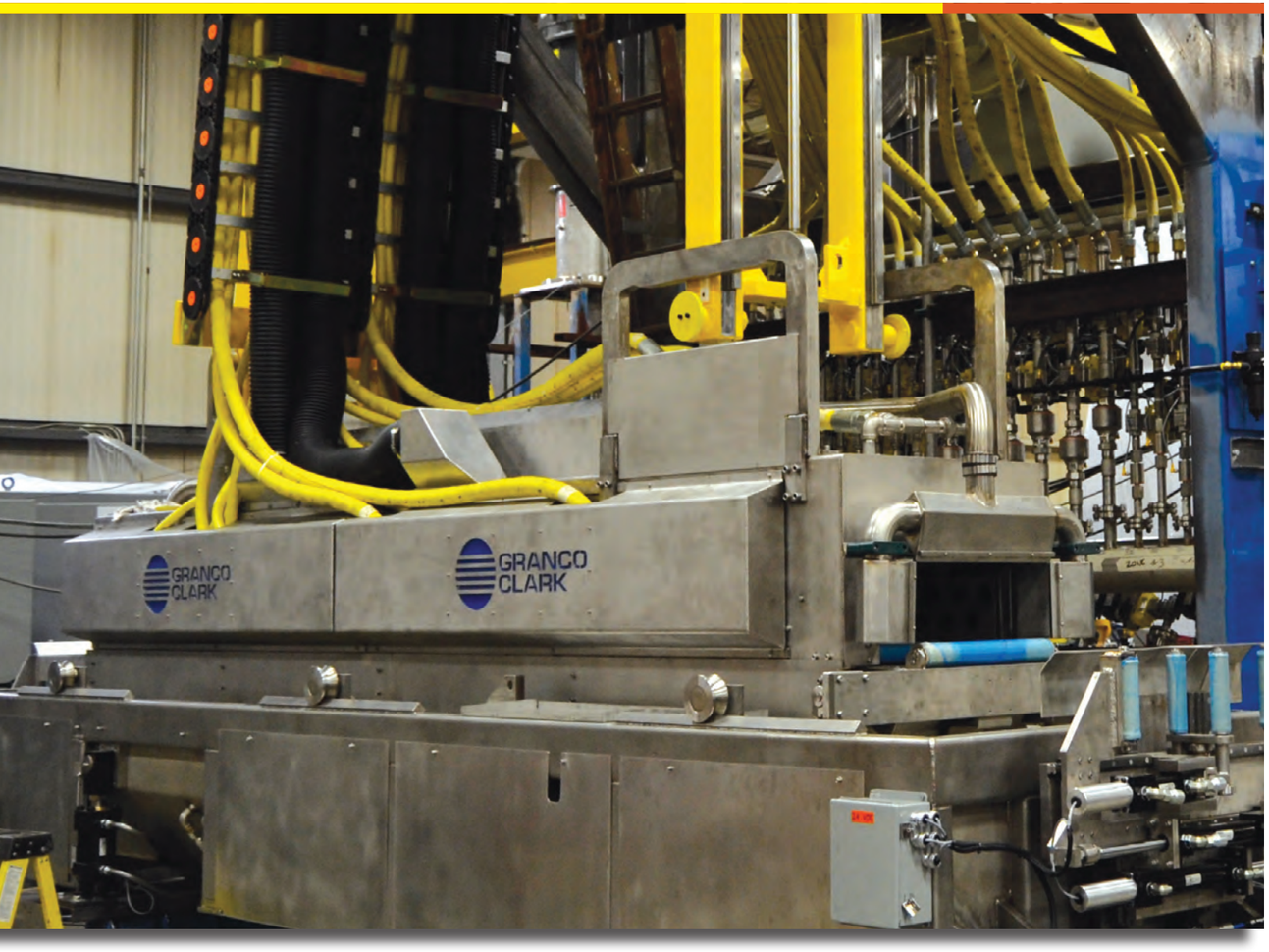
High Impact Velocity Quench



- Unmatched Cooling Rates
- FEA Analyses For Any Shape
- Performance Guaranty
- Eliminate Distortion with Progressive Quenching
- All Stainless Construction
- Crash Profiles

100% USA Supply

AEC Member and Supporter

GRANCO CLARK has been supplying "high impact velocity" quenches since 1985. We documented the underlying science more than a dozen years ago in a seminar paper at the Extrusion Technology Symposium in 2004 *(ET-04)*.

Cooling rate is determined by quench technology and profile thickness. For most crash box sections our systems can provide cooling rates of more than 200°F per second on enclosed hollows *(that is - quenching only the outside of the profile)*.

GRANCO CLARK's High Impact Velocity Quench provides the maximum heat transfer available in a profile quench. Unlike flood quenches, the High Impact Velocity Quench penetrates the steam barrier surrounding the profile and puts water droplets directly on the aluminum. More importantly, the **GRANCO CLARK** High Impact Velocity Quench provides adjustability unlike any other, for a gain in profile quality.

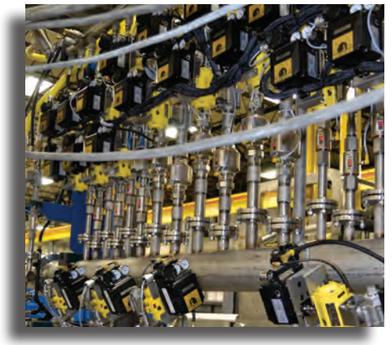
With the **GRANCO CLARK** High Impact Velocity Quench, the speed of the cooling process is greatly increased—in fact, it can provide more than twice the cooling rate of a flood quench and three times the cooling rate of other spray quenches.

First Billet Pull-Through

Profile Quality:
- Uniform
- Efficient cooling

High-Pressure Spray:
- Unmatched heat transfer in a profile quench

- Highest pressure
- Maximum heat transfer available in a profile quench
- Nozzles arranged in adjustable rings, divided into 8 zones (more for larger press sizes)
- High pressure, in-line filtration system removes particles from water
- Scrap preventing dead cycle sequence is available
- Air knives at each quench opening minimize water running down the profile length and water spray entering work area
- All stainless steel construction
- Nozzles are protected from impact
- Penetrates steam barrier, thereby dramatically increasing cooling speeds
- Maximum extrusion speed with minimum space requirements
- Precise cooling control appropriate to profile
- Distortion control
- Recipe system
- Pressure and flow feedback per zone
- Reproducibility of spray patterns
- First billet pull through capability



Fully Assembled and Shop Tested