



Press Information

December 5, 2019

Stack Metallurgical Group Augments Hot Isostatic Pressing Capacity with Second System from Quintus Technologies

Combination of large and mid-sized HIPs advances Stack's objective of one-stop shop thermal processing

Västerås, Sweden, December 5, 2019 – Spurred by a successful entry into Hot Isostatic Pressing at the beginning of this year, Stack Metallurgical Group is redoubling its commitment to the technology with the addition of a second Hot Isostatic Press (HIP) from [Quintus Technologies](#).

A trusted provider of heat treating and metal processing services to quality-critical industries, Stack is now investing in a model QIH 122 M URC®, which features a work zone of 26.0 inches (660 mm) in diameter and 68.9 inches (1,750 mm) in height. The new system follows the installation of [a high-capacity Mega-HIP](#), the QIH286 M URC®, with a work zone of 63 inches (1,600 mm) in diameter and 102 inches (2,591 mm) in height.

“We’ve been extremely happy with the market response as we have expanded our service offerings to include [HIP](#),” states Doug Puerta, CEO, [Stack Metallurgical Group](#). “The massive size of our first unit enables us to process larger castings and/or powder metal components. The new unit now allows us to process all ranges of materials and lot sizes and is ideal for moderately sized components. The capabilities and capacity offered by these two units further strengthen the value proposition that Stack facilities provide their clients.”

Like the Mega-HIP, the QIH 122 M URC is equipped with the Quintus proprietary [uniform rapid cooling](#) (URC®) feature, which combines HIP and heat treatment in a single process. Known as high pressure heat treatment (HPHT),

Quintus Technologies specializes in the design, manufacture, installation, and support of high pressure systems for sheet metal forming and densification of advanced materials and critical industrial components. Headquartered in Västerås, Sweden, and represented in 45 countries worldwide, the company is the world leader in high pressure technology and has delivered more than 1,900 systems to customers across the globe within industries such as aerospace, automotive, energy, and medical implants.



this innovative approach streamlines the steps involved in material densification and heat treatment. It enables all processed components to cool uniformly, resulting in minimal thermal distortion and non-uniform grain growth. The improved material properties are essential for parts designed for demanding applications--in aerospace, medical implants, and power generation, for example.

The burgeoning [additive manufacturing](#) (AM) environment played a large role in Stack's decision to expand its HIP portfolio. "We see opportunities not only in traditional markets such as castings, but also in emerging markets, with additive manufacturing being the most notable," Mr. Puerta says.

The new press, which operates at a maximum temperature of 2,552°F (1,400°C) and a maximum pressure of 30,000 psi (2,070 bar), will be installed in Stack's recently completed facility in Albany, Oregon.

Stack has also enrolled in a five-year [Quintus® Care](#) agreement, a comprehensive program that assures safe, trouble-free press operation and optimized functionality at a fixed annual cost. This rigorous preventative maintenance program helps reduce operational risk while providing access to Quintus's in-depth technical expertise and vast HIP application knowledge.

"HIP is an important contributor toward our objective to be a one-stop shop for our clients, as we can now service a broad range of manufacturing milestones," Dan Ederer, Stack Corporate President, comments, adding, "Quintus has been a great partner since we first began exploring an entrance into HIP. Quintus has provided unique solutions including size, pressure, and cooling rate capability, which has in turn enabled us to partner with our clients in a more comprehensive manner."

"Stack's decision to invest in a second Quintus HIP is a tribute to our leadership position in the industry," says Jan Söderström, CEO of Quintus Technologies. "As the need for Hot Isostatic Pressing steadily increases, we are very pleased with this next step in our relationship."

About Quintus Technologies

Quintus Technologies is the global leader in high pressure technology. The company designs, manufactures, installs, and supports high pressure systems

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for sheet metal forming and densification of advanced materials. Quintus has delivered over 1,900 systems to customers within industries such as aerospace, automotive, energy, and medical implants. The company is headquartered in Västerås, Sweden, with a presence in 45 countries worldwide. For more information, go to www.quintustechnologies.com

About Stack Metallurgical Services, Inc.

With a history dating back to 1946, the Stack Metallurgical Group has grown to become the most versatile provider of heat treating and metal processing services in the Pacific Northwest. With its new HIP facility coming on-line in 2019, Stack will offer four Nadcap-accredited locations with a focus on the aerospace, power generation, medical implant, and high-end knife and cutlery markets. The company's modern and extensive equipment line-up offers a comprehensive portfolio of services for demanding clients throughout North America. With a range of aerospace OEM approvals for heat treatment, Stack has built trusted relationships with aerospace titans like Boeing, General Electric, Consolidated Precision Products, and Precision Castparts. Read more about Stack: www.stackmet.com

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Caption for image below:

An additional Quintus® Hot Isostatic Press (HIP) with uniform rapid cooling (URC®) will be installed in Stack Metallurgical Group's newest facility in Albany, Ore., USA. (Photo courtesy of Quintus Technologies)

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