

SHEET METAL

Figur G15

Introduced for the first time at IMTS 2022, the Figur G15 is the first commercial platform of its kind to shape sheet metal on demand directly from a digital file. A software-driven ceramic tool on an XY gantry forms the sheet with up to 2,000 lbs of force in a highly engineered and proprietary build zone.

Figur's patent-pending Digital Sheet Forming (DSF) technology eliminates the need for a traditional stamping press or tools and dies – delivering sheet metal forming that is accessible, flexible, and cost-effective, even at low volumes.

[PRELIMINARY SPECIFICATIONS]

Max sheet size	1,600 mm x 1,200 mm (63.0 x 47.2 in)
Forming area interface technology	1,450 mm x 1,000 mm (57.1 x 39.4 in)
Z travel	400 mm (15.7 in)
Forming force	2,000 lbs X, Y & Z
Forming speed	1 m/sec
Capacity — Aluminum	2.5 mm (10 Ga)
— Steel	2.0 mm (14 Ga)
Power	480 V / 3 Phase / 20 kw
Machine Dimensions	2.8 m x 2.2 m x 1.8 m (110.2 x 86.6 x 70.9 in)
Weight	8,000 lbs

*Subject to change without notice

Learn More at: figur.desktopmetal.com

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OVERVIEW

Figur's patent-pending Digital Sheet Forming (DSF) technology begins with easy-to-use software that creates a toolpath for a ceramic tool on an XY gantry to shape sheet metal with up to 2,000 lbs of force.

High precision is maintained by the proprietary build box design that reduces force distribution across the sheet during the build – a challenge that can impede accuracy, is difficult to predict, and has hindered other efforts to digitize sheet metal forming in the past. Parts have a high quality surface finish directly off the machine with little to no post finishing required.

The Figur G15 has an XY forming area of 1,450 x 1,000 mm and can process forms up to 400 mm in the Z direction. A wide variety of metals and sheet thicknesses can also be processed – including steel up to 2.0 mm thick and aluminum up to 2.5 mm.

Competing processes are so expensive from a capital investment and time perspective that the payback for the G15 is fast for both manufacturers and suppliers seeking lower volume production or prototyping solutions.

With the Figur G15, manufacturers can supply customers with unique metal products quickly without high startup costs and long wait times.

For example, producing a common automotive exhaust muffler typically requires the purchase of a \$150,000 die with a three month lead time. At a

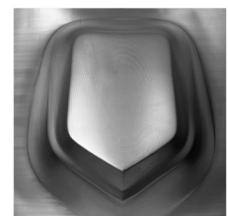
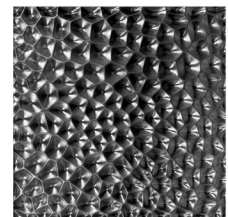
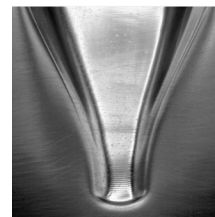
quantity of 1,000 parts, the cost per part for a runoff would be about \$160 per part including materials. On the Figur G15, however, the same quantity of parts could be produced in weeks with an all-in part cost of approximately \$10 per part, primarily materials and labor. That's less than 10% of the cost of traditional stamping with little to no lead time required.

REVOLUTIONIZING SHEET METAL FORMING

Traditional sheet metal forming is a capital- and time-intensive process that requires an expensive stamping press, which often costs about \$1 million, as well as tools and dies that take months to produce.

While digital sheet metal cutting is widely used today, and has delivered many benefits to the sheet metal forming and fabricating industry, no toolless digital sheet forming solutions have been widely commercialized until now.

Figur's breakthrough and patent-pending DSF technology is ready to unlock the benefits of digitization for sheet metal manufacturers, making them more agile and making sheet metal forms more accessible to new markets.



The sheet metal designs shown here were produced in 15 to 90 minutes and range in size from about 20 x 20 cm (8x8 in) to 91 x 91 cm (3x3 ft) in a range of steel thicknesses from 18-24 ga