WIRE ARC ADDITIVE MANUFACTURING



FLEXIBLE 3D PRINTING FOR LARGE METAL COMPONENTS

INNOVATIVE CUSTOMER EXPERIENCE

INTEGRATED INDUSTRIAL SET-UP

DEMONSTRATED MATERIAL INTEGRITY

CERTIFIED PARTS



WIRE ARC ADDITIVE MANUFACTURING (WAAM)

A GAME CHANGING TECHNOLOGY



For large metallic components, WAAM is the most promising and fastest 3D printing technology. WAAM can design, print and fully qualify metal parts to the highest standards of quality. It offers you greater efficiency and shorter lead times, allowing you to revolutionize how you manage your assets.

How does the 3D printing work?

WAAM uses an electric arc controlled by a robotic arm to melt metal wire directly onto the surface of the base, layer by layer.

How does it impact supply chain?

WAAM does more than create a physical product, it offers the ability to create a digital warehouse so you can cut down physical storage costs and improve your supply chain efficiency by obtaining parts on demand.

How flexible is the process?

WAAM provides total freedom to create new designs and new functionalities. Shape the part you need using any material in our large portfolio, from carbon steel to stainless and nickel-based alloys.

WE SUPPORT YOUR MOVE TOWARDS DIGITAL WAREHOUSING

EXPERTISE IN NON-DESTRUCTIVE TESTING

Our experience in rigorous nondestructive testing processes guarantee the integrity of every component.



- Designed with stateof-the-art technologies (part printing and ultrasonic inspection) capable of manufacture with short lead times.

INTEGRATED

With existing traditional operations to address market requirements.

PRINTING **AREA OF 3M³**

Capable of manufacturing large parts.



A NEW TECHNOLOGY GAINING GROUND

- Carbon steel components are qualified with a pressure test up to 22,500 psi
- Quality plans are available with reference to standards and norms
- Corrosion resistant alloys under qualification in R&D to be available soon

YOUR CHALLENGES?

- Reduce the lead time for obtaining parts
- Reduce delays in stock supply and non-productive time
- Radically reduce the size of inventory
- Miltigate the risk of obsolescence
- Eliminate need for transport logistics by sourcing closer to the point of use

THE BENEFITS OF WAAM

- On-demand production
- Shorter lead times
- Digital warehousing
- Weight reduction

- Parts readily available closer to the point of use
- No minimum quantity order
- Redesign opportunities



TRIED & TRUSTED **BY MAJOR INDUSTRIAL PLAYERS**













YOUR PARTNER, SETTING THE PACE FOR INNOVATION AND PERFORMANCE EVOLUTION



NEED MORE INFORMATION?

Information is available online on vallourec.com or by scanning the following QR code.





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