CS6- MELD 3D prints a 10ft dia aluminium cylinder

DR. M.ELANGOVAN

16ME420

Meld Manufacturing Co

MELD Manufacturing holds more than a dozen patents for the MELD technology, a truly novel and innovative process for metal manufacturing.

Traditional processes melt metal, introducing weakness and other issues. MELD makes the material malleable without melting, offering stronger, better quality parts

Christianburg, Virginia

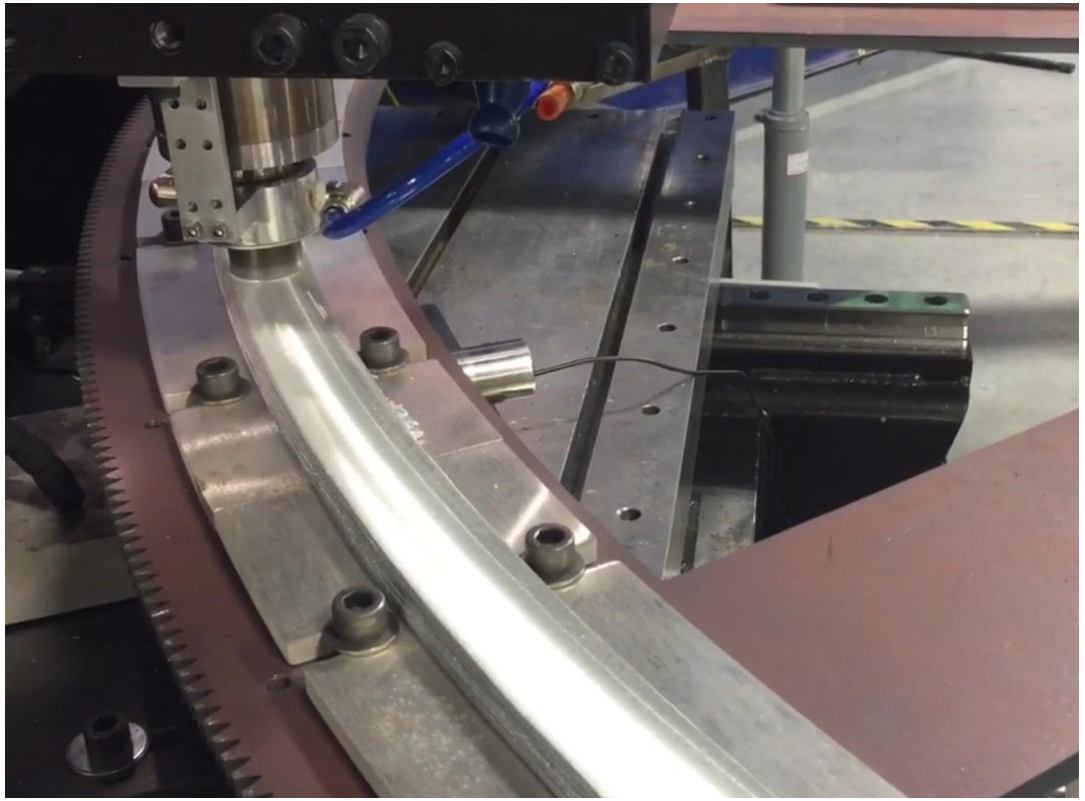
Introduction to the Case Study

MELD Manufacturing, the company that developed and commercialized a unique friction consolidation 3D printing process, showed off the scalability of its open-air capabilities by printing a ten-foot (3.05 meter) diameter aluminum cylinder, using off the shelf aluminum

The Challenge

The size of the component is a milestone for the company and for the metal additive manufacturing industry as a whole.

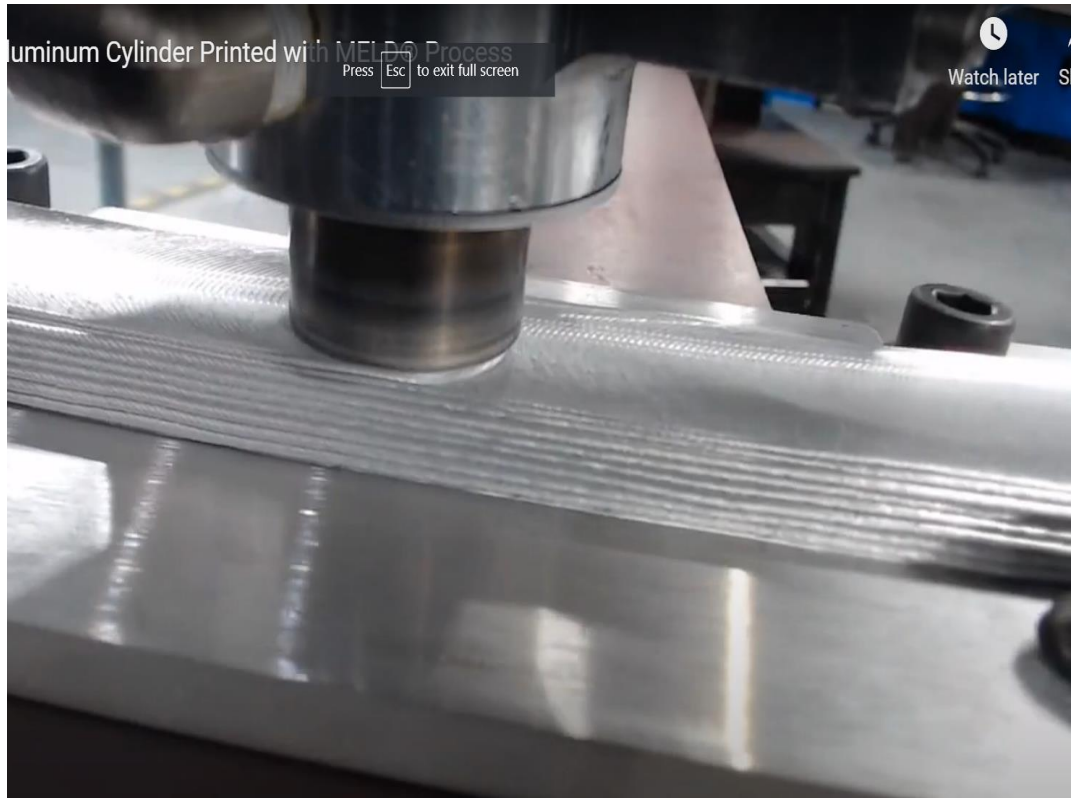
The MELD process allows the use of off the shelf metals in solid or powder form, creates fully dense parts, and operates in an open-air environment.



10 Feet Dia Aluminium Cylinder

The process can take place in an open atmosphere, meaning no special chambers or vacuums are needed.

This flexibility not only means less equipment and cost, but also increased scalability and can make parts bigger, better, and faster than other processes



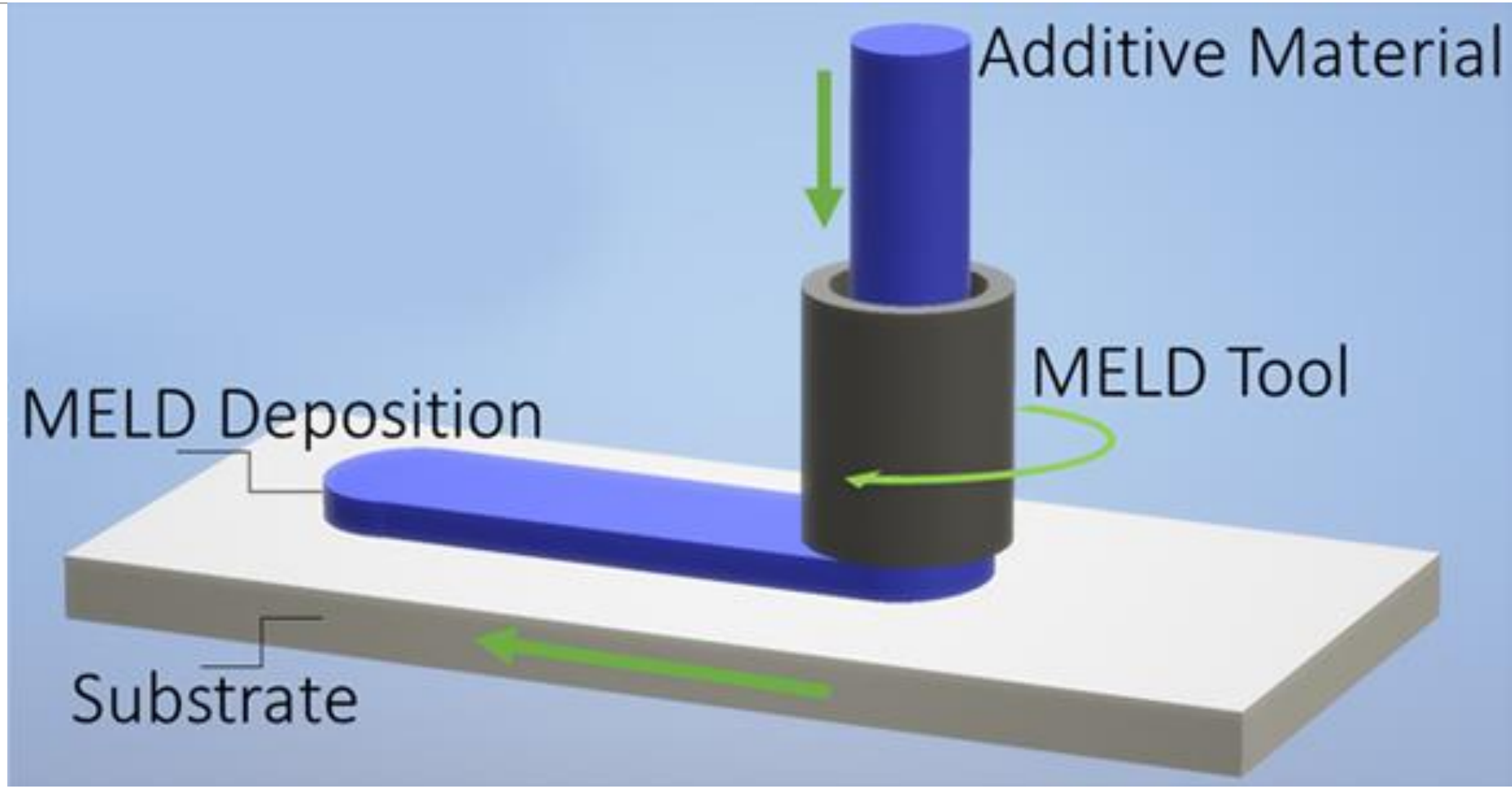
The advantage

The MELD process is unlike any other and opens up the possibilities of working with materials that were once off the table and can even allow customers to work with unweldable metals.

The combination of material freedom and scalability make MELD a revolution for a wide range of industries, including aerospace, defense, turbomachinery, and many others.

Meld 3D Printing

Open air printing of large scale aluminum structure using MELD machine



References

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ThankYou!