

Energy Companies Turn to 3-D Printing to Bypass Snarled Supply Chain

The pandemic is giving 3-D printing, also known as additive manufacturing, a shot in the arm. Factors including extensive congestion at ports and other transportation nodes have slowed delivery of goods just as companies try to meet demand unleashed by economies reopening.

For commodities industries, one missing part can be costly if it forces operations offline. An estimate by Energy and Industrial Advisory Partners LLC puts the average cost of unplanned downtime for Gulf of Mexico oil and gas operators at about \$20 million annually, rising to \$50 million for larger operators.

Issues including cost and print speeds have constrained the 3-D printing industry, but a rise in global shipping costs and new techniques are making the technology more attractive. Freight costs have leveled off from recent peaks but remain elevated amid port congestion and shipping shortages. The Los Angeles and Long Beach ports, which together move a quarter of all American imports, have begun operating around the clock to clear a backlog of dozens of ships waiting up to three weeks to dock.

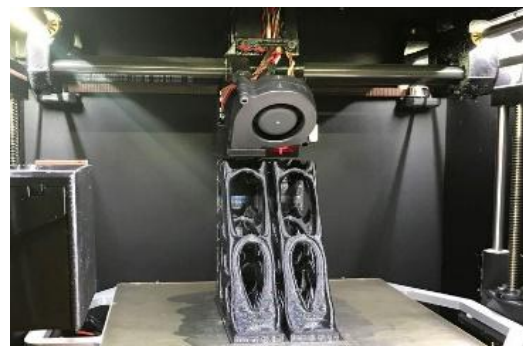


3D Metalforge has a facility at the Port of Singapore, the world's largest container transshipment hub.

“Companies who may have tentatively taken their first steps last year are now starting to mature their interest,” said Matthew Waterhouse, chief executive of 3-D printing firm [3D Metalforge](#). Earlier this year, the company installed a facility at the Port of Singapore, the world’s largest container transshipment hub.

Mr. Waterhouse said some customers also see 3-D Printing as a way to eliminate large inventories of parts, which can be expensive to store and often become obsolete before they get used because of minimum order sizes imposed by traditional suppliers.

3D Metalforge said companies' interest in 3-D printing is maturing.



Companies such as 3D Metalforge — analyze component inventories to identify parts suitable for printing, developing the designs and processes before helping with testing and certification. For now, a lack of regulation remains an obstacle to widespread adoption in the oil-and-gas sector. Companies are required to use certified components and processes to meet industry benchmarks and insurance requirements, so industry executives hope the API's formalization of standards will help 3-D printing grow even as supply chains normalize.

See the entire article at: [Energy Companies Turn to 3-D Printing to Bypass Snarled Supply Chains - WSJ](#)