



Magna Electro Castings Ltd
 43, Balasundaram Road,
 Coimbatore - 641 018,
 Tamil Nadu, India.
 Email : info@magnacast.com
 Web : www.magnacast.com

Design, Tool, Components, Heat, Finishing

News Letter No: 169

June - 2018

Sub :: 3D Sand Printing.

Magna Electro Castings is proud to announce the availability of Rapid Tool-less Casting Prototyping capability via 3D Sand Printing. The facility has been planned and commissioned by Magna Digitech India LLP, the leading Foundry Engineering Service Provider in India and the same was inaugurated by **Mr.Markus Muhlethaler Vice President, Head of BU Supply & Value Chain Excellence,ABB Turbo Systems AG, Switzerland on 17th Nov 2017.** Magna Digitech has over 18 years of experience in the Casting Domain and has over 100 Foundries and End User customers in India and Abroad.

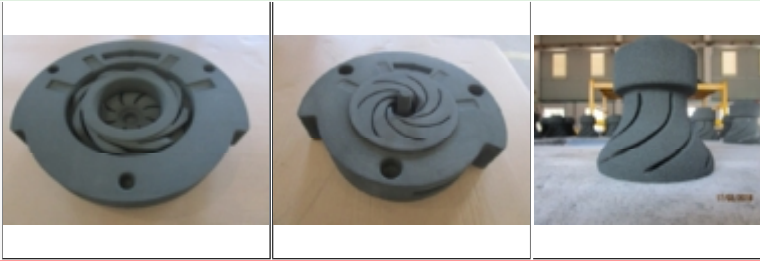


Magna can now offer Rapid Casting Development through its Tool Less Development of Castings, Cores and Molds utilizing Sand 3D printing technology. The maximum size of the molds/ cores are 1500mmx1000mmx750mm. The process uses special imported sand and resins for the manufacture of the Molds and Cores. The facility has been in operation from January 2018 and has built up a wide range of customers and products. Examples of which are as follows :

<p><u>1. Cylinder Heads</u></p> <p>Developed and Supplied to a Leading Commercial Vehicle manufacturer in India, two models of Cylinder Heads in a matter of 30 days, without tooling.It enabled the customer to cut down the development time and costs manifold times.The products met the critical Dimensional Accuracies, Metallurgical Requirements and Quality Criteria. Previously the Customer developed these prototypes in Europe.</p>				
		<p><u>2. Hydraulic Components</u></p> <p>A Multinational Customer had production and cleanliness issues in a complicated Hydraulic Component and was not able to develop and stabilize the component over six months. Through 3 D Printing route, we were able to provide the customer in a matter of two weeks and satisfy all the critical requirement.</p>		

3. Pump Components

Performance Critical Impellers and Bodies for Industrial applications are now designed, developed and tested within a matter of weeks, instead of months using the 3D Sand Printing technology. Further design optimization and concurrent prove-outs, helps this large domestic manufacturer of Flow products, to out beat the competition in terms of time to market.



4. Off Road Applications

Products developed in weeks enable the manufacturers to validate designs and test new models, before committing to costly permanent tooling.

5. Optimizing Performance

Leading Turbo Manufacturers, utilize the 3D Sand Printing capability, to integrate multiple parts to a single one and also to concurrently test the performance of the products to optimize the same.

Magna is utilizing the Engineering Services capability and the leading edge 3D printing technology of its sister company, to leverage New Product Development at its customers. This one of a kind USP puts Magna in an enviable position to provide solutions to its customers right from the Design Stage to Engineering to Prototyping to Validation and to Production lots to its customers. Magna aims to become the Go To supplier for Casting Technology !

