

Localisation of Heat Treatment Suppliers of Eccentric Shaft for Common Rail Application



G. V. Gadigyappa

Gadigyappa.GV@gmail.com
Ph. No: 0 92423 46399

Student's Name	G. V. Gadigyappa	EMM (PT-2010)
Academic Supervisor(s)	P. S. Satish	
Industrial Supervisor(s)	V. Raja Sreekanth, Bosch Ltd., Bangalore	

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Abstract:

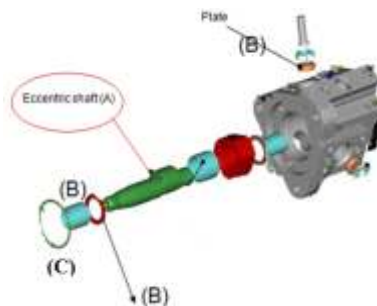
As a part of the global strategy of localisation, this project is carried out at Bosch Limited to fulfill the growing demand of eccentric shaft for Common Rail Application. The benefits expected to be derived are enhancing the manufacturing to meet the cost reduction targets, customer requirement, eliminating import duty, reducing the procurement lead time. Presently, the eccentric shaft is imported from Bosch plant at Germany. At Bosch Plant in Bangalore in India, local manufacturing is planned by outsourcing heat treatment operation as one of the steps.

The technique applied in this project is "Manufacturing by Localization". The project starts with understanding of the eccentric shaft heat treatment process. Data was collected from various sources and study of running quality level of imported part work was done. The supplier was identified and selected as per Bosch requirement for heat treatment process. Heat treatment trials were conducted at supplier's site to achieve required material properties in eccentric shaft. The supplier selection for the final manufacturing was based on cost, quality criteria and other critical parameters. Trials were carried out to find best process parameters results. The process was frozen. Heat treatment process audit was done as per Company's requirement. Validation of heat treatment process done as per Bosch ISIR requirement and results are archived.

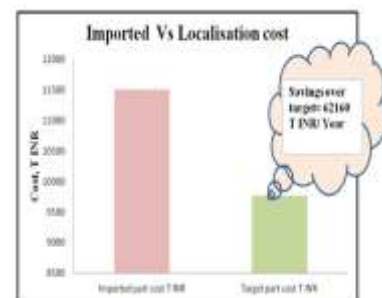
The results of this project had shown good results in terms of Cost and Quality criteria. All the key results and significant benefits achieved by this project are summarised and presented. The identified Indian Supplier is recommended for the heat treatment of eccentric shafts for Common rail application.



CRS Pump type-Z



Product view



Cost comparison of part