

INNOVATIVE MACHINING SOLUTIONS FOR **FORGING INDUSTRY**

The Indian forging industry has emerged as a major contributor to the manufacturing sector of the Indian Economy. It is a key element in the growth of the Indian automobile industry as well as other industries such as general engineering, construction equipment, oil, gas and power. The Indian forging industry is well recognized globally for its technical capabilities. The Forging Industry is expected to grow 25% by 2020.

While current market demands emphasize on supply of completely machined components post-forging, the challenges in machining of forged components are numerous:-

- i. Requirement of High volume production with low takt time.
- ii. Requirement of low volume, large variety components with demanding quality requirements.

The Forging industry is currently facing new trends that will transform the manner it operates in the days to come:

- a. Emerging manufacturing set-ups
- b. Deployment of automation to sustain productivity
- c. Increasing complexity of part designs
- d. Changing dynamics of multi-processing approach
- e. Emerging materials & challenges of machining them

With the view to address these challenges in the most effective manner, the paper discusses various innovative machining solutions for machining of Forged parts like

- Front axle Beam.
- Steering Knuckle.
- Connecting Rod.
- Crankshaft.
- Camshaft
- Input Shaft / Output shaft.
- Tie Rod.
- Axle Shaft.
- Tripode.
- Cross, etc.

The Detail Machining Solution will be shared during Seminar.