Area: Forging

**Topic:** Comparison between the compressed air and hydraulic forging machines in terms of Capacity that both can handle, Operating and maintenance cost of both techniques and Specific Energy Consumption

**Problem/Issue:**

To find out a substitute for the existing high energy consuming pneumatic forging hammers systems; hydraulic systems are less energy consuming as compared to compressed air based forging hammers. However suitability/limitations of hydraulic systems need to be ascertained for forging applications.

**Need:**

To minimize energy cost in compressed air based forging machines.

**Expected Outcome:**

1. Find out a commercially available hydraulic system for large scale forging operations and compare energy consumption (in terms of KWh/cycle) with pneumatic systems

2. If not, then design hydraulic system for forging operations and compare energy consumption (in terms of KWh/cycle) with pneumatic systems