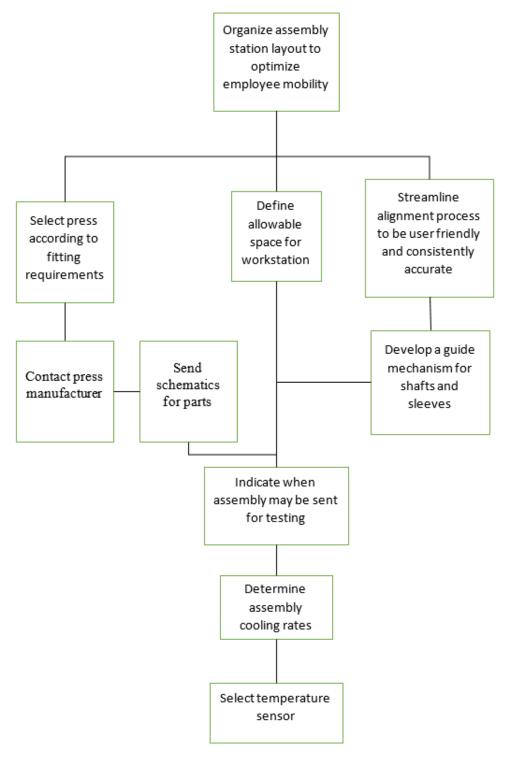
High Speed Shaft Assembly System – SD Team 507 Elijah Beard Joshua Boyd Hui Xu

## **Functional Decomposition**



The project goal is to design a workstation that allows an employee to efficiently assemble a compressor shaft. This goal necessitates the development of a workstation that makes it simple to select a shaft and sleeve combination, align the parts for a press, press the parts together, and then move the assembly to a testing stage. The diagram on the previous page serves as a preliminary outline for achieving the stated goal. The chart below illustrates the functional decomposition by designating main functions and sub functions expected to be met in order to create the workstation.

	Main Functions			
Sub Functions	Select Press	Define Workstation Space	Streamline Alignment Process	Indicate Assembly Ready for Testing
Contact Press				
Manufacturer				
Send Part				
Schematics				
Develop Guide				
Mechanism				
Determine Cooling				
Rates				
Select Temperature				
Sensor				