

Fit-3.

Industry Training

Dr. E. Pavithra (TTS 2616)

Company Visit: Addison Cutting Tools, Irungattukottai, Chennai

Visit No.	Date	Activities/Observations
Visit 1	13.02.19	Visited the problem facing areas in the Addison Cutting Tools. In this regard, the observations are noted and is given below. • Improper use of cutting fluids – Nozzle position • Re-sharpening is frequently done due to the cutter worn out – Increase the Idle time • Machining of M2 region is difficult and surface imperfections are seen. • Tool worn out due to the higher cutting forces, friction, temperature, material hardening and lack of lubrication and cooling. • Main mode of tool failure – Tool fracture and gradual wear. • High Power consumption
Visit 2	20.02.19	Problem facing areas are studied and concluded with solutions. Well defined suggestions are given with respect to the problems faced in the milling operations. Various possibilities are analyzed with the experts in the Industry (Mr. Anand – Production and Mr. Radhakrishnan – Metallurgy). Finally, an optimal solution is arrived with cryogenic treated milling cutters. They also agreed the execution of project work by consultancy.
Visit 3	27.02.19	The proposal is submitted for the consultancy work on cryogenic treated milling cutters. Further, discussed an another problem related to the reuse of slag in the heat treatment process.
Visit 4	06.03.19	Metallurgy department given the sample of the Barium chloride slag for studying about their properties to recycle the same and also requested to collect the information about the study of Friction Welding of Carbide with High Speed Steel.
Visit 5	13.03.19	Another discussion is made on the friction welding of carbide with steel, which is treated as an important problem in the Industry. Literatures are referred to the conduction of experiments on welding of dissimilar materials.
Visit 6	20.03.19	On their request, literature survey is prepared and submitted. Subsequently, the required facilities and methodology for the proposed work is discussed. Had discussion with Mr. Sowrirajan.T, General Manage-Manufacturing, regarding the same.
Visit 7	27.03.19	Collaborative research work on friction welding of carbide with tool steel is accepted by General Manager – Manufacturing. He also requested to submit the proposal in detail.

Amount Received: Rs. 1750/-

