K. K. Wagh Institute of Engineering Education & Research, Nashik

Department of Electronics & Telecommunication Engineering

AY: 2017-18

Industrial Visit Report

Name of Industry Visited:	Traction Machine Workshop
Address of Industry Visited:	Nashik Road, Nashik, Maharashtra 422214
Date of Industrial Visit:	16th Sept 2017
Target Participants:	Students of SE ((Electronics)
Number of Participants:	60
Name of Course for which Industrial Visit Organized:	Electrical Circuits and Machines
Name of Visit Coordinator:	Prof. Kirti Shinde
Name of Instructor:	Mr. Shriniwas
Outcome of Industrial Visit:	Students will be able to explore the concept of motors. (This outcome is mapping to PO2)

About Visited Industry:

With the expiry of a year-long warranty on Siemens motors, the Traction Machine Workshop (TMW) at Nashik stepped in to help the Railways and repaired the motors of the new suburban local trains. The move saved both time and money.

The maintenance facility, which is located 190 km away from Mumbai at Nashik road, works on the re-winding, re-shafting and revival of electric equipment of traction motors, which play a vital part in smooth running of electric locomotives.

"After the warranty expired, maintaining the motors was a challenge for us. Since Railways had not transferred the technology, our engineers were not allowed inside Siemens units to oversee the work. Now, the engineers have invented a technology to repair these traction motors. Tools and equipment were specially made at the site," said R P Sharma, Chief Works Manager, TMW.

Traction motors is of great importance for electrical locomotives. Its reliability directly affects the punctuality of the trains.

The workshop's efficiency has minimized the failure of motors of electric multiple unit (EMU) and Electric Locomotives, thereby increasing its reliability from 15 to 30 per cent. The traction motors provided by the workshop enabled Chittaranjan Locomotive Works to manufacture 10 locomotives this year.

Between 2010 and 2011, facilities such as linear induction motor model, multilayer stand for shaft stacking with a capacity to stack 48 shafts and a prototype of movable armature stand have been developed at the site.

Photos of Industrial Visit:

Prof. K.P. Shinde
Industrial Visit Coordinator