

Report of Workshop on “Best Practices of Electric Motor Rewinding to Preserve Most Part of Energy Efficiency” on April 11, 2009.

The above Workshop was unique in the State of Andhra Pradesh, in - as - much - as it strikes the issue of energy efficiency at the grass – root level of an important maintenance activity of rewinding the most populated electric motor.

Sri N Ram Mohan, Project Director (T) EC & MHS of NEDCAP, inaugurating the Workshop, as the Chief Guest, exhorted the Rewinders to achieve higher levels of energy efficiency in their profession by adopting the right materials and best practices. In A.P, there is a huge population of over 26 Lakhs of Electric motors in the Agriculture Sector alone. The failure rate of motors in this sector being very high, several hundred megawatts of power can be saved through high efficiency electric motor rewinding. He offered to secure grant of Government funds to organize training programmes to improve skills in the trade. In his Key-note address, Er A Padmanabhan, General Manager (Projects) ITC – PSPD, encouraged the rewinding professionals by narrating ITC’s own achievements at rewinding of electric motors of imported used paper machines to high degrees of energy efficiency. Er C V Rao, at the very outset, set the tone for the Workshop by highlighting the macro - economics of capturing the most part of energy efficiency in the rewinding of an electric motor. He made a strong plea to NEDCAP and to BEE, through the Nodal Agency of the State, to allocate adequate funds to equip the Rewinding Trade with essential inputs to achieve energy-smart performance. Wg Cdr V L Nanda Kumar (Retd), Chairman, ECM presided over the Inaugural Session which concluded with a generous Vote of Thanks by Prof T Narayana, Hon. Secretary of IEI – APSC.

The Technical Session was opened with an interesting case-study presentation by Mr Venkatesh, ITC-PSPD. Mr Bhanudas Chaudhari of Baldor Electric India Pvt. Ltd, Pune and Er V Sridhar of Sirius Electronet India, Hyderabad did an excellent job to drive home to the participants most practical tips and best practices to rewind motors with the least loss of energy efficiency. It was highly encouraging that they pointed to the possibility of an innovative Rewinder achieving better than original energy efficiency. Er V Sridhar further explained the simple method of computation of energy efficiency which is the most vital performance indicator. Mr N Venkateswara Rao of Sri Sai Electricals stole the show of

the Workshop by demonstrating the practical method of locating defects in a motor core by supplying low voltage to a stator core through a Welding transformer and creating hot-spots. The Session was presided over by Er J N Karamchetti of ESCI who made occasional elaborations of ideas mooted out by speakers for easy comprehension of the participants. All speakers used English, Hindi and Telugu for effective communication with the multi-lingual participants.

The delegates comprising Rewinders from Trade and Engineers from the Industry were fully charged with enthusiasm to work for and demand a high degree of energy efficiency while rewinding a motor. Measurement / computation of energy efficiency is essential. It was felt that workshops of this nature immensely benefit the Trade, the Industry and the Nation and should be fostered. The workshop came to a happy close with sumptuous vote of thanks by Er A R Venkatraman of ECM.