



### Usefulness of **E Yantra MEDO** for Industry

Indian Industries range from small scale to large scale global version. Many of these industries have foreign collaborations that have passed on first or second generation versions of design and products to take advantage of cheaper, trained labour in India. These foreign companies have control over the latest developments which are not available to their collaborators. The research & development & design departments in the Indian Industries have not shown any path breaking innovations or inventions. They are mainly attending to failures in the field or finding solutions for substitution of non available materials.

All is not well on educational front too. CEOs and managers of industries nowadays are not happy with the quality and merit of students churned out by number of engineering colleges.

These student engineers are not well versed with the skills as required by of the concerned industries. Thus a big burden of training these graduate engineers poses a challenge to the industries. Good design engineers are not readily available. Good design engineers can improve the performance, reliability of products, cut cost and remove constraints in production techniques. Industries have no time or personnel to speed up the training of the fresh graduates. **E Learning** facilities can be very useful for the above purpose. **E Yantra MEDO** is developed for design of various mechanical elements.

**E Yantra MEDO** help design engineers to save time, which otherwise is spent on tedious calculations, therefore the finer aspects of design such as economics, aesthetics, ergonomics, reliability etc. could be given proper attention to. Many solutions can be obtained by varying input parameters such as dimensional and metal

properties at the click of button and these can be saved for comparison to arrive at best or optimum solution.

**E Yantra MEDO** considers the design for safety accounting for all possible modes of failures. This is its greatest merit. It is well known that 90% of the service failures are attributed to fatigue phenomenon. **E Yantra MEDO** helps design engineer to design against fatigue for infinite or finite life as required. **E Yantra MEDO** has analysis provision where functional parameters can be analyzed from the known geometrical parameters.

**E Yantra MEDO** has provision for two dimensional sketches with dimensions of the designed component which can be stored in IGES/DXF format, which can be easily exported to solid modeling software like Catia, Pro-E, and Ansys etc for post processing in FEM solutions. **E Yantra MEDO** is more valuable software for the industries to carry out design solutions and cutting down on lead time. **E Yantra MEDO** can be used equally well for training fresh graduate trainees in industry.

**E Yantra MEDO**, developed indigenously by **M/s FEAST Software Pvt Ltd**, is one such product that is useful for the above purposes.

Few benefits that accrue to the users of **E Yantra MEDO** are listed below.

- **E Yantra MEDO** is unique, excellent and indigenous software developed by a premier institution. It serves as an **E Learning tool** for students and graduate trainees both in academic institutions and industries.
- **E Yantra MEDO** encourages creativity. Being a ready menu driven design calculator, iterative computations are performed expeditiously.
- The voice-over flash information saves the time of the trainer in explaining basics of machine design to the graduate trainees and they can therefore concentrate on more practical complex and intricate details of design engineering. This will greatly benefit graduate trainees.
- The voice-over flash information enables the graduate trainee to learn more outside the classroom on a fast track learning process at their convenience.
- Information on failures together with visuals, enable graduate trainees and engineers to identify failures in

the field and also to know the causative factors.

- An excellent data bank on various materials is provided. There is a provision to add more material information to the data bank.
- All formulae used in design approach are presented in accompanying manual. Further, “on-line” help has been provided for ease in understanding basic concepts.
- **E Yantra MEDO** is in international SI units and GUI based menu driven software, easy to use by anyone with engineering background.
- **E Yantra MEDO** has a provision for sketcher for two-dimensional drawing of the designed component in IGES and DXF file formats compatible with commercial drafting packages like AutoCAD, Pro-E etc.
- **E Yantra MEDOCO** is an advanced version where cost estimate is also possible.
- **E Yantra MEDO** is reasonably priced and is an excellent value addition to any engineering industry.

© 2009 FEAST Software Pvt Ltd. All rights reserved.  
[www.feastsoftware.com](http://www.feastsoftware.com)

**FEAST Software Pvt. Ltd.**  
343, Powai Plaza, Hiranandani Gardens, Powai  
Mumbai – 400 076, INDIA  
Phone : +91-22 32678270, 25701332  
Email : [contact@feastsoftware.com](mailto:contact@feastsoftware.com)