

COMPUTER PROGRAMME FOR WIRE ROPE DESIGN

A. R. PATIL¹ AND HIMANSHU AGRAWAL²

¹ Research Scholar, Deptt. of Mechanical Engineering
Dr. C.V. Raman University, Bilaspur (C.G.), India.

² Associate Professor Mech. Engg., Govt. Engg. College Raipur
Old Dhamtari Road Raipur (C.G.), India.

Abstract

Wire rope designing has always been a tedious work for designers. At the beginning level there are more than twenty parameters for the design consideration of wire rope. A minor change in a single parameter may drastically affect the end result. The use of computer programming helps us to predict the effect of change of parameters on the overall design of the rope. Along with that it gets rid of cumbersome iterative design method of wire rope. In the present work a computer program has been prepared using the visual basic environment. A user friendly interactive console has been designed to input the required parameter and output console provides the design parameter which can be further used for optimization of wire rope design too.

Keywords: Rope Design, Numerical Method of wire rope design, Simulation of wire rope design, Design software for wire rope, Wire rope design technique using simulation method