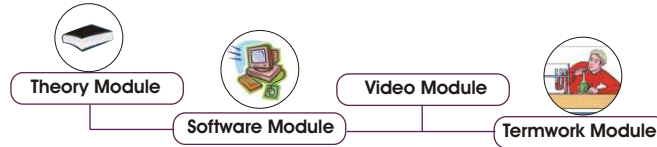


Unconventional Machining



System Requirement:- IBM-PC Compatible Min P-III with Window-OS, 128 MB RAM/Multimedia Kit

Features : Theory, Figures, Photographs, Animations with controller, Highlighter tool, Note creation Facility, Systematic page navigation, Printing facility Access to Videos at appropriate locations.

Modern Machining Process



Introduction and classification

Abrasive Jet Machining

Fundamental principles, process parameters, Metal removal rate, effect of parameters, applications & limitations, Water Jet Machining.

Ultrasonic Machining

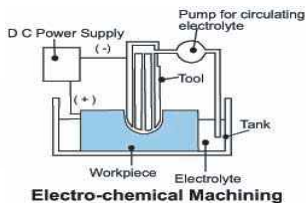


Fundamental principles, cutting tool design, tool feed mechanism, transducer, Design of velocity transformers, Mechanics of cutting, Effect of parameters, Economic considerations, application and limitations.

Chemical Machining

Chemical milling, chemical engraving, chemical blanking fundamental principles and process parameters.

Electrochemical Machining



Classification fundamental principles, elements of process, Metal removal rate, electro-chemistry of process, Dynamics and Hydro dynamics of process, optimization analysis, choice of electrolyte.

Electrochemical Grinding.

Fundamental principles, electro-chemical and process parameters, Electrochemical debarring and honing.

Electrical Discharge Machining



Mechanism of metal removal, Basic circuitry, Evaluation of metal removal rate, Machining accuracy, Evaluation of metal removal rate, Machining accuracy, Surface finish, Analysis for optimization, tool material, dielectric fluid, application & limitation.

Laser Beam Machining



Features, metal removal, thermal analysis, cutting speed and accuracy, application & limitation, Microdrilling by laser.

Electron Beam Machining : Theory, forces in machining, process capability.

Plasma Arc Machining : Non-thermal generation of plasma, mechanics of metal removal, various parameters, accuracy and surface finish, application.