JANUARY 2021

K.RAMAKRISHNAN COLLEGE OF TECHNOLOGY

An Autonomous Institution

Approved by AICTE, New Delhi & Affiliated to Anna University Chennai
Accredited with 'A+' grade by NAAC, ISO 9001:2015 Certified Institution

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NEWS LETTER

DEPARTMENT OF MECHANICAL ENGINEERING

VISION:

To produce effective, quality and responsible mechanical engineering graduates.

MISSION:

Broad Education: *To provide broad education in Mechanical Engineering with analytical and research abilities, encouraging culture of endless learning and by adopting new technologies to solve the industrial need and social issues.*

Infrastructure: *Provide state-of-art infrastructure and learning resources with well experienced faculty members.*

Teaching & Learning Process: *To share knowledge with our students through educational programs & all of society through disseminating our research findings in scholarly publications, presentations, patents, entrepreneurship and technology transfer.*

UNIVERSITY RANKING

G HARINI
21st

N PIRAICHUDAN
20th

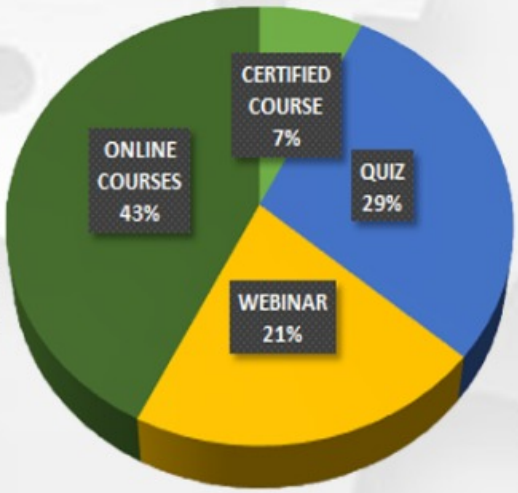
STUDENT'S PARTICIPATION

FINE BORING BAR

DEFINITION

Fine boring or Single-edge boring is used for finishing operations with small cutting depths when close tolerance (IT6 to IT8) or high quality surface finish is required. The diameter of fine boring tool can be adjusted within microns with a high precision mechanism.

PATENT : FINE ADJUSTABLE BORING BAR
APPLICATION NO:201641006702
PATENT NO: 354611



CRYOGENIC TREATMENT

Cryogenic treatment is the process of cooling materials to cryogenic temperature temporarily to improve their material properties at room temperature. This is distinct from cooling materials down to cryogenic temperature to take advantage of phenomena such as superconductivity that only occur at cryogenic temperature. Cryogenic treatment, sometimes also referred to as deep cryogenic treatment, it is a best alternate to other material processing steps such as heat treatment, quenching and cold work. Cryogenic treatment generally occurs at roughly 77 K (liquid nitrogen temperature). Graph shows a typical time versus temperature curve for cryogenic treatment. Some processes use dry ice temperature (189 K) which, while above the nominal 120 K limit of cryogenics, are also sometimes referred to as cryogenic treatment.

MOHAN RAJ
LMEB17135 (IV MECH A)