



SNS COLLEGE OF TECHNOLOGY,
(An Autonomous Institution)
Coimbatore- 35



DEPARTMENT OF MECHATRONICS ENGINEERING
19MCT102 – ENGINEERING MATERIALS

NDE Methods

- Non-destructive testing (NDT) is a testing and analysis technique used by industry to evaluate the properties of a material, component, structure or system for characteristic differences or welding defects and discontinuities without causing damage to the original part.

SIMPLY,

**Inspecting
the quality
of egg like
this....**



Instead of this.....

NDT

DT



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NDE Methods

DT TECHNIQUES


- Bend test
- Break test
- Tensile test
- Hardness test
- Impact test

PHYSICAL PROPERTIES OF THE
MATERIALS ARE DETERMINED
EASILY

NDT TECHNIQUES

- Visual inspection
- Liquid penetrant
- Magnetic particle testing
- Ultra sonic testing
- Radiography

MAINLY MEANT FOR
FOUNDING DEFECTS IN
MATERIAL AND THE PHYSICAL
PROPERTIES ARE DETERMINED
BY FORMUALTION.



VISUAL INSPECTION - SURFACE DEFECTS



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VISUAL INSPECTION - SURFACE DEFECTS

By **direct viewing** or **enhanced viewing** with the use of optical instruments such as magnifying glasses, mirrors, borescopes, and computer-assisted viewing systems.

