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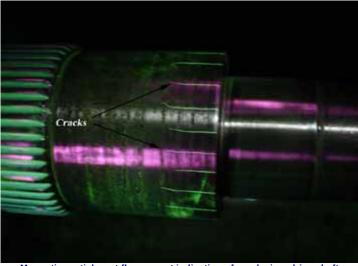
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Introduction to Magnetic Particle Inspection

Examples of Fluorescent Wet Magnetic Particle Indications

The indications produced using the wet magnetic particles are more sharp than dry particle indications formed on similar defects. When fluorescent particles are used, the visibility of the indications is greatly improved because the eye is drawn to the "glowing" regions in the dark setting. Below are a few examples of fluorescent wet magnetic particle indications.



Magnetic particle wet fluorescent indication of cracks in a drive shaft.

Introduction

Introduction
Basic Principles
History of MPI

Physics

Magnetism Magnetic Mat'ls Magnetic Domains Magnetic Fields Electromag. Fields Field From a Coil Mag Properties Hysteresis Loop Permeability Field Orientation Magnetization of Mat'ls Magnetizing Current Longitudinal Mag Fields Circular Mag Fields Demagnetization Measuring Mag Fields

Equipment & Materials

Portable Equipment
Stationary Equipment
Multidirectional Equipment
Lights
Field Strength Indicators
Magnetic Particles
Suspension Liquids

Testing Practices

Dry Particles
Wet Suspension
Magnetic Rubber
Continuous & Residual Mag
Field Direction & Intensity
L/D Ratio

Process Control

Particle Concentration
Suspension Contamination
Electrical System
Lighting
Eye Considerations

Example Indications

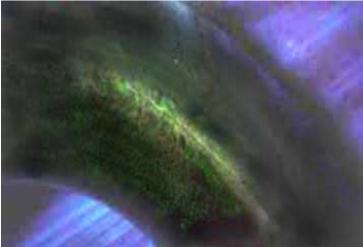
Visible Dry Powder Fluorescent Wet

Quizzes

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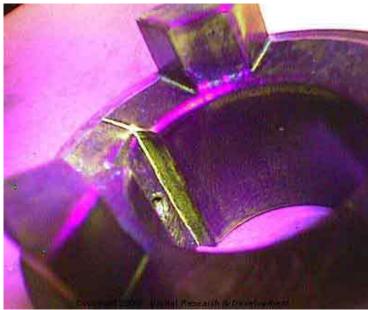


Magnetic particle wet fluorescent indication of a crack in a bearing.



Magnetic particle wet fluorescent indication of a crack in a crane hook.

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Magnetic particle wet fluorescent indication of a crack at a sharp radius.



Magnetic particle wet fluorescent indication of a crack in a casting.

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