

Animation Worksheet: Magnetic Crack Detection

Name: _____ Date: _____

1. Magnetic crack detection is a type of _____ testing (NDT) method.
2. This process is specifically used for inspecting engine blocks and other _____ components.
3. The primary goal of this test is to identify _____ and near-surface defects in the metal.
4. The first step in the procedure involves _____ the engine block.
5. Magnetizing the block can be done by applying a direct current (DC) or an _____ current (AC).
6. When the block is magnetized, magnetic _____ are established within the material.
7. These magnetic lines will follow the path of least _____ through the metal.
8. After magnetizing the block, a fine _____ powder or liquid is applied to the surface.
9. The iron particles are attracted to areas where the magnetic field is _____ by a crack.
10. When particles accumulate at a defect, they form a visible _____ of the crack's location.