

System and Method of Measuring Defects in Ferromagnetic Materials

ABSTRACT

Defects in ferromagnetic materials are detected and characterized by analyzing the items' magnetic fields to find portions of the magnetic fields that differ in characteristic ways from residual magnetic fields generated by non-defective portions of the items. The portions of the magnetic fields that differ in the characteristic ways correspond to locations of the defects. The residual magnetic fields correspond to portions of the items distant from the defects. The defect characterization may include volume of material lost due to each defect and/or width and/or depth of each defect.

Figure 28