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TECHNICAL BULLETIN #223

TYPE A AND TYPE B MAGNETIC STRIPE CARDS

TYPE A and TYPE B MAGNETIC STRIPE CARDS are simple tools that assist in evaluating the sensitivity of wet-method and dry-method magnetic particle inspection (MPI) materials. The stripe on each card contains a standardized pattern of magnetic lines across the length of the stripe. Particles are attracted to these lines and form visual indications. The cards act as a test piece and supplement the ASTM D-96 settling tube, Ketos ring and other tests for MPI materials.

The TYPE A - HIGH COERCIVITY CARD (3600 Oersted) is recommended to evaluate dry-method particles and larger size wet-method particles. The TYPE B - COERCIVITY CARD (300 Oersted) is recommended to evaluate finer size wet-method particles and high-sensitivity materials.

Apply the MPI particles over the magnetic stripe. DO NOT ATTEMPT TO MAGNETIZE THE STRIPE IN ANY WAY. Observe the particle indications under applicable visible or UV-A light. Individual lines should appear smooth and uniform for an acceptable MPI material. Lines that appear spotty or broken may indicate contamination, low concentration or other problems with the particles. For permanent documentation allow particle indications to completely dry and "lift off" the indications with transparent tape. Reattach the tape to Circle Systems Form 93-MS-1 or other suitable reference document.

Contact Circle Systems or your Circle Systems representative with any questions regarding the use of MAGNETIC STRIPE CARDS. Technical Bulletin #224 describes the magnetic properties of TYPE A and TYPE B cards.

NOTE: Personal credit cards and bank cards should not be used to evaluate MPI materials at the risk of permanent damage to those cards.

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