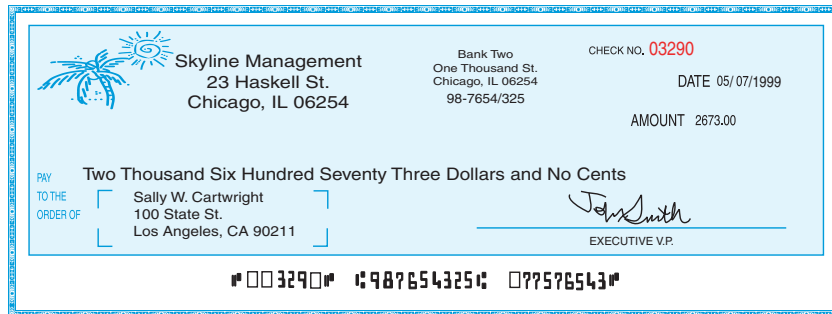


## What is MICR?

What is MICR? It's those mysterious, funny characters at the bottom of a check, sometimes referred to as the MICR line. These characters are the key by which all checks are automatically processed in the United States today. This automated process is based on a technology called Magnetic Ink Character Recognition or MICR. As the name indicates, this technology uses magnetic reading to identify these unique numbers and characters. Currently, the United States processes over 65 billion checks and other financial documents per year based on the details of this MICR line.

MICR technology was developed in the mid-1950s to address the volume of checks that were being processed manually. The goal was to accelerate the check routing process to route the check back to the location where the funds exist and to settle the transfer of funds as soon as possible.

To address this problem, a group of individuals from the American Bankers Association and Stanford University developed a set of 14 unique characters called E13B MICR fonts. These fonts are printed with magnetic ink or toner that when magnetized, will emit a magnetic signal that identifies each unique character. What do the characters mean? The digits 0-9 are self-explanatory. However, the E138 fonts have four special symbols with the following meanings:



@ 3290 @ : 987654325 : 77576543 # @ 000023861 #

↓  
Auxiliary  
On-Us Field

↓  
Route & Transit  
Field

↓  
On-Us Field

↓  
Amount Field

## Why Magnetic Ink?

MICR documents are processed within the banking industry on special reader/sorter machines. The reader/sorters will first magnetize the MICR line, and then read the magnetic signals. Each character, if printed correctly and with the appropriate amount of ferrous oxide in the ink or toner, will give off a magnetic signal unique and identifiable to that character.

The magnetic signal's shape is developed from two key elements:

- The character shape - the character's horizontal and vertical attributes
- The magnetic content - the amount and distribution of magnetic material in the ink

If the shape and/or magnetics of the characters do not meet specified standards, the reader/sorter will reject the check. The rejected check will then require manual handling which will delay the automated process. Today's processing industry has an average reject rate of approximately 1.2% of all checks. That results in over 700 million dollars the banking industry pays for rejected checks.

With a simple signature, preprinted checks become legal tender. According to the Federal Reserve Board study, check fraud is a problem that will cost U.S. businesses and banks approximately 20 billion this year alone.

How do you make sure you are meeting the specific MICR standards? American National Standards Institute (ANSI) serves in its capacity as administrator and coordinator of the United States private sector voluntary standardization system. The Institute is a nonprofit membership organization supported by a diverse constituency of private and public sector organizations. During your vendor selection process make sure your MICR solutions provider is ANSI compliant.

All of Altec's MICR products, from paper check printing to software related solutions are ANSI compliant and guaranteed compatible to your software output. Altec stays abreast of the latest anti-fraud and security features to help ensure documents security. Look to Altec for all your disbursement needs!

# Understanding Magnetic Ink Character Recognition (MICR)

Altec  
23422 Mill Creek Drive  
Suite 225  
Laguna Hills, CA 92653  
800-997-9921 • 949-727-1248  
fax 949-597-1200  
email: doc-link@altec-inc.com



enterprise  
document  
management