

# FACT SHEET



## In-line ANSI Barcode Grading

Fast, Reliable, In-line Barcode Verification and Grading to ANSI/ISO Standards

### PRODUCT OVERVIEW

In today's world of highly automated systems from document and mail handling, inventory management, track and trace to streamlining point of sale operations, the humble barcode (both 1D and 2D formats) offers a simple but efficient, reliable and cost effective way to identify and track a product, package or shipment throughout its lifecycle.

#### When barcodes fail

All industries from manufacturing, finance, medical, retail to logistics and communications rely heavily on being able to read barcodes, quickly, effectively and accurately in order for their business processes to function smoothly.

When a barcode fails to scan correctly, this can have serious repercussions to an organisation ranging from increased processing time, introducing manufacturing errors, production downtime, processing bottlenecks, lost or misplaced items, security infringements, lost revenue and much, much more. Furthermore, many government agencies (such as postal authorities and food & drug authorities) and industries (including pharmaceuticals, shipping and major retail chains) require that the printed barcode must conform to specific industry standards before they can be used.

#### Barcode verification and grading

Barcode verification gives organisations the reassurance and confidence that the bar code will perform as intended at all stages of the product's supply chain. Barcode grading gives a measure of the first-time scan rate which determines its quality, through decoding, measuring, and checking the format of the barcode.

#### Barcode Scanners vs. Barcode Grading

Barcode scanners are designed specifically to read the contents of a barcode at various distances and angles. Just because a barcode can be read by a certain type of scanner, it does not ensure that the barcode will be read by other scanners. Throughout a typical supply chain, the barcode may be read by a myriad of different types of barcode scanners and therefore many organisations require the reassurance that the barcode will perform as expected.

The **Discovery Multiscan Barcode Grading Tool** is a precise, quality control instrument, designed specifically to continuously determine the quality of variable data barcodes, being printed on documents, labels, cards and packaging, at high speeds. The tool measures the characteristics of each barcode to industry standards (e.g. ISO/IEC 15415 & ISO/IEC 15416).

#### How The Multiscan Barcode Grading Tool Works?

The Multiscan Barcode Grading Tool measures specific characteristics of each barcode, compares to a benchmark, and grades its to a value ranging from (A-F or 4-0). This ANSI/ISO grade provides an indication, based on the print quality, of the likely scanning performance rate of the barcode throughout the supply chain. The lower the ANSI/ISO grade, the higher the possibility of scanning difficulties.

The Barcode Grading Tool inspects, verifies, and measures a range of attributes such as: edge determination, reflectance, modulation, defects within each bar/space, widths of each bar/space, decodability, quiet zone and much more and calculates its ANSI/ISO grade.

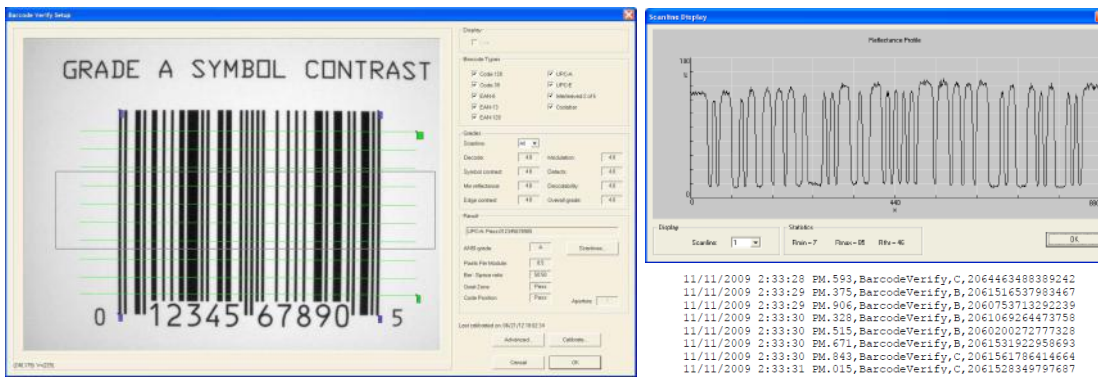
Typically, a barcode with a grade of A-C (or 4-3) is considered acceptable quality and is expected to be scannable anywhere and by anyone. It confirms to the barcode printer that they are producing barcodes to the required quality level.

#### Complete, Comprehensive Reporting

The Barcode Grading Tool produces detailed reports for every barcode it grades. When a failed barcode is detected, a full diagnostics report is displayed with the grade for each measured parameter. The failed parameter(s) are highlighted, enabling the operator to adjust the print production process to improve the quality of the barcode. A detailed grading report also serves as proof to the end customer that the barcode has been produced to the required quality standard.



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## FEATURES

### Easily Barcode Verify Set-up

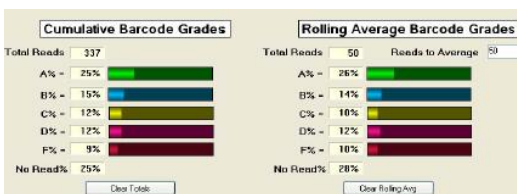
- Multiple Calibration Set-up options:
  - Area Scan with Test Card
  - Manual with Reflectance samples
  - Linescan calibration
  - Global Calibration Facility accessing central store of calibration data
- Intelligent, fast barcode detection & auto training
- Smart scan set-up for multi-lane barcodes
- Advanced set-up for custom grading for non-ISO/ANSI

### Control

- Operator Light & Audible Alarms/Warnings
- Rewinder Jog/Stop (where possible)
- Marking & flagging device - Optional

### Grading History / Reporting

- Real-time reflectance display
- Real-time results display
- Summary report of cumulative & rolling average barcode grades
- Full report of key grading parameters and ANSI Grade result for each barcode.



## CAPABILITIES

### Supported Barcode Types

- 1 & 2D Barcode
- Code 128 & 39
- EAN-8
- EAN-12
- EAN-128
- QRcodes
- 2D Datamatrix
- UPC-A & UPC-E
- Interleaved 2 of 5
- Codabar

### Grade Parameters Measured

- Edge Determination
- Reflectance
- Symbol/Edge Contrasts
- Modulation
- Defects within bar/space
- Widths of bar/space
- Decodability
- Quiet Zone
- Pixels Per Module
- Bar/Space Ratio
- Barcode Position
- ANSI Grade

### Camera Types

- Line Scan Cameras
- Contact Image Scanners - Discovery Maxscan
- Area Scan Cameras

### Performance

- Press Speeds: up to 350 meters/min (1150 ft./min)
- Web widths: from 10mm to 1000mm

### Installation / Integration

- On Press: Standard press mounting kits
- Rewinders: Web stability frame, web guide and path rollers available if necessary
- Remote technical support and training

## ADVANTAGES

- Machine independent** - Can be retro-fitted to most existing printing and converting equipment
- Reliable** - 100% grading of all barcodes. Uninterrupted detection of sub-standard barcodes
- Flexible** - Ability to deploy a broad set of grading options to meet your specific industry requirements
- User-Friendly** - Faster set-up & logical GUI layout
- Supported** - Comprehensive maintenance contracts featuring remote diagnostics

## BENEFITS

- Lower Costs** - Automatically detects barcodes that fall below a pre-set level. Prevents costly reprints
- Improved Productivity** - Automates manual barcode grading & quality inspection processes
- Increased Customer Satisfaction** - Ensure barcode meets the standard agreed with your customer, support by detailed reports
- Less Scrap / Less Waste** - Immediately prevent costly scrapping of large runs of defect print
- Mitigate risks** - Ensure all barcodes meets with specific industry and government regulations

