Validation is checking that a barcode is present, can be scanned, and matches the barcode expected during a particular production batch. Verification is measuring and grading the quality of a printed barcode according to international ISO/IEC standards, and is a more rigorous process.

Axicon’s Checkrite validators are not intended to replace barcode verification, but they are a very useful check on the correct barcode labelling or printing on any production line, as every barcode will be scanned.

The Checkrite validators are stand-alone systems that are fitted to a production line, and they comprise a control box, a scanner and a sensor. They are PLC (programmable logic controller) based systems that can provide a visual indication of the validity of a barcode, as well as halt the line or an alarm if an incorrect barcode is scanned.

The Checkrite 5 will check up to five barcoded products every second.

The Checkrite 7 will operate on faster production lines than the Checkrite 5, and and can be integrated with a wider range of high speed industrial barcode readers. It can be customised to suit individual requirements, with extra programmable features.
Features
Each Checkrite is installed with a scanner and sensor, and the choice will be determined by the particular characteristics of each production line. More details are available from Axicon.

Operation summary
Before starting a production batch, a correct barcode is scanned and all subsequent barcodes must match this first one. A constant green light means that all the barcodes scanned match the stored barcode. If a different barcode is scanned, a red warning light will show, and the system can trigger an audible warning or line-stop. Missing or unscannable barcodes will prompt an amber warning light. The normal functions are set by the key-operated three-way switch which means that only key holders can operate the system. The system can be switched off for non-barcoded products. Ethernet communications can be provided as an option on Checkrite 7 units.

Simple programming
Recording the barcode to be matched is very simple. The three-way switch is set to ‘Learn’ and the barcode is passed in front of the scanner. The barcode data is recorded automatically.

Matching
The switch is set to ‘Run’, and if subsequent barcodes are identical to the first one, the green light will switch on and stay on until the next product passes the scanner.

Mis-match
If the barcode being scanned does not match the stored barcode, the red light will switch on, and stay on until the switch is set to ‘Reset’. A relay with isolated contacts will also be activated, and this may be used to stop the conveyor or activate an ejector arm.

No-read
If a barcode is missing or unreadable (for whatever reason) the amber light will switch on and stay on until the next read cycle. After a programmable number of consecutive no-reads (usually five) both the amber and red lights will switch on and stay on until the switch is set to ‘Reset’. The relay, as with mis-match, will also be activated.

Specifications
Dimensions: 300 mm x 200 mm x 150 mm (H x W x D)
Finish: Steel housing for Checkrite 5, stainless-steel for Checkrite 7. Scanners may also be supplied in stainless-steel enclosures for use in wash-down areas.