

# NFPA 79 Cable Requirements

Save Time and Money by Meeting the Requirements

NFPA 79 is the section of the National Electric Code (NEC®) that focuses on the electrical wiring standards used with industrial machinery. NFPA 79 applies to the electrical equipment used within a wide variety of machines, as well as groups of machines working together in a coordinated manner. Examples of industrial machinery include, among others: machine tools, injection molding machines, woodworking equipment, assembling machinery, material handling machinery and inspection and testing machines. The scope of NFPA 79 includes all electrical and electronic elements of the machinery operating at 600V or less.

In 2007, the NFPA 79 code underwent significant revisions. The main goal of the revision was to harmonize NFPA 79 with its European counterpart, IEC-60204. This involved reorganizing the NFPA 79 chapter structure to follow IEC-60204 while adopting less restrictive, more progressive requirements without sacrificing the equipment safety.

As of January 2007, one of the major changes in the NFPA 79 is the cable selections required under section 12.2.7.3. This section states that single conductor or multi-conductor AWM shall not be permitted, unless the completed assembly has been listed prior for such use. Machine Tool Wire (MTW) is one of the wire and cable permissible options.

Historically, little attention has been given to cable selection; often it was an after thought. Today, however, with ever increasing concerns of liability issues, more time is devoted to machine components such as wire and cable to ensure performance reliability. Regardless of the product, the strength of quality is only as good as its weakest component.

With present day global supply access, it is more important than ever to meet regulatory requirements and proper cable selection for industrial machinery.



In keeping with the Principles of the Lapp Group, customer education is at the top of the list. We strive to keep our customers aware of breaking industry changes. For a more detailed technical explanation, please visit Lapp USA's website at [www.lappusa.com](http://www.lappusa.com). Go to APPLICATIONS, then to "NFPA 79 Compliant". Once there you will see our white paper and a PDF of all the Lapp products that comply to the NFPA 79 2007 Edition. These products also have the new logo (see left) denoting they compliance with this standard.

The cost of improper cable selection and non-compliance is too expensive in today's highly competitive market place. Save time and money now. Lapp USA can assist in the selection of the proper cable for your installation. Please contact one of our Technical Representatives today.

Lapp USA offers a variety of product solutions that are UL Listed and conform to the NFPA 79 2007 Edition.

The diagram illustrates key NEC and NFPA regulatory codes for an industrial plant manufacturing floor. Each code calls out permissible cables.

\* NEC® is a registered trademark of the National Fire Protection Association.

