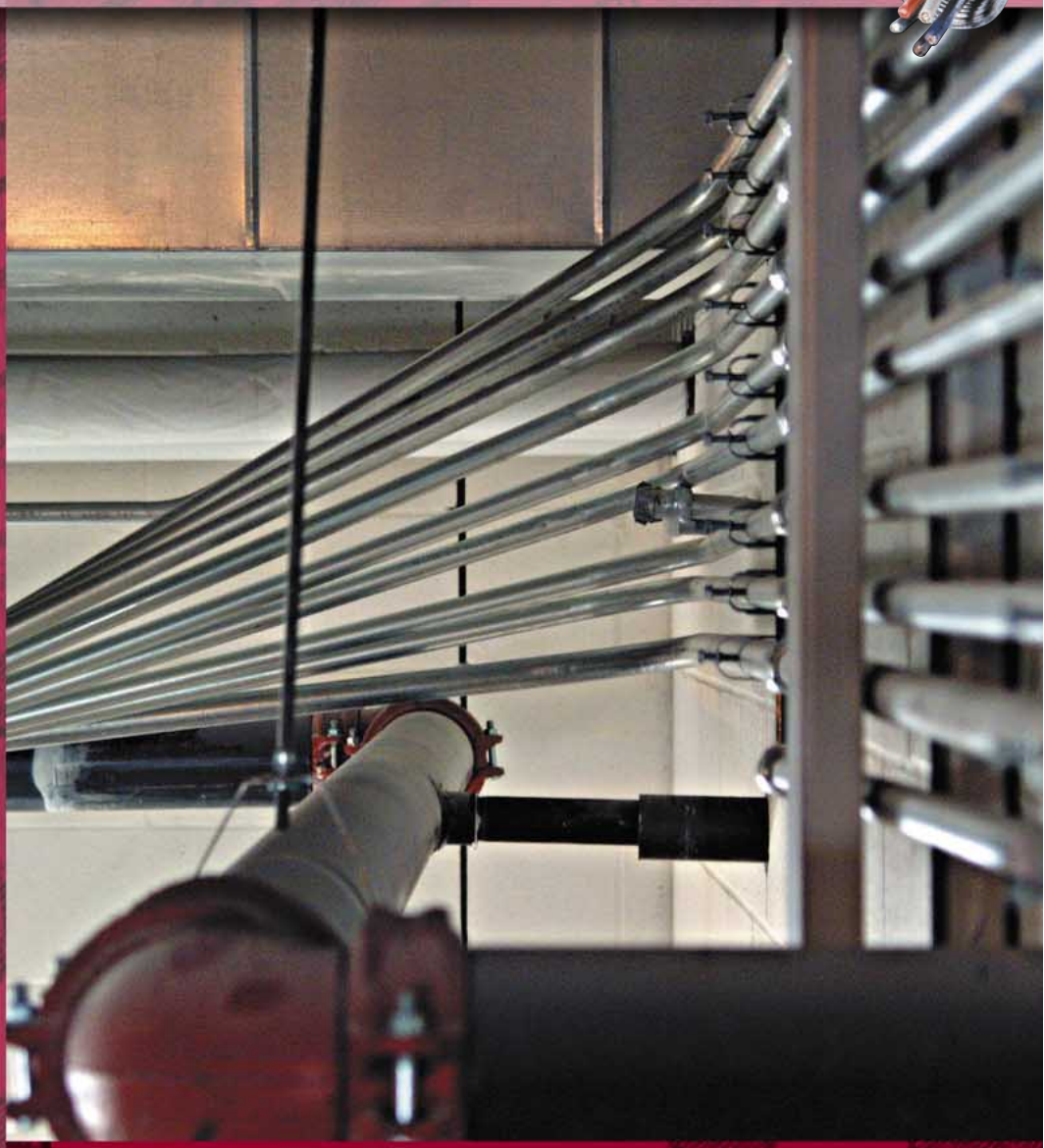
STEEL CONDUIT

Contractor Has Long List of Reasons to Specify it



General Engines Co., Lake Wales, Florida Plant

FLORIDA ELECTRICAL CONTRACTOR SPECIFI

Gary Estes knows electrical wiring inside out.

He's President of Estes Electric, Inc., a Lake Wales, Florida firm that he's operated since 1983. The company primarily handles commercial and industrial contracts in the central part of the state, although it will go further away for larger jobs.

Gary's an enthusiastic user of steel conduit to protect conductors in the systems he installs. In fact, he rarely specifies any other type of conduit.

Continuing work for two Estes Electric clients in Lake Wales illustrates the reasons why Gary prefers steel conduit. Estes has performed work for General Engines Co., Inc. since it bought an existing Lake Wales plant in 1985 and retrofitted it to produce truck trailers between five and 30 tons. The facility has roughly 80,000 square feet under roof.

Plant Has Nearly a Mile of Steel Conduit

Over that period, Estes has installed more than 5,000 feet of steel conduit in diameters ranging from 1/2" to 4". The firm has put in both rigid steel conduit and electrical metallic conduit (EMT), primarily because of their strength.

Steel Conduit. Get wired for the future.

IES STEEL CONDUIT...FOR LOTS OF REASONS!

The work has been ongoing, since General Engine is continually modernizing the facility and adding new equipment. "It's a tough environment there," Gary says. "Most of the potential damage to electrical conductors is from forklifts and other mobile equipment."

A number of times, Gary adds, General Engine has simply used regular electrical cords as a temporary expedient. "Every time that happens, the cords end up being cut, and we go in and replace it with steel conduit."

Steel Conduit Protects Against EMF

While the conduit at General Engine primarily protects against physical damage and provides equipment grounding, the steel conduit installed at the Lake Wales plant of Findley Industries also serves another protective function, EMF protection. The facility has three separate buildings and produces door panels for several auto and truck manufacturers.

"Basically," Gary explains, "the high EMF that the plant's machine puts out is a concern, so we run all the control wires and feeder wires through steel conduit to keep the energy off them while the machine is in operation."

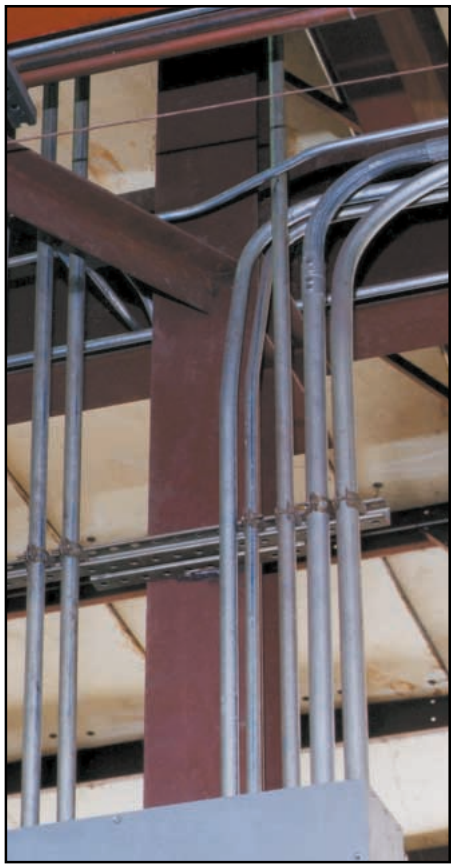
The plant also has a lot of computer-controlled production equipment, and steel conduit protects their controls from electromagnetic interference (EMI) from other plant energy sources.

Estes Electric has installed about 4,000 feet of steel conduit in diameters between 3/4" and 4" in the Findley Industries facility.

Gary normally specifies the type of conduit used in the electrical systems his company installs and he says he has a long list of reasons to specify steel conduit.

Fire Protection Another Steel Conduit Benefit

In addition to equipment grounding, physical protection and EMF



shielding Gary notes that steel conduit is a superior product in protecting conductors against fire damage—in part because of its grounding function.

"If you have a short," he explains, "it's generally in a box or in the conduit. If it's in the conduit, the short will trip a breaker and shut everything down, minimizing damage. That's not the case with some other types of conduit."

Another advantage Gary notes is the rigidity of steel conduit. "When you're spanning 5' gaps between wall columns, steel conduit's the best material to do that with."

Steel conduit makes it easier to pull old wiring and install new systems when electrical power, data and communications conductors need to be replaced or upgraded. Sometimes that involves the removal of existing conduit. When that happens, Gary says, "we simply tear out the conduit, scrap it and replace it with new steel conduit." And because steel is recyclable, disposing of old steel conduit is no problem.

The Steel Tube Institute

The Steel Tube Institute was founded in 1930 and sponsors cooperative member efforts to improve manufacturing techniques for conduit and other tubular steel products and informs customers and fabricators about these products' utility and versatility. It is headquartered in Coral Gables, Florida.

Steel Conduit Provides Added Protection

Steel conduit protects electrical conductors against mechanical and electrical damage, and provides excellent grounding for electrical equipment. It also protects against electromagnetic fields (EMF) that could hurt the performance of nearby computers and other electronic equipment. There are three basic types: Rigid Steel Conduit (GRC); Intermediate Metal Conduit (IMC); and Electrical Metallic Tubing (EMT).

Free GEMI Analysis Software Available

The Georgia Tech study that confirms the EMI shielding advantages of steel conduit is incorporated in the Grounding and ElectroMagnetic Interference (GEMI) analysis software, available free from the Steel Tube Institute. The GEMI CD helps you accurately calculate the electromagnetic field density of a network design for conduit-enclosed circuits. It also helps you confirm that your system design complies with the equipment grounding requirements of the NEC.

For your free GEMI CD, contact the STI. Log onto www.steelconduit.org and download it at no cost.

Steel Conduit Members

Allied Tube & Conduit
16100 S. Lathrop Avenue
Harvey, IL 60426
Telephone: (708) 339-1610
Fax: (708) 339-0615

Picoma Industries
330 East Ninth Street
Waynesboro, PA 17268
Telephone: (800) 742-6621
Fax: (717) 762-0948

Republic Conduit
Maverick Tube Corp.
1315 Albert Street
Youngstown, OH 44505
Telephone: (330) 742-6000
Fax: (330) 742-6096

Robroy Industries
1100 US Highway 271 South
Gilmer, TX 75644-1828
Telephone: (903) 843-5591
Fax: (903) 843-2516

Western Tube & Conduit Co.
P.O. Box 2720
Long Beach, CA 90801-2720
Telephone: (310) 537-6300
Fax: (310) 604-9785

Wheatland Tube Company
P.O. Box 600
Collingswood, NJ 08108-0600
Telephone: (856) 854-5400
Fax: (856) 858-5578

Steel Tube Institute
OF NORTH AMERICA
2000 Ponce de Leon, Suite 600, Coral Gables, FL 33134 • Tel: (305) 421-6326
E-mail: STINA@steeltubeinstitute.org • Website: http://www.steeltubeinstitute.org

Visit our conduit website at:
www.steelconduit.org