## Large-format FRP sheets

Röchling Engineering Plastics KG (Haren, Germany) is now offering its Durastone fiber-reinforced plastic sheets, produced via press molding in lengths of up to 12m and widths of up to 0.95m (39.4-ft by 3.1 ft). Durostone sheets comprise a resin matrix of polyester, vinyl ester or epoxy and glass reinforcement (mat or fabric). Large-format sheets are available for customer machining, or Röchling can custom-machine them to customer specification prior to delivery. Target applications include generator and transformer construction, control panels and vehicle and traffic engineering structures. In the electrical industry in particular, the larger sheets enable the application of one-part peelable slot liners made of Durostone EPC St. 38 in generators that are 10m/32.8 ft long and longer, www.roechling.com

Wide-format, flatbed cutting system

AZCO Corp. (Fairfield, N.I.) has introduced a shear-cut traveling knife assembly designed to cut material up to 1,400 mm/55 inches wide and 3 mm to 55 mm (0.1 to 2.2 inches) thick. This cut-to-length unit is built to feed the material all the way through the knife assembly. A precision-ground urethane drive top roller supplies a force that provides positive traction between the material and the drive system. A brushless servomotor is said to ensure high accuracy with low maintenance. Its programmable logic controller (PLC) controls and monitors servomotor drive operation and the entire cutting process. System set-up and control is managed by the opera-

tor from a color touch screen interface. To ensure safe operation, the unit will operate only if material is present to be cut. www.azcocorp.com

## Textbook explores mechanics of adhesives

DEStech Publications Inc. (Lancaster, Pa.) has released The Mechanics of Adhesives in Composite and Metal Joints: Finite Element Analysis with ANSYS (192 pages, hardcover, \$129.50 USD), by Magd Abdel Wahab, Ph.D. professor and chair of Applied Mechanics, Ghent University, Belgium. The text investigates the mechanics of adhesively bonded composite and metallic joints, using finite element analysis (FEA) and, more specifically, ANSYS FEA software (Ansys Inc., Canonsburg, Pa.). The book is intended to provide engineers and scientists with the technical know-how to simulate a variety of adhesively bonded joints using ANSYS, the basics of which are presented. It explains how to model stress, fracture, fatigue crack propagation, and thermal, diffusion and coupled field analysis of the following: single-lap, double-lap, lapstrap/cracked-lap-shear, butt and cantilevered-beam joints. Readers receive free digital access to a variety of input and program data, which can be downloaded as macrofiles for modeling with ANSYS, Book highlights: Scientific background and practical methods for modeling adhered joints; tools for analyzing stress, fracture, fatigue crack propagation, thermal, diffusion and coupled thermal-stress/diffusion-stress as well as life prediction of joints; and access to downloadable macrofiles for ANSYS.

www.destechpub.com; www.ansys.com







