Firm offers 3D solids modeler and evaluation kits

American Channels has announced an advanced 3D solids modeler for computer-aided design applications. AC/SOLIDS integrates with surface modeling, 2D CAD, and numerical control parts programming. It also allows the user to incorporate doubly curved surfaces.

According to the company, AC/SOLIDS can take either the surface model or the 2D outline and create a true 3D solids model.

Other features of AC/SOLIDS include the full range of solid primitives and Boolean operations with hidden model of during interference and inertia, can be carried out at any time. Interference checking and articulation of mechanism features also are included.

During AC/SOLIDS introductory period, the company will provide an evaluation kit to prospective customers. This kit will include a demonstration copy of AC/SOLIDS, a user guide, a primer, and an introduction and overview.

AC/SOLIDS is available on DEC VAX/MicroVAX and Apollo Domain computer systems. The license price is $9000 per single user and $18,000 per DEC VAX/MicroVAX system or four Apollo nodes. AC/SOLIDS is offered as an option to AC/DIAD, American Channels’ 2D drafting and design system. A user’s evaluation kit is also available for AC/DIAD. It is free to qualified inquirers for 90 days.

The kit contains the software; a demo of the system’s capabilities with accompanying script; a full set of documentation, including a primer and card-indexed Rolodex user’s guide; a recommended procedure for conducting the evaluation; and questionnaires designed to assist in the evaluation.

Different kits have been developed for the Digital VAX and Apollo Domain systems. Both Digital and Apollo field offices have agreed to provide systems in the event that appropriate hardware is not already available at a user’s site.

For further information contact American Channels, Inc., 1050 Waltham St., Lexington, MA 02173; (617) 862-4441.

Reader Service Number 34

Low-cost CAD package for IBM PC

Drafrix from Foresight Resources Corp. provides full-featured CAD with extensive geometry-creation and editing capabilities. A complete range of input techniques for lines, arcs, circles, fillets, and chamfers includes grid and angle locks, snap locks to item endpoints, midpoints, intersections, and tangents. The user selects a particular function from the main menu which runs horizontally across the top of the screen. If that function includes optional features, a roll-down menu appears over the display, listing the options available. After an option is selected, the menu disappears.

Other Drafrix features include advanced copy and move operations such as translation, rotations, scaling, and mirroring. Numeric input, combined with calculation capability, provides the user with areas, perimeters, angles, coordinates, and other drawing item information. Full-annotated features include automatic dimensioning, crosshatching, and note entry/editing.

The stand-alone CAD software package has an AutoCAD file exchange utility that enables a Drafrix I-generated drawing to be used on an AutoCAD workstation. The utility adds $95 to Drafrix I’s base price of $295.

Drafrix I is written in C and runs on IBM PC XT/AT or compatibles with MS-DOS or PC-DOS. A minimum 512K memory is required, and a math coprocessor is recommended.

The company is located at 932 Massachusetts, Lawrence, KS 66044; (913) 841-1121.

Reader Service Number 35

Direct machining from solid model

Matra Datavision has developed a system, based on the EUCLID CAD/CAM system, that provides direct machining capabilities from the solid model. EUCLID can design and produce numerical control data for a part by first building the rough part and then removing the material with a solid modeling cut routine.

Besides displaying the finished part and the tool paths, EUCLID’s 2½-axis NC application facilitates interference checking of the parts, tools, jigs, and fixtures. The application automatically generates the tool path from the geometry of the material to be removed and the user-definable speed and feed rate of the tool.

The main EUCLID 2½-axis NC functions for technological data include NC machine types and controllers, cutting tools, machining cycles, various feeds and speeds, and update of existing machining processes.

Price not provided. For more information contact the company at 30 Commerce Way, Woburn, MA 01801; (617) 938-1230.

Reader Service Number 36