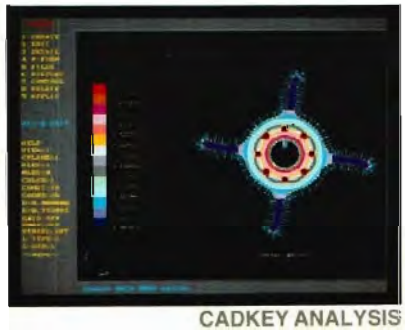
Cadkey, Inc.

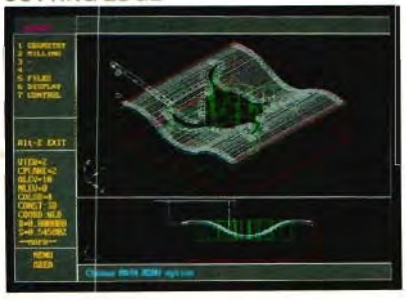
Applications Guide

CADKEY



CADKEY ANALYSIS

CUTTING EDGE



DataCAD

CADKEY

1992-1993

CADKEY Resource Guide

Volume 1, Number 1
Fall / Winter 1993

INTRODUCTION

Welcome to the *Fall / Winter 1993 CADKEY Resource Guide* published by KEYSOLUTIONS Magazine. A compendium of third-party application software packages, hardware, services, and training/education tools, the *Resource Guide* includes some of the most innovative and advanced manufacturing solutions available today. Some are CADKEY-specific, but all work well with CADKEY in a design/engineering/manufacturing environment. All can provide real solutions for concurrent engineering problems. A complete list of worldwide CADKEY Users Groups is also included.

The information in each listing was supplied by the vendors and neither KEYSOLUTIONS Magazine nor Cadkey, Inc. assumes responsibility for the accuracy of the information. Not all of the products listed have been tested or are endorsed by KEYSOLUTIONS or Cadkey, Inc. Products may or may not have complete compatibility with the current versions of Cadkey, Inc. products. In addition, the products and services undergo constant development and improvement, and prices are also subject to change. Be sure to contact the individual vendors regarding enhancements, compatibility, and prices.

To keep up with these changes and provide the reader with the most up-to-date information, the *CADKEY Resource Guide* will be published twice each year — in the Fall and Spring. No directory can be a complete listing of all products related to the use of CADKEY. If you have a product you think should be listed in future editions, please send information about your product to the following address.

Cathy Bilderback
Resource Guide Coordinator
P.O. Box 11978
Spokane WA 99211-1978
(509) 928-5169 Fax (509) 928-4937

We welcome your suggestions and your participation in future issues!

All Cadkey, Inc. products listed in this publication are copyrighted, trademarked or registered trademarked as noted. Third party products may be copyrighted, trademarked or registered trademarked beyond what is indicated in this publication.

The *CADKEY Resource Guide* is published by KEYSOLUTIONS Magazine, a division of Value Engineering Associates. KEYSOLUTIONS is an independent publication without obligation to Cadkey, Inc. or any hardware or software vendor, dealer or distributor.

This publication may not be reproduced in any form, for any purpose, without written permission of KEYSOLUTIONS Magazine.

A KEYSOLUTIONS *Publication*
A Division of Value Engineering Associates

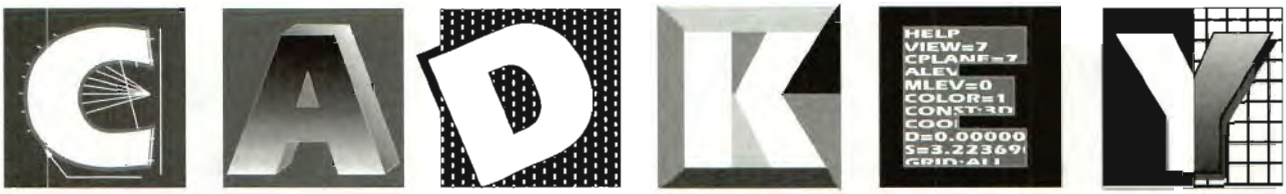


TABLE OF CONTENTS

INTRODUCTION 2

OVERVIEW 4
CADKEY® - Concurrent Engineering Tools for the '90s 4
Cadkey Training Materials 5
Developer Program 5

APPLICATIONS - Software Products 6

PERIPHERALS - Hardware Products 27

TRAINING & EDUCATION - Services 28
CADKEY USERS GROUPS 29

INDEXES 31
Company Index 31
Product Index 32

1993
FALL • WINTER
RESOURCE GUIDE

CADKEY® - Concurrent Engineering Tools for the '90s

Cadkey, Inc. is committed to producing software which can help companies streamline their design, engineering and manufacturing processes. They pioneered true PC-based 3D mechanical CAD in 1985 with their flagship product CADKEY and have since added a full range of desktop tools for concurrent engineering.

Companies of every size around the world have chosen CADKEY for their CAD needs. Today there are more than 110,000 installations including many Fortune 500 companies. CADKEY is available in 11 languages and has been honored with numerous industry awards.

As a leader in the mechanical CAD market, Cadkey's experience and expertise with concurrent engineering tools means they can meet the changing needs of the world's mechanical and design engineers. Call or visit your local CADKEY VAR/dealers for a demonstration. Or call Cadkey, Inc. at (203) 298-8888.

CADKEY®—Flagship Product

CADKEY 6 provides the true 3D design, detail drafting and solid modeling capabilities found in high-end CAD systems— on a PC at a fraction of the cost. Features include:

- Complete model-to-drawing associativity
- Reads and writes DWG and DXF files directly
- Assembly design and soft prototyping
- Auto hidden line removal, shading, mass properties
- Integrated design analysis
- Minimal learning curve
- Powerful IGES translator
- Unlimited potential for customization
- A network solution
- Exceptional support

More Cadkey Tools

CADKEY® Light

An introductory version of CADKEY for personal use. Patterned after CADKEY, this entry-level package features many of the 2D drafting and 3D design elements that have made CADKEY the most popular mechanical engineering software in the world.

CADKEY® DRAFTER

Fully compatible with CADKEY 6, this comprehensive, low-cost drafting package features a robust set of automatic dimensioning functions including geometic tolerancing, and a full suite of mechanical symbol libraries. It also includes an integrated DXF/DWG translator encouraging co-existence with AutoCAD and other applications.

CADKEY® IGES Translator

A 2D/3D bi-directional translator for the transfer of design data, including surface data and drawing layout information between CADKEY and other CAD/CAM systems. Integrated into CADKEY 6 and CADKEY ADVANCE MODELER.

CADKEY® ANALYSIS

A fast and powerful analysis tool based on the boundary element method. Integral to CADKEY 6 and CADKEY ADVANCED MODELER, this program performs heat-transfer, stress/strain and thermal analysis, and handles 2D, 3D and axisymmetric models.

CADKEY® ADVANCED MODELER

A hybrid solid modeler with effective NURBS-based design capabilities. This integrated add-on to CADKEY lets draftspeople make an easy transition to 3D solid and surface modeling and gives experienced 3D designers more productive and efficient methods.

Cadkey AEC Tools

DataCAD® 5

A sophisticated but easy-to-use 2D/3D program for architectural, building engineering, and construction professionals.

DataCAD® Velocity®

A photorealistic rendering program allowing architects and their clients to visualize and "walk through" designs in three dimensions

DataCAD® 128

An entry-level, full-featured version of DataCAD. Widely used by schools, colleges and those working on smaller buildings.

Cadkey Training Materials

Introduction to Design and Drafting
Using CADKEY - Training Guide

The tutorial approach used in this manual helps new users get up to speed quickly at a self-paced rate. Thorough step-by-step exercises use all the basic CADKEY functions. The Manual for Version 6 even includes exercises for CADKEY's new shape recognition and solid rendering system, PICTURE IT, and the integrated element method ANALYSIS system.

Introduction to Design and Drafting
Using CADKEY - Student Guide

This complementary workbook goes hand-in-hand with the Training Guide. It contains diagrams of various menu choices, what they do, and what they mean, and has plenty of room for student notes.

Advanced Geometric Modeling - Training Guide

This guide is for the advanced CADKEY user who wants to increase 3D modeling techniques and skills. Its useful definitions and explanations of advanced modeling techniques are followed by several exercises that require the user to construct geometry by referring to detail drafting rather than step-by-step instructions.

Advanced Geometric Modeling - Student Guide

Explanatory diagrams correspond directly to the chapters in the Advanced Geometric Modeling Training Guide and has room for notes about each section.

Exploring CADKEY's Open Architecture
Using CADL AND CDEs -Training Guide

Basic programming techniques using CADL (CADKEY Advanced Design Language) and C Language (to write CDEs — CADKEY Dynamic Extensions™) are introduced. A sample disk with source code is provided.

Developer Program

No software or company can be all things to all people and Cadkey's developers' programs effectively open Cadkey products to customized application solutions of every imaginable kind. This ongoing program provides extensive tools and technical support to accepted third party developers. Third party applications cover the entire gamut from general purpose productivity programs to industry-specific programs, such as sheet metal or mold/die design. Such programs normally interface with Cadkey products via Cadkey's programming language, CADL and/or CDEs.

Strategic partners are third party developers who produce programs that are complementary to Cadkey's products. Partners have contractual ties to Cadkey and their products are typically integrated, not interfaced.

Who Qualifies?

- Independent application developers
- International developers
- Strategic developers
- Corporate/government developers
- University developers
- Authors and publishers

Benefits

- Access to the Cadkey user base
- Inside track on Cadkey developments
- First-to-market competitive advantage
- Co-development opportunities
- Most favored priority for enhancement requests
- Potential bundling and strategic partner contracts

For more information, contact Jeff Hall at (203) 298-8888.

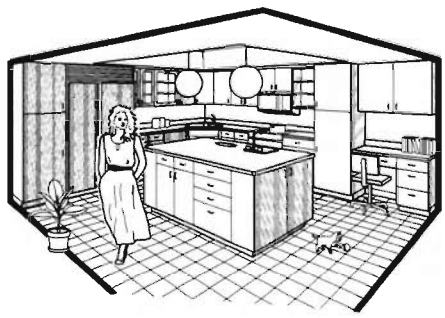
APPLICATIONS

A/E/C

Cases Templates for DataCAD

A comprehensive collection of template files with some 435 3D symbols for typical and special architectural cabinets, accessories, appliances and plumbing fixtures. Easy to install and to use. Works with Velocity tool. Created for an architect's own use. Includes a sampler of Neo-Graphic's people and plants. Manual furnished. Price: $375. Platforms: DOS. Links to DataCAD via Template and Symbol files.

Architectural CAD of Colorado
7170 W. 8th Place
Lakewood, CO 80215
(303) 237-7812 Fax (303) 237-7812



Architectural CAD of Colorado

Cheap Tricks & Cheapware

Cheap Tricks, the monthly newsletter for DataCAD users, is packed with quick tips and techniques on how to get the most out of DataCAD and computers in general. Automatically comes with *Cheapware*, the incredible quarterly listings of user shareware of macros, details, entourage, and utilities. Yearly Subscription: $30.

Shu Associates
10 Thacher Street, Suite 114
Boston, MA 02113
(617) 367-9622 Fax (617) 367-9622

ANALYSIS

IMAGES-3D

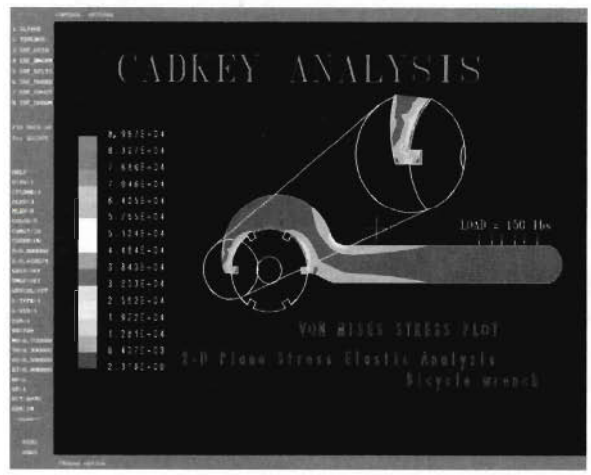
IMAGES-3D is a fully integrated, menu-driven, easy-to-use modular finite element analysis software package which performs state of the art static, modal, dynamic and heat transfer analysis. The program interfaces directly with CADKEY to accept nodal and element definition through a bi-directional translator. Evaluation package available. Starts at $795. Links via CADL. Platforms: DOS.

Celestial Software
2150 Shattuck, Suite 1200
Berkeley, CA 94704
(510) 843-0977 Fax (510) 848-9849

CAD/CAE Technologies

CAD/CAE Technologies, a spinoff company formed by Peter H. Smith, formerly President of Cadkey, Inc. and one of it's founders, creates and markets analysis and manufacturing applications. The initial products will include extensions of the CADKEY ANALYSIS product with an array of boundary element and finite element analysis software. Additional products will include Navier-Stokes fluid flow solvers, invention software, and educational products. Call for pricing. Platforms: DOS, UNIX. Links via CADL, CDE.

CAD/CAE Technologies
4 Griffin Road North
Windsor, CT 06095-1511
((203) 298-6450 Fax (203) 298-6401



CAD/CAE Technologies

BILL OF MATERIAL

DRAFT-PAK Bill of Material Database Generator

Automatically creates BOMs for designs quickly, easily and accurately without risk of error from redundant data entry. Extracts data from your CADKEY part files using group table data. Links directly to your existing external database or to our own database manager (included)...there is no need to purchase a separate database manager! Standard output formats produce notes on your part file. Creates single-level or indented BOM structures. Supports on-line viewing, editing and modification of text and database files.

APPLICATIONS

Browse utility allows quick access to your external database from inside CADKEY for seamless information management. Automatic ballooning, user-definable templates, more! Price: $795+. Platforms: DOS, SGI, Sun. Links via CDE, Other.

BAYSTATE TECHNOLOGIES, Inc.
33 Boston Post Road West, #420
Marlborough, MA 01752
(508) 229-2020 Fax (508) 229-2121

COORDINATE MEASURING

APPS

Sequential point-to-point or contour data are read using any manual CMM. Contours are smoothed and reduced to linked arcs and corner and offset features are implemented, if required. APPS then outputs a CADL file that describes the part. Full display, plot and edit support. Price: $900 to $4500. Platforms: DOS, 286 up. Links via CADL.

Alden Computer Systems Corp.
15 Summer Street, P.O. Box 4505
Salem, MA 01970
(508) 744-1314

Digitizer ++

Digitizer ++ links existing Cadkey CADD Inspector software to the Mitutoyo Coordinate Measuring Machine. Price: $1500. With Cadkey's CADD Inspector: $3495. Platforms: DOS/Windows. Links via Direct.

Precision Measurement Laboratories
201 W. Beach Avenue
Inglewood, CA 90302
(310) 671-4345 Fax (310) 671-0858

Engineering Inspection Service

PML has the capabilities and resources to assist in reverse engineering projects, complete with CADKEY drawings and/or 3D models. Engineers have used our models for finite element analysis and rapid prototyping models. Price: call for quote. Platforms: DOS, DEC, SGI, Sun. Links via: CADL, IGES, DXF.

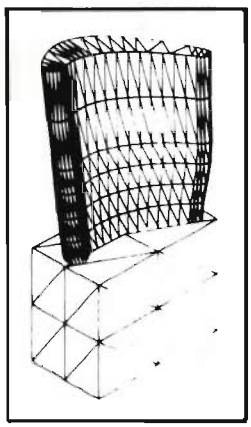
Precision Measurement Laboratories
201 W. Beach Avenue
Inglewood, CA 90302
(310) 671-4345 Fax (310) 671-0858

RevEng

RevEng links CADKEY to many commercially available coordinate measuring machines. By combining RevEng with CADKEY and any of the support CMM's you can digitize 2D and 3D points, lines, arcs, circles, and splines into a CADKEY part file in real time; the geometry can be used with all CADKEY modules.

ULTIMATE ASSURANCE

ENGINEERING INSPECTION SERVICE



Before you ship a job – be sure you'll be paid for it!! Inspect your parts before your customer does!

PML has the Capabilities and Resources to Assist With:
- First Article Inspection
- Process Cabability Studies
- Calibration of all Measuring Equipment and Inspection is Performed in Compliance with MIL-STD-45662 and MIL 45208. NIST Traceability.
- Reverse Engineering Projects – complete with CAD drawings and/or a 3-D model. Use our models for finite analysis and stereo lithography models.

PML
FAX: (310) 671-0858
PRECISION MEASUREMENT LABORATORIES
(310) 671-4345 • 201 West Beach Avenue, Inglewood, CA 90302

Price: $3495 + 1 year maintenance. Platforms: DOS 386. Links via CADL.

Design Automation, Inc.
4900 Lake Nona Court, Suite 300
Raleigh, NC 27604
(919) 250-9990 Fax (919) 250-9002

DESIGN AND DRAFTING TOOLS

CADjet Drafting Package

Mechanical Design and Drafting programs offering such advanced features as parametric Screws, Nuts, Bolts, Washers, Holes, Beams, Channels, Ducts, Pipes, Geometric Tolerancing, Drafting Symbols and Welding Symbols. Utilities include: Set/Change Attributes, Dynamic Text, AutoDraftsman, Compress, Piping Symbols, Search & Replace, Quikview, Dimension Editor, an on-screen MENU TOOLBAR and more! Links with CADKEY via CADL, CDE, MACRO, other. Available for CADKEY V4.X, 5.X, 6.X and CADKEY Drafter. Price: $495. Annual Maintenance Policies and Upgrades also available.

HLB Technology
P.O. Box 527
Blue Ridge, VA 24064
(703) 977-6520 Fax (703) 977-6531

FREE DRAFTING

Yes, we want to give you a FREE DRAFTING PACKAGE* without RISK or OBLIGATION of any kind. THIS IS NOT A GIMMICK! Just call us TODAY and get parametric 2D/3D NUTS, BOLTS, WASHERS, HOLES, GEOMETRIC TOLERANCING, ANSI DRAFTING SYMBOLS, WELDING SYMBOLS, QUIKVIEW, BEAMS, CHANNELS, DUCTS, PIPES, MENU TOOL BAR, and MORE!

2D/3D Nuts, Bolts, Washers & Holes.

Beams, Channels, Ducts, & Pipes

QuikView

Piping Symbols

MENU TOOL BAR

Menu Toolbar is available for CADKEY6 only.

Geometric Tolerancing

Drafting Symbols

Welding Symbols

Ask about our ANNUAL MAINTENANCE POLICY - Now, with 3-D to 2-D Layout w/ COMPRESS!

AND MUCH MORE!

FREE DRAFTING PACKAGE AVAILABLE for either CADKEY® VERSION 5, 6, or the NEW CADKEY DRAFTER®

ONLY ONE FREE DRAFTING PACKAGE PER USER!
(Please Specify Version)

CALL 703-977-6520

**Programs given away FREE will vary between CADKEY Versions. Not all programs shown will be in some versions. CALL FOR DETAILS.*

Only one FREE Drafting Package per customer.
WE RESERVE THE RIGHT TO REJECT/DENY
ANY APPLICATION FOR FREE DRAFTING PACKAGE.
Some programs shown may not be included in FREE Offer.

HLB TECHNOLOGY

We Make CADKEY Even Better!

LIMITED TIME OFFER! Offer good in US and Canada only.
Prices and conditions subject to change without notice. Programs contained in FREE DRAFTING PACKAGE will vary between CADKEY Versions.

CADKEY and CADKEY Drafter are reg. trademarks of CADKEY, Inc.

DE/CAASE

DE/CAASE: The CAE Solution Handbook. DE/CAASE provides numerical/graphical solutions to 5000+ equations used by structural and mechanical engineers from 100+ books. Requires MS DOS and 640K memory. UNIX requires the XWindows system and the motif graphical user interface. Price: DOS $950; UNIX: $1995. Platforms: DOS, Sun, other. Links via CADL.

Desktop Engineering Int'l Inc.
1200 MacArthur Blvd.
Mahwah, NJ 07430
(201) 818-9700 Fax (201) 818-9707

DE/MEC

DE/MEC: The Mechanism Designer. DE/MEC is a powerful yet simple mechanism design, analysis, animation and optimization tool. Using Windows 3.1 and a mouse, it can also interface with CAD systems. Price: $1495. Platforms: DOS, other. Links with CADKEY via Other.

Desktop Engineering Int'l Inc.
1200 MacArthur Blvd.
Mahwah, NJ 07430
(201) 818-9700 Fax (201) 818-9707

Digitizing Tablets

Numonics offers a complete line of digitizing tablets including the first small format flexible digitizing mat, the GridMaster, the standard small format hardback GraphicMaster II, and the large format AccuGrid tablets including opaque, translucent, and backlighted models. All tablets include an installation utility, Wintab Windows 3.x, and mouse drivers. Price: $395. Links via PC serial port. (See ad page 11)

Numonics Corporation
101 Commerce Drive
Montgomeryville, PA 18936
(215) 362-2766 Fax (215) 361-0167

Draftsman

Draftsman automatically translates scanned raster images into CADKEY CDL files; drawings are made of lines, arcs, and circles. Draftsman users will find that zooms and pans are almost as fast as on drawings created from scratch. Editing is a simple task because the drawing is made of entities that CADKEY recognizes. Price: $199-$1695. Platforms: DOS; SPARCstation; Windows. Links via CDL.

Arbor Image Corporation
230 Collingwood, Suite 250
Ann Arbor, MI 48103
(313) 741-8700 Fax (313) 741-8806

Power Tools Bundle 2.0

Bundle includes an offset for splines, conics, arcs and line/arc paths; advanced extrude command, parapath; supports draft, fillets, rounds, wall thickness, construction planes and an undo. A pocket/boss option allows fillets/rounds at all edges and corners. A path changing program is included with advanced file searching capabilities. Platform: DOS. Links with CADL and CDE. Price: $249.95

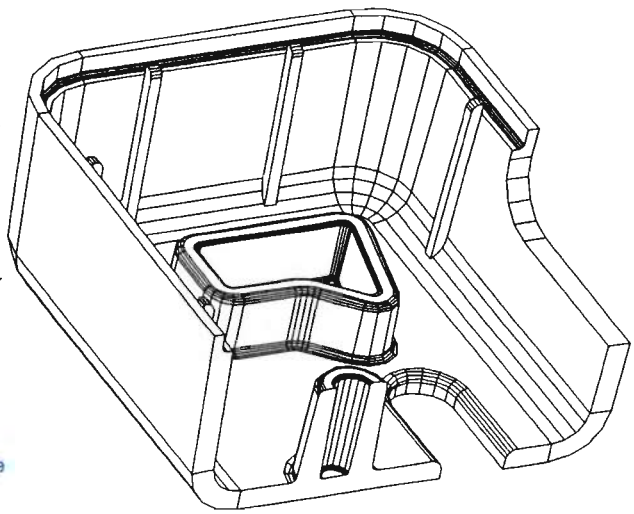
Paradesign
14235 Classique Way
San Diego, CA 92129
(619) 484-8386 Fax (619) 484-8386

OPEN UP THE POSSIBILITIES

WITH CADKEY® AND

THE POWER TOOLS BUNDLE™

- There's never been an easier to use, more powerful 3D enhancement tool for CADKEY!
- Stop wishing you could do that injection molded part in 3D. Now you can, with *The Power Tools Bundle* using its powerful feature capabilities to design with draft, fillets, rounds, and wall thickness.
- CDE speed, construction planes, and CADKEY 6.0 Toolbar support.
- Enhanced offset, extrude, and fillet commands are driven by easy to define parameters input through CADKEY Dialog Boxes.
- *The Power Tools Bundle*, at $249.95, is one of the best bargains for CADKEY users serious about 3D design.
- Included is a path changing program that can quickly search for your files anywhere, anytime. Wildcards characters are supported.



Call your CADKEY/Paradesign Dealer for more information or call/write:

PARADESIGN
14235 Classique Way
San Diego, CA 92129
FAX or Voice (619) 484-8386

Demo Disk available for
CADKEY 5.0 or 6.0
Yearly enhancement/maintenance
agreements are available.

APPLICATIONS

Symbol Generator Bundle

ANSI Y14.5M geometric tolerancing and ANSI/AWS a2.4 welding symbols. Datums. Balloons. Text search and replace. Set and change attributes. Icon toolbar interface. Automatically load CADL programs into menu. Enter text dynamically on screen. Edit and explode dimensions. Redundant line removal. More. Price: $195. Platforms: DOS. Links via CDE, CADL.

JES Engineering
7935 Calle Posada
Carlsbad, CA 92009
(619) 436-5510

DOCUMENT MANAGEMENT

Cadmandu

Cadmandu is a flexible CAD and Document Management System that provides a total solution for managing complex CAD environments. Available for DOS, Windows, and most UNIX platforms, Cadmandu works with your application to improve work flow and increase bottom line productivity. Cadmandu is the most robust, cost-effective Engineering Document Management system available. Price: single user DOS, $495; UNIX, $995. Platforms: DOS, UNIX. Links via Other.

BaraTek, Inc.
1550 N. Northwest Hwy
Suite 209
Park Ridge, IL 60068
(708) 803-6363
Fax (708) 803-6375

DMS Pro

DMS Pro is a powerful and flexible software environment which assists organizations whose objectives are to contain costs, improve time to market, and edge out competition. DMS Pro manages the complete development and distribution of your CADKEY drawings and related documents. Engineering change control cycle time is reduced, and document retrieval is swift and easy ensuring quick responsiveness to customer requests. The outstanding flexibility of DMS Pro allows you to customize a document control system that fits your environment. Call for pricing. Platforms: DOS, Windows, and all major networks and DB servers. Links via CADL.

The van der Roest Group, Inc.
1535 East 17th Street, Suite N
Santa Ana, CA 92701
(714) 542-2201 Fax (714) 543-4931

Engineering Data Management Experts

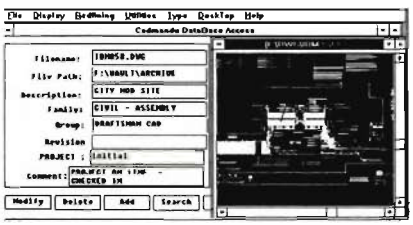
The van der Roest Group, Inc. specializes in helping companies develop smart management strategies which include optimizing the design change control and distribution process. Primary objectives would be to contain costs and improve customer support. The Group's clients include: AT&T, ITT Barton, Texaco, among others. Expertise in database technology in DOS, Windows, networks, and database servers.

The van der Roest Group, Inc.
1535 East 17th Street, Suite N
Santa Ana, CA 92701
(714) 542-2201 Fax (714) 543-4931

File Guru

Manage your CADKEY files using industry standard tools such as Dbase-compatible databases and compressed archivers such as .zip or .arc. Files can be arranged in user definable projects, assemblies, subprojects, etc. and keep track of time, dates, part names and revision levels. Update databases manually, auto-

Cadmandu Drawing Management for CADKEY



Cadmandu is the leading CAD and Document Management system for AEC and Manufacturing industries.

Project and Group management, SQL database, integral EC-Email, Archiving and Revision control form the basis of **Cadmandu's** Document and Application management system.

Multiple applications and documents are managed across local or wide area networks and platforms with ease in a secure, compliant state of the art EDM environment. Multi-format Viewing with Redlining, Plotting, Audit Trail, On-The-Fly Compression, CRC Copy Verification and more.

Cadmandu is the most comprehensive multi-platform CAD and Document Management system available today. DOS, Windows, SUN, HP, RS-6000, SGI and other platforms available. NFS, Netware and NetBIOS compliant. Price and features platform dependent. Contact your local dealer or BaraTek.

BaraTek, Inc.

Phone: 708/803-6363 FAX: 708/803-6375

APPLICATIONS

matically at file creation or modification, or at operator selected times. Call for free demo disk. Price: $399. Platforms: DOS. Links via CDE.

UNITEC, Inc.
52 Pondside Lane
Rocky Hill, CT 06067
(800) 365-9595 Fax (203) 529-2114

KeyView 2.0

KeyView is a cost-effective tool to assist organizations in the quick view and distribution of drawings. With its easy-to-use interface, users can quickly access, view, print, or plot a drawing. Integrates with CADKEY. Works with DOS or Windows. Supports all major networks. Prices: single, $295; 10 users, $1495; 20 users, $2495; unlimited, $4995.

The van der Roest Group, Inc.
1535 East 17th Street, Suite N
Santa Ana, CA 92701
(714) 542-2201 Fax (714) 543-4931

LONGNAME 6

LONGNAME 6 provides 25 character part name capability for CADKEY 6. Functions included are: 25 character Save, Load, List/Load (with drawing sort by index) and Delete with recovery. LONGNAME 6D provides the network user with the additional features of document ownership, read-only restriction, revision level and revision pending warning. Price: LONGNAME 6: $79.95; LONGNAME 6N: $395; LONGNAME 6D: $595. Platforms: DOS only. Links via CADL.

Geri Engineering, Inc.
559 Pilgrim Drive, Suite A
Foster City, CA 94404
(415) 578-8500 Fax (415) 578-6670

FONTS

CADjet E-Z FONTS

CADjet by HLB TECHNOLOGY
We Make CADKEY Even Better!

CADjet E-Z Fonts for CADKEY come in 17 different styles. Loads directly into CADKEY's menus ready to use. Each font comes with a CADKEY FONT MANAGER Program and Drafting Symbol Library. May be purchased separately ($49.95) or all 17 Fonts (Font Pac -$299). Additional Font Pacs 1/2 price. Works with all CADKEY platforms (e.g., DOS, 386, Sun, SGI) and all versions of CADKEY including CADKEY Light, Cutting Edge and CADKEY Drafter.

HLB Technology
P.O. Box 527
Blue Ridge, VA 24064
(703) 977-6520
Fax (703) 977-6531

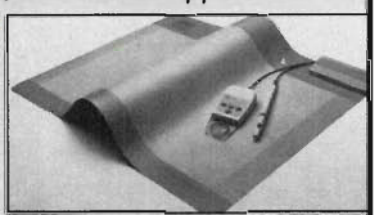
PRECISION FONTS for CADKEY

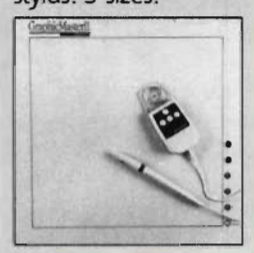
Complete library of high resolution typeset quality fonts for CADKEY. Twenty-five industry standard typefaces with numerous variants provide tremendous flexibility for engineers, designers and artists. Companion product ... MACHINEABLE FONTS...provides portable geometries to NC processing software. Many other uses. Price: $49 to $449. All Platforms. User installable via CADKEY font menu.

ARCDRAFT America
2826 College Street
Jacksonville, FL 32205
(904) 389-4899

More choices. More answers.
Now, graphic digitizers with more specialized features.
Add our unique value to your CAD, GIS, and medical applications.

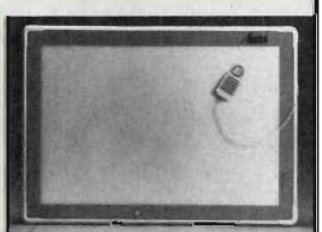
GridMaster™ Roll-Up Digitizing Mat
Desktop performance to go.
Just 1/32 in. thin, 12 oz light. Accuracy, +/- 0.010 in. Resolution, up to 5,000 lpi. Self-diagnostics. Operates all graphics software. 4 or 16 button cursor, or 2 button stylus. 3 sizes.





GraphicMaster II™ Digitizing Tablet
Looks familiar. But it's different.
Tilt top varies tablet angle. Changes field of vision. Accuracy, +/- 0.010 in. Up to 5,000 lpi resolution — industry's highest. Compatible with CAD/CAM/CAE. 6 soft keys. 2 button stylus, and 4 button cursor or 16 button cursor. 2 sizes.

AccuGrid™ Digitizing Tablet
Opaque, translucent, or backlighted models.
Excellent for CAD professionals; optical light panels ideal for GIS, mapping, and medical applications. Accuracy, +/- 0.010 in. or +/- 0.005 in. Resolution, 2,000 lpi. Opaque, 4 sizes. Translucent/backlighted, 6 sizes each.



NUMONICS
800-247-4517
101 COMMERCE DRIVE • PO BOX 1005 • MONTGOMERYVILLE, PA 18936

CADKEY FONTS

Fonts

fonts

ezFonts

Touring

DIGITAL

OldType

HiTech

$49.95* per individual ezFont:

- ❑ Blackline
- ❑ Block
- ❑ Script
- ❑ Touring
- ❑ Helvett
- ❑ QikDraw
- ❑ OldType
- ❑ Kirk
- ❑ Paragon
- ❑ HiTech
- ❑ Slimline
- ❑ Digital
- ❑ Drafter
- ❑ Chrissie
- ❑ Slant

Available for all versions of CADKEY including CADKEY v3,4,5,6, CADKEY Light, Cutting Edge, and CADKEY 'Drafter'.

Each ezFonts includes the FontMan Installation Program & Symbol Library.

We accept MasterCard, VISA, AmericanExpress & Corporate P.O.s

$299.00* for all 15 fonts:

- ❑ FontPac (all 15 Fonts plus FontManager)
- ❑ FREE CircleIT w/ each FontPac Order. ($70 value)

NEW eZ Fonts for CADKEY 'Drafter'

HLB TECHNOLOGY

CALL 703-977-6520 or FAX 703-977-6531

APPLICATIONS

GIS

Digital Maps

Street Maps, County Maps, State Maps, World Maps in digital vector format for use in CADKEY. Maps generated from the USGS Digital Line Graph, CIA World Data Bank, and Census Bureau TIGER Line Data. Price: $25 per 7.5° quadrangle. Platforms: DOS. Links with CADKEY via Other.

Micro Map & CAD
9642 W. Virginia Circle
Lakewood, CO 80226
(303) 988-4940

MANUFACTURING

ACU.Tools +

An NC machining package that creates NC code directly from within CADKEY, using CADKEY part data without translation. ACU.TOOLS+ features include: profile milling, pocketing, drilling, tapping, etc. for hole locations, along with auto-routing of hole locations. ACU.TOOLS+ utilizes climb milling and cuts true arcs using circular and linear interpolation. Wire EDM features include: 2 axis with multiple taper and multiple glue stops, 4 axis with multiple sync point. ACU.TOOLS+ includes a completely configurable universal postprocessor, and true DNC communication software capabilities are available. Price: $2495. Platforms: DOS. Links via CADL, CDE.

Olmsted Engineering
2320 Aero Park Court
Traverse City, MI 49684
(616) 946-3174 Fax (616) 946-7080

CAM Connection

CAM Connection integrates SmartCAM from Point Control Company with CADKEY to provide superior CAD/CAM at an affordable price. CAM Connection is an intelligent translator of design information, automatically creating an ordered tool path while the translation takes place. CADKEY two or three-dimensional design elements are transferred along with other relevant information. Designers may specify varying amounts of part information in CADKEY in accordance with the desired production process. Price: From $800. Platforms: DOS, UNIX. Links via CADL.

Point Control Company
P.O. Box 2709, 1750 Willow Creek Circle
Eugene, OR 97402-0269
(503) 344-4470 (800) 999-7025
Fax (503) 342-8277

Computer Optimized System for Calculating Aluminum Extrusion Dies

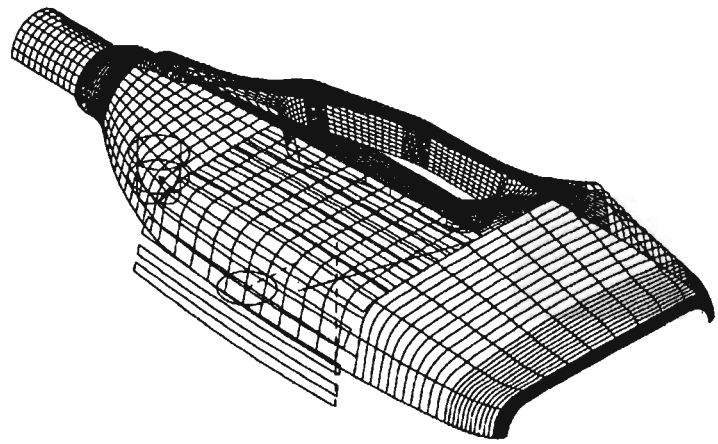
The extruded aluminum product geometry is drawn using CADKEY. COSCAED applies deflection allowances to generate die opening drawing (suitable for wire EDM tool path generation), provides die layout and shows bearing lengths necessary for metal flow control. Limited to solid shape sections only. Price: $15,000. Platforms: same as CADKEY (DDS only). Links via CADL.

COSCAED, Inc.
1732 Breckenridge Road
Orwigsburg, PA 17961
(717) 366-1966 Fax (717) 366-2340

CUTTING EDGE

CUTTING EDGE, the CAM system for three-axis milling machine operations, is the first truly open architecture CAM product on the market (it runs with or without CADKEY). New version 6 now supports: full NURBS surface machining; automatic gouge checking; constant Z depth roughing; 3D dynamic cutter display; IGES surface support; over ninety library Post Processors; and complete CDE environment, all with 100% CADKEY database and human interface. Call for pricing. Platforms: DOS, other. Links via CDE.

Cutting Edge Technologies, Inc.
4 Griffin Road North
Windsor, CT 06095
(203) 298-6433 Fax (203) 298-6490



CUTTING EDGE

ESPRIT

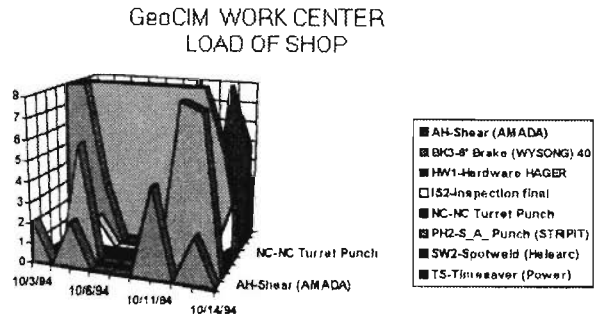
ESPRIT, a CAD/CAM, NC/CNC parts programming and DNC shop floor networking software, supports traditional and non-traditional machining methods. Features parametric design and manufacturing, automated shop floor documentation and full-fledged 3D CAD for mechanical design. Bi-directional file transfer of DXF, IGES, CADL, and HP MI file formats. Platforms: DOS, UNIX, X-Windows. Links via IGES, DXF, CADL.

D.P. Technology Corp.
1150 Avenida Acaso
Camarillo, CA 93012
(805) 388-6000 Fax (805) 388-3085

GeoCIM

GeoCIM is a complete shop floor manufacturing management and control system. GeoCIM consists of Job Estimating, Order Entry, Inventory Control, Capacity Planning (Scheduling), Job Tracking, Purchasing and Sales Analysis. This user-friendly system can include options such as an accounting package that automatically updates Accounts Receivable and General Ledger. Other options include Nesting and Sheet metal, which customizes GeoCIM to sheet metal and plate fabrication for punch presses, lasers and plasma machine tools. Price: $9995. Platforms: DOS. Links via DXF, CADL.

AOB Corporation
7557 Marketplace Drive
Eden Prairie, MN 55344
(612) 829-9060 Fax (612) 829-9328

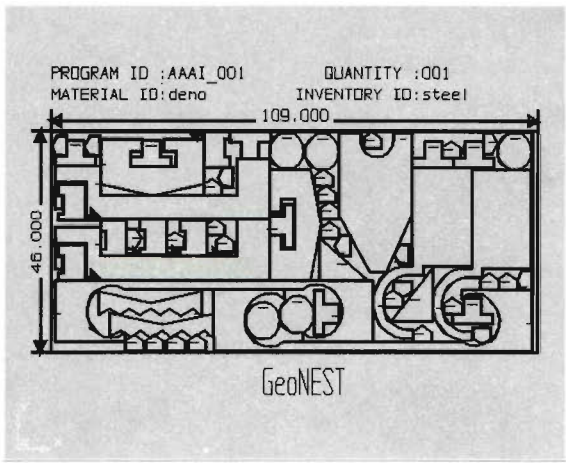


AOB GeoCIM

GeoNEST

GeoNEST provides efficient automatic nesting for an unlimited number of parts and jobs to an unlimited number of sheet or plate sizes and thicknesses. GeoNEST also has options that provide material management, order scheduling, part assembly and customer analysis. GeoNEST is designed for punch presses, lasers, plasma cutters, etc. and directly interfaces to CADKEY. Demo Available. Price: $7995. Platforms: SunSPARC, DOS. Links via CADL, DXF.

AOB Corporation
7557 Marketplace Drive
Eden Prairie, MN 55344
(612) 829-9060 Fax (612) 829-9328



AOB GeoNEST

QUIKCAM

QUIKCAM is a fully automatic postprocessing program which provides fast and easy conversion of CAD files into machine-ready 2-axis CNC files. QUIKCAM's advanced logic determines proper cutting direction, cutting sequence, and placement of the lead-in/out on each profile. It has flexible setup parameters and powerful interactive editing capabilities. Price: $2550. Platforms: DOS. Links via CDL, DXF, IGES.

Microcomputer Technology Consultants, Ltd.
P.O. Box 467 Bewley Bldg, Suite 342
Lockport, NY 14094
(716) 433-7722 Fax (716) 433-1554

SmartCAM CNC Process Modeling

SmartCAM® CNC process modeling systems generate CNC machine code for milling, turning, fabrication, and wire EDM applications, helping engineers inte-

DP TECHNOLOGY

***ESPRIT:** The only CAD/CAM system you need for NC/CNC parts programming, DNC, and shop floor networking.*

Excels at:
- *Live tooling, synchronized turrets, and multi-spindle lathe applications*
- *Production machining centers with rotary 4- & 5- axis positioning capabilities*
- *Wire EDM - a leading programming choice among manufacturers of Wire EDM machines*

Features include:
- *Parametric Design and Manufacturing*
- *Turning, milling, sheet metal, & EDM applications*
- *Bi-directional IGES, DXF, and CADL translators*
- *NURBS surface modeling and machining capabilities*
- *Runs under UNIX on leading workstations*
- *Also supports X-Window under MS-DOS*

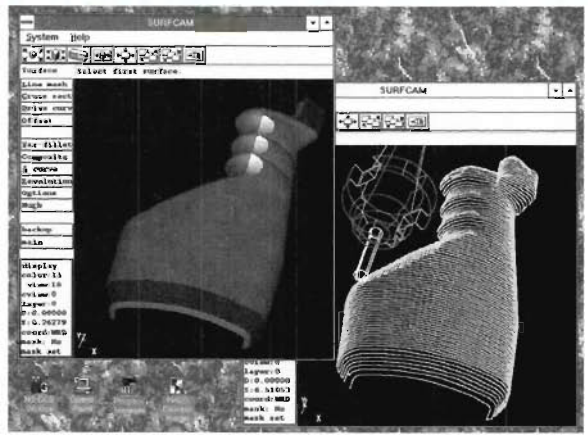
Call DP today for complete details: (805) 388-6000, or Fax (805) 388-3085.

grate and optimize design and manufacturing processes. SmartCAM applications import 2D or 3D CADKEY designs via Point Control's CAM Connection translator for seamless, bidirectional CAD/CAM integration. CAM Connection automatically creates sequential tool path from 2D or 3D CAD files and facilitates feature-based design for manufacturability. For both PCs and workstations, these systems let users compare manufacturing processes and strategies before production, and allow tool-path optimization before cutting the part. The systems then output the machine-ready CNC code. Prices from $800 for CAM Connections. Platforms: DOS, UNIX. Links with: Point Control's CAM CONNECTION.

Point Control Company
P.O. Box 2709, 1750 Willow Creek Circle
Eugene, OR 97402-0269
(503) 344-4470 (800) 999-7025 Fax (503) 342-8277

SURFCAM NC Machining

Known for accuracy, speed, and easy user interface, PC-based SURFCAM has capabilities usually found only on workstation systems costing many times more. Products range from low-cost 2D and lathe systems to simultaneous 3, 4, and 5-axis machining of multiple sculptured surfaces. Data translators and postprocessors included. Price: $2500 to $16,500. Platforms: DOS, 32-bit Windows 3.1, Windows NT. Links via



SURFCAM NC Machining

CADL and IGES 5.1 including trimmed NURBS.(See advertisement on inside back cover)

SURFWARE, Inc.
421 Park Avenue
San Fernando, CA 91340
(818) 361-5605 Fax (818) 361-1919

Tool Designer's Assistant®

This library contains over 3500 3D CADKEY pattern files of industry standard tooling components. Any clamp, locator, rest, fixture, base, etc. can be quickly retrieved and inserted. Complete documentation with solmetric views of every part type, with dimensions, is included. Suggested list price: $95. Platforms: DOS, other. Links via Other.

Carr Lane Manufacturing Co.
4200 Carr Lane Court
St. Louis, MO 63119
(314) 647-6200
Fax (314) 647-5736

TorchPak

An inexpensive, user-oriented CAD/CAM system. DXF format is translated into machine code for flame, plasma, or laser cutters. The cutter path generator extracts entity information, creates a path in the proper order, direction, and kerf side for external and internal paths. Interactive graphics editing with cutter path control, part optimization and more. Platforms: DOS 386/486-based systems. Links with all major CAD programs.

SDG Inc.
1434 W. Ocean View Ave.
P.O. Box 8217
Norfolk, VA 23503
(804) 587-4771 Fax (804) 588-0026

Get Your Designs On Line, On Time

With Our CAD Tooling Library

Bring new products to market faster with the Tool Designer's Assistant®. Compatible with dozens of software formats, it contains scale drawings of more than 6,500 clamps, pins, chuck jaws, modular fixturing, and more. Analyze the tooling drawings in conjunction with your design.

Save the countless hours of building a library from scratch. This CAD/CAM tooling library can be used with any workstation, microcomputer or mainframe. Call (314) 647-6200, ext. 510 for more information and our special low price.

Tool Designer's Assistant.

Carr Lane MANUFACTURING CO.
4200 Carr Lane Ct., P.O. Box 191970
St. Louis, Missouri 63119-2196
® Phone: 314-647-6200, FAX: 314-647-5736

MOLD ANALYSIS

C-Mold

A complete FEM/FDM mold filling, cooling, packing and warpage analysis program for improving plastic injection-molded product quality and performance. Over 2,200 materials in database, unlimited elements for C-Flow. Simulations also available for blow-molding, thermoforming, gas-assisted molding, co-injection, thermoset, RIM and RTM/SRIM. Call for Pricing. Platforms: DOS 486, DEC, IBM, Sun, HP, SGI. Links via IGES.

AC Technology
11492 Bluegrass Pkwy, Suite 100
Louisville, KY 40299
(502) 266-6727 Fax (502) 266-6654

MOLD DESIGN

D-M-E Moldware Expert SystemDESIGN

The D-M-E Moldware Expert System (CADKEY version) offers the capability to mix and match over 100,000 different combinations of mold bases and mold components. The system is integrated within CADKEY allowing easy access to this wide range of mold bases and components. Both 2D or 3D wire frame representations are created with color and layer structures for easy detailing and assembly drawing generation. Price: $1495. Platforms: DOS. Links via Binary CADL.

D-M-E Company
29111 Stephenson Highway
Madison Heights, MI 48071
800-321-3632 Fax 313-544-5707

DRAFT-PAK 2D Mold Designer

Parametric program for plastic injection mold designers. Generates over 45 standard mold components and mold bases via an easy to use dialog box interface. Ejector/core/leader pins, sleeves, bushings, support pillars, fasteners, draft offset, detailing symbols, hole charts, A/B series bases, clearance lines, top and side views for most components, more! Price: $595 +. Platforms: DOS. Links with: CDE.

BAYSTATE TECHNOLOGIES, Inc.
33 Boston Post Rd West, #420
Marlborough, MA 01752
(508) 229-2020 Fax (508) 229-2121

DYNAMICS Mold Design Software

Automatic plate-by-plate breakdowns in 2D/3D that dimension, detail and section mold sets. Comprehensive Bill of Materials. Instant balloons. Unmatched user-definable dimensioning and detailing. CNC module assigns schedule of holes for drilling (X and Y coordinates). Over 100,000 standard and custom National and DME components. Price: $595 to $2595. Platforms: DOS. Links via CADKEY, CUTTING EDGE via CADL, CDE, IGES.

Engineering Dynamics
1169 Tower Road
Schaumburg, IL 60173
(708) 885-3636 Fax (708) 885-4383

MOLD MAKING

Danly-Dynamics Die Design Software

Unlimited combination of standard and progressive Danly die sets and components including punches, springs and IEM products. Automatic Bill of Material with catalog numbers, component descriptions and handy automatic Bill of Material fax file for fast and easy ordering. Components can be rotated, and insertion points are provided for easy, accurate insertions. Price: $495. Platforms: DOS. Links via CADKEY, CUTTING EDGE via CADL, CDE, IGES.

Engineering Dynamics
1169 Tower Road
Schaumburg, IL 60173
(708) 885-36736 Fax (708) 885-4383

MOLDFLOW/CADKEY LINK

LINK empowers DOS and SGI users to design elegant models faster and more accurately. This two-way modeler and translator allows the user to create and modify CADKEY part drawings for MOLDFLOW plastic flow analysis. Annual Maintenance available. Pricing: DOS $2400; Maintenance $500; SGI $3600; Maintenance $800.

Software Ventures, Inc.
Waters Edge Building, 5930 Lovers Lane
Kalamazoo, MI 49002
(616) 344-0708 Fax (616) 381-2965

PC/MOLD CAD Database

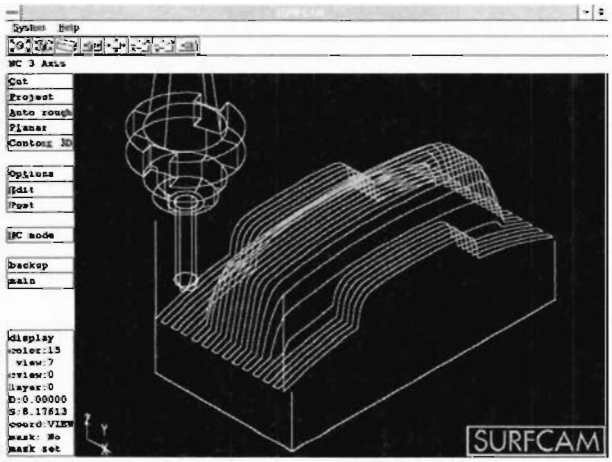
PC/MOLD™ CAD Database is a library of pre-drawn mold component and mold base pattern files, available at no charge to mold design personnel. Patterns are easily inserted into the mold design. Featured products include Mold bases, Pins, Components, Brass fittings, Locks, and UniLifters, and more. Free to qualified mold design personnel. Platforms: DOS. Links via PTN.

D&L Progressive Components
1000 Rand Rd., P.O. Box 70
Wauconda, IL 60084
(708) 487-1000 Fax (708) 487-1003

SURFCAM NC Machining

Developed in a mold shop with 30 years background in precision machining, PC-based SURFCAM has capabilities usually found only on workstation systems costing many times more. Products range from low-cost 2D and lathe systems to simultaneous 3, 4, and 5-axis machining of multiple sculptured surfaces. Data translators and post processors included. Price: $2500 to $16,500. Platforms: DOS, 32-bit Windows 3.1, Windows NT. Links via CADL and IGES 5.1 including trimmed NURBS. (See advertisement on inside back cover.)

SURFWARE, Inc.
421 Park Avenue
San Fernando, CA 91340
(818) 361-5605 Fax (818) 361-1919



SURFCAM NC Machining

PIPING

Isometric Piping Components

Pictorial isometric line illustrations of commonly used piping or plumbing components such as tees, elbows, unions, valves, clamps, hosebarbs, plugs, caps, reducers, etc. for isometric view layouts and parts drawing. Price: $89-$109. Platforms: DOS, DEC, SGI, Sun. Links via PTN files.

Mike Williford
2505 Chamblee-Tucker Rd., Suite 101
Chamblee, GA 30341
(404) 452-8797

PLOTTING

FPLOT 3

FPLOT, a software program, turns your printer into an HP pen plotter. No jagged lines, fast, vary your line width. Works with HP-GL and supports most printers, both black and white, and color. Screen preview-zoom-pan. Has a user-friendly full screen menu interface. Suggested list price: $119. Platforms: DOS. Links via Other.

FPLOT Corporation
24-16 Steinway Street, Suite 605
Astoria, NY 11103
(718) 545-3505 Fax (718) 545-3505

PLUMP-Rx

PLUMP-Rx is plot spooling software. With it you can plot drawings to serial or parallel devices in the background while you continue editing drawings or running other programs in the foreground. Won't slow down foreground applications. Plots to two devices at once. Thousands sold. $175. Platforms: DOS. Links via Plot files.

Eclipse Software, Inc.
301 West Holly Street, Suite U4
Bellingham, WA 98225
(206) 676-6175 Fax (206) 676-0921

PrintAPlot 3.0.3

CAD or graphics software utility with "pop-up" TSR option that turns hundreds of laser, inkjet and dot-matrix printers into high-speed, high-resolution personal plotters. Converts HP-GL files, supports 255 pens/colors, prints standalone or to NetWare print queues up to 20 times faster than a plotter and includes batch printing feature. Users can re-size (from 1% to 600%), rotate and position images, and print A to E size drawings on single or multiple pages. Price: $199. Platforms: DOS. Links via all CAD programs.

Insight Development Corp.
2420 Camino Ramon, Suite 205
San Ramon, CA 94583
(800) 825-4115 Fax (510) 244-2020

APPLICATIONS

Spool-It 4 Lite/Pro

Spool-It Lite and Pro are the ideal background plot spoolers for CADKEY. Cut plot time to a fraction of what you normally experience plotting direct. Lite sends to two devices simultaneously. Pro supports all standard devices and has bells and whistles for maximizing your system's potential. Price: $100/$200. Platforms: DOS.

Spectrum Research of Memphis
690 Stonewall Street
Memphis, TN 37205
(901) 272-7858 Fax (901) 272-0516

PRODUCTIVITY TOOLS

ACTools' Mega-Bundle

Includes ACTool's Utilities, 3rd DIMENSIONS, and ACTView. The utilities include over 40 indispensable functions including offset, dynamic editing, system, and modeling functions. 3rd DIMENSIONS adds drafting functions; "iso dimensions", dual dimensions, "jogged leaders", geometric tolerancing, balloons, dimension validation, etc. ACTView rounds out the Mega-Bundle with a file and document control manager. Manage large assemblies through file associations, assign 30 character descriptors, quickly search for and launch files from multiple directories, control your files and documents with check in/out functions and revision and archival functions. Price: Each $195. Any two $250; Bundle $295. Platforms: DOS. Links via: CADL.

Allan CAD Tools
6450 SE Aldercrest Court
Portland, OR 97267
(503) 659-1262 Fax (503) 659-9935

CADjet by HLB TECHNOLOGY
We Make CADKEY Even Better!

CADjet Master Templates

CADjet Master Templates provide users with over 300 CADKEY commands that can be easily executed directly from any digitizer tablet. Makes using CADKEY fast, easy and shortens work sessions by thousands of keystrokes. Comes in 2 sizes: 11" by 11", $195 (fits most digitizers) and 17" x 11", $295 (for larger digitizers). Separate Templates available for CADKEY V3.1, 3.5, 4.X, 5.X, and 6.X. Upgrade and Customization Kits also available. Price: $75-$125. Platforms: DOS.

HLB Technology
P.O. Box 527
Blue Ridge, VA 24064
(703) 977-6520 Fax (703) 977-6531

CADjet Productivity Tools

Librarian...Consolidates CADL and Pattern Files into a "Rolodex" type interface for easy recognition and retrieval. Works on single computers or on a Network. (Single user license: $149. Site Licenses available). **CircleT!**...Utility program that takes any CADKEY Text and draws it as an arc or circle. Available for CADKEY V5.X, 6.X and CADKEY Drafter. Price: $69.95. Platforms: DOS.

HLB Technology
P.O. Box 527
Blue Ridge, VA 24064
(703) 977-6520 Fax (703) 977-6531

DRAFT-PAK Productivity Software

A high-productivity 2D/3D enhancement package for CADKEY that instantly creates high-level features, fasteners (over 60 types), mechanical elements, sprockets, chains, gears, springs and more, using powerful parametric programs. Also includes 3D to 2D part compression, full-screen symbols, standard symbol libraries (electrical, fluid power, piping, etc.), database utilities, dimension checking, attribute tagging, dynamic external file referencing, coordinate/dual dimensioning, hole charts, level/picture manager, more! ANSI/ISO standard dimensions from "Machinery's Handbook" are incorporated into the menu structure to standardize the design process, increasing productivity up to three times!! Price:$795+. Platforms: DOS; UX-SGI; UX-Sun. Links via CDE.

BAYSTATE TECHNOLOGIES, Inc.
33 Boston Post Rd. West, #420
Marlborough, MA 01752
(508) 229-2020 Fax (508) 229-2121

DRAFT-PAK®
FREE EVALUATION

DRAFT-PAK 6 "Limited Entity" Evaluation Kits are free to qualified CADKEY 6 users.

Please contact your CADKEY / DRAFT-PAK Dealer for details.

DRAFT-PAK Professional Tablet Overlay

The ONLY overlay with icons for the most common functions of DRAFT-PAK Productivity Software and CADKEY. Contains fifteen separate color-coded menu groupings with 376 specific command functions. Icons run a macro that executes multiple keystrokes. Productivity is dramatically increased...no more searching through menu trees! Automatic installation/user-

programmable area. Price: $195+. Platforms: DOS. Links via Macros.

BAYSTATE TECHNOLOGIES, Inc.
33 Boston Post Rd. West, #420
Marlborough, MA 01752
(508) 229-2020 Fax (508) 229-2121

MENU-COMMANDER

MENU-COMMANDER will give you access to over 250 CADKEY functions and 17 immediate mode commands through preprogrammed macros. Definable area for your macros. Several sizes and options are available. Price: $89.95 and up. Platforms: DOS, DEC, SGI, Sun. Links via Macros.

Innovative Design Consultants
354 Broad Street
Trumbauersville, PA 18970
(215) 538-9613 Fax (215) 538-2519

PARAMETRIC SOLUTION

Parametric Solution (PS) offers an automated approach for creating parametric designs in CADKEY. PS supports CADKEY-dimensioned geometry and is dialog box driven. Once a parametric program has been developed, it can be used over and over to generate any variation of the original concept. Demonstration software available on C.A.T. BBS (708) 498-9726, 9600-8-N-1.

Computer Aided Technology, Inc.
3100 Dundee Road, Suite 202
Northbrook, IL 60062-2460
(708) 498-9600 Fax (708) 498-9726

PC Animate

PC Animate from Pacific Motion is a professional 2D paint and animation package. Import still images of your CADKEY models, or DataCAD drawings, and add scanned backgrounds or text notation with a variety of fonts. Create animated presentations with wipes and special effects. Import animations from 3D WorkShop of CADKEY models, and add digitized sound effects. Features full paint tools, including Hi-Color 32,000 color support, and simple graphic interface. Import/export ANI, FLI/FLC, GIF, PCX, TIFF, BMP files. Windows version adds support for True-Type fonts. Price: DOS $199.00, Windows $299.00.(See ad page 22)

Pacific Motion
3145 Geary Blvd., #265
San Francisco, CA 94118
(800) 208-1515 Fax (415) 221-5582

PC-Kwik Power Pak

PC-Kwik Power Pak triples the speed of any PC! All copies are bundled with the award-winning Super PC-Kwik disk cache. Cursor movement and text screens fly...printing output and allotting to files are as much as 600% faster. Fragmented files are a thing of the past with Power Disk, and over 100 boot configurations are available with KwikBoot. Suggested retail price: $129.95. Platforms: DOS, Windows. Links via all CAD applications and more.

PC Kwik Corporation
15100 SW Koll Parkway
Beaverton, OR 97006
(800) 365-5945 Fax (503) 646-8267

PC-Kwik

PROGRAMMING

LaserCAM

An interactive CNC programming system for lasers and burners. Includes precise speed and power control. One code generator is included. Runs 100% within CADKEY. Price: $1000. Platforms: DOS, UNIX. Links via CADL.

Action CAD/CAM Inc.
1517 Kenmore Avenue
Buffalo, NY 14214
(716) 875-4336 Fax (716) 875-3847

TG-Professional v.4.0

A library of over 800 device-independent, 2D/3D geometric and graphics routines for C/C++ MS DOS programmers. This CAD/CAM/CAE programming engine has a wide range of routines that can generate B-Spline, Catmull-Rom, Beziér, quadratic and NURBS surfaces and curves. Create wire frames and silhouettes of solids. Transformations, such as rotate, scale, translate mirror and perspective. 3D polygon clipping; compute the intersection, union and differences of concave and convex polygons. Calculate volumes and areas. Full range DXF input and output and much more. Full source included with purchase. Call for a free 30 page Technical White Paper. Price: $500 (US) $565 (Foreign). Platforms: DOS. Links via CADL.

Disk Software Inc.
109 S. Murphy Rd.
Plano, TX 75094
(214) 423-7288 Fax (214) 423-7288

Tired Of Going UP and DOWN CADKEY's MENUS?

With CADJET Master Templates for CADKEY you'll never get lost in CADKEY's Menus again!

*Digitizer Tablet Not Included.

WE Accept VISA, MC, AMEX and Company POs'.

NEW

CADJET 11x11 Master Template for CADKEY Drafter™ Introductory Special $99

30 Day Free Trial
Fax:703/977-6531

Call 703-977-6520

Prices and conditions subject to change without notice.
Offer good in US and Canada only.

HLB Technology

CADJET Master Templates for CADKEY

Requires Digitizer Tablet

- **CADJET 11x11'DesignerONE' Master Template: _v3.1 _v3.5 _v4__v5__v6...$195.00**
- **CADJET 17x11'PRODesigner' Master Template: _v3.1 _v3.5 _v4__v5__v6...$295.00**

Fits right on your DIGITIZER and saves you thousands of keystrokes

- **Template Upgrade Kits for CADJET 11x11 Master Templates: _v3.5 _v4__v5__v6.....$75**
- **Template Upgrade Kits for CADJET 17x11 Master Templates: _v3.5 _v4__v5__v6.....$125**

Upgrade your CADJET Master Templates with all the latest CADKEY Commands!

- **TEMPLATE CUSTOMIZATION KITS:...$99.00**

Over 200 pre-programmed CADKEY COMMAND Macros to place on your CADJET Master Templates. Includes Software, high quality stick-on commands and instructions.

ALL OUR PRODUCTS FOR CADKEY come with a FULL, UNCONDITIONAL MONEY-BACK GUARANTEE. If for any reason you are not completely satisfied you may return it for a FULL REFUND.

CADJET MASTER TEMPLATES Installed on Digitizer of your choice also available. CALL FOR PRICE!

NEW

- **CADJET LIBRARIAN:__Available for CADKEY v6 Only.....$149**
  Organizes your Pattern Files into a Computerized File Cabinet!
- **CADJET KEYBOARD TEMPLATE for DRAFTING PACKAGE__v5__v6.....$25**

- **CADJET DRAFTING PACKAGE__v4__v5__v6__Cadkey Drafter.....$CALL**

CADJET Drafting Packages are Mechanical Design and Drafting Programs with such advanced features as: Parametric Screws, Nuts, Bolts, Washers, Holes, Beams, Channels, Ducts, Pipes, Welding Symbols, Drafting Symbols, Geometric Tolerancing, AND MUCH MORE!

NEW

CADJET Drafting Packages and Ez Fonts for CADKEY Drafter®
CALL FOR DETAILS!

NEW

CADJET Drafting Packages now have 3-D to 2-D Layout with COMPRESS! CALL

Ez FONTS

- **Ez Fonts for CADKEY®. Works with CADKEY®v3.5,4.X,5.X, 6.X, Cadkey Drafter®,386®, DOS, UNIX, and Light®. .....Ea. $49.95**

17 DIFFERENT STYLES TO CHOOSE. Call for Catalog

- **All 17 Fonts(FONTPAC).....$299**
  Additional FONTPACs 1/2 Price ($149)
- **CIRCLEIT! Text Utility (Draws any CADKEY text on an ARC or CIRCLE).....Ea. $69.95**

Get a FREE CircleIT! with each FONTPAK order.

All prices US$.
PRICES SUBJECT TO CHANGE WITHOUT NOTICE.

CADKEY is a reg. trademark of CADKEY, Inc.

HLB TECHNOLOGY

(703) 977-6520

Fax 703/977-6531

We accept MasterCard, VISA, AmericanExpress & Corporate P.O.s
Site Licenses on most CADJET products available.

HLB Technology
PO Box 527
Blue Ridge, VA 24064

RENDERING

3D WorkShop

3D WorkShop provides the easiest way to render and animate your CADKEY 3D models. Add texture maps and procedural textures to your models. Use the keyframe animation tools for architectural walk-throughs, product demonstrations, or assembly instruction. Spline paths for smooth motion. Unlimited cameras and lights make scene composition quick and easy. Use the built-in rendering for quality Phong shading, or output to the freeware POVRAY ray tracer for full photorealism. Intuitive graphical user interface speeds your work. Supports CADKEY CDL files, output in ANI (animation file format), GIF, PCX, TIFF, BMP, Targa files. Price $299. Platforms: DOS.

Pacific Motion
3145 Geary Blvd, #265
San Francisco, CA 94118
(800) 208-1515
Fax (415) 221-5582

PACIFIC MOTION

Add the impact of 2D & 3D Animation to your CADKEY and DATACAD work

3D WorkShop • PC Animate Plus • PC Animate for Windows

1-800-208-1515

SCANNING

CADKEY Overlay

Read scanned drawings into CADKEY, speeding tracing jobs, cleaning scanned drawings, building 3D models from paper drawings, completing changes with least effort, printing raster data and CAD data in single printout, databasing documents and converting raster formats. Pricing: Tracer $495; Edit/Print $495; Findware/Raster Converter $495. Platform DOS.

Software Ventures, Inc.
Waters Edge Building, 5930 Lovers Lane
Kalamazoo, Michigan 49002
(616) 344-0708 Fax (616) 381-2965

XFORMER®

XFORMER software inputs TIFF/RLC/PCX and outputs DXF/PS/HPGL for CAD, GIS, sign-making, and technical graphics through editing images and vectors and vectorizing line/area drawings. XFORMER offers automatic, interactive, and overlay vectorization methods and numerous tools on polylines, arc, Beziérs, and B-Splines. DOS Standard/LF version handles A-E or A4-A0 drawings; profile version outputs continuous lines/arcs. Price: Standard/LF $449/$1449; Profile version $649. Platforms: DOS. Links via DXF.

Elcee Computek, Inc.
500 NE Spanish River Blvd., #105
Boca Raton, FL 33431
(407) 750-8061 Fax (407) 750-8057

SERVICE BUREAUS

Rapid Prototypes

Plynetics is a full-service rapid prototyping service bureau offering Stereo Lithography, Selective Laser Sintering (makes parts in Nylon & Polycarbonate), CNC direct from CAD, Cast Urethane Duplications, Injection Molded Parts from Low Cost Tooling, Die-Cast Prototypes and Patterns for Investment Castings. In addition to rapid prototyping technologies, Plynetics has a full-on model shop.

Plynetics Corporation
627 McCormick Street
San Leandro, CA 94577
(510) 613-8300

APPLICATIONS

Technical Service Bureau

Technical Service Bureau providing large document scanning, CAD drafting, file conversion, color raster plotting. Existing hard copy documents up to 42 inches wide and any manageable length scanned and edited to your engineering specifications. We can help you meet your next project time deadline under budget and ahead of schedule. Price: call for quote.

Access Technologies, Inc.
18110 W. Bluemound Road
Brookfield, WI 53045
(414) 797-9189 Fax (414) 797-8280

SHEET METAL

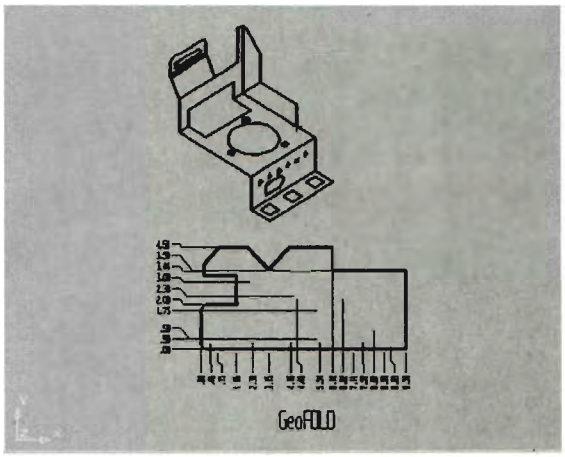
DieCAM

An automatic compound die design system. Takes user through parameter selection, generates 2D and 3D drawings, spring placement, knockouts, standard components, BOM. Runs 100% within CADKEY. Price: $2500. Platforms: DOS, UNIX. Links via CADL.

Action CAD/CAM, Inc.
1517 Kenmore Avenue
Buffalo, NY 14214
(716) 875-4336 Fax (716) 875-3847

GeoFOLD

GeoFOLD automatically creates a fully-dimensional flat of parts assemblies from a 3D design. From a single-sided wire frame model, GeoFOLD produces a full double-sided, solid, ready part, fully prepared for CADKEY's Automatic Shading. GeoFOLD also provides full bend reliefs, automatic notching, and a table



GeoFOLD

showing labeling of bend lines and "K" (neutral axis) factors. GeoFOLD even unfolds conical surfaces and allows for parametric modifications. It does all this from simple CAD wire frame drawings of 2D and 3D designs. GeoFOLD interfaces with GIP and GeoPOINT. Demo Available. Price: $3975. Platforms: SunSPARC, DOS. Links via CADL, DXF.

AOB Corporation
7557 Marketplace Drive
Eden Prairie, MN 55344
(612) 829-9060 Fax (612) 829-9328

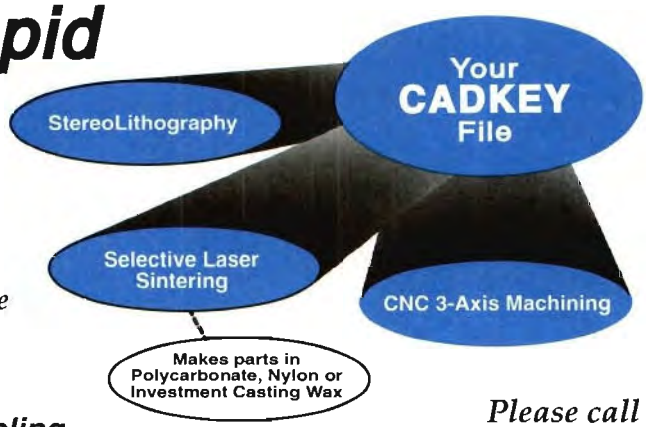
GeoPOINT IV

GeoPOINT IV is a total sheet-metal CNC fabrication system with direct interfaces to CADKEY. GeoPOINT IV includes automatic folding and unfolding, automatic tool programming, and tool path optimization for punch presses, lasers, and plasma machines. With

Plynetics Has A Rapid Prototyping Solution For You

Plynetics will use your ***Cadkey*** *database to rapidly make prototypes using* ***StereoLithography, Selective Laser Sintering*** *or* ***CNC Machining****. Plynetics can then provide further tailored solutions such as:*

- ***Urethane Duplications***
- ***Short-Run Tooling***
- ***Die-Cast Prototypes***
- ***Investment Casting Patterns***

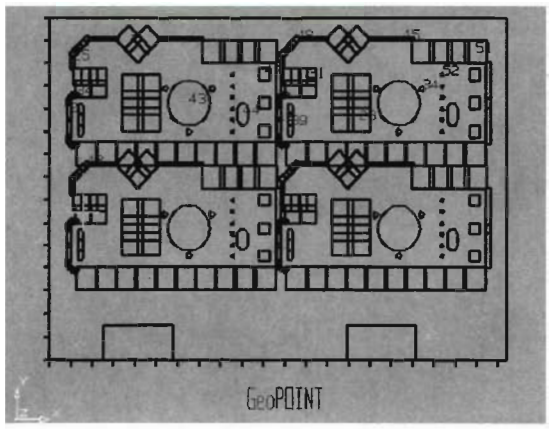


Please call to discuss your possible application.

(510) 613-8300

Fax your drawings for next day quote!
Fax (510) 632-6682

Plynetics Corporation *627 McCormick Street, San Leandro, CA 94577*



GeoPOINT IV

CADKEY, nesting is semi-automatic on given sheet sizes. Automatically interfaces with all other AOB "Geo" software products. Demo available. Price: $7995. Platforms: SunSPARC and DOS. Links via CADL, DXF.

AOB Corporation
7557 Marketplace Drive
Eden Prairie, MN 55344
(612) 829-9060
Fax (612) 829-9328

JETCAM I, II, AND II Plus

High performance CNC programming system for punches, burners, lasers, water jets, and combination punch/plasma machines. Features component design with dimensioning, automatic tooling, interactive and automatic nesting, automatic path and turret optimization, materials and component order libraries, automatic collision checking and "hole" avoidance. Supports machine canned cycles and sub-routines. Call for pricing. Platforms: DOS only. Links via DXF, IGES.

JETCAM America, Inc.
P.O. Box 128
Walterville, OR 97489
(503) 896-0265
Fax (503) 896-0268

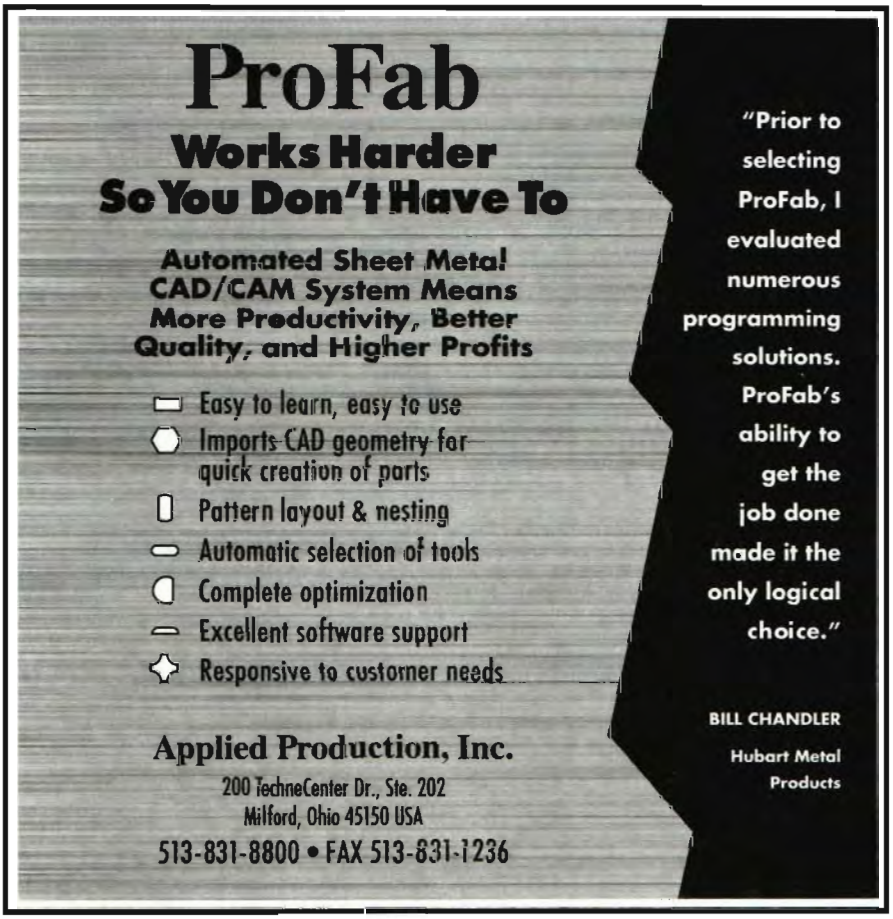
ProFab

ProFab is the first true knowledge-based system for sheet metal manufacturing application. Through its in-depth knowledge of your punch press, tooling and manufacturing techniques, ProFab automates the task of programming your CNC punch press while keeping you in control of the process. From its inception, ProFab was designed to be much more than just a programming tool. With advanced techniques for tool selection and turret loading, along with the industry's most efficient machine optimization routines, ProFab increases your productivity on the shop floor. Price: $7750, plus Machine Interfaces. Platforms: DOS. Links via CADL or DXF.

Applied Production, Inc.
200 TechneCenter Drive, Suite 202
Milford, OH 45150
(513) 831-8800 Fax (513) 831-1236

ProFold

ProFold is a powerful flat pattern development program capable of folding or unfolding CAD drawings of sheet metal parts with bends of any angle. Working within CADKEY, ProFold produces accurate flat blank layouts in seconds, eliminating the errors found in manual calculations. ProFold is easy to use and includes menus and dialogue boxes to assist you in specifying bend information. Parts may be drawn with or without material thickness. Hole patterns and cutouts are automatically identified and correctly compensated. A chart is generated describing each of the



bend areas. Price: $1495. Platforms: DOS. Links with CADL.

Applied Production, Inc.
200 TechneCenter Drive, Suite 202
Milford, OH 45150
(513) 831-8800 Fax (513) 831-1236

qSHEET/qUNFOLD

From a simplified single-sided "shorthand" input model, output images are generated automatically, incorporating bend reliefs and corner setbacks. Output files facilitate correction of input geometry errors, and document materials, finishes, bend radii, "k" factors and bend angles. qSHEET produces fully defined (double sided) wire frame, rendered, and hidden line removed images for visualization of design, and paper drawing input. qUNFOLD produces a complete dimensionally compensated "flat" file which is automatically dimensioned, and suitable for use in manual or automatic punch path generation, and brake operation. Comprehensive (40+ page) manual. Price: qSHEET $695; qUNFOLD $1995. Platform: DOS. Links with CADL.

Consulting Services International
14621 Titus Street
Van Nuys, CA 91402
(818) 994-8881 Fax (818) 994-8881

SigmaNEST

Comprehensive sheet metal nesting and profiling software. Supports fully automatic feature-based, as well as manual, nesting. Powerful work order management and NC programming in ISO and ESSI formats. SigmaNEST automatically identifies internal contours and nests small parts in large part cutouts. Stitch-cut and burn-ins fully supported. Price: $5000. Platforms: DOS 386 and over. Links via CADL, DXF.

Sigmatek
13333 BEL-RED Road, Suite 104
Bellevue, WA 98005
(206) 649-9021 Fax (206) 643-8008

SIMULATION

VERICUT

VERICUT is a software program that simulates the cutter motion and the material removal of an NC tool path. Programming errors or inefficient motion are visually detected during the simulation process, which aids the NC programmer in correcting the tool path. VERICUT provides increased programmer and machine tool productivity. Price: $3000-$10,000. Platforms: 386/486-based PCs; Sun, SGI, IBM, HP, DEC UNIX workstations, DEC VAXstation. Links via CADKEY SOLIDS, CADL.

CGTech
15375 Barranca, Bldg L
Irvine, CA 92718
(714) 753-1050 Fax (714) 753-1053

SURFACING

FastSURF

FastSURF is a surfacing program which runs within CADKEY, Surf Mill, and the Advanced Modeler. Beyond just building surfaces, FastSURF supports: intersection, projection, verification, editing, rendering, SLA, IGES, CAM, advanced splining, a planes module, flat patterns, and more. Call for pricing. Platforms: DOS, SGI, Sun. Links via CDE.

FastSURF
6 South Washington, Suite 14
Sonora, CA 95370
(209) 536-0591 Fax (209) 536-0592

TRANSLATORS

NOAH/CXF

NOAH/CXF provides CATIA users with the capability to download 3D and 2D CATIA models into CADKEY or other PC CAD systems via the DXF format as well as upload DXF files into either SPACE or DRAW mode in CATIA. Includes user-friendly X-Windows interface and batch submission facility. $6000. Platforms: RS/6000 A/X. Links with DXF format.

NOAH Technologies, Inc.
250 Pennsylvania Avenue, P.O. Box 176
Salem, OH 44460
(216) 332-2737 Fax (216) 332-8158

QuickTrace for Windows

QuickTrace for Windows can import TIFF, PCX, MSP and BMP raster files for conversion to CGM, EPS and DXF vector files. The DXF file from QuickTrace for Windows can be imported into CADKEY for use with CADKEY applications. QuickTrace for Windows can edit raster files prior to conversion to DXF. Price: $295. Platforms: Windows 3.1. Links via DXF files.

Mitsubishi International Corporation
520 Madison Avenue
New York, NY 10022
(212) 605-2339 Fax (212) 605-1847

VIEWERS

AutoVue

AutoVue is excellence in technical document viewing and management. The program features powerful viewing, printing, plotting, file conversion and overlaying of CAD, vector, raster, bitmap and text file formats. Optional Redlining and a Document Database

FILE VIEWING & DOCUMENT MANAGEMENT

MULTI-FORMAT

- CADKEY.
- AutoCAD ®DWG, DXF™, DXB, SLD.
- Generic CADD.®
- Intergraph Microstation.
- HP-GL, HP-GL/2, PCI plot-files.
- Scanned files RLC, RLE, NRF.
- TIFF Group 3 & 4, Fax.
- CALS CCITT Group 4.
- Text ASCII and Wordperfect.
- Wordperfect WPG, Lotus PIC.
- PCX, GIF, BMP, and more...

MULTI-PLATFORM

- DOS on any PC
  XT, AT, 386, 486
  Full ADI support
- MS-Windows 3.0, 3.1
- Unix Workstation:
  Sun Sparc, HP series 700 & 800,
  IBM RISC/6000, SGI, DEC Station.

AutoVue

AutoVue is a powerful and feature rich software program that will enhance the productivity of anyone using a PC or workstation. AutoVue can be used as a standalone program or on a network. Through powerful application launching and scripting features, AutoVue can be fully customized and integrated within your computing environment.

Today, companies may use a variety of computers such as PCs running DOS or Windows as well as Unix workstations. Companies also use a variety of applications that generate different file formats. AutoVue provides you with a single viewing program that is available for different platforms and supports many popular file formats.

View and Browse

Rapidly view files in any supported format. Browse through your directories quickly. Zoom, pan, change viewpoints, select layers etc...

Print and Plot

Print or plot any file to a variety of printers and plotters including ADI devices. Tag files for batch operation.

Launching Applications

Launch any application related to the document being viewed through a customizable menu.

RedLine [1]

Mark-up and annotate your drawings for revisions without altering the original files.

Overlay

Overlay any number of documents (vector, raster or text) for conversion or hard copy output.

Scripting

Create script sequences of AutoVue commands.

Management [2]

Organize and manage your files with a customizable Document DataBase Management System.

File Conversion

Convert any supported file format to DXF, SLD, HPGL, Calcomp PCI, PCX, Postscript, TIFF, GIF and more.

User Friendly

Intuitive user interface. Many customizable options and features.

OmniPrint/Plot

Standalone program to print or plot files in any of the supported formats. It includes facilities to browse, select and tag files for batch operation.
Supports a variety of printers and plotters including ADI devices. You can even print plot-files on a dot matrix or laser printer!

OmniConvert

Standalone program to convert from any of the supported formats to: AutoCAD DXF and SLD, HP-GL, Calcomp PCI 906/907, PCX, TIFF, GIF and more. Use it to import small raster files or HP-GL plot files into AutoCAD or convert CAD to Raster.

1- With RedLine Module.
2- With DDBMS Module.

Cimmetry Systems Inc. (C.S.I.)

Tel: 1-800-361-1904
1-514-735-3219
Fax: 1-514-735-6440

U.S.A: 1430 Mass. Ave., suite 306, Cambridge, MA. 02138-3810
CANADA: 8300 Cote de Liesse, ste 201 St-Laurent, PQ, H4T 1G7

AutoVue, OmniPrint/Plot, OmniConvert and Integrator are trademarks or registered trademarks of Cimmetry Systems, Inc. All other brand and product names are trademarks or registered trademarks of their respective owners.

Management System enables users to build document viewing and management solutions tailored to their needs. Suggested list price: $250. Platforms: DOS, Windows, UNIX. Links via: Software.

Cimmetry Systems Inc.
1430 Massachusetts Ave., Suite 306
Cambridge, MA 02138-3810
(514) 735-3219 Fax (512) 735-6440

CADView™

CADView is the only viewer for CADKEY 4, 5, & 6 part and pattern files. Complete control over drawing layouts, views, levels, and display scale. Prints, plots, faxes and exports CADKEY data to other Microsoft Windows applications. Keyboard accelerators allow full functionality without a pointing device. Includes a free batch printer server. No CAD expertise required, easy to use, no learning curve. Easily integrated into other applications. Requires PC and MS Windows. Site licenses available. Call for price and a list of other file formats supported. CADView is an affordable solution to secure, enterprise wide data access. Call for pricing. Platforms: Windows.

Information Technology International Corporation
86 Juniper Lane
South Windsor, CT 06074
(800) 229-2238 Fax (203) 644-3069

PERIPHERALS

The Metrecom

The Metrecom, a "liberated CMM", is a portable six-axis Coordinate Measuring Machine (or digitizer) with an articulated arm for scanning and measuring simple to complex, points, surfaces and shapes in 3D! Measures all materials without light, magnetic, or sound interference. Because of the Metrecom's open architecture design, the 3D data can be used seamlessly with a variety of design or quality control software packages, including CADKEY, AutoCAD, and many others. Price: $12,900.

FARO Technologies, Inc.
125 Technology Park
Lake Mary, FL 32746
(800) 736-6063 (407) 333-4181

SPARC Your PC

SPARCard™ is a complete SPARC workstation on a PC/AT board that lets you run both DOS and Windows, and high-end CAD/CAM/CAE software like Varimetrix, from your PC. Supports ISA/EISA PCs, and shares PC monitor, mouse and keyboard. Includes all of the standard workstation I/O ports like Ethernet, SCSI, serial port and SBus expansion slots. Runs the Solaris (SunOS) operating system, and is 100% binary compatible with Sun Microsystems workstations. PC continues to run native DOS/Windows. Performance is not degraded even when both PC and UNIX applications run simultaneously. SPARCard 1+ is 15.8 MIPS (25 MHz); SPARCard 2 is 28.5 MIPS (40 MHz); SPARCard 2+ is 35.6 MIPS (50 MHz). Price range: $2495-$8995.

OPUS Systems
3000 Coronado Drive
Santa Clara, CA 95054
(408) 562-9340 Fax (408) 562-9341

Tektronix Color Printers

Tektronix offers a complete family of color printers for the CADKEY user. Phaser III PXi from Tektronix offers true plain-paper printing on any media size from 4 by 6 inches to 12 by 18 inches. Phaser IISDX provides photographic quality output on letter-size paper and transparencies. Phaser 200i combines superb color quality and fast print speed (30 seconds per page) for printing on letter-size paper and transparencies. All offer 300 dpi resolution, Adobe PostScript Level 2, and auto-switching Parallel, serial, AppleTalk and optional TCP/IP Ethernet and EtherTalk interfaces. All are compatible with CADKEY version 5.0 and above. Phaser 200i lists for $5995; Phaser III PXi lists for $9995; Phaser IISDX lists for $9995. Platforms: Sun, HP, IBM, SGI, DEC, Ultrix and VMS, DOS compatibles and Mac; Links via CADKEY driver for color PS printers.

Tektronix, Inc.
P.O. Box 1000, MS 63-630
Wilsonville, OR 97070
(800) 835-6100 Fax (503) 685-3063

Xi 486 & Pentium Workstations

Fast, very competitive workstations for CAD based on Intel 486 and Pentium Technology, with 32 bit VESA Local BUS and EISA architecture. 8 MB to 128 MB on Mother Board, 32 bit VESA Local BUS and EISA IDE and fast SCSI-2 controllers from 240 MB to 2.9GB hard drives, 17", 20" and 21" FST 1600 x 1280NI color

Xi Computer Corporation

monitors, Diamond, #9 and Matrox VESA LB video boards, multimedia, Xi, mid- and full-tower case. Prices start from $1999.

Xi Computer Corporation
980 Calle Negocio
San Clemente, CA 92673
(800) 432-0486 Fax (714) 492-6571

TRAINING AND EDUCATION

CADKEY AND DataCAD Instructional Materials

Microcomputer Education Systems, Inc. has a full line of instructional books and video tapes for new CADKEY and DataCAD users. See our ad below.

Microcomputer Education Systems, Inc.
4900 Blazer Parkway
Dublin, OH 43017
(614) 793-3069 Fax (614) 766-3605

INSTRUCTIONAL MATERIALS FROM
Microcomputer Education Systems Inc.
4900 Blazer Parkway, Dublin, Ohio 43017
phone: 614-793-3069 fax:614-766-3605

Beginning CADKEY 6, A complete, project-based guide to release 6. Includes info on "Layout Mode", "Picture It" and "CADKEY Analysis". 424 pages, ISBN Number 1-880544-18-0, $36.95

Beginning CADKEY Light, Includes projects on basic CADKEY concepts, 3D construction, detail drawing, descriptive geometry, and illustration tricks. Great for schools and colleges. 240 pages, ISBN Number 1-880544-12-1, $29.95

Beginning DataCAD, A project-based guide to DataCAD 4.06 and 128. Includes info on traditional architectural drawing as well as 3D modeling. Praised by both architects and teachers. 244 pages, ISBN Number 1-880544-00-8, $29.95

Architectural CAD Workbook, An introduction to DataCAD for beginning students. 150 pages, $15.95

Mechanical CAD Workbook, An introduction to CADKEY Light for beginning students. 180 pages, $15.95

The CADKEY Light Videos, five video tapes correlated with *Beginning CADKEY Light* provide over 8 hours of instructional content. $435 per set of 5 (tapes also available individually).

The DataCAD Videos, ten video tapes correlated with *Beginning DataCAD* provide over 8 hours of instructional content. $750 per set of 10 (tapes also available individually).

The Architectural CAD Video, One 2 hour tape divided into separate sessions for each project found in the *Architectural CAD Workbook*. $150 (includes site license for the *Architectural CAD Workbook*).

The Mechanical CAD Video, One 2 hour tape divided into separate sessions for each project found in the *Mechanical CAD Workbook*. $150 (includes site license for the *Mechanical CAD Workbook*).

The CADKEY 6 Videos, video instruction correlated with the contents of *Beginning CADKEY 6*. Available August, 1993. Price to be announced.

CIM Solutions & Networking, Inc.

CIM Solutions & Networking is a certified Cadkey Training Center and distributor. We offer Cadkey beginner and advanced classes monthly. Our instructors have years of experience in the CAD/CAM field and understand your design problems. We also will train at your site.

CIM Solutions & Networking, Inc.
2200 N. Canton Center Road, Suite 210
Canton, MI 48187
(313) 981-7470 Fax (313) 981-7473

KEYSOLUTIONS Magazine

Bi-monthly magazine features in-depth, up-to-date information, concurrent engineering issues and methods, hardware/software tools for CAD, and tips, techniques and tutorials on CADKEY, CADL, and CDE programming. Free subscription available.

KEYSOLUTIONS Magazine
P.O. Box 11978
Spokane, WA 99212-1978
(509) 928-5169 Fax (509) 928-4937

Mastering CADKEY 6.0

Complete step-by-step learning package for classroom use or individualized instruction. Twenty units (each with hints, notes, and reviews) cover all versions through Version 6. Includes advanced activities, multiple appendices, and practice drawings on both 3 1/2" and 5 1/4" disks. Price: $36.99.

Glencoe Publishing Company
P.O. Box 543
Blacklick, OH 43004-0543
(800) 334-7344 Fax (614) 860-1877

CADKEY USERS GROUPS

A network of worldwide Users Groups provides a forum for learning and sharing, and a vehicle for voicing common interests and concerns. Have fun. Get involved. Join your local CADKEY Users Group. If there isn't a Users Group in your area, start one. For information, call the Users Group Coordinator at Cadkey, Inc. (203) 298-8888.

AMERICAS

BRAZIL

Grupo de Usarios CADKEY de Brasil
Greater Sao Paulo Area
Moheb nasr Bismarck Nasr
Valmet Company
Sao Paolo, SP

CANADA

CADKEY UG at the University of Newfoundland
Saint John's Area,
Dr. David Bonham
Manufacturing Technology
Fredericton, New Foundland
(506) 453-353

L'Association de Utilisateurs de CADKEY
Greater Montreal Area Quebec
Manon Dube
170 Montee de Liesse
Villa Saint Laurent
H4T 1N6

USA (Alphabetically by State)

Greater Alabama-Georgia CADKEY UG
Jeffrey Simon
CIMPRO
Opelika, Alabama
(205) 749-9705

Arizona CADKEY UG
Dwayne Quatier
Acoustic Imaging
Phoenix, Arizona
(602) 496-6681

CADKEY UG of Northern California
Mike Poelman
Poelman's Design Service
Campbell, California
(408) 378-9980

CADKEY UG of San Joaquin Valley
Central California
Mark Arnett
Fresno, California
(209) 432-8099

Ventura County CAD/CAM UG
Brian Gillespie
Computer& Systems Engineering Co.
Agoura, California
(818) 991-7463

CALCAD
San Fernando Valley
James Moschenross
Burbank, California
(818) 845-1235

San Diego CADKEY UG
San Diego, Imperial, Orange Counties
Alex Morales
Entech International, Inc.
San Diego, California
(619) 695-0102

Southern California CADKEY UG
San Diego, Riverside, and Orange Counties
Jim Neeley
3-D CADware
Temecula, California
(714) 676-3223

CADKEY UG at the University of Colorado
Denver, Boulder Areas
Andreas Vlahinos
Denver, Colorado
(303) 556-2370

Colorado CADKEY UG
Greater Denver, Colorado
Sue Boland
MCAD Technologies
Lakewood, Colorado
(303) 969-8844

Mid-Connecticut CADKEY UG
Steve Kidd
CIMTECH
Branford, Connecticut
(203) 488-3032

Northern Connecticut CADKEY UG
Western Massachusetts
Mitchell White
Plastics on Wheels
Torrington, Connecticut
(203) 489-5089

Southern Connecticut CADKEY UG
Steve Kidd
CIMTECH
Branford, Connecticut
(203) 488-3032

Central Florida CADKEY UG
Spence Quilling
Metra Electronics
Holl Hill, Florida
(904) 257-1186

C.A.T. CADKEY UG
Chicago Area
Robert Roberman
Computer Aided Technology
Northbrook, Illinois
(708) 498-9600

Northern Illinois CADKEY UG
Greater Chicago Area
Paul Bergetz
CADPRO Chicago
Arlington Heights, Illinois
(708) 640-1853

New England CADKEY UG
Rhode Island
Dana Seero
Computer-Aided Products
Marblehead, Massachusetts
(617) 631-9662

Chesapeake Bay CADKEY UG
Greater Washington, D.C.
Tom Warner
Maritime Institute of Technology
Linthicum Heights, Maryland
(410) 879-6010

Minnesota CADKEY UG
Upper Mid-West
Tom Loftus
Anoka-Ramsey Community College
Coons Rapids, Minnesota
(612) 427-2600

St. Louis Area CADKEY UG
John Lucas
Ultra-Comp Corporation
Earth City, Missouri
(314) 949-9710

CADKEY UG - College of Staten Island
Changmin Kim
College of Staten Island
Staten Island, New York
(718) 390-7524

Central New York CADKEY UG
Binghamton, Syracuse, Troy, and New York
Douglas Miller
Vestal, New York
(607) 721-4422

New York-New Jersey CADKEY UG
Arkady Kleyner
American Training Center
Forest Hills, New York
(718) 544-8100

CADKEY USERS GROUPS

Northern New York CADKEY UG
Buffalo, Rochester, and New York
Robert Hefner
Rochester Institute of Technolgy
Rochester, New York
(716) 475-2205

Ohio CADKEY UG
Karen Lorenzo
Progressive Computing
Mentor, Ohio
(216) 255-0460

Oregon CADKEY UG
Greater Portland Area
Anne McKasson
CTR Business Systems
Portland, Oregon
(503) 293-8627

Eastern Pennsylvania CADKEY UG
Barry Bennett
Micro Control, Inc.
Yardley, Pennsylvania
(215) 321-7474

Texas CADKEY UG
Austin, Houston, and Dallas Areas
Michael Leesley
MLC CAD Systems
Austin, Texas
(512) 288-9126

Utah CADKEY UG
Paul Findlay
Mountain West Computer Systems
Springville, Utah
(801) 489-5497

CADKEY UG Luncheon Meeting
State of Washington
Grizz Wallace
CAD WEST
Seattle, Washington
(206) 281-8086

Northwest CADKEY UG
State of Washington
Joe Brouwer
Redmond, Washington
(206) 623-1403

Wisconsin CADKEY UG
Mike Roberts
CAD Professionals
Brookfield, Wisconsin
(414) 782-9199

EUROPE

BELGIUM

CADKEY UG of Belgium
Jos Vliegen
Sprl VLECAD Bvba
Genk B-3600
32-89-35-05-83

FRANCE

Club Utilisateur CADKEY
France, greater Paris area
Raymond Douguet
Ecole nationale Superieure d'Arts
Paris
33-1-44-24-62-9

GERMANY

CADKEY UG of Germany
Ulrich Oehler
EDV Beratung Oehler
Hochheim 2 D-6203
49-6145-4882

SWEDEN

CADKEY UG of Sweden
Mr. Bertilson
Flygkonsulteri Malmo AB
Malmo-Sturup 23032
46-40-500-340

UNITED KINGDOM

CADKEY UK Users Group
Mark West
Marlin Design
Enterprise House, Rassau Indus
Ebbw Vale, Gwent NP3 5SD
44-923-679-324

PACIFIC

AUSTRALIA

CADKEY UG of Australia
State of Victoria
David Lowe
Zagames-Mathew Flinders Hotel
Chadstone, VI 3148
61-3-551-3077

NEW ZEALAND

Central Regional CADKEY UG
Lower North Island
Kevin Sullivan
Interlock Group
Miramar, Wellington
64-4-388-8355

Northern Regional CADKEY UG
Upper North Island
Brett May
Interlock Group
North Shore Mail Centre
Auckland
64-9-415-7111

Southern Regional CADKEY UG
South Island
Dave Scottorn
PDL Holdings, Limited
Christchurch
64-3-338-9059

SOUTH KOREA

Dongbang CADKEY UG
Greater Taeku area, South Korea
Dongbang CAD/CAM Engineering Company
Daemyung-5Dong, Taeku
82-53-652-1527

Hyundae CADKEY UG
Greater Seoul Area
Hyundae CAD/CAM Company
289-6, Dokan-1 Dong
Kuro-ku, Seoul
82-2-851-1214

TAIWAN

CADKEY UG - Sinotech Research & Development
Mr. Lin
Sinotech Research & Development
Taoyuan, Taiwan
886-3-322-2222

CADKEY UG - Far East Machinery Co.
Mr. Lu
Far East Machinery Company, Ltd.
Chiayi, Taiwan
886-5-276-6171

CADKEY UG - Fujitec Taiwan Company, Ltd.
Mr. Jiang
Fujitec Taiwan Company, Limited
Hsinchu, Taiwan
886-35-981-414

CADKEY UG - Jerrold Communications
Mr. Wang
Taipei, Taiwan
886-2-918-9145

CADKEY UG - PCC
Mr. Chen
Changhua, Taiwan
886-4-769-1714

CADKEY UG - Roc-Spicier, Limited
Mr. Chen
Taoyuan, Taiwan
886-3-361-6184

CADKEY UG - Taiway, Limited
Mr. Chang
Hsinchu, Taiwan
886-35-983-601

Company Index

A
AC Technology 16
Access Technologies, Inc. 23
Action CAD/CAM, Inc. 20, 23
Alden Computer Systems Corp. 7
Allan CAD Tools 18
AOB Corporation 14, 23, **23***
Applied Production, Inc. 24, **24***
Arbor Image Corporation 9
ARCDRAFT America 11
Architectural CAD of Colorado 6
B
BaraTek, Inc. 10, **10***
BAYSTATE TECHNOLOGIES, Inc. 6, 16, 18
C
CAD/CAE Technologies 6
Carr Lane Manufacturing Co. 15, **15***
Celestial Software 6
CGTech 25
CIM Solutions & Networking, Inc. 28
Cimmetry Systems Inc. 25, **26***
Computer Aided Technology 20, **IFC***
Consulting Services International 25
COSCAED, Inc. 13
Cutting Edge Technologies, Inc. 13
D
D&L Progressive Components 17
D-M-E Company 16
D.P. Technology Corp. 13, **14***
Design Automation, Inc. 7
Desktop Engineering Int'l Inc. 9
Disk Software Inc. 20
E
Eclipse Software, Inc. 17
Elcee Computek, Inc. 22
Engineering Dynamics 16
F
FARO Technologies, Inc. 27, **BC***
FastSURF 25
FPLOT Corporation 17
G
Geri Engineering, Inc. 11
Glencoe Publishing Company 28
H
HLB Technology 7, **8***, 11, **12***, 18, **19***, **21***
I
Information Technology International Corporation 27
Innovative Design Consultants 20
Insight Development Corp 17
J
JES Engineering 10
JETCAM America, Inc. 24
K
KEYSOLUTIONS Magazine 28
M
Microcomputer Education Systems, Inc. 28, **28***
Microcomputer Technology Consultants, Ltd. 14
Micro Map & CAD 13
Mitsubishi International Corporation 25
N
NOAH Technologies, Inc. 25
Numonics Corporation 9, **11***
O
Olmsted Engineering 13
OPUS Systems 27
P
Pacific Motion 20, 22, **22***
Paradesign 9, **9***
PC Kwik Corporation 20
Plynetics Corporation 22, **23***
Point Control Company 13, **14**
Precision Measurement Laboratories 7, **7***
S
SDG Inc. 15, **16***
Shu Associates 6
Sigmatek 25
Software Ventures, Inc. **17**, 22
Spectrum Research of Memphis 18
SURFWARE, Inc. 15, 17, **IBC***
T
Tektronix, Inc. 27
U
UNITEC, Inc. 10
V
The van der Roest Group, Inc. 10, 11
W
Williford, Mike 17
X
Xi Computer Corporation 27

Display Ad - **pp***

Product Index

A
ACTools' Mega-Bundle 18
ACU.Tools + 13
APPS 7
AutoVue 25
C
C-Mold 16
CAD/CAE Technologies 6
CADjet Drafting Package 7
CADjet E-Z FONTS 11
CADjet Master Templates 18
CADjet Productivity Tools 18
CADKEY AND DataCAD Instructional Materials 28
CADKEY Overlay 22
Cadmandu 10
CADView 27
CAM Connection 13
Cases Templates for DataCAD 6
Cheap Tricks & Cheapware 6
CIM Solutions & Networking, Inc. 28
Computer Optimized System for Calculating Aluminum 13
Cutting Edge 13
D
D-M-E Moldware Expert System 16
Danly-Dynamics Die Design Software 16
DE/CAASE 9
DE/MEC 9
DieCAM 23
Digital Maps 13
Digitizer ++ 7
Digitizing Tablets 9
DMS Pro 10
DRAFT-PAK 2D Mold Designer 16
DRAFT-PAK Bill of Material Database Generator 6
DRAFT-PAK Productivity Software 18
DRAFT-PAK Professional Tablet Overlay 18
Draftsman 9
DYNAMICS Mold Design Software 16
E
Engineering Data Management Experts 10
Engineering Inspection Service 7
ESPRIT 13
F
FastSURF 25
File Guru 10
FPLOT 3 17
G
GeoCIM 14
GeoFOLD 23
GeoNEST 14
GeoPOINT IV 23
I
IMAGES-3D 6
Isometric Piping Components 17
J
JETCAM I, II, AND II Plus 24
K
KEYSOLUTIONS Magazine 28
KeyView 2.0 11
L
LaserCAM 20
LONGNAME 6 11
M
Mastering CADKEY 6.0 28
MENU-COMMANDER 20
MOLDFLOW/CADKEY LINK 17
N
NOAH/CXF 25
P
Parametric Solutions 20
PC Animate 20
PC-Kwik Power Pak 20
PC/MOLD CAD Database 17
PLUMP-Rx 17
Power Tools Bundle 2.0 9
PRECISION FONTS for CADKEY 11
PrintAPlot 3.0.3 17
ProFab 24
ProFold 24
Q
qSHEET/qUNFOLD 25
QuickTrace for Windows 25
QUIKCAM 14
R
Rapid Prototypes 22
RevEng 7
S
SigmaNEST 25
SmartCAM CNC Process Modeling 14
SPARC Your PC 27
Spool-It 4 Lite/Pro 18
SURFCAM NC Machining 15, 17
Symbol Generator Bundle 10
T
3D WorkShop 22
Technical Service Bureau 23
Tektronix Color Printers 27
TG-Professional v.4.0 20
The Metrecom 27
Tool Designer's Assistant® 15
TorchPak 15
Trans-Pak IV 16
V
VERICUT 25
X
XFORMER® 22
Xi 486 Workstations 27

PC MAGAZINE EDITORS' CHOICE
AUGUST, 1988
CADKEY, VER. 3.02

PC MAGAZINE EDITORS' CHOICE
MARCH 11, 1986
CADKEY, VER. 2.0

PC MAGAZINE EDITORS' CHOICE
MARCH 27, 1990
CADKEY, VER. 3.53

MACHINE DESIGN 92 CAD/CAM LEADER AWARD

Cadkey, Inc.
4 Griffin Rd. North
Windsor, CT 06095-1511

203 / 298-8888
Fax: 203 / 298-6401