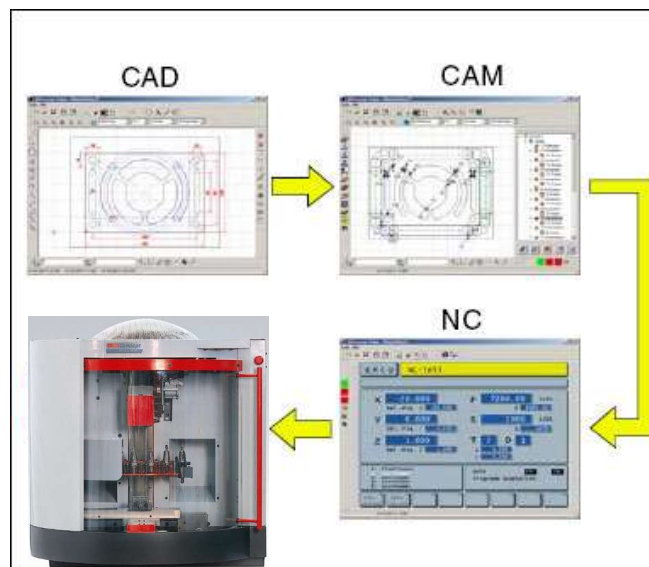


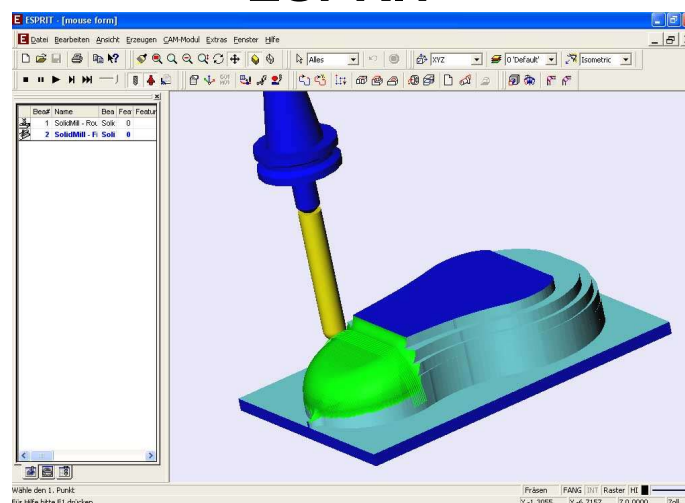
TECHNICAL SPECIFICATION

SOFTWARE CAD-CAM Turning/Milling

EMCO CAMCONCEPT



ESPRIT®



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Short description EMCO CamConcept

CAD-CAM Software for education of CNC technicians and production

CAMCONCEPT is a part of the EMCO educational concept on basis of PC. This software offers a continuous didactic concept, starting with the simple creation of workpiece contours in CAD mode to the automatic interactive creation of the NC program in CAM mode. Due to the completely structured online help CamConcept is suited optimally for training.

PC system requirements

Processor		PC Dual Core 2GHz
Operating system	32 bit / 64 bit	Windows 7 or higher
Working memory		4 GB RAM
Monitor		16:9 Full HD
Free hard disk memory		2 GB
Necessary interfaces		2 free USB ports
Additional interface for machine licence		network card (TCP/IP able) – 1 free port for the connection to the machine

Types of licenses

Single license:

For the external NC programming of CNC-controlled tool machines on a PC-workstation, independent of machine

Multiple license:

For the external NC programming of CNC-controlled tool machines it may be installed within an institute registered by the licensor in an unlimited number on PC workstations resp. in a network. Interlocking of the individual workstations is possible with standard networks, independent of machine

Machine license:

Only for the direct control of the machines Concept Turn 60 / Mill 55 and Concept Turn / Mill 105. All other machines eg. series 155, 250, 260, 300, 450 and 460 can NOT be controlled direct by CamConcept.

Language:

on request.

Scope of functions EMCO CamConcept

User-friendly graphic surface

Creation of CAD drawings and workpieces

CAM cycle programming

Adjustable clamping devices and unmachined parts

Tool library and database

Automatic contour programming

Online-NC-program editor

Direct run of CT 60, CM 55, CT 105 and CM 105 (incl. AC95)

Status displays of the programmed machine status

Import and export interface for DXF: Line, PLine, Arc, Circle, Text, Rectangle

Support of various control and machine types

Context-Sensitive-Help with Acrobat Reader

2D simulation of machining

3D simulation of machining

Post processor for EMCO EASY CYCLE included

Post processor for DIN/ ISO included




Creation of hachures


Engraving Cycle

Feed override and Spindle override by mousewheel

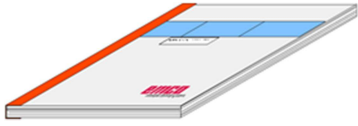
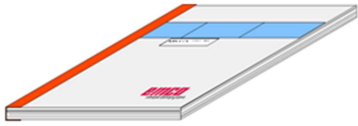
Optional: Post processors for the WinNC control systems

Reference numbers CAMCONCEPT

	<p>EMCO CAMCONCEPT, machine license For CAD/CAM Programming and direct operation of PC controlled CNC machines.</p> <p>Only for: PC and Concept Turn 55/60 + Mill 55 PC and Concept Turn 105 + Mill 105</p>	<p>X3A 400</p>
	<p>EMCO CAMCONCEPT, Single License, SL (32bit and 64bit) The single license is for CAD/CAM programming of CNC machine tools on a external PC workstation.</p> <p>Camconcept, Turn, single license Camconcept, Mill, single license Camconcept, Combination Turn-Mill - Single license</p>	<p>X3A 440 X3A 450 X3A 411</p>
	<p>EMCO CAMCONCEPT, Multiple License, ML (32bit and 64bit) The multiple license is for CAD/CAM programming of CNC machine tools on external PC workstations.</p> <p>It may be installed within an institute registered by the licenser in an unlimited number on PC workstations.</p> <p>Camconcept, Turn, multiple license Camconcept, Mill, multiple license Camconcept, Combination Turn-Mill - Multiple license</p>	<p>X3A 420 X3A 430 X3A 410</p>
	<p>Upgrade from WinCAM to CamConcept (32bit and 64bit) For an upgrade from WinCAM to CamConcept the datas of the enduser are required!</p> <p>Upgrade Machinenlicense Turn&Mill Single license Turn Single license Mill Single license Combination Turn - Mill Multiple license Turn Multiple license Mill Multiple license Combination Turn - Mill</p>	<p>X3A 402 X3A 442 X3A 452 X3A 462 X3A 422 X3A 412 X3A 432</p>

	<p>EMCO CAMCONCEPT, Postprocessors CamConcept includes the NC format DIN/ISO. For translation to other CNC machine codes postprocessors are optionally available:</p> <p>single license is for a external PC workstation:</p> <p>PP for WinNC Sinumerik Operate 840D sl / 828D Postprocessor for WinNC Sinumerik 840D Postprocessor for WinNC Fanuc21 Postprocessor for WinNC Sinumerik 810/820 Postprocessor for WinNC Fanuc0 Postprocessor for WinNC Heidenhain TNC426 Postprocessor for WinNC Emcotronic TM02 Postprocessor for WinNC Fanuc Serie 31i</p> <p>Postprocessors include turning and milling</p>	<p>X5A467 X5A460 X5A461 X5A462 X5A463 X5A464 X5A465 X5A468</p>
	<p>multiple license is for external PC workstations:</p> <p>PP for WinNC Sinumerik Operate 840D sl / 828D Postprocessor for WinNC Sinumerik 840D Postprocessor for WinNC Fanuc21 Postprocessor for WinNC Sinumerik 810/820 Postprocessor for WinNC Fanuc0 Postprocessor for WinNC Heidenhain TNC426 Postprocessor for WinNC Emcotronic TM02 Postprocessor for WinNC Fanuc Serie 31i</p> <p>Postprocessors include turning and milling</p>	<p>X5A567 X5A560 X5A561 X5A562 X5A563 X5A564 X5A565 X5A568</p>

Manuals CAMCONCEPT

	<p>Instruction Manual CamConcept EMCO CamConcept – Turning</p>	<p>DE 1829 EN 1829 FR 1829 HL 1829 SP 1829 TA 1829</p>
	<p>Instruction Manual CamConcept EMCO CamConcept - Milling</p>	<p>DE 1828 EN 1828 FR 1828 HL 1828 SP 1828 TA 1828</p>

Short description ESPRIT® Educational License

CAD-CAM Software

Due to the constantly rising requirements at industrial CAD/CAM-education the EMCO product range in the area industrial training systems has been extended by a industrial CAD/CAM system.

This CAD/CAM system serves as a supplement to our existing product CamConcept and covers all areas of industrial manufacturing.

The software may be sold worldwide by EMCO and its partners on a non exclusive base for education customers.

Product Name: ESPRIT

Producer: DP Technology, USA www.dptechnology.de

Areas of Application: CAD_CAM education for CNC-Advanced and Professionals

How to get an ESPRIT educational license?

1. By ordering an educational license following documents are required:
 - a) A official confirmation from the enduser/institute, where they certify that the licenses will not be used for productive applications.
 - b) A copy off the original enduser invoice, where the price of of the licenses are listed.
2. educational licenses can only be sold with a min. 1-year SMC, Service-Maintenance-Contract.
3. Floating- / Network licenses are valid within the ordered software version without time limitation.
4. Software-Updates are only possible with an enclosed SMC.

ESPRIT must not be sold to

Iran, Irak, Libya, North Korea, Cuba, Sudan and Syria

ESPRIT Installation and System Requirements

ESPRIT 2010 System and Component Requirements

Welcome to ESPRIT 2010, the latest release of DP Technology's CAD/CAM solution ESPRIT. Computer systems that meet the minimum supported hardware requirements will be able to run ESPRIT 2010. Any hardware requirement that exceeds the minimum will improve the performance and user experience of ESPRIT 2010.

ESPRIT 2010 Minimum Hardware Requirements	
Processor ¹	1 GHz 32-bit (x86)
System Memory	1 GB
Resolution	SVGA (1024x768)
Graphics Memory	128 MB
HDD	40 GB
HDD Free Space	3 GB
Optical Drive	DVD-ROM
Ports	Parallel or USB (required for ESPRIT security)

ESPRIT requires certain operating system components to be installed to function properly. These are prerequisites of installing ESPRIT. These components must be installed prior to installing ESPRIT. Systems failing to meet these criteria will cause the ESPRIT installation to fail.

Required Operating System Components for ESPRIT 2010
Microsoft® Windows® XP SP3 ² or Windows® Vista™ or Windows® 7™
Microsoft® Internet Explorer® version 6.0 or greater

¹ Processor must support the SSE2 instruction set

² ESPRIT 2010 will be the last version of ESPRIT supported on Microsoft® Windows® XP

Server minimum configuration for ESPRIT

DP Technology's Security System Server System and Component Requirements

Welcome to the Security System Server, the latest security product used in DP Technology's CAD/CAM solutions for floating licenses. Computer systems that meet the minimum supported hardware requirements will be able to run the Security System Server. Any hardware requirement that exceeds the minimum will improve the performance and user experience of the Security System Server and the programs that access it.

Security System Server Minimum Hardware Requirements	
Processor	1 GHz 32-bit (x86)
System Memory	1 GB
Resolution	SVGA (1024x768)
Graphics Memory	128 MB
HDD	40 GB
HDD Free Space	20 MB
Optical Drive	DVD-ROM
Ports	USB

The Security System Server requires certain operating system components to be installed to function properly. These are prerequisites of installing the Security System Server. These components must be installed prior to installing the Security System Server. Systems failing to meet these criteria will cause the installation to fail.

Required Operating System Components for ESPRIT 2010
Microsoft® Windows® XP SP3 ³ or Windows® Vista™ or Windows® 7™
Microsoft® Internet Explorer® version 6.0 or greater
Microsoft® Windows® Installer version 3.1
Microsoft® .NET Framework Version 2.0
Safenet Sentinel Drivers Version 7.4.2

For the latest information, please visit
www.dptechnology.com

Postprocessors ESPRIT

- Available Postprocessors for the EMCO WinNC systems see Reference numbers.
- Postprocessors for other controls can be adapted for additional costs.

³ ESPRIT 2010 will be the last version of ESPRIT supported on Microsoft® Windows® XP

Subject to technical modifications!

SMC “Service-Maintenance-Contract” ESPRIT

A SMC is required for every education license!

- Validity for one SMC is 12 months, it can be bought for a couple of years previously
- incl. Updates during 12 months, free of charge
- incl. Support via e-mail or phone
- incl. newest information about the product
- The SMC is a contract between enduser and EMCO

Training / Support

- The software is installed at the training center at EMCO Hallein, customer training and first level support can be handled.
- Basically EMCO is contact partner for support and training.
- Training can also be handled at the customers location by local ESPRIT partners. The costs for this kind of service have to be arranged with the respective dealer.
On your request we will gladly provide you with the necessary dealer information.

Demo Software

DEMO CD's are available on demand.
For a DEMO CD the enduser has to be named.

Examples for orders:

One programming station of Esprit for programming a Concept Mill with WinNC Operate

Description	SAP No.	Qty.
ESPRIT academic license	224200	1 pc.
SMC / ESPRIT Academic License per stations and year	224210	1 pc.
USB SafeNET Dongle	224220	1 pc.
Postprocessor WinNC Sinumerik Operate, milling	223 865H	1 pc.

Ten programming station of Esprit for programming a Concept Turn with WinNC Fanuc 31 connected by network via Networkserver

Description	SAP No.	Qty.
ESPRIT Academic License	224200	10 pcs.
SMC / ESPRIT Academic License per station / year	224210	10 pcs.
Floating License Server	224240	1 pc.
SMC / Floating License Server	224250	1 pc.
Postprocessor WinNC Fanuc 31, turning	223 880H	1 pc.

For programming stations with academic licenses, which are not connected by network, Dongles are required for EVERY PC / station!

An ESPRIT postprocessor for WinNC-controls must be ordered only once, and can be installed on any ESPRIT-workstation!

Subject to technical modifications!

Scope of functions ESPRIT®

ESPRIT Contents (Partial):

The ESPRIT education package contains all functions of a complete industrial version.

General

- Developed for Windows
- Modular structure
- Multimedia, kontextsensitive assistance
- Geometry-, Surface- and Volume model
- Surface processing through NURBS
- Compatibility to the common CAD systems
 - DWG (ACAD, Mechanical Desktop, Inventor)
 - DXF, ESP, IGES, PAR (Solid Edge)
 - SAT (ACIS), SLDPRT (Solid Works)
 - STEP*, TXT, VDA, X_B_X_T (Parasolid)
- Knowledge base for administration of tool-, material-, cutting-, and process data
- Automatic calculation of speed- and feedrate values
- Automatic recognition of contours, pockets and bores
- Programming of different versions
- Volume simulation and check
- Creation of set up pages
- NC-Program editor

2D-Milling, Multi side processing

- Definition of Devices and work piece holding
- Contour-, Profile- and Pocket milling
- Various move in and move out strategies
- Drilling cycles and thread milling
- Multi side processing up to 5 axis

3D-Milling

- Powerful milling strategies from 2 to 5 axis
- Projekt milling
- Corner processing
- Modification of tool motions
- Processing of steep and flat areas
- Final material processing
- High speed milling
- collision detection and volume simulation



Turning

- endless number of turrets and spindles from 2 to 22 axis
- fixed and driven spindles and turrets
- Turning cycles and bar operation
- Driven tools
- Part take over and synchronous processing

Erode

- 4-Axis processing, Destroying cut
- Integrated tool and cutter conditions for most erosion machines

Reference numbers **ESPRIT**

 <p>ATTENTION:</p>	<p>ESPRIT® CAD/CAM Important details of sales informations see short description and order example</p> <p>Single license per station</p> <p>SMC / single license per station and year</p> <p>USB SafeNET Dongle USB Dongle for licensing of ESPRIT</p> <p>Academic Native File Reader Package CATIA V4/ CATIA V5/ Pro/Engineer, Unigraphics. !!!!floating license client needed!!!!</p> <p>ESPRIT Floating License Server Incl. USB SafeNET Dongle 2010 LS</p> <p>SMC / Floating License Server pro Jahr</p> <p>for a ESPRIT software package is required coercively:</p> <ul style="list-style-type: none"> • License per station • SMC per station • Dongle per station or network <p>recommended: optional postprocessor for the CNC translation to the machines control. compare with order examples</p>	<p>224200</p> <p>224210</p> <p>224220</p> <p>224230</p> <p>224240</p> <p>224250</p>
	<p>Postprocessor ESPRIT – WinNC</p> <p>WinNC Sinumerik Operate 840D sl / 828 Turning</p> <p>WinNC Sinumerik Operate 840D sl / 828D Milling</p> <p>WinNC Sinumerik 810/840D, Turning</p> <p>WinNC Sinumerik 810/840D, Milling</p> <p>WinNC Fanuc 21T, Turning</p> <p>WinNC Fanuc 21M, Milling</p> <p>WinNC Fanuc 31iT, Drehen</p> <p>WinNC Fanuc 31iM, Fräsen</p> <p>WinNC Emcotronic TM02, Turning</p> <p>WinNC Emcotronic TM02, Milling</p> <p>WinNC Heidenhain TNC426, Milling</p> <p>WinNC Sinumerik 810/840D, 5 Axis- Milling</p> <p>WinNC Heidenhain TNC426, 5 Axis- Milling</p> <p>WinNC Sinumerik Operate 840D sl / 828 - 5 Axis- Milling</p> <p>An ESPRIT postprocessor for WinNC-controls must be ordered only once, and can be installed on any ESPRIT-workstation!</p>	<p>223 860H</p> <p>223 865H</p> <p>223 850H</p> <p>223 855H</p> <p>223 870H</p> <p>223 875H</p> <p>223 880H</p> <p>223 885H</p> <p>223 862H</p> <p>223 877H</p> <p>223 857H</p> <p>223 897H</p> <p>223 898H</p> <p>223 899H</p>

Classroom Management Software SchoolVue

SchoolVUE provides all tools for modern education in IT classrooms.

This feature-rich software provides teachers with the ability to instruct, monitor and interact with students individually, as a pre-defined group or as an overall classroom, along with other tools to manage the classroom more effectively.

SchoolVUE in practice

- Control of the pupils PCs from the teacher's working station
- Control of USB devices
- Control of printer's use
- Control of access to applications and Internet pages
- Possibility to introduce additional tutors
- Possibility to introduce pupils as additional tutors
- Visit web pages together with students
- Presentations of demos and videos in real time
- Possibility to teach in wireless LAN areas
- Simple realization of electronical tests
- Collect and distribute files

SchoolVue system requirements

Win2000, 2003, 2008, XP, Vista und Windows7
 35 MB free hard disc storage (90 MB for full installation)
 IPX/SPX, NetBEUI, TCP/IP, Support of Windows Terminal Server

Available Languages: German, English, French, Spanish

Sales Restriction:

This product may not be sold in the USA by EMCO. In this country, the supplier itself is responsible for the sale.

Download 30 days trial version:

English

InstallShield: <http://download.crosstecsoftware.com/ctcvue.exe>

MSI: <http://download.crosstecsoftware.com/ctcvue.msi>

German

InstallShield: <http://download.crosstecsoftware.com/DE/ctcvueDE.exe>

MSI: <http://download.crosstecsoftware.com/DE/ctcvueDE.msi>

French

InstallShield: <http://download.crosstecsoftware.com/FR/ctcvueFR.exe>


MSI: <http://download.crosstecsoftware.com/FR/ctcvueFR.msi>

Spanish


InstallShield: <http://download.crosstecsoftware.com/ES/ctcvueES.exe>

MSI: <http://download.crosstecsoftware.com/ES/ctcvueES.msi>

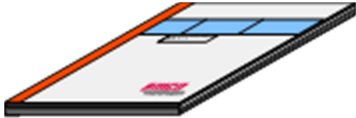
Further information: <http://www.crosstecsoftware.com/educational/schoolvue.html>

	SchoolVUE	
	2 Licenses (min. purchase), per License	288240
	3 to 9 Licenses, per License	288250
	10 to 99 Licenses, per License	288290
	100 to 249 Licenses, per License	288300
	more graduations on request	

Courseware

	<p>E[MCO] Campus</p> <p>E-Learning 2.0 for machining. Multimedia teaching and learning materials for CNC</p> <p>.</p> <p>E[MCO] Campus is a multimedia training program that teaches all the basics of modern CNC technology. The cleverly-designed teaching format makes even complex concepts easy to grasp and learn. Interactive dialog features allow students to progress at their own pace. Views are displayed using attractive 2 and 3D graphics, animations, and videos, sustainably improving the success of the learning process..</p> <p>Languages On request</p> <p>Single-user license 1</p> <p>Multiple-user license 20</p> <p>Multiple-user license 50</p> <p>Multiple-user license 100</p> <p>Campus License A Campus-License consists of several Multiple licenses. The Software is working without any time restriction, a renewal of the version is not necessary. A Software Maintenance Contract (SMC) is not available right now.</p>	<p>X2Y 400</p> <p>X2Y 410</p> <p>X2Y 420</p> <p>X2Y 430</p> <p>On request</p>
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Catalogues

	EMCONOMY moves	DE 2801 EN 2801 FR 2801 SP 2801 RU 2801 CZ 2801
	EMCO Software	DE 1835 EN 1835 SP 1835
	EMCO Industrial Training	DE 1837 EN 1837 TA 1837 SP 1837
	EMCO Campus	DE 1842 EN 1842 CZ 1842