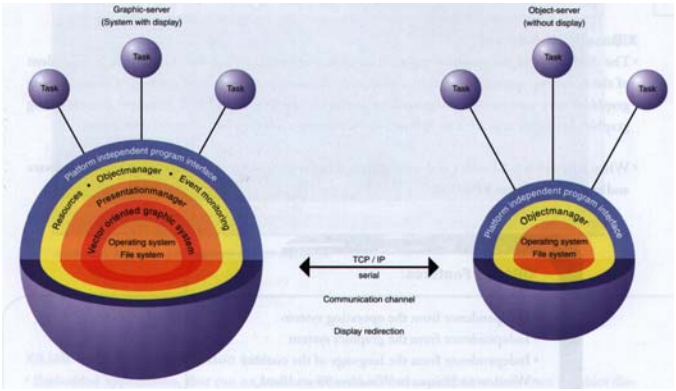
XiBase9 - Graphical User Interface for embedded OS

Corporate background

- 1986: The development of a system independent graphics server for industrial environments was started
- Target systems: OS-9, UNIX and DOS
- 1988: First implementation on an OS-9 based bare board tester and an UNIX based data preparation station
- 1989: IBM in Endicott bought first machine with XiBase9
- 1994: XiSys Software GmbH was founded
- 1998: Microware and XiSys signed distribution agreement
- 2005: Distribution agreement with RadiSys in Japan

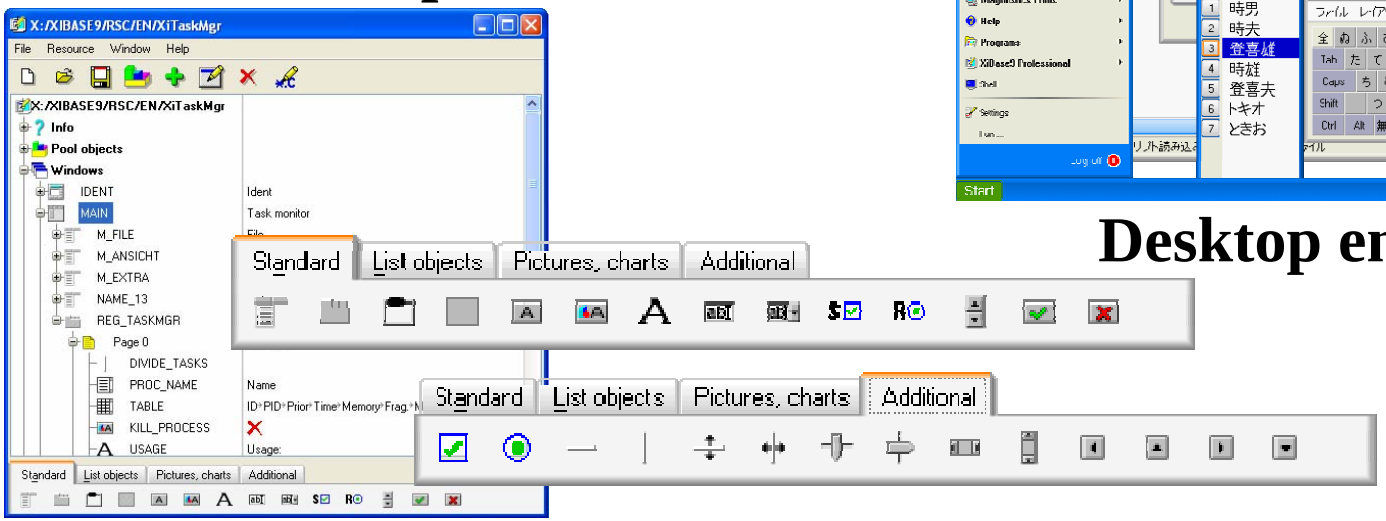
XiBase9 - Components

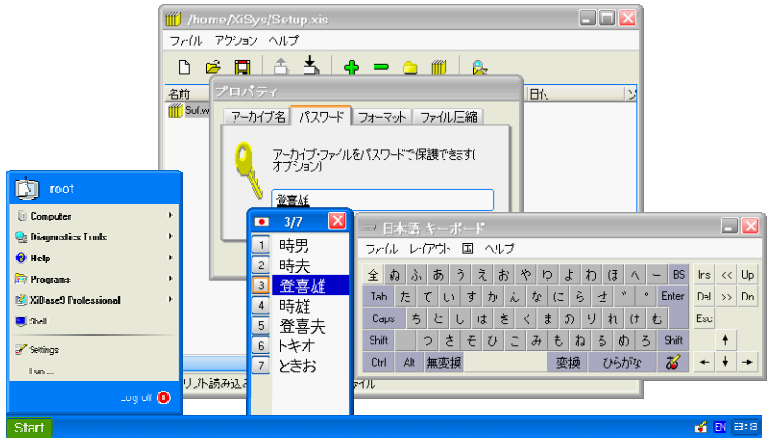


Runtime environment

- Local graphics engine
- Remote graphics engine

GUI Development Tools





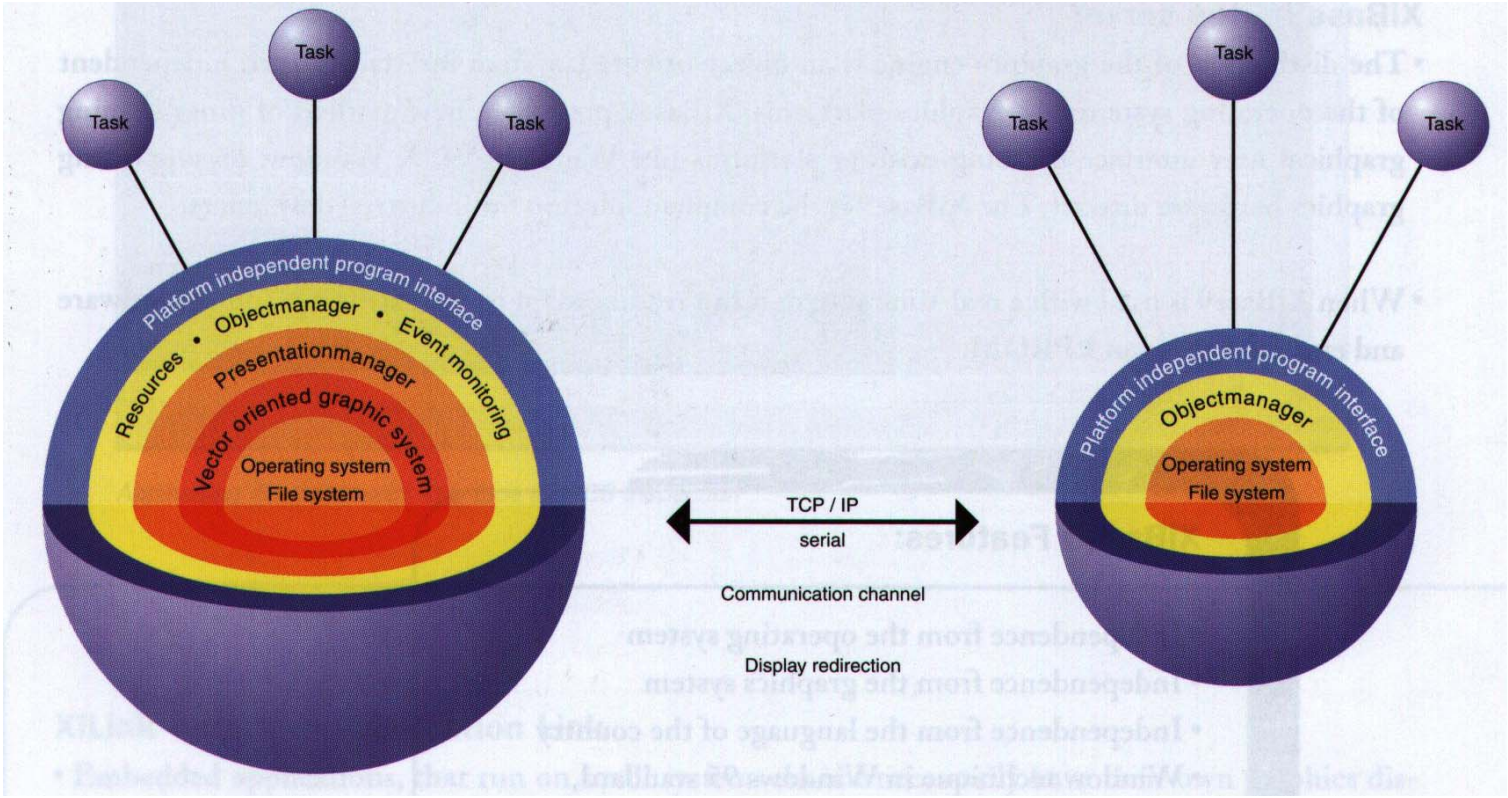
Desktop environment

XiBase9 is the platform for embedded machines

XiBase9 - Virtual Machine

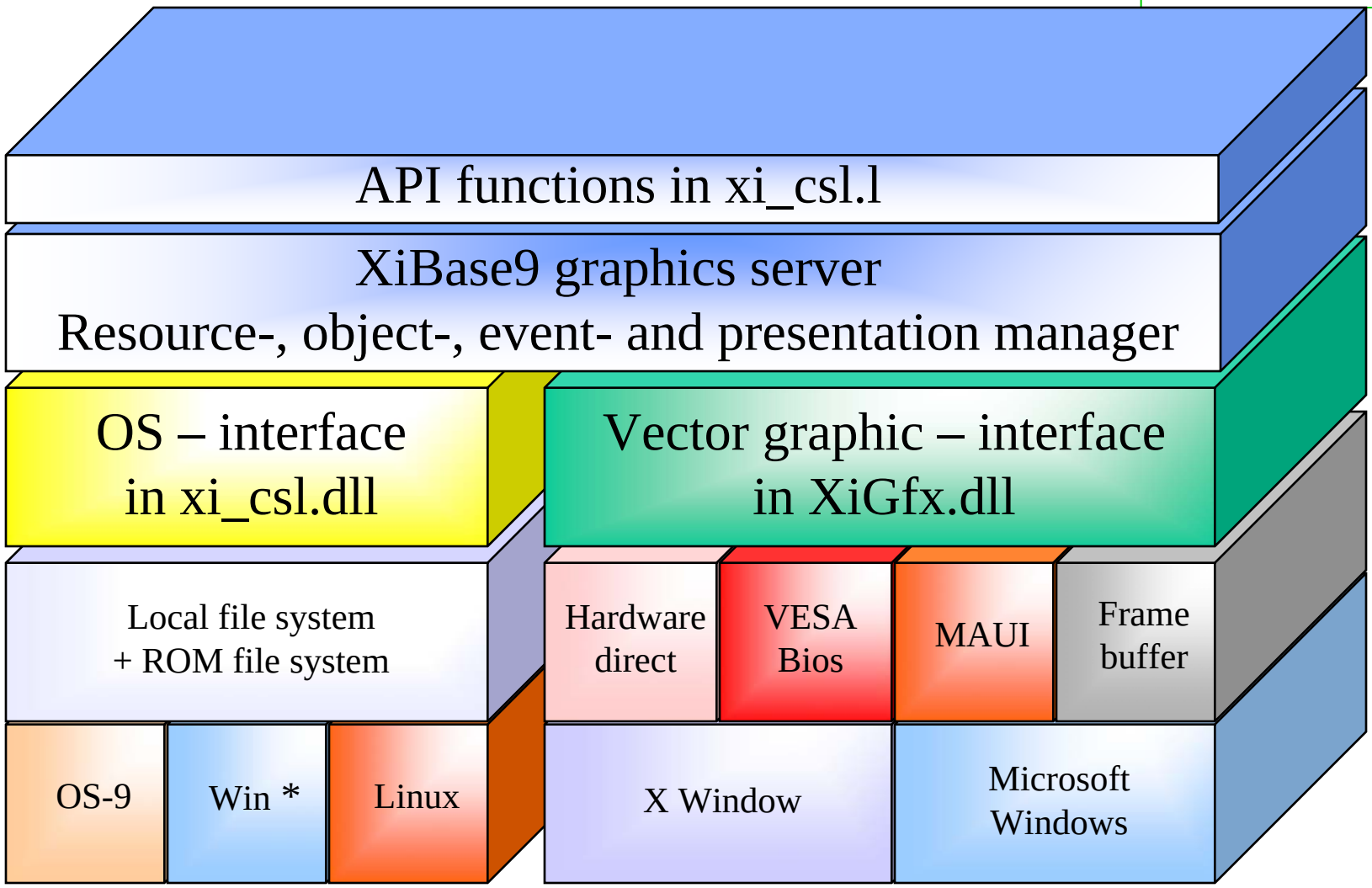
GUI Server
(display/input; local/remote; various OS)

Object Server
(i.e. embedded system)

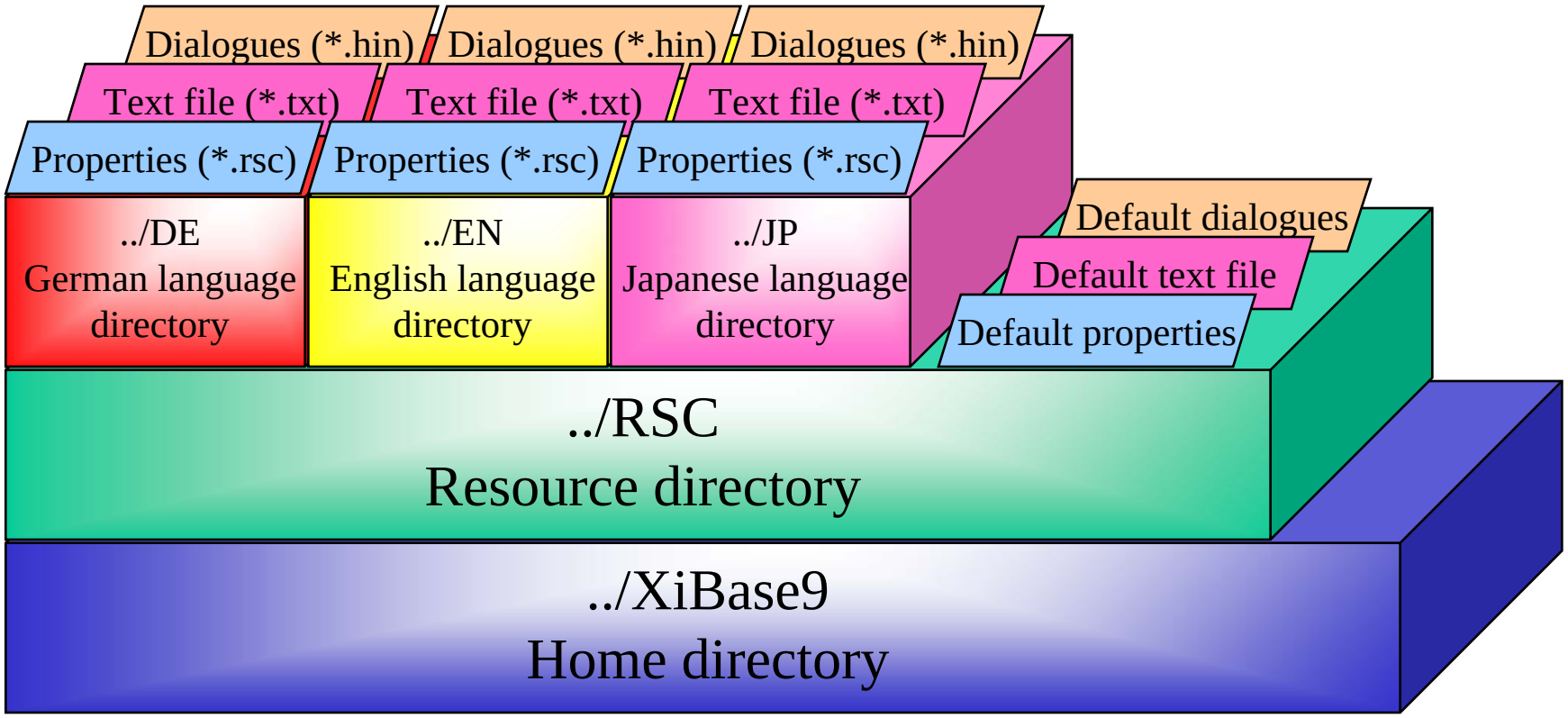


Runtime environment for local and remote GUI

Server - interfaces

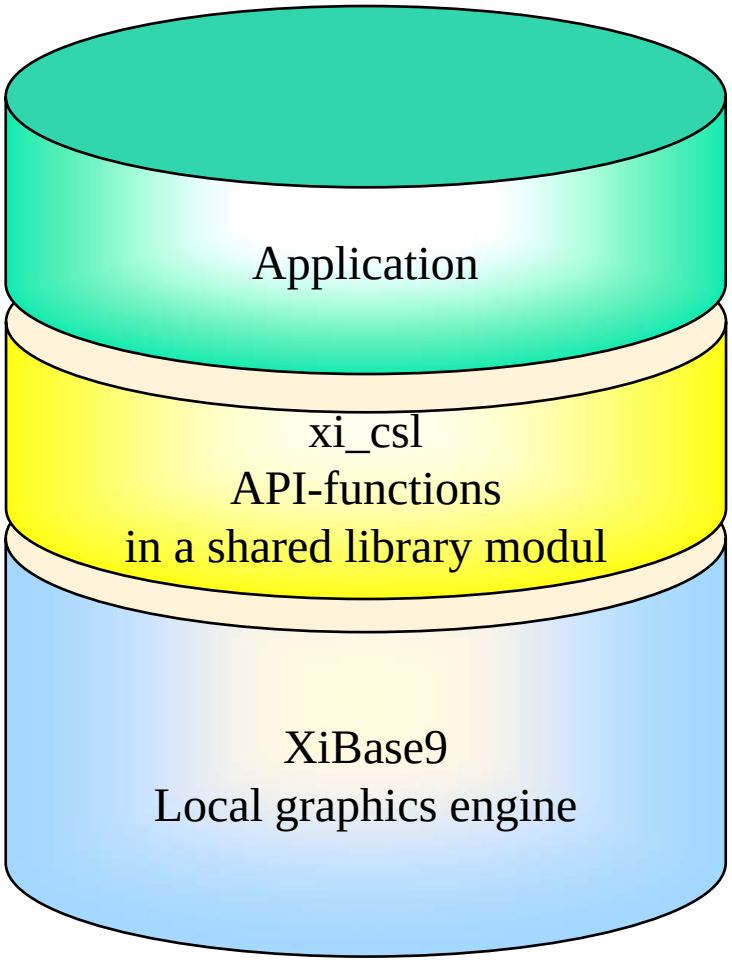


Language concept



Text information can be exchanged **without compiling or linking** the application!

Memory consumption (Local graphics engine)



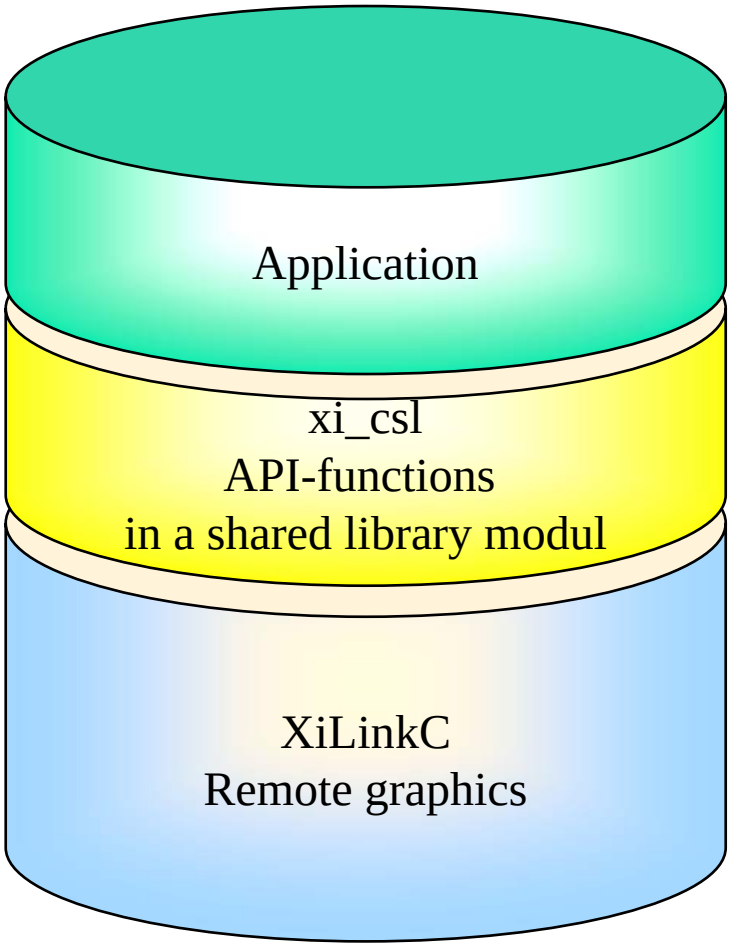
Code size: 5 k ...
Dynamic consumption: 4 k ...

Code size: 150 - 250 k
Dynamic consumption: 0

Code size: 500 - 900 k
Dynamic consumption: 200 k ...

Total consumption: >= 1 MByte

Memory consumption (Display redirection)



Code size: 5 k ...
Dynamic consumption: 4 k ...

Code size: 150 -250 k
Dynamic consumption: 0

Code size: 100 - 150 k
Dynamic consumption: 100 k ...

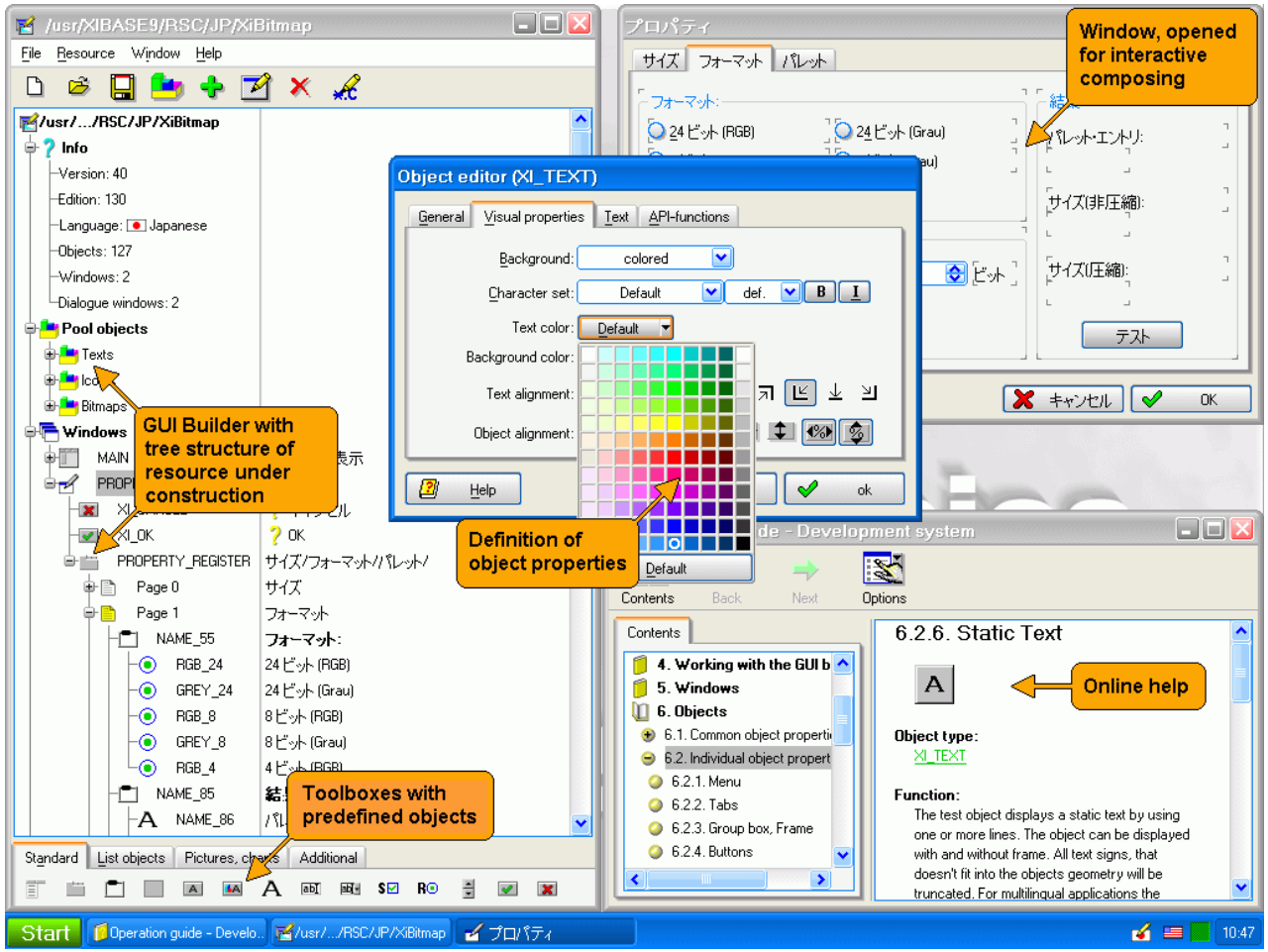
Total consumption: >= 500 kByte

Platform support

- **Operating systems**
  - Linux
  - OS-9, OS-9000
  - Win NT/2000/XP
  - Others …
- **Graphic platforms**
  - H/W direct, VESA BIOS, Frame buffer
  - Win NT/2000/XP
  - MAUI
- **Processor architectures**
  - 68k, x86, PowerPC, SuperH, ARM/StrongARM

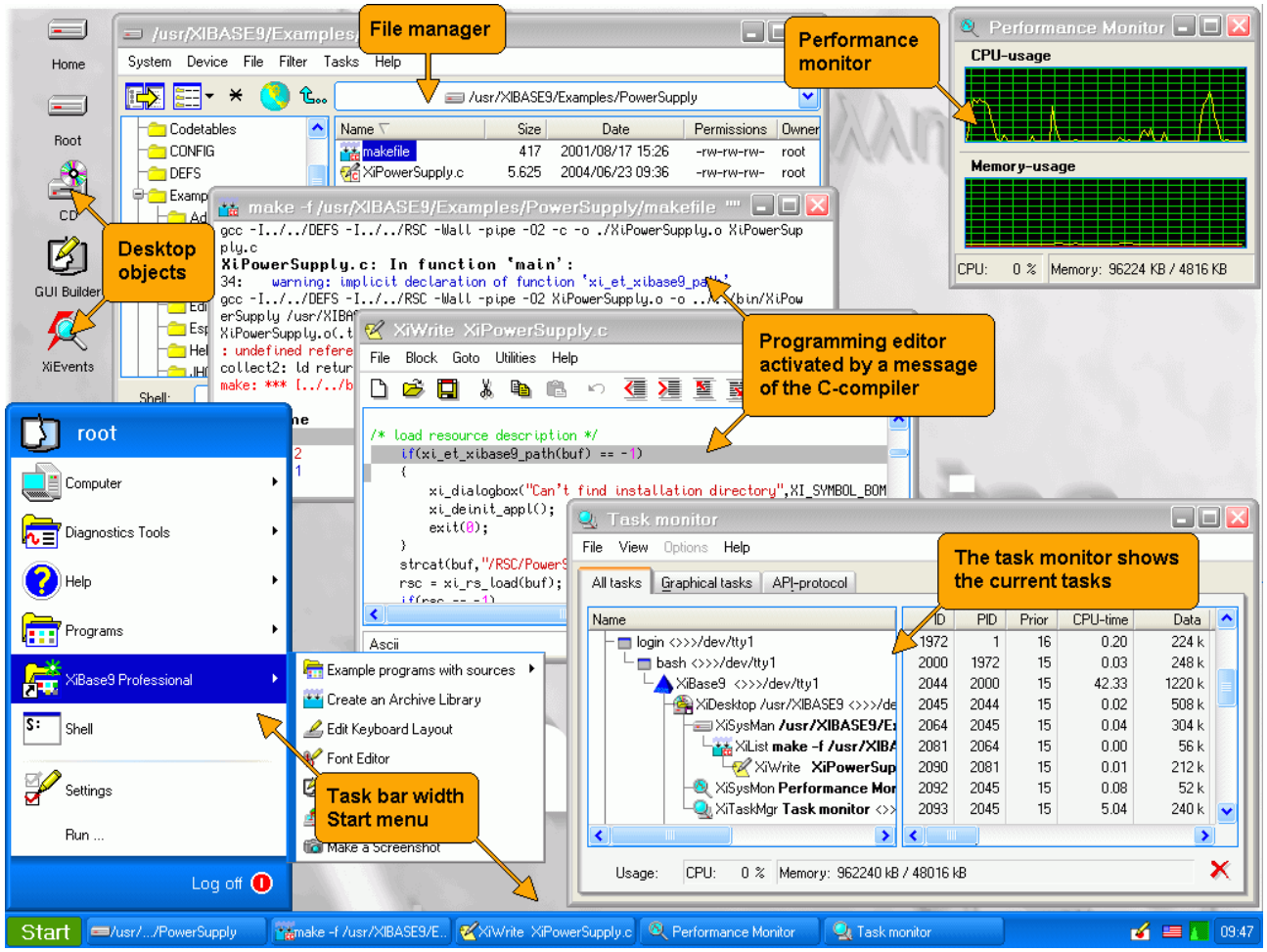
All major OS and graphic platforms supported

Development Tools



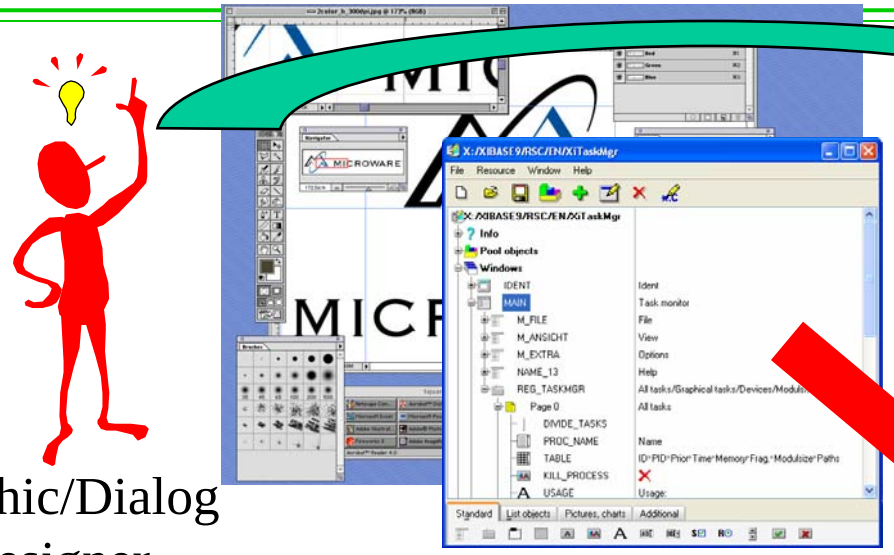
WYSIWYG GUI builder & diagnostic tools

Desktop for embedded OS



... on 2MB RAM, HDD optional

Market components

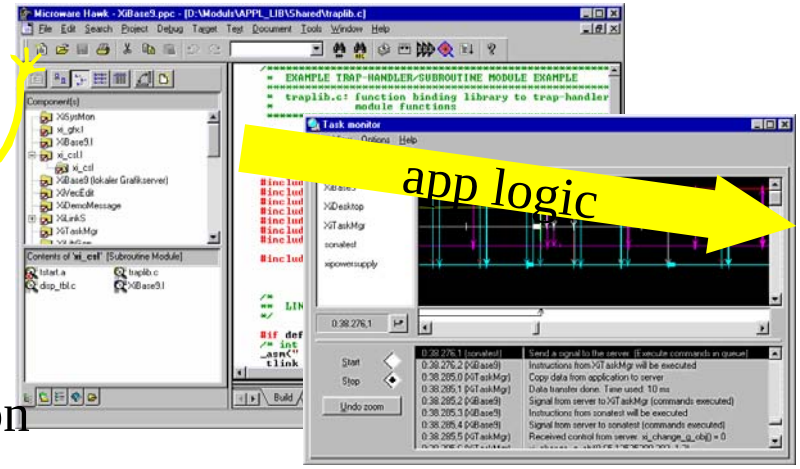


Graphic/Dialog Designer

look&feel

Localization

language



app logic

Application Developer

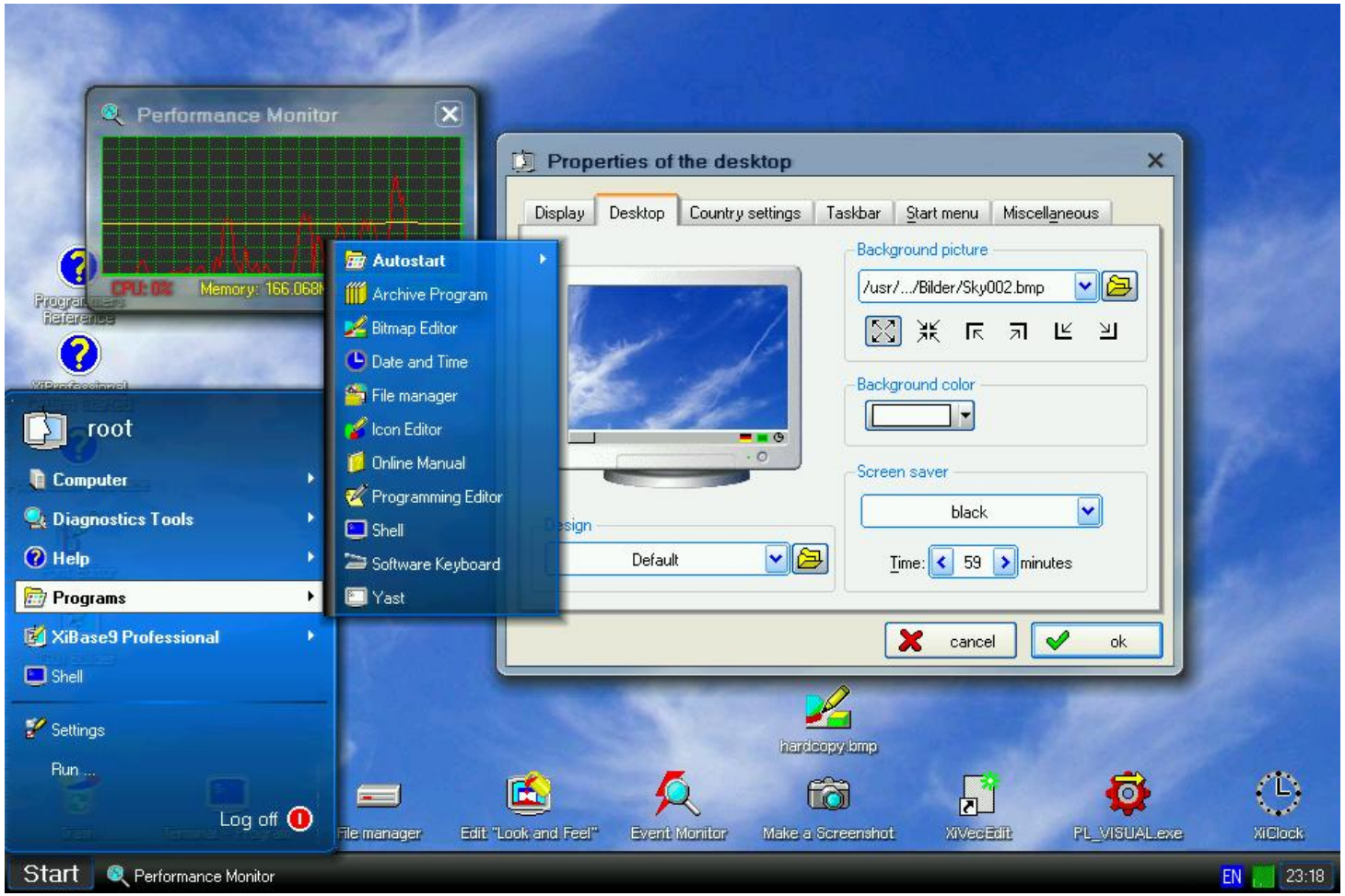
Application

XiBase9 Runtime

OS-9 ..... Win*

Tailored tools for all project phases

The next step



Transparent windows for embedded systems

Comparison: Vista – XiBase9

	Vista	XiBase9
RAM:	**>= 512 MByte**	**>= 8 MByte**
Installation (Harddisk):	**>= 8 GByte**	**>= 4 MByte**
CPU-Speed:	**>= 1 GHz**	**>= 100 MHz**
Graphics card / bus:	**AGP 8X, PCI-Exp.**	**Any**
Video memory:	**>= 64 MByte**	**>= 2MByte**
Color resolution:	**>= 32 Bits per pixel**	**>= 8 Bits**
Accelerator:	**necessary**	**not necessary**

Structured and simple development saves time

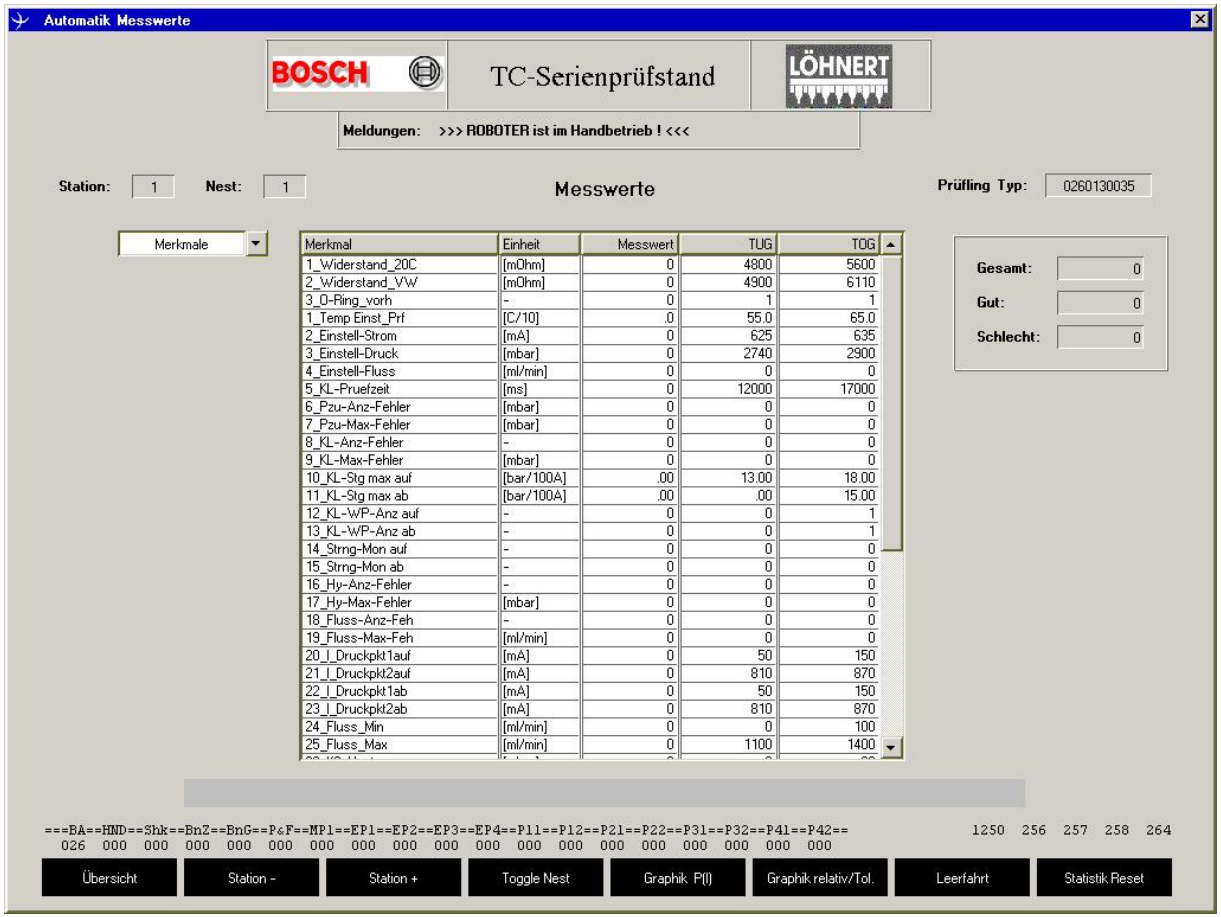
Highlights

- **Language concept**
- **Performance**
- **Networking and communications**
- **Remote maintenance**
- **Touch support**
- **Independence**
- **Availability**
- **Support**

Structured and simple development saves time

Applications

Quality inspection



Hydraulic transmission parts

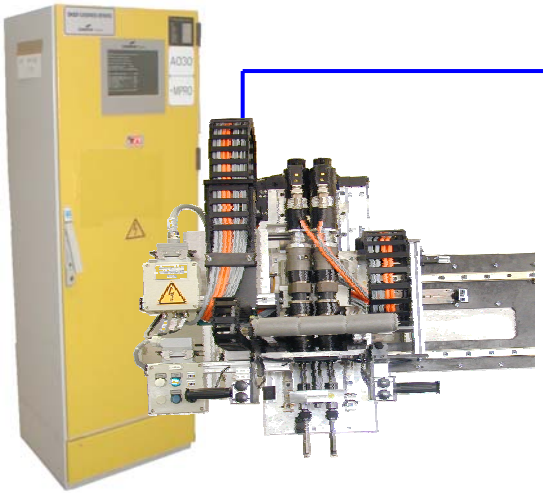
COOPER PowerTools

Process interface integrated

Parallel I/O
Profibus-DP

Data Network interface integrated

Processor unit
m-Pro 400 S



TM12 TM34 TMH

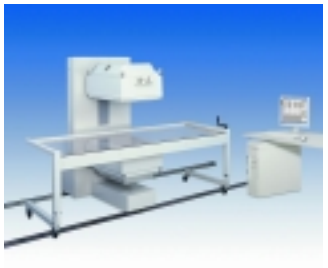
Measuring modules

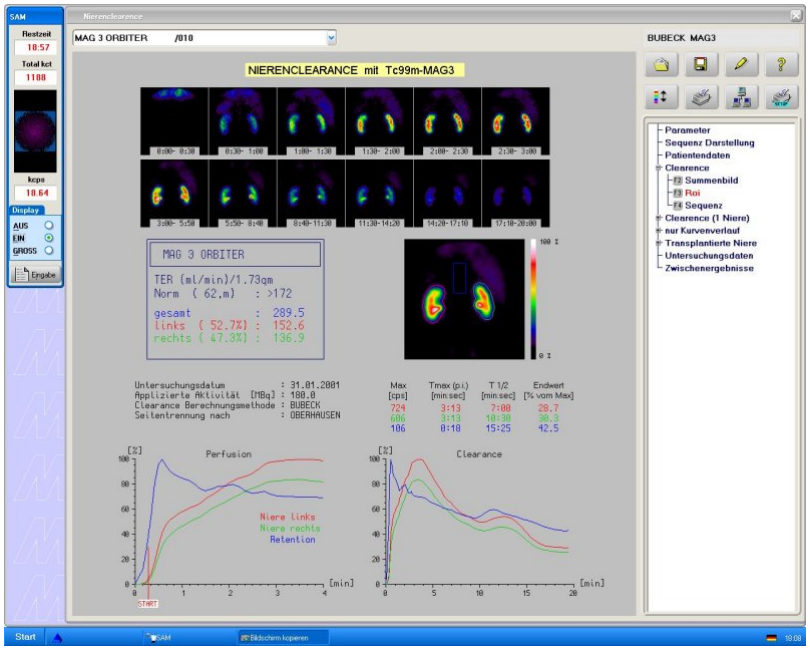
Handheld nutsetters

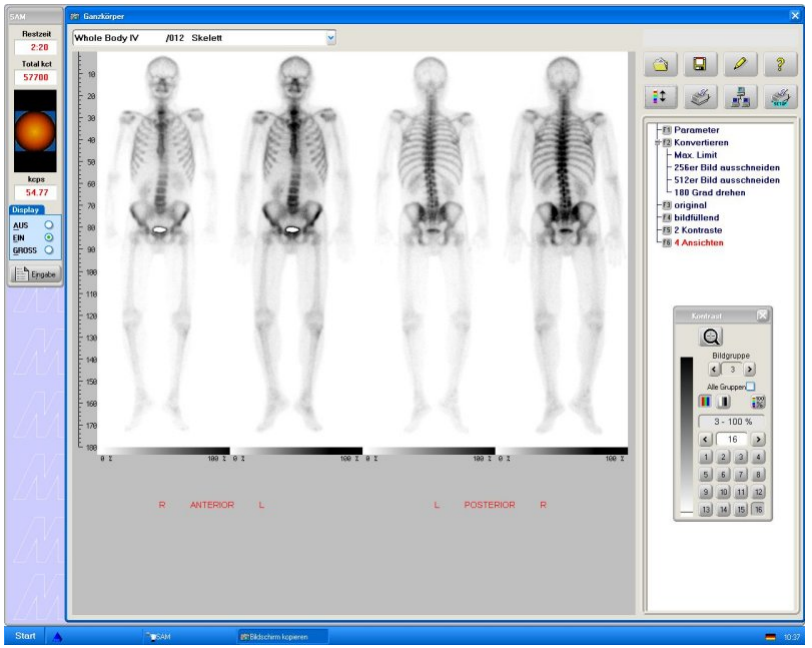
Tightening equipment

Weaving machines

medical imaging electronics







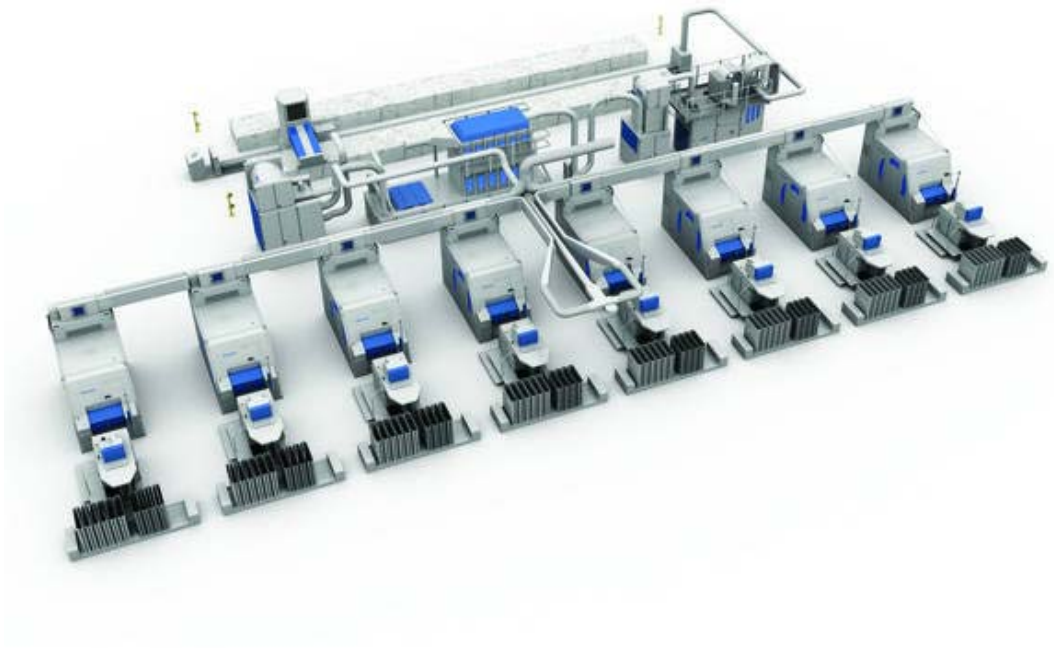
Nuclear medical computer tomographs

Medical systems

Endoscopes

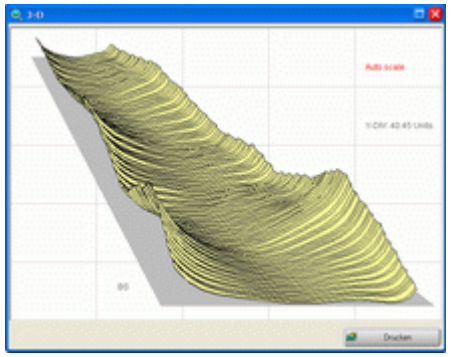
TRÜTZSCHLER

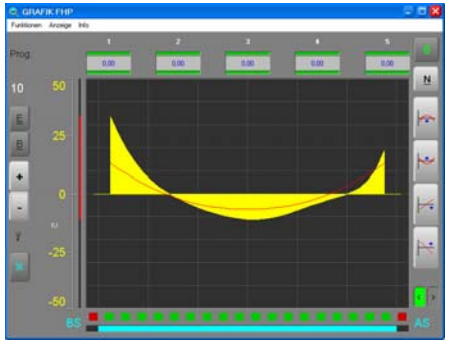
Textile machines

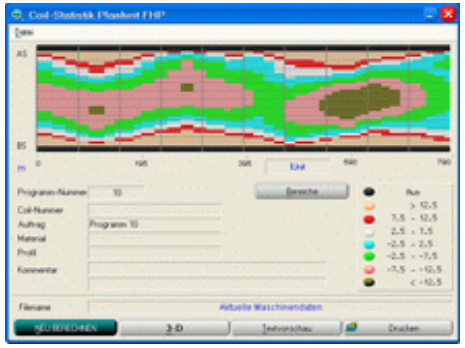


Fibre preparation, Sliver formation, Nonvovens

Measurement and Control Technology







Strip thickness and roll measurement

Contact list

XiSys Software GmbH
Klosterstr. 24
D-97236 Randersacker
Germany

Phone: +49-931-4677-090
Fax: +49-931-4677-098
email: info@xisys.de
web: http://www.xisys.de