



Introduction to SERCOS interface

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Managing Director

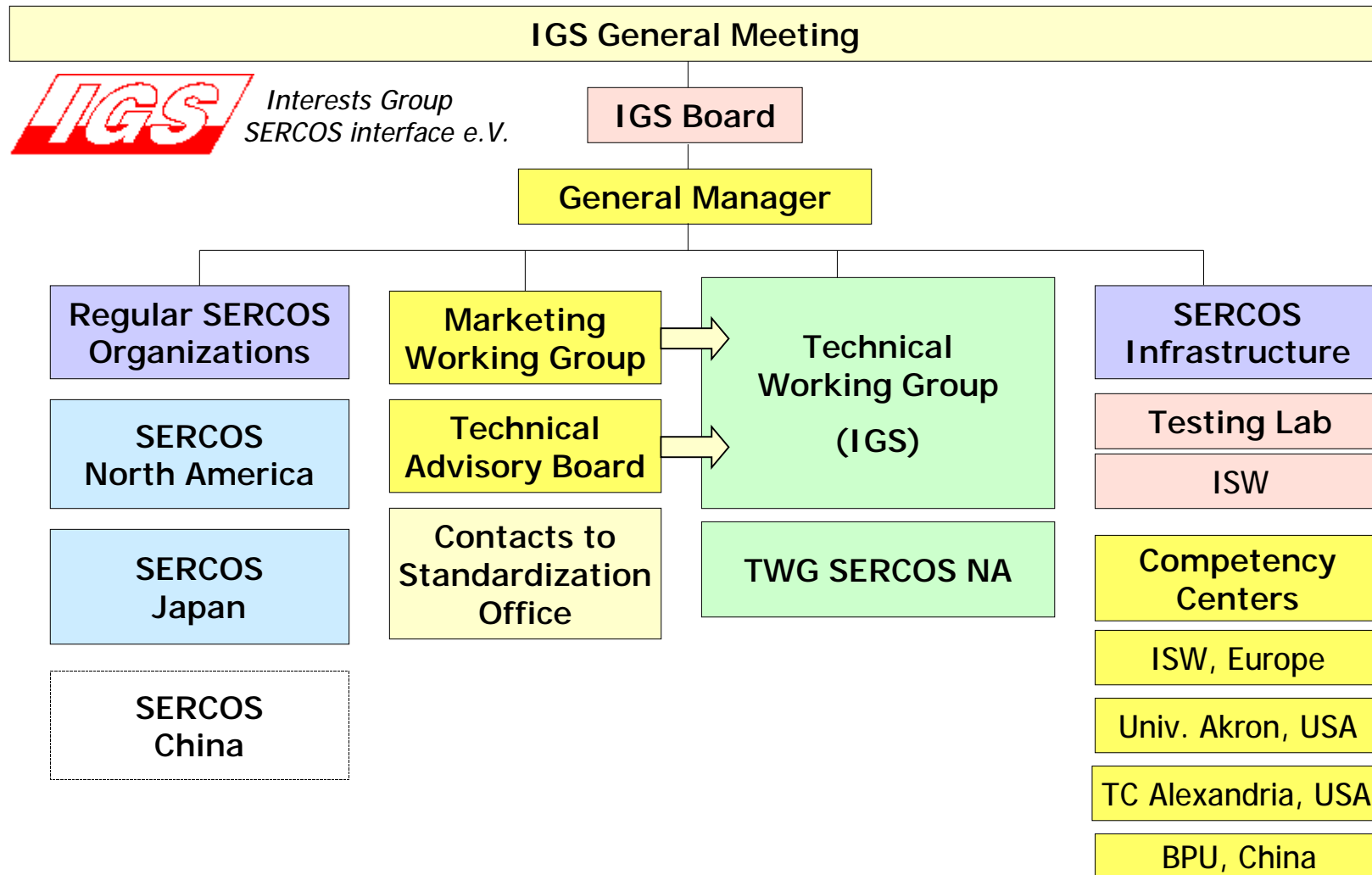
Interests Group SERCOS interface e.V. (IGS)

SERCOS interface Organization – Interest and Basic Charter



- Establishment of SERCOS interface as the International Digital Drive Interface Standard
- Ensure that products using the SERCOS interface trademark comply with the current standard
- Continuous improvement and update of the SERCOS interface
- Joint marketing activities
- Cost sharing for measures of common interest, rather than several times individual cost spending

IGS Organization - Structure



Members of SERCOS interface Organizations

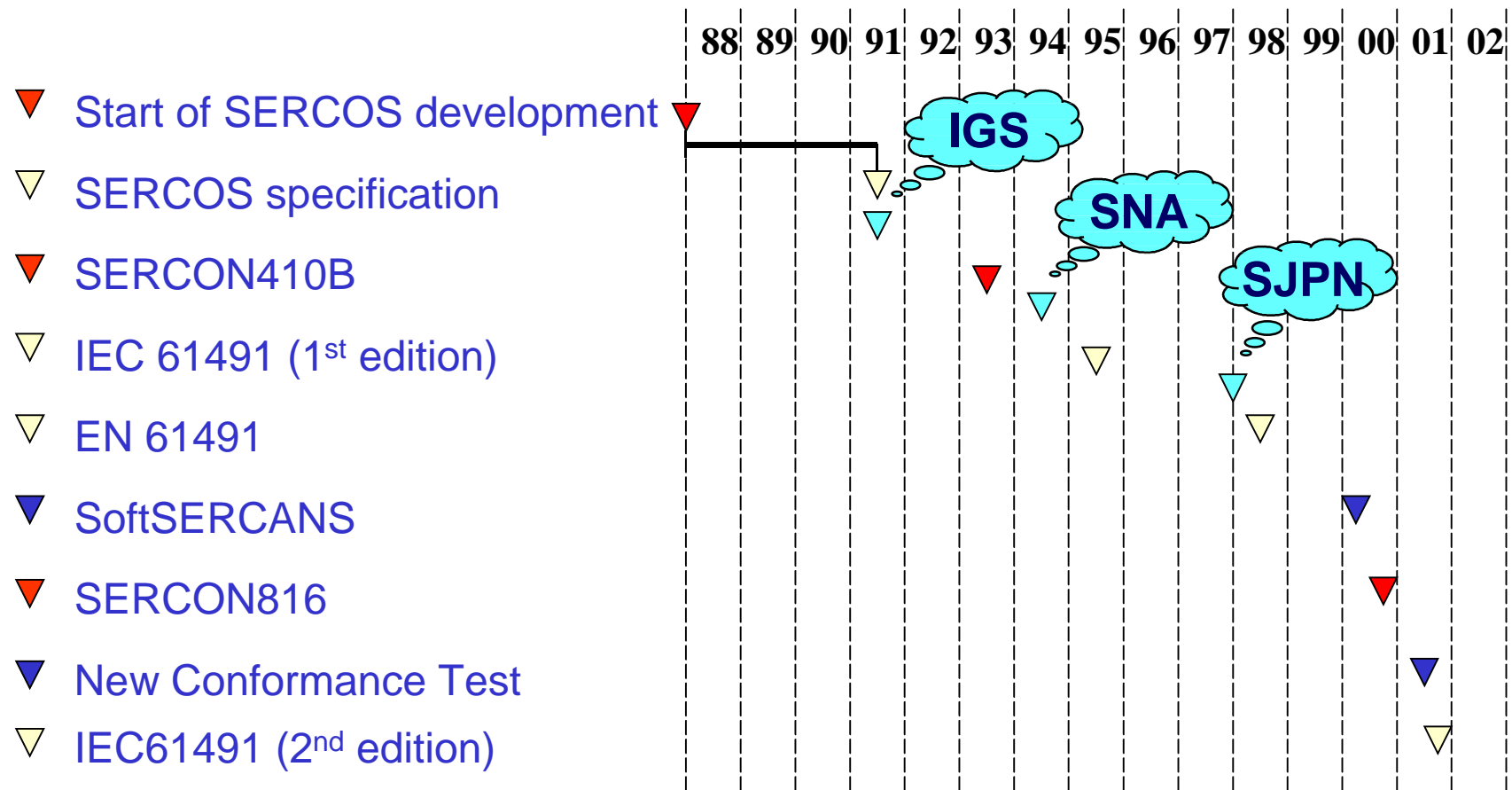


SERCOS interface - Profile



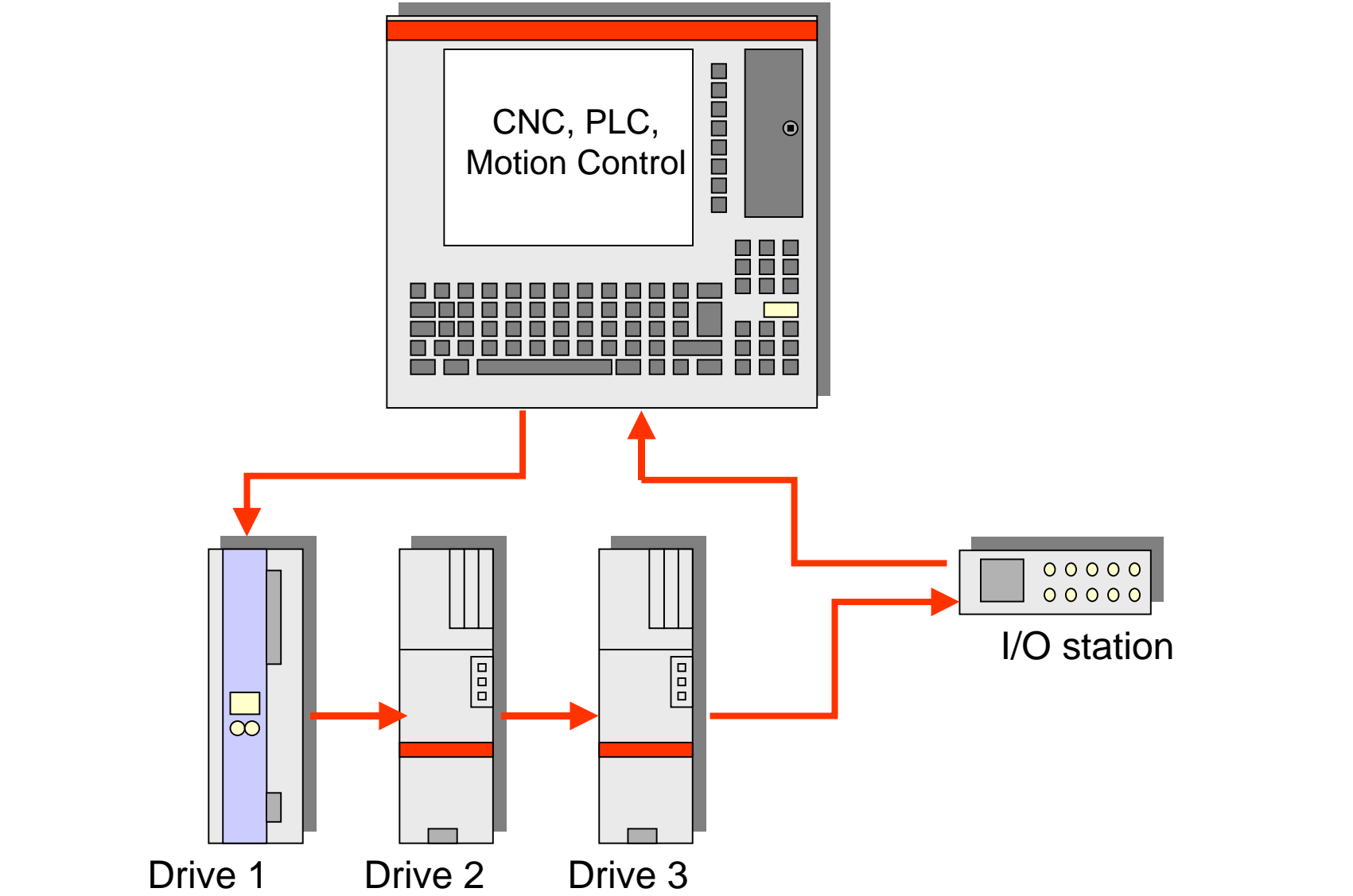
- **SERial Real-time COmmunication System**
- Focus on Motion Control Interface
- High Degree of Determinism – Nanosecond Range
- Small Overhead - Net Bandwidth ~ 75%
- Detailed Definition of Motion Control Structure
- Extensive Definition of Standard Parameters
- Data Rates: 2,4,8,16 with ASIC 816
- IEC 61491 First Edition Accepted November 1995,
Second Edition Approved in 2002

SERCOS interface - Milestones



IGS: Interests Group SERCOS interface; SNA: SERCOS North America; SJPN: SERCOS Japan

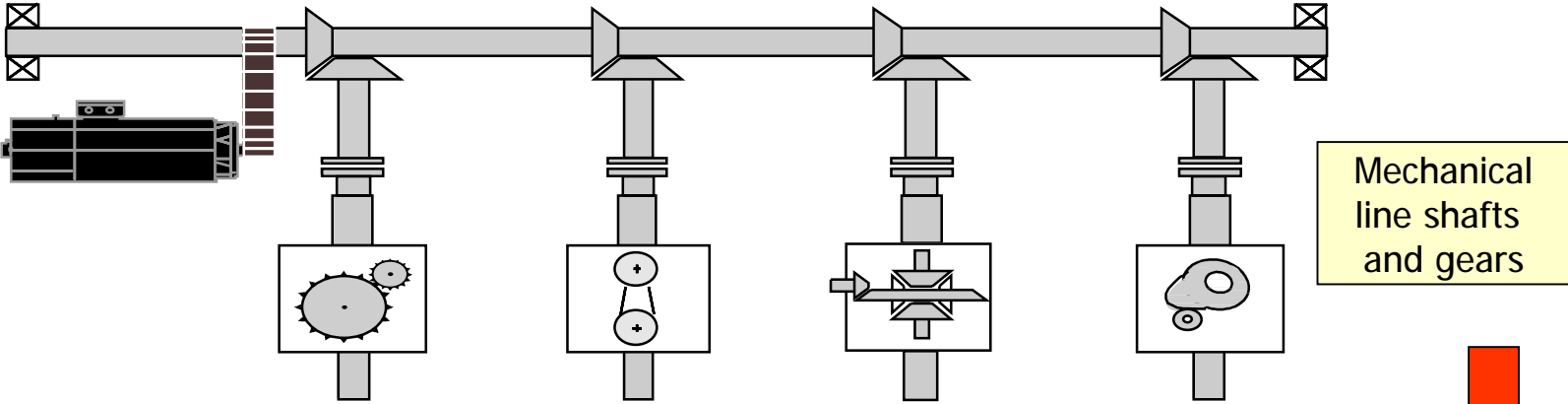
SERCOS Topology



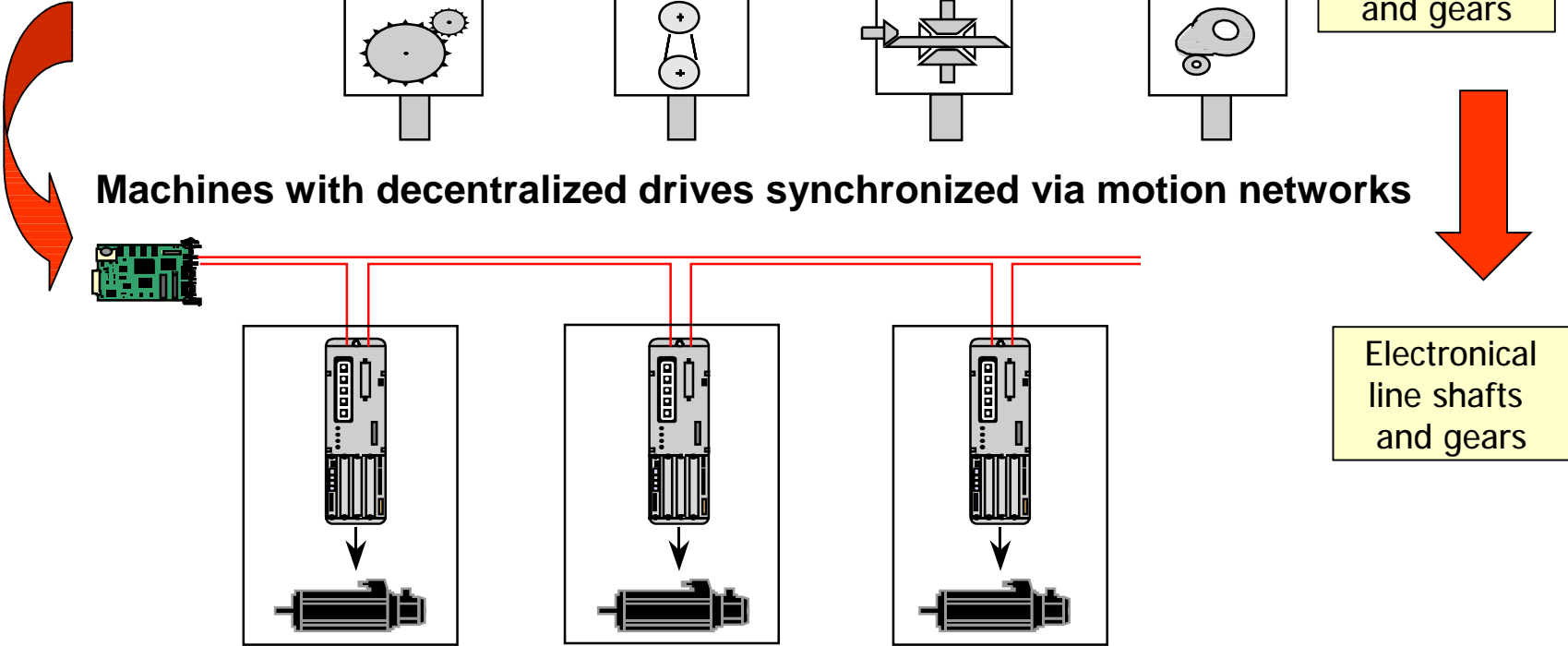
Synchronization with SERCOS



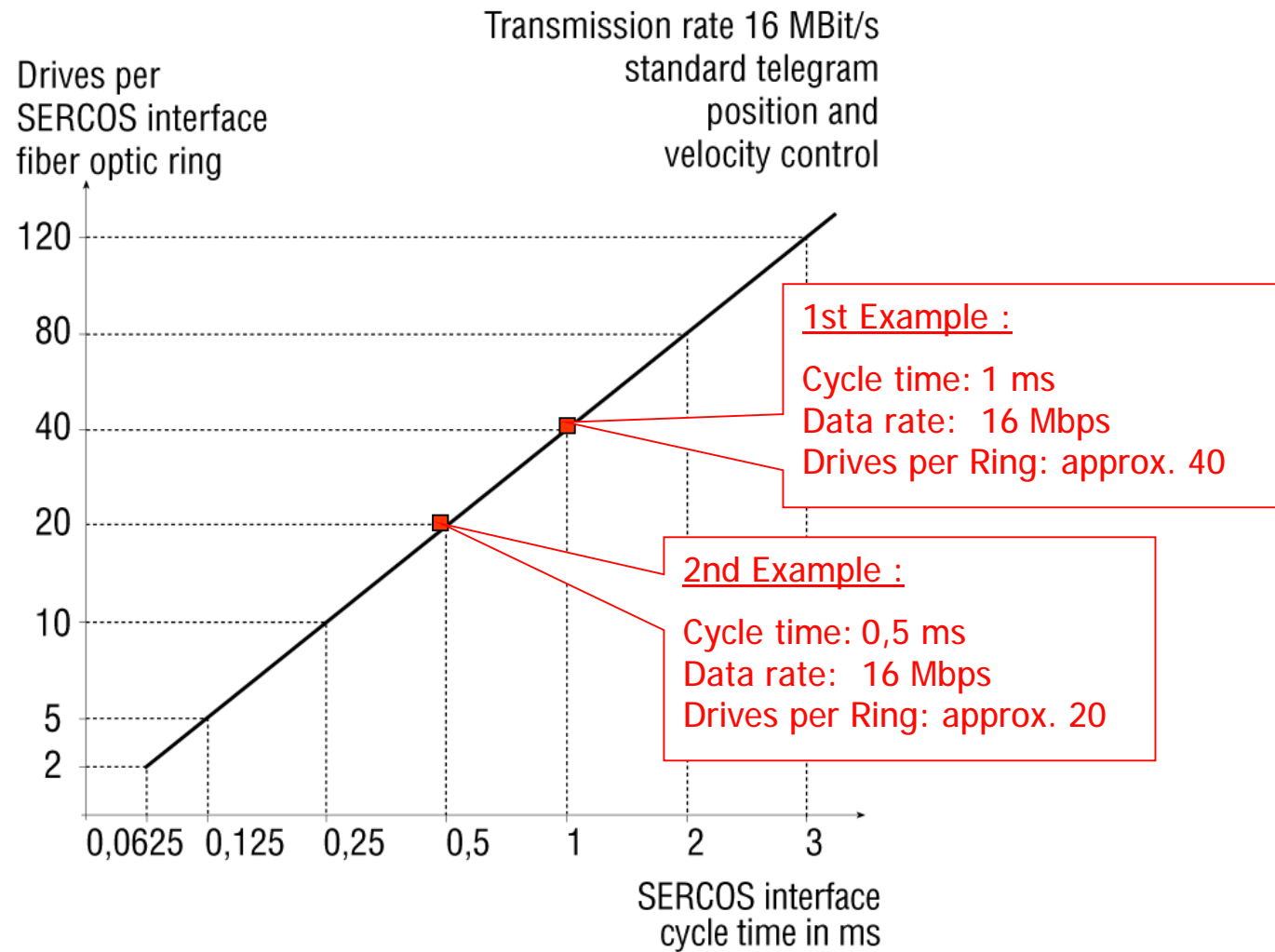
Machines with master drive and mechanical synchronization elements



Machines with decentralized drives synchronized via motion networks



Performance of SERCOS interface



Selected SERCOS Applications



Gear Grinding



Camshaft Grinding



High-speed Free-form Milling



Wood working



Packaging Machines



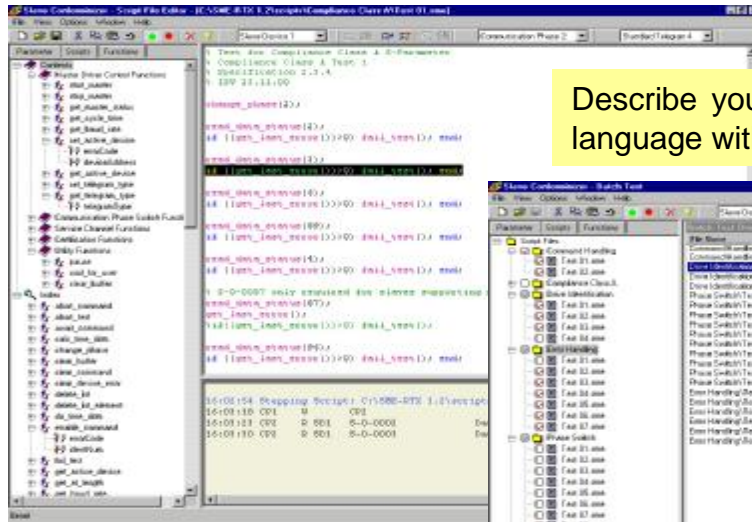
Printing Machines

Conformity Tests for SERCOS interface Devices - SERCOS Conformizer

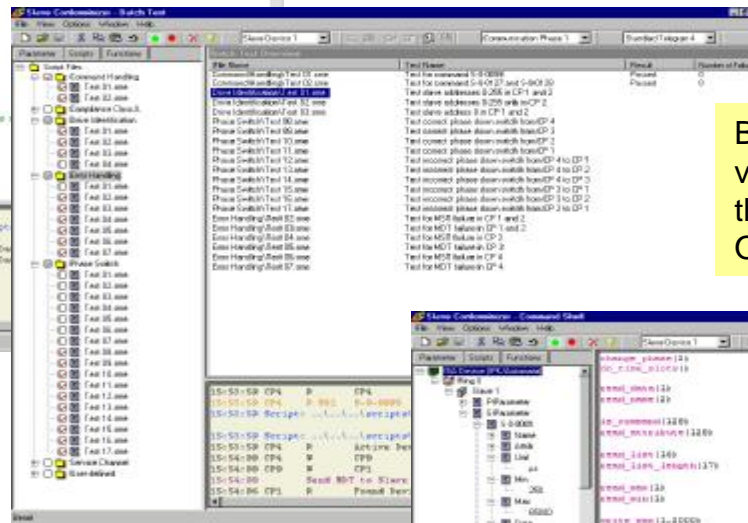


System Requirements

- Windows NT/2000
- RTX 4.3.2 or higher
- Internet Explorer 5.5 SP1



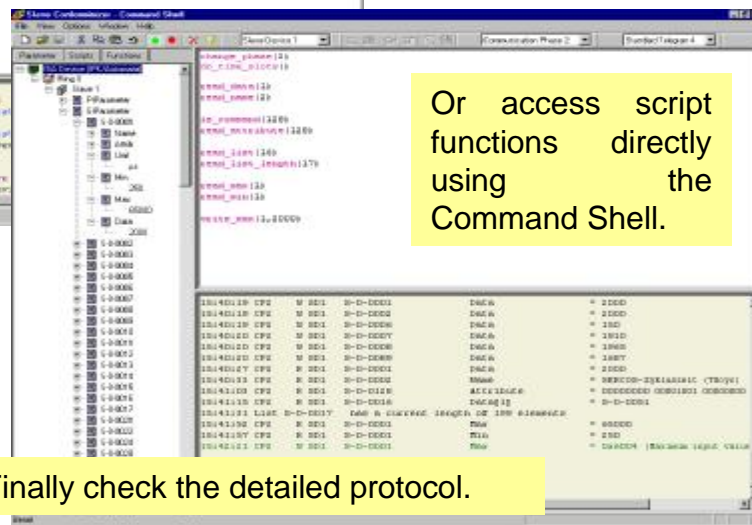
Describe your own tests using a script language with over 60 functions.



Build test scenarios and view the results using the Batch Test Overview.

Try out the official test scripts of the conformity test

- *Guarantee Sercos' Conformity for your customers*
- *Reduce your development time for Sercos' Devices*
- *Simulate Master and Slave Devices*



Or access script functions directly using the Command Shell.

Finally check the detailed protocol.

SERCOS interface – Actual Status



- SERCOS interface is the **only international and world-wide accepted standard** for digital drive interface technology
- SERCOS interface is the **superior solution** especially for motion applications requiring high performance combined with high precision
- Several 100.000 applications **prove the suitability and the stability** of the technology in many different application areas
- Many **multi-vendor installations** demonstrate the vendor-independent character of SERCOS interface
- **Over 70 suppliers** offer a large variety of SERCOS interface products world-wide

Contact Information



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