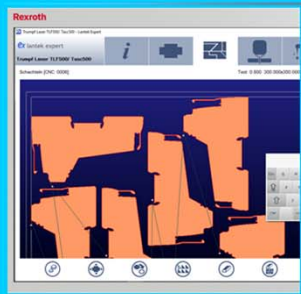
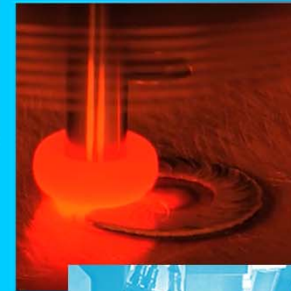
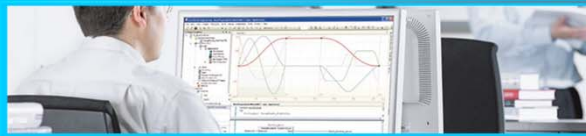


CNC Workshop – MTX 15VRS XM42

Free, a \$1500 value



We provide
the most
powerful CNC
in the market



CNC Workshop – MTX 15VRS XM42

Goals

- A hands-on approach is used to gain basic understanding and skills for the CNC, PLC, CNC HMI and servo/spindle drive, IndraDrive - walk away with a basic CNC example project.
- Each attendee uses CNC hardware with PROFINET RT, Ethernet/IP and Sercos automation connected to IndraDrive servo drives, building up a basic working project.
- Each attendee receives a USB memory stick with IndraWorks software and documentation and can save the created projects for later use.
- A laptop with Windows 7 is provided to those attendees that are unable to install the IndraWorks Engineering software.



CNC Workshop – MTX 15VRS XM42

Agenda



A. System Description

1. Overview MTX – CNC scalability
2. Hardware with Version 15VRS
 - a) Control hardware XM42
 - b) I/O - S20 and S67E IO-Link
 - c) panels and keyboards (VAM and VAK)
 - d) Industrial PCs (options)
 - e) Embedded HMIs
3. IndraWorks Software –Version 15
 - a) Software Variants and Options
 - b) IndraWorks Engineering
 - c) IndraWorks Operation OPD2 HMI
 - d) IndraWorks Workstation for 15VRS
 - e) Virtual Machine Builder VMB
 - f) Lantek Expert Inside for Shape Cutting
4. Demo of IndraWorks Operation
 - a) Layout of Framework and Screens, Features, Operation Modes, Diagnostics, NC Programming, etc.

B. IndraWorks Engineering

1. Create an IndraWorks project
2. Configure the Machine Parameters
3. Configure the Machine I/O
4. Program the PLC

C. IndraDrive

1. Configure Sercos Communication to the drives
2. Configure an IndraDrive

D. NC Programming

1. G-code or DIN Programming
2. CPL Programming
3. Subroutines
4. NC Variables

E. IndraWorks Operation

1. Screen Modification
2. Modifying OP-keys, M-keys and F-keys
3. Creating M-panels and F-panels
4. Creating User screens with WinStudio
5. Adding User Screens to IndraWorks
6. Creating Logbooks
7. OPC DA / OPC UA connections

F. WebComposer/WebAssist

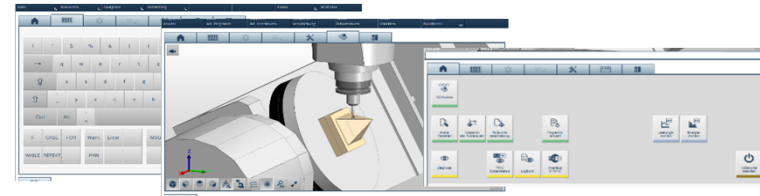
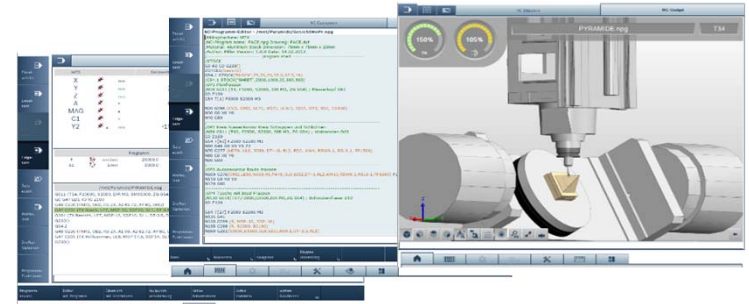
G. Backup & Restore

1. Create a backup of the workshop project
2. Restore backup in Emulation on the laptop

CNC Workshop – MTX 15VRS XM42

Prerequisites

- Each attendee must be registered for the complete event as it is limited to 7 attendees
- Attendee should be familiar with:
 - PLC systems
 - Drive technology
 - CNC systems
- The nature of the workshop assumes that the attendee can follow the faster pace
- Attendance of formal “**Indra**” product training may still be required after this workshop
- Attendee must make their own travel arrangements and cover expenses
- Please schedule any machine specific application reviews outside of the workshop hours



CNC Workshop – MTX 15VRS XM42

Certificate

- The attendee can request a printed certificate if attending the complete workshop
- The certificate will state
"Attended CNC MTX 15VRS XM42"
- The Application Team looks forward to meeting and working with you in this exciting workshop.



CNC Workshop – MTX 15VRS XM42

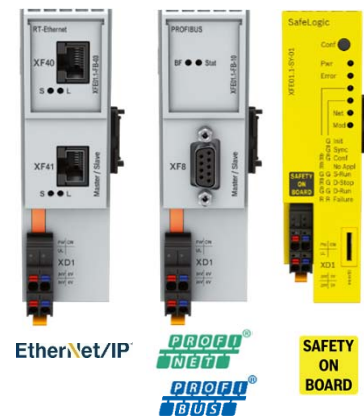
Hardware

High Performance with Multi-Core Processor

- $\geq 0.25\text{ms}$ interpolator cycle for max. productivity and results
- CNC automation with up to 250 axes in 60 channels
- Intelligent real-time task management
- One hardware platform with flexible performance scalability

Up to 3 additional communication and/or technology interfaces:

- PROFINET RT Controller / Device
- EtherNet/IP Scanner / Adapter
- PROFIBUS Master / Slave
- SafeLogic extension



Inputs and Outputs:

- Fastest signal processing ($10\ \mu\text{s}$ typical bus cycle)
- I/O processing synchronous with drives and motion-task
- Easy and flexible I/O-extension
- Up to 63 modules can be connected
- Complete IO portfolio of IndraControl S20

CNC Workshop – MTX 15VRS XM42

Variants

One hardware for all CNC performance levels



MTX standard



MTX performance



MTX advanced

CNC-Controller	XM42...MTXS	XM42...MTXP	XM42...MTXA
Max. number CNC axes	8...12	8...64	8...250
Max. number CNC spindles	4	32	60
Max. number interpolating axes / channel	4...5*	4...8*	4...8*
Max. number CNC channels	2	3...12	3...60
Minimum interpolator cycle	2ms	0.5ms	0.25ms

*) Base variant not export restricted acc. to EU dual use regulation

CNC Workshop – MTX 15VRS XM42

Topology

