# **APPLIED**

# **ProWin LNX**

## ProWin LNX Suite of online Monitoring Products

ProWin LNX PR for Machines from Blow room to Ring Spinning

ProWin LNX RF for Ring Frames Including Speed Control, TPI, and Power Monitoring

ProWin LNX LM for Looms

ProWin LNX PM for Power Monitoring of the Entire Spinning mill

ProWin LNX RH for Department Humidity Monitoring

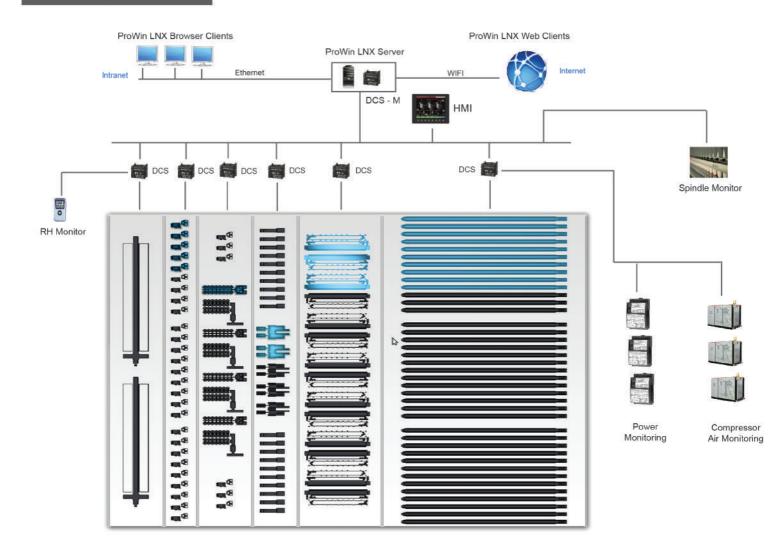
ProWin LNX AR for Compressed Air Consumption Monitoring





ProWin LNX is a powerful spinning Production, Power and RH Management Tool for departments ranging from Blow room to Ring Spinning. Looms. It offers flexible solutions to typical Production management problems An impressive number of more than 300 Installations of Pro Win verify this.

ProWin LNX acts as a front end to a back process deploying state-of-art PLC's and communication tools to realize a networked production management system. Pro Win LNX is build around industry standard PLC control electronics and interfaces making it the most reliable networked monitoring system in the world for this application. Open architecture of ProWin is the further evident in the wide range of machinery and flexibility in configuring fault inputs.



ProWin LNX has an open architecture which is designed for use under a variety of environment in a vendor independent manner. This system can be implemented on today's most popular computing environments using Linux and their networks.

The back-end control electronics could be multi-ventor PLC's and DCS Systems using industry standard open communication protocols. All popular makes and models of Production machinery on the plant floor can be linked to the system via the backend control electronics. Alternatively the machinery can be directly linked if they already employ PLC's with industry standard Interfaces. With specific reference to Ring Frames, the speed control feature supports drive systems of all types ranging from dual drives, VPS, G5/1 variator and inverter drives of all leading vendors like Siemens, Danfoss, RockWell Automations, Fuji etc...

# ProWin LNX System Reliability of Components

ProWin LNX is extremely reliable and trouble free. This reliability is designed into the system by use of industrial grade ruggedised components from leading automation equipments vendors.

Communication System: Industrial Ethernet interface between PC and PLC for Reliable Communication

Data Capture and Control System: Industry Standard PLC based system for data capture and control System

Online Information Display Systems: Embedded standard industrial PC for Online Monitoring.

#### Controls:

Machine Speeds TPI Variations Doff Timings Preparatory M/c Speed Control using Inverter, Variator actuator for Ringframe Monitors TPI Variations on short lengths and initiates alarm stop Monitors Doff timings and Doff delays and manages doff staggering

Automatic can change after doffing

Looms Beam change, Humidification Pump,Fan

#### Monitors:

Production Hanks, Spindle Speed, TPI, Picks Stoppages Mc, Doff, Doff Delay, Short and Long

Faults Reason based stops on wired faults, Warp, Welt

Power Volts, Amps, PF, KW, KWH, UKG

Humidity RH and Temperature
Quality TPI,Breaks rates,U% CV%

## Reports:

Production, Utilization online & instant,

Downtime's, Quality

Exceptions,

**Employee Productivity** 

Graphs

### Integrates:

Production Data with ERP systems like SAP,INTEX,Data Tex,and other third party Systems. Interfaces to multivendor Energy meters over mod bus RS 485 or Ethernet

Interfaces to multivendor Weighting Balances

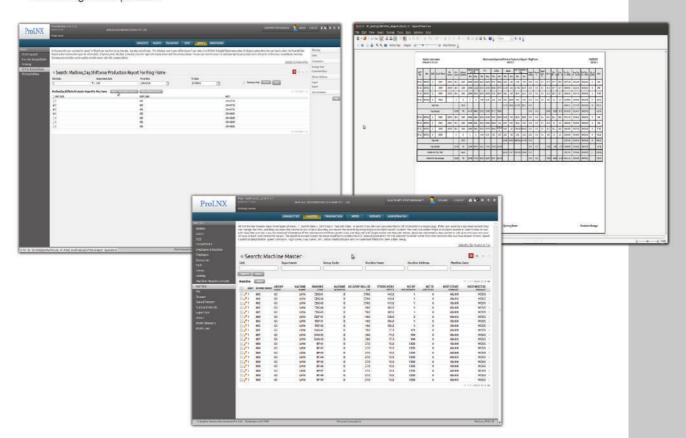
Supports Touch Screen HMI to collect data on shop floor





# **User Benefits**

- \* Accurate timely availability of Data helps enforce standards on productivity & downtime's
- \* Eases production accounting and minimizes manual efforts to maintain records
- \* Speed control on Ring Frames improves production while maintaining end breaks
- \* Power Monitoring helps track & control UKG, Variations in UKG between machines
- \* Corporate MIS needs compressor and humidification plants can be managed effectively by close monitoring made possible



### System Highlights

#### User Friendly:

ProWin LNX Consistent graphical user interface is extremely easy to operate wit minimal training. Complete documentation is available online. This can be accessed a any point of time to get help on the features and operations.

#### Secure:

ProWin LNX is build with a tight security features. All the operations can be given access or denied on a per user basis. This helps create a hierarchy of users with rights corresponding to their operational needs and no more. Further more audit trails are builds tracking are built tracking each user's activities. This helps in building a secure controlled usage environment to manage information access and machinery control.

### Networked:

ProWin LNX is available in single-user or multi - user configurations. ProWin clients run on Embedded workstations connected over LAN/WAN The production and QC personal at all levels can access the system under a co-operative secure network setup.

## Complete:

ProWin LNX packs full-fledged diagnostics,backup/restore operations and host of other house-keepingfeatures to help administer and manage the systems effectively.

#### Flexible:

ProWin LNX is unbundled. Users can pick and choose the exact package that suits their needs today-with the confidence that advanced features are available should they need later.

#### Future Proof:

Above all, ProWin LNX is open, making it future proof. It is designed to handle the computer control electronics and production machinery environments of today and the future.

#### Proven

ProWin LNX software suite embodies the experience of more than 300 installations across India. It is working for some of the most modern EQUs and plants making it a proven and reliable production management tool.

## **Technical Specifications**

# System Information

ProWin Server : Embedded Industrial Computer

Network and Clients : Browser Clients

Control Electronics : Simatic programmable PLC with Industrial Ethernet Interface : ModBus, Profibus, Devicenet, RS232 ,RS485 HMI : 5.7 inch Touch Panel WinCE terminals

**Data Specifications** 

Database Supported : MS Access /MSQL Express/MSQL Server

Storage Time Frame : Can go upto 36 months based on Database choice

Shift Schedule : Upto 4 Shifts

# Machines for Monitoring

Machines	Blowroom	Cards	Draw Frames	Lap Frames	Combers	Speed Frames	Ring Frames	Looms
Production Efficiency		1	<b>/</b>	<b>✓</b>	1	<b>✓</b>	1	✓
Machine Utilization	1	1	1	<b>✓</b>	<b>✓</b>	<b>✓</b>	1	1
Downtimes(Stops)	1	1	1	1	1	<b>✓</b>	1	1
Employee Efficiency	1	1	<b>✓</b>	1	1	1	1	<b>✓</b>
Duration of Stops	✓	1	<b>✓</b>	✓	1	<b>✓</b>	1	1

Power : KWH,UKG and other electrical parameters based on Energy Meter

Compressor : Air Pressure Consumption Monitoring

humidity : Location RH, Temperature

# APPLIED

<sup>\*</sup> Trademark/Copyright patent rights of all products mentioned by name vest with respective manufacturers

<sup>\*</sup> Product specifications subject to change without notice due to continuous improvements