



**SAKTHI**  
ASSOCIATES

# ELECTRICAL PRODUCT CATALOG



## Our Electrical Conversion Portfolio



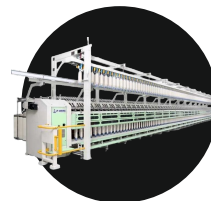
Blowroom



Carding



Comber



Speed Frame



Ring Frame



[www.sakthiassociates.co.in](http://www.sakthiassociates.co.in)



# OPTIMIZING CONTROL PANELS FOR **BLOWROOM** MACHINES



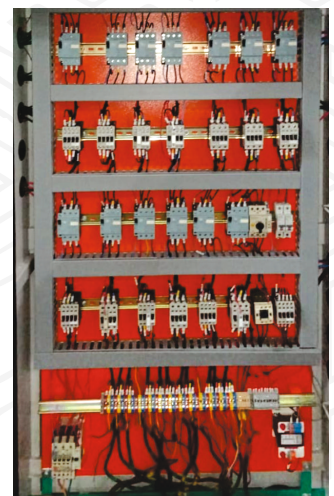
“Providing Automation Solution for all Blowroom Machines with our software kit.”

## SALIENT FEATURES:

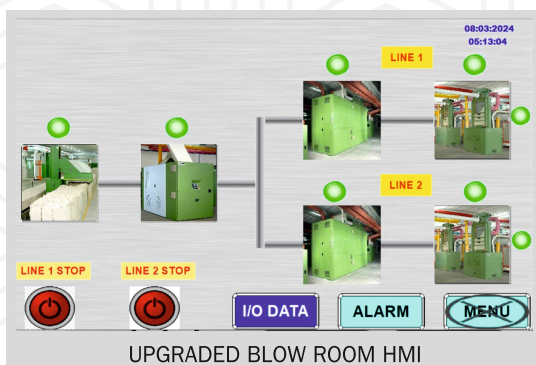
- ▶ Easy remote ON & OFF sequence possible through our HMI.
- ▶ All alarm messages will pop up in HMI for easy troubleshooting.
- ▶ Opening Rollers & Feed Rollers Speed can be assigned through HMI.
- ▶ Opening Rollers speed monitoring is inbuilt.
- ▶ Intelligent Contifeed system will result in consistent & better material feeding.

## BLOWROOM PRODUCTS:

- ▶ EGS / Line Commander control Panel complete Automation.
- ▶ TKN Network will be replaced with our DI Controls.
- ▶ BDT / Unifloc Panel Automation.
- ▶ Unclean Panel Automation.
- ▶ Mixer machine (MPM, UNIMIX) Panel Complete Automation.
- ▶ Uniflex / CLC Panel Automation.
- ▶ Intelligent Contifeed System.
- ▶ PID System for all waster collection filters.



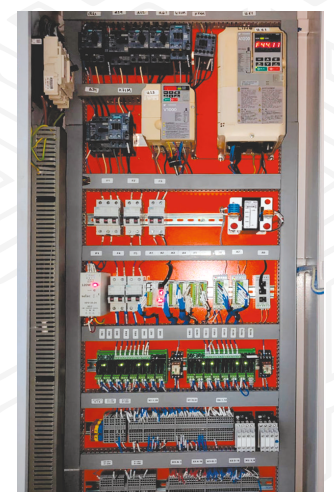
LINE COMMANDER PANEL  
POWER CONTROLS



UPGRADED BLOW ROOM HMI

COMMON ALARMS	LINE 1 ALARMS	LINE 2 ALARMS
EMERGENCY	MONITOR POSITION A	MONITOR POSITION B
STOP BUTTON FAIL	UNIMIX 1 READY	UNIMIX 2 READY
FIRE ALARM	UNIMIX 1 ALARM	UNIMIX 2 ALARM
COMP READY FAIL	FLEX CLEAN 1 READY	FLEX CLEAN 2 READY
MOTOR OLR FAIL	FLEX CLEAN 1 ALARM	FLEX CLEAN 2 ALARM
METAL DETECTOR FAIL	CCM 1 READY	CCM 2 READY
WASTE COLLECTION FAIL	CHUTE 1 LOW PRESSURE	CHUTE 2 LOW PRESSURE
PROCESS LINES SELECTED		
BALE PLUCKER READY		
BALE PLUCKER ALARM		
VARIO CLEAN READY		
VARIO CLEAN ALARM		
	ALARM HISTORY	

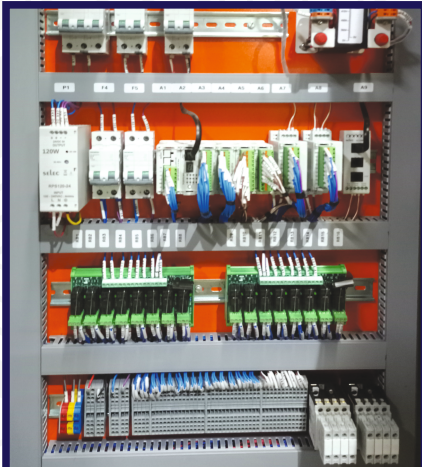
ALL MACHINES ALARMS IN SINGLE SCREEN



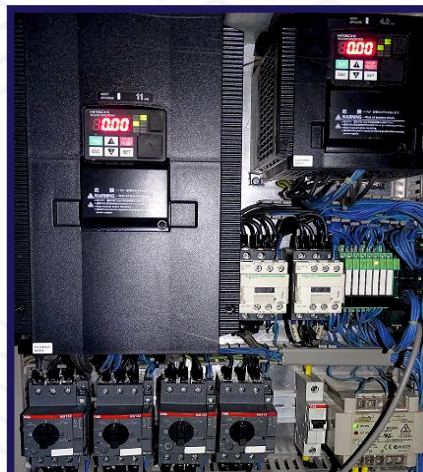
LINE COMMANDER PANEL  
AUTOMATION CONTROLS



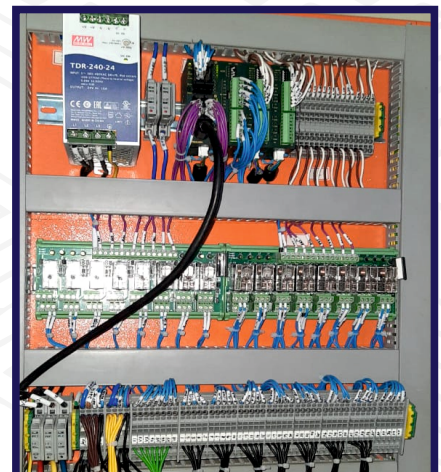
# OPTIMIZING CONTROL PANELS FOR **BLOWROOM** MACHINES



UPGRADED - BDT TURRET PANEL



UPGRADED - UNICLEAN PANEL



UPGRADED - CL - C1 PANEL



UPGRADED - MPM MACHINE PANEL



UPGRADED - UNIMIX MACHINE  
PANEL



UPGRADED - INTELLIGENT  
CONTIFEED PANEL



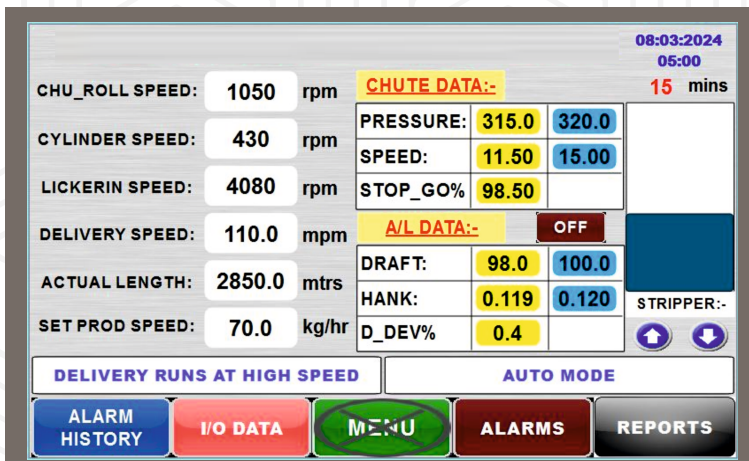
# ADVANCED UPGRADES FOR **CARDING** MACHINE

## SALIENT FEATURES:

- ▶ Conventional Baumuller Drives will be replaced with our PMM Drives conversion.
- ▶ Existing Servo Motors will be replaced with induction gear motors along with pulse output drives.
- ▶ DFK DC Motors will be replaced with AC Induction motors.
- ▶ Rieter Carding C50 & C51 complete panel conversion.
- ▶ Complete panel conversion with PLC & HMI.
- ▶ Consistent performance with better quality.



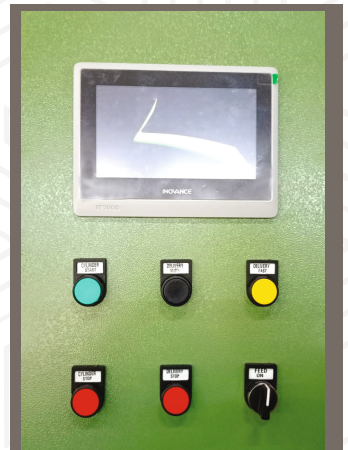
**DK 903 - DK 803 - DK 760 - DK 740  
C50 - C51**



UPGRADED HMI OF CARDING MACHINE



UPGRADED CARDING C50 & C51  
DRIVE AND PANEL CONVERSION



UPGRADED CARDING C50 & C51  
HMI CONVERSION



PMM DRIVES CONVERSION



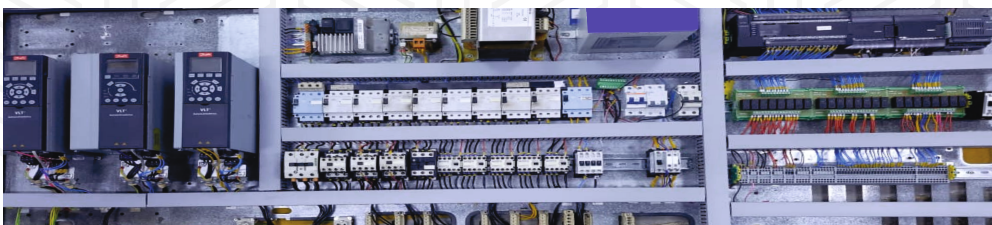
DRIVES WITH MOTOR CONVERSION



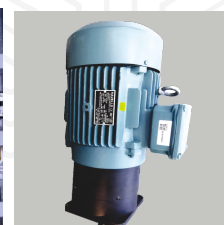
DFK FEED ROLLER MOTOR



MACHINE FEED ROLLER MOTOR



COMPLETE PANEL AUTOMATION



DELIVERY MOTOR



DOFFER MOTOR



# OPTIMIZED CONTROL PANELS FOR COMBER MACHINES

## SALIENT FEATURES:

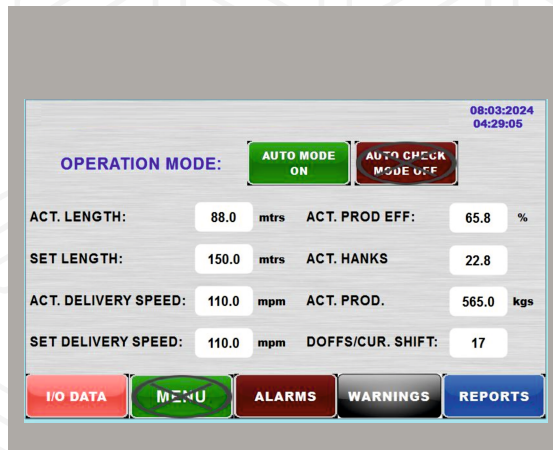
- ▶ RMP & SCU PLC will be replaced with our PLC.
- ▶ B&R HMI will be replaced with our HMI.
- ▶ Waste collection Suction pressure monitoring is inbuilt.
- ▶ Brush Speed monitoring is inbuilt.
- ▶ Digital pressure switch provided for detaching roller & Drafting roller.



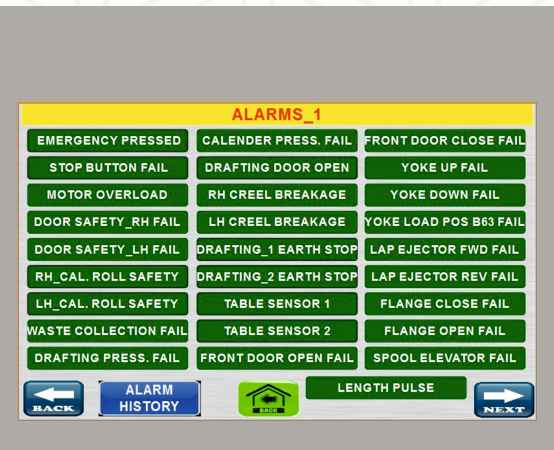
**WE CAN MODIFY ALL TYPE OF LAP FORMER  
& COMBER PANELS WITH OUR SYSTEM**



UPGRADED UNILAP PANEL



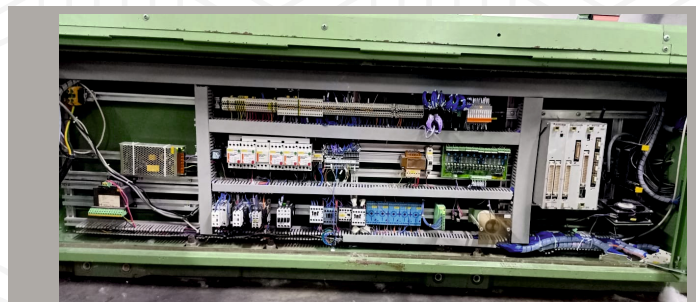
UPGRADED UNILAP HMI



UPGRADED UNILAP HMI ALARMS



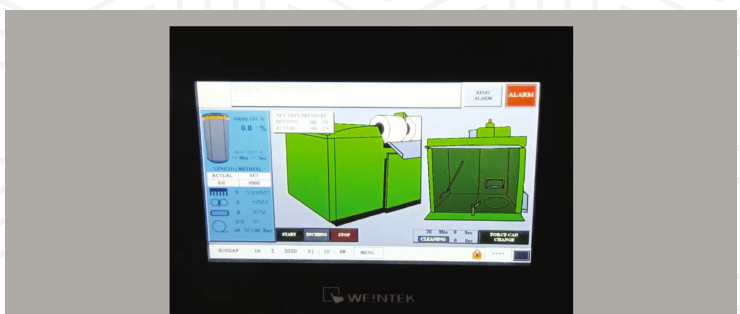
OLD PLC SYSTEM : SCU & RMP



OUR MODIFIED COMBER PLC PANEL



OLD HMI SYSTEM : B&R



OUR MODIFIED COMBER TOUCH SCREEN



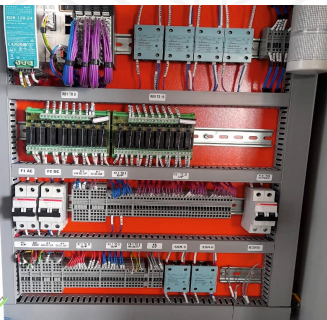
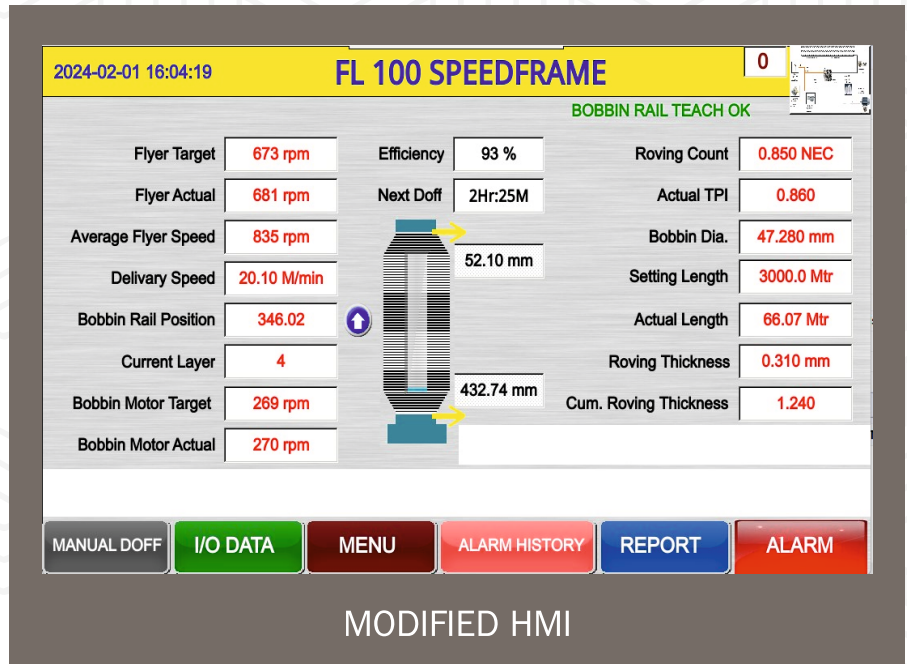
# ADVANCED UPGRADES FOR SPEED FRAME MACHINE PANELS



## SALIENT FEATURES:

- ▶ Cone drum will be replaced with induction motor (closed loop feedback).
- ▶ No need of Mechanical adjustments for tension control
- ▶ No need of Mechanical adjustments for bobbin angle
- ▶ Consistent Tension control from initial to full bobbin - without tension sensors.
- ▶ Speed pattern can be adjusted with 10 steps.
- ▶ After set length / dia during doffing bobbin Rail will reach home position automatically.
- ▶ Bobbin Reversal safety monitoring through digital encoder pulses inbuilt.

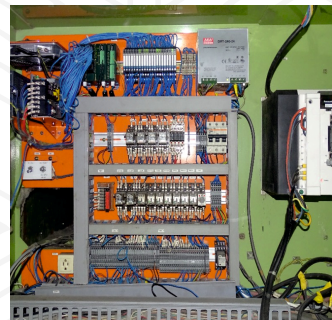
**A Complete Technological Solution Suitable for  
Toyota FL-16, FL-100, Howa, Jingewi, LF - 1400 & 1465**



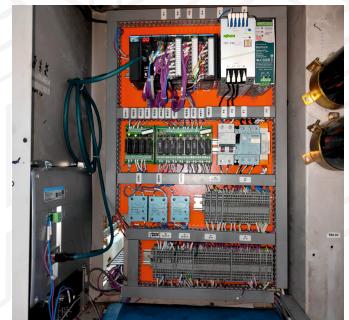
**MODIFIED FL-16  
ELECTRICAL PANEL**



**MODIFIED JINGEWI  
ELECTRICAL PANEL**



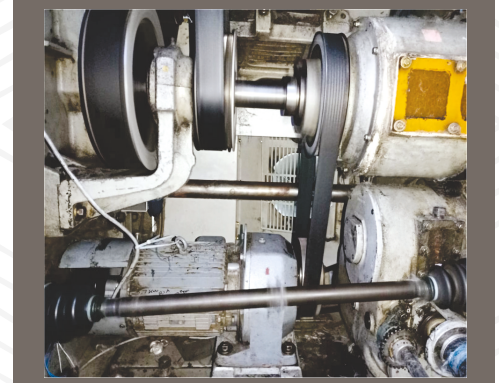
**MODIFIED HOWA  
ELECTRICAL PANEL**



**MODIFIED FL - 100  
ELECTRICAL PANEL**



**CONE DRUM & IT'S MECHANICAL COMPONENTS REMOVED**



**CONE DRUM REPLACED  
WITH INDUCTION MOTOR**



# EFFICIENCY UPGRADATION FOR RING FRAME

**A Complete Technological Solution Suitable for  
LRG5/1, LR 6, G30, K40, RX 240 Machines**

## SALIENT FEATURES:

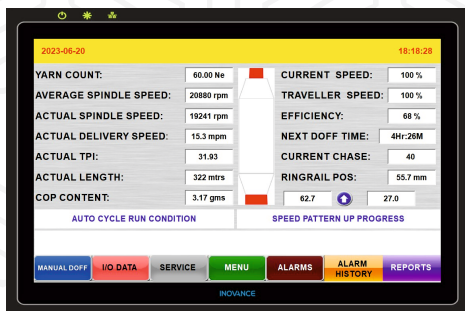
- ▶ Precision Ring rail movement with Motor Drive System.
- ▶ Reduced startup breaks achieved by controlling the ring rail position in millimeter accuracy. All the ring rail position and speed settings can be set through display.
- ▶ We can achieve the below target in startup breakages
  - 2 to 3% - Fine counts
  - 1 to 1.5% - Coarse counts.
- ▶ Cop content increase - 3 to 5%



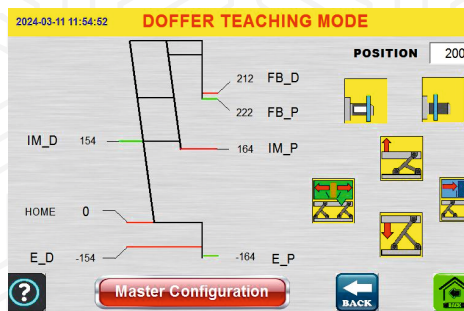
WITH SNARL



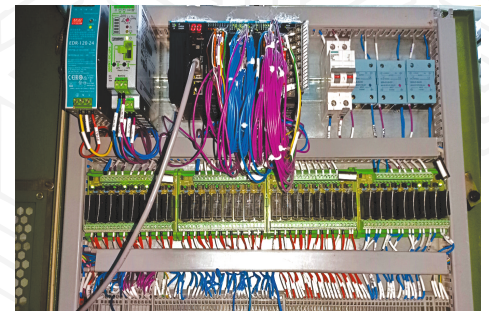
AFTER SNARL REMOVAL



UPGRADED MACHINE HMI



UPGRADED DOFFER HMI



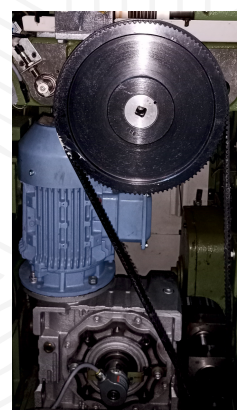
MODIFIED ELECTRICAL PANEL

## MECHANICAL COMPONENTS ELIMINATED BY THIS CONVERSION



1. Long snarl Cylinder
2. Short snarl Cylinder
3. Toggle Lever Cylinder
4. Under winding Cylinder
5. Damping Cylinder
6. Mechanical ratchet
7. Arm for ratchet
8. Heart Cam
9. Taper ration cam
10. Cop base cam

### RINGRAIL MOTOR & ENCODER TECHNOLOGY



### RINGRAIL VFD DRIVE







**SAKTHI**  
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**"PERFECT PARTS  
POWERING YOUR  
SUCCESS"**

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