



Partners in Progress
Growth catalyst for electrical infrastructure

Wissen Zentrum Technology
Technology Control system

Our Company

- ▶ **PM Control Equipment was incorporated in the year 2001 under The Companies Act, 2013;**
- ▶ **We have two manufacturing units, one in Kolkata and the other one at Vadodara (in Gujrat) spread across an area of 60,000 sq. ft. in both locations;**
- ▶ **Both manufacturing units are equipped with state-of-the-art manufacturing facilities, CNC machineries imported from renowned industrial houses like Amada, Japan.**
- ▶ **The Company has established its reputation as a reliable partner in the field of control panel boards, fabrication and other panel boards manufacturing technologies;**
- ▶ **Our Company specializes in manufacturing of electric panels for applications in housing, steel and oil & gas industry, power plants, textile, chemical industries and tea gardens etc;**

Vadodara factory

- ▶ **We are a well managed organization supported by dedicated and experienced professionals.**
- ▶ **The Company is certified under ISO 9001:2015 by DNV for quality management systems;**
- ▶ **We have achieved the privilege of becoming The Channel Partner of Schneider.**

Our Vision & Mission

Our Vision

“To become a preferred choice of partner to our customers for our organizational excellence, profitable and sustainable growth...”

Our Mission

“To develop in-house capability to offer all range of Fabrication, low & medium voltage switchgear panels within quality, cost, delivery and safety...”

An inspiring example !

Our Quality Policy

“The entire organization promises to make quality products

‘ON TIME’

TIMELY DELIVERY is the motto of our service.

**In order to achieve total customer satisfaction we work together in advance,
both at micro and macro level”**

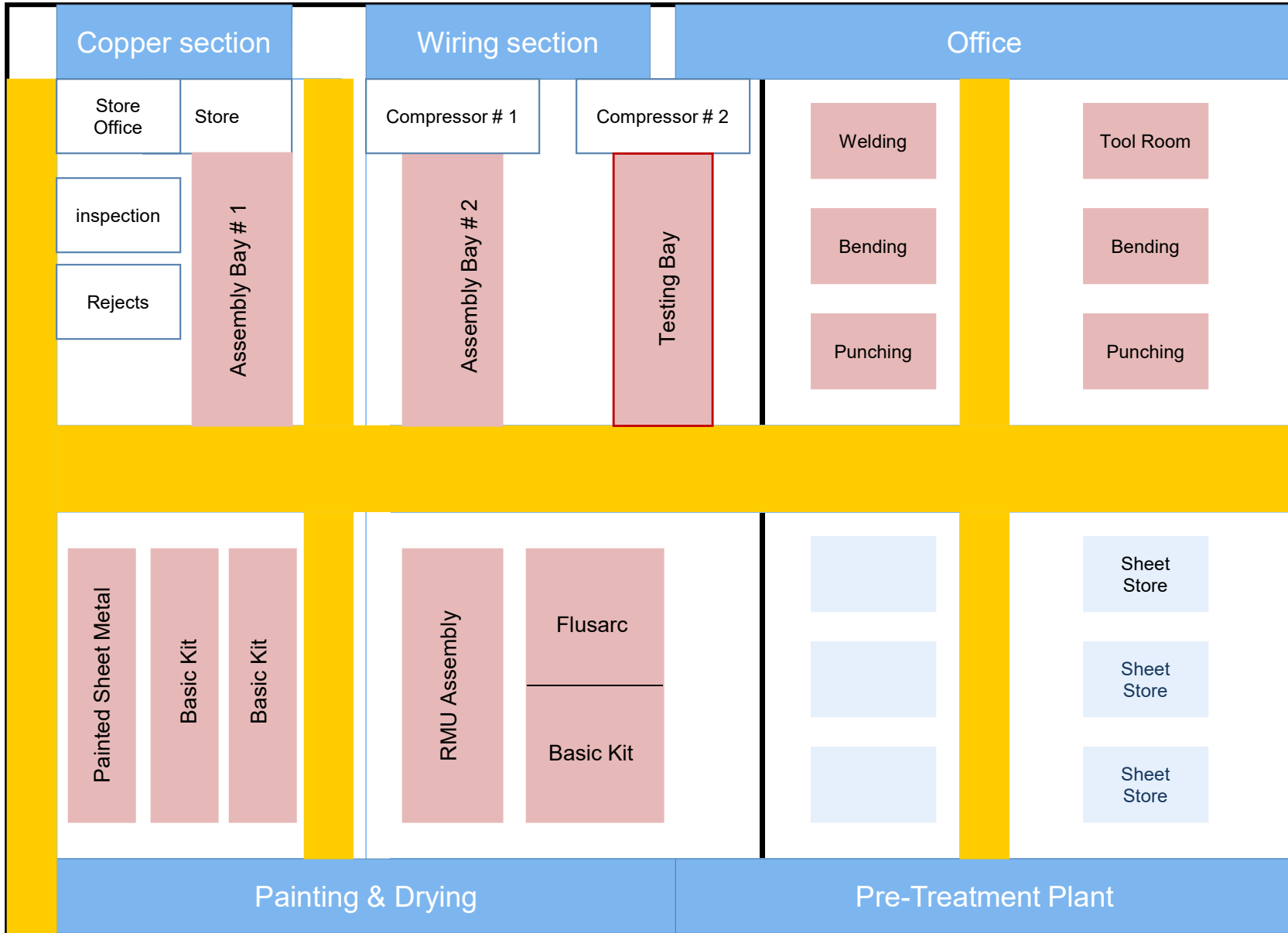
...strive beyond excellence!

- ▶ **Safety and safe working conditions.**
- ▶ **Customer & process driven.**
- ▶ **Healthy work environment.**
- ▶ **Non-conformity disposal.**
- ▶ **Employees engagement, mutual trust & respect for each others.**
- ▶ **Integrity, team work, honesty and commitment.**
- ▶ **Delivery performance.**
- ▶ **Excellence in all endeavour.**
- ▶ **Responsible corporate citizen.**

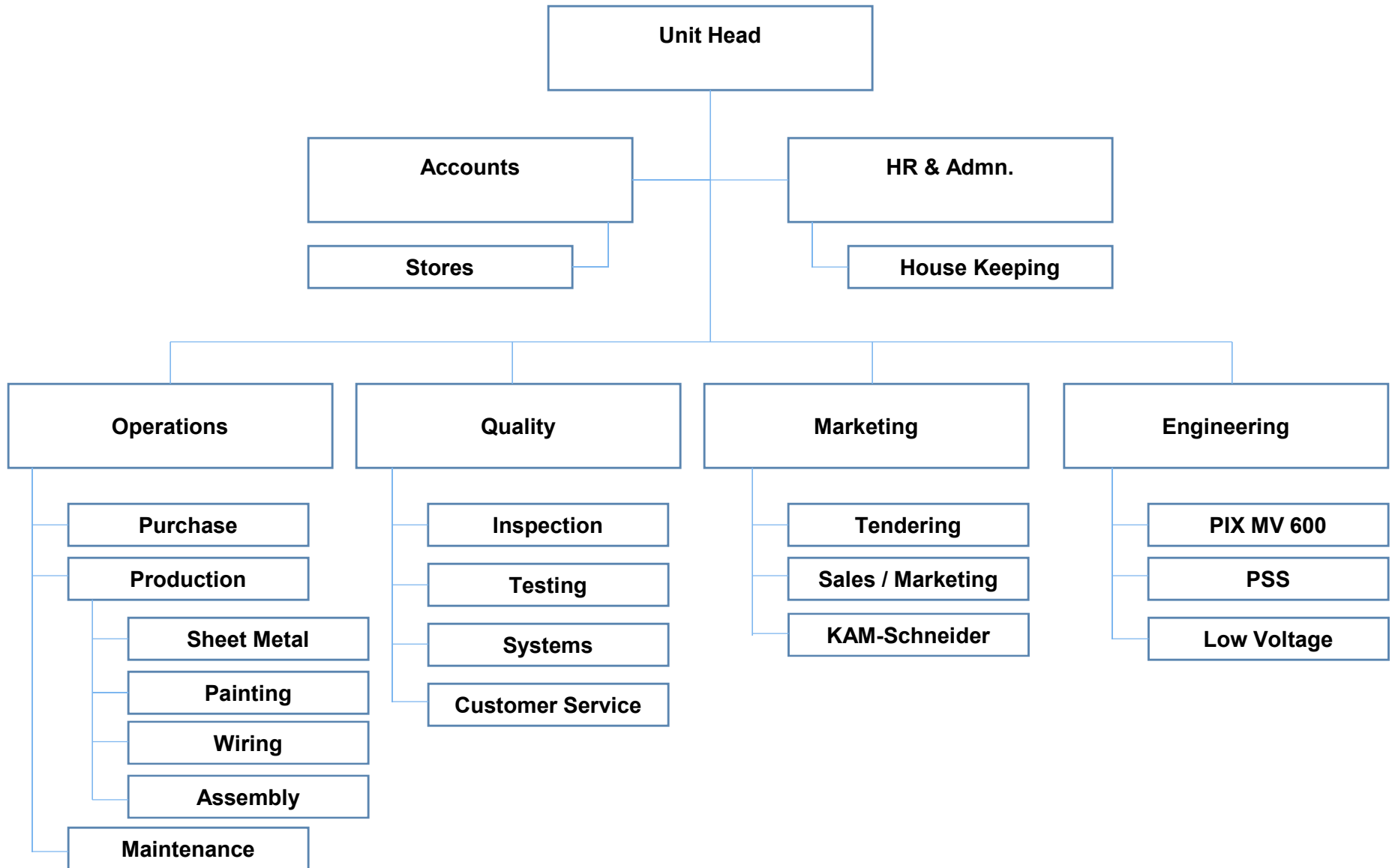


- ▶ **Factory areas total 185,180 Sq.ft**
- ▶ **Building area 60,500 Sq. Ft**
- ▶ **All heavy machines are Amada make and directly imported from Japan.**
- ▶ **Investment (Gross as on 31st Dec,2013)**
 - **Land & Building : 11,55,75 K**
 - **Plant & M/c : 4,82,67 K**
 - **Office Equipment : 6,13 K**
 - **Electrical & Computer : 9,20 K**
 - **Vehicle : 5,77 K**
 - **Software : 6,87 K**
 - **Powder coating plant : 98,75 K**
 - **Capital WIP : 3,41,65 K**
 - **Total : 20,85,16 K**
- ▶ **Employee (52)**
 - **Management staff (9) | Production Staff (7) | Permanent Workmen (25) | Contract labour (2) | Casual (8) | Driver (2)**

Factory Layout



Our Organisation



Manufacturing Equipments

Sl. No.	Machine / Equipments	Model	Make	Capacity	Quantity
1	Punching M/c	AC 255 NT	Amada GmbH	200 KN	1
2	Punching M/c	Aries 255	Amada GmbH	200 KN	1
3	Bending M/c	RG M2 1003	Amada GmbH	1000 KN (100 Ton)	1
4	Bending M/c	RG 80	Amada GmbH	1000 KN (80 Ton)	1
5	Bending M/c	RG 35	Amada GmbH	1000 KN (35 Ton)	1
6	MIG Welding M/c	300TS	Mogora & ESAB		6
7	Surface Grinding M/c		AMADA		1
8	Stand Dril M/c	1/2"	KM Panchal	19 mm	1
9	Guillotine Shearing M/c	KHS-25/4		4 mm	1
10	Power Press		Shailesh	75 T	1
11	Hydraulic Lifting M/c				1
12	Compressor		Kaeser	8 Bar	1
13	Compressor		IngerSoll Rand	8 Bar	1
14	Compressor	Two Stage		175 PSI	1
15	Multi Punch Press	For BUSBAR	Nam Sung	12 mm	1
16	Multi Punch Press	For BUSBAR	Arco Whitney	12 mm	1
17	Table Drill		KNIP	32 mm	1
18	Sleeve Heating M/c				1
19	EOT Crane		Endeavour	5 Ton	1
20	Bench Grinder				1

Powder Coating Equipments

Sl. No.	Test Instrument	Model	Make	Capacity	Quantity
1	10 Tanks Pre-treatment			1.5*3Mtrs	10
2	Water Drying Oven		Brahma		1
3	Powder Coating Booth		SFT		1
4	Powder Coating Guns		Statfied Equipments		2
5	Curing Oven		SFT	13Mtrs	1
6	Automatic Conveyer		SFT		1
7	Hydraulic Trolley				2
8	ETP Plaint		Eco Care		1
9	ETO Crane		Indef	2 Tons	1



Punching M/c

Amada AC 255 NT



Model	Amada AC 255 NT
Year	2007
Press Type	AC Servo Drive
Axis Traverse Distance	1270 x 1270mm
Workable Maximum Sheet Size	1270mm x 2540mm (with auto repositioning)
Max. Material Thickness	3.2mm mild steel
Max. Hole Diameter	88.9 mm
Max Material Weight	150 kg
No. of Stations	24 A up to 12.7 mm 18 B up to 31.7 mm 3 C up to 50.8 mm 2 D up to 88.9 mm 3 A1 up to 31.7 mm 1 A1 up to 50.8 mm
Axis Speed (X, Y)	100 m/min
Hits Per Minute	

Turret Speed Bi-Directional	30 R.P.M
Punching Accuracy	0.1 mm (incl 1 reposition)
Electric Power Required	19 KVA
Air Pressure Required	5.0 Kg/cm ²
Air Flow	500 l/min
Machine Length	4165 mm
Machine Width	2600 mm
Machine Height	2082 mm
Machine Weight	11000 kg
Model Of NC:	AMNC-F windows based network control
Display: Data Interface:	15" Colour LCD touch screen www.powermanagement.co.in

Serial No: 50520464

Bending M/c

Armada RG M2 1003

Specifications		RGM2-1003
Tonnage	KN (ton)	1000(100)
Max Bend Length	mm	3100
Stoke length	mm	
Approach Speed	mm/s	70
Bending Speed at	mm/s	13.0
Return Speed	mm/s	52
Machine Weight	Kg	6700



Serial No: 10032003

Features:

- NC Controller, Front support table
- Table speed:1.3 times, Back gauge speed:3 times
- Side guard, Rear guard, 3P foot S/W
- Direct/Angle mode, new bend deduction calculation, note functions
- Amada fixed height tool, 2V die, Front supporter, Digital protractor

MIG Welding M/c

Moroga MIG 300TS

MODEL	MIG 300TS	
Power Source	Switching	
characteristic	CV	
Rated Output (KWA)	12.50	
60% Duty Cycle	6.25	
100% Duty Cycle		
Input supply voltage (V)	415V AC / 3 Ph.,50Hz.	
Max.input current @ 60% Duty Cycle (Amps)	17.5	
Power factor	-	
Switch fuse rating (Amps)	TP/20	
No. of steps	30	
Open circuit voltage(VDC) (VDC)	18-43	
Current range (Amps)	60-300	
Max. current DC @ 60% duty cycle (Amps)	300	
@ 110% duty cycle	230	
Insulation (class)	H	
Cooling	Forced Air	
Dimension (LxWxH)(mm)	700x390x690	
Weight Approx (Kg)	130	



Quantity : 2 Nos.
 Serial No : 10040059
 : 10031006

Features:

- The spatter in CO2 welding is almost eliminated, hence less labour needed to clean the spatter;
- The voltage and current can be precisely regulated to get an optimum welding condition;
- As efficient as an inverter based machines, hence less power consumption;
- User-friendly and very easy to maintain;
- Wide range of applications: MS, SS, Aluminium and its alloys.

Busbar Multi Processing M/c

NSB 606A

Features:

- User convenience
- Innovatively improved punching system
- Bending, cutting, and punching work by 3 persons at the same time
- Improvement of work efficiency is 10 folds more than compared to the conventional machine by adopting newly improved system



Specification

Max. Capacity		Punching	Bending	Cutting
Copper		T15 xW150mm	T15 xW150mm	T15 xW150mm
Aluminum		T15 xW150mm	T15 xW150mm	T15 xW150mm
Steel Plate		T6 xW150mm	T8 xW150mm	T6 xW150mm
Hole	Round(Bus Bar)	∅ 23mm	The hole dimension is available according to customer's requirement	
	Oval(Bus Bar)	20x23mm		



Busbar M/c

Shearing, Punching, Bending (3 in 1)M/c NSB 606A

Features:

- User convenience
- Innovatively improved punching system
- Bending, cutting, and punching work by 3 persons at the same time
- Improvement of efficiency of work faster than 10 times compared to the conventional machine by adopting new



SPECIFICATIONS

Maximum processing capacity	160mmx15mm Copper & Aluminum
Size	Width : 1350mm, Length : 1250mm Height : 1420mm
Power	380V, 415V / 3 Phase
Motor	5HP / 50hz, 60hz / Single Motor (3 Motors Available)
Busbar Cutting and Bending	160mm x 15mm
Busbar Punching	3.4 ~ 25



Process flow chart

Step 1
Raw Material Stock



Store

Step 2
Punching



**Punching process on Amada AC
255 NT**

Step 3
Bending



Amada RG 80



Amada RG 35

Process flow chart



Testing Instruments

Test Instrument	Make	Serial No.	Model	Range
AC-DC Test Panel Serial No. 09/12/023	Delta	K-81	NIL	0-750 V
	Delta	K-86	NIL	0-2A/20A
	Delta	K-85	NIL	0-200/750 V
HV Test Set Serial No. 09/02/024(A)	Nippen	NIL	SI 96	0-40 KV
	Nippen	NIL	SI 96	0-100 mA
High Current Injection Set Serial No. 09/02/025(A)	Delta	K-88	NIL	0-600 A
Digital Micro-Ohm Meter		A01537C10	LR-2045	0-2000 mili-ohm/0-2000 ohm
Digital Multimeter		111917	14S	0-1020 VAC
				0-1020 VDC
				0-11 ADC
				0-11 AAC
Digital Micrometer		15064184	MDC-25SB	0-25 MM
Bevel Protector		135685		0-90-0-90-0
Digital Vernier Caliper		50665	CD-12 PSX	0-300 MM 0-12 INCH
Digital Height Gauge		3006015	HDS-H12C	0-12 INCH

Design Processes

- ▶ **A skilled team of around Six(6) Engineers from the design cell under the watchful eyes of our Director for optimum solution.**
- ▶ **The aim of the design cell is to design innovative and economical panels that satisfies the demands of today's business, utilizes optimum floor space and are flexible enough to meet the requirements of varying customers from different industries;**
- ▶ **The detailed engineering is done based on finale design and released for execution for fabrication and assembly;**

Assembly Process

- ▶ **Four assembly lines follow a lean process;**
- ▶ **Completely assembled panels are powder coated to make them completely dust and rust proof;**
- ▶ **Assembled panels are put through all stringent routine tests like High Voltage Di-electric Strength, High Voltage Megger Test etc. to eliminate any margin of error;**
- ▶ **All the products of the company are manufactured as per the international quality standards and can compete with their international counterparts.;**
- ▶ **The company ensures that the products are monitored at each stage of production, to ensure that only the best products leave the factory;**
- ▶ **The company's electric panels are high in aesthetic looks, performance and durability.**

- ▶ **Our commitment to quality is validated every year by DNV for ISO 9001:2015 certification for quality management systems;**
- ▶ **We ensure incoming inspection of all bought-out materials;**
- ▶ **In-process inspection throughout the production process;**
- ▶ **Our technical experts ensure compliance as per the international IEC 60439-1 standards for all 7 routine tests meeting the requirements;**
- ▶ **Protections from both external influences viz. foreign bodies, dust, water, corrosion and earthquakes and internal influences viz. Internal arcs, Short Circuit & Temperature rise are built in the system.**



- ▶ All components are checked as per BoM, Legend Sheet / SLD;
- ▶ We check all component stickers as per scheme drawings:
- ▶ Checking of all continuity test of control circuit as per scheme drawings;
- ▶ Test the control circuit as per scheme drawing injecting the power;
- ▶ Test the CT polarity, metering and potential circuit injecting the primary side;
- ▶ High voltage test;
- ▶ Resistance in micro-Ohm between incoming & outgoing with breaker;
- ▶ Check for cleanliness inside and outside the panel.
- ▶ Routine tests are conducted to ensure the following:
 - Verification of effectiveness of the control & protective scheme;
 - Verification of clearances & creep age distances;
 - Verification of mechanical operation;
 - Verification of insulation resistance;
- ▶ Our products are type tested at independent NABL approved test lab for 50kA short-circuit withstand capacity and temperature rise at 2500A;
- ▶ They are also tested for degree of protection for IP: 55

Products Range



Compact Substation



33KV Outdoor Panel



33KV Indoor Panel

Products Range



Ring Main Unit



5000A Bus duct



Distribution Transformer

Products Range



PCC Panel



MCC Panel



Capacitor Panel

Products Range



11KV Outdoor Panel



11KV ICOG Panel



11KV Switch Board



Relay Panel



11KV Instrument Chamber



2.2KW Drive Panel

Products Range



Soft Starter Panel



160KW Drive panel



PLC panel internal wiring



Control Desk

Improvement actions

- ▶ **Five PS' (People, Product, Plant, Process & Performance)**
- ▶ **People development;**
- ▶ **Product – Prototype development and validation**
- ▶ **Plant layout and facilities**
 - **Factory premises including gate, signage, guard room, landscaping to make it sustainable green building;**
 - **Plant layout - Product & process flow;**
 - **Solar power back-up;**
 - **Welfare activities including workmen accommodation, recreational facilities, washrooms & kitchen, canteen and sport complex etc.;**
- ▶ **Process improvement for consistent delivery high quality product, eliminate waste, on-time delivery and to ensure safety for all as per SAM Audit Action Plan;**
- ▶ **Achieve consistent and high operational /Business performance.**



1st Generation (1991 to 2000):

Sl. No.	Customer Name	Type of Project	Year of Supply
1	Concast Steel & Power Ltd	LT Panel	In between 1991 to 1995
2	Eveready Industries Ltd	LT Panel	In between 1991 to 1995
3	Mcleod Russell India Ltd	LT Panel	In between 1991 to 1995
4	Tata Timken	LT Panel	In between 1991 to 1995
5	International Airport Authority of India	LT Panel	In between 1991 to 1995
6	Central Glass and Ceramic research Institute	LT Panel	In between 1991 to 1995
7	Vishnu Cotton Mills	LT Panel	In between 1991 to 1995
8	Hindusthan Cocacola Beverages Pvt Ltd	LT Panel	In between 1991 to 1995
9	ONGC	LT Panel	In between 1991 to 1995
10	Duncans Agro Industries Ltd	LT Panel	In between 1996 to 2000
11	Penden Cement	LT Panel	In between 1996 to 2000
12	Lakhi Cement	LT Panel	In between 1996 to 2000
13	Hindusthan Lever Ltd	LT Panel	In between 1996 to 2000
14	Ordinance Factory	HT & LT Panel	In between 1996 to 2000
15	Kanoria Chemicals	LT Panel	In between 1996 to 2000
16	Siemens Ltd	LT Panel	In between 1996 to 2000
17	Areva (Now Schneider)	LT Panel	In between 1996 to 2000
18	Hindusthan Motors	LT Panel	In between 1996 to 2000
19	Hindusthan Sales	LT Panel	In between 1996 to 2000
20	PWD West Bengal	LT Panel	In between 1996 to 2000



2nd Generation (2001 Onward):

Sl. No.	Customer Name	Type of Project	Year of Supply
1	Areava T& D India Limited	11 KV HT Panel	2007-2008
2	McLeod Russel India Limited	33KV S/S and LT	2008 , 2015
3	Hindustan Leaver Limited	LT Panels	2010
4	Siemens Limited	LT Panels	2014
5	The Luxmi Tea Company Limited	33KV S/S	2015
6	Oil & Natural Gas Corporation	Feeder Piller	2015
7	Bill Infratech Limited	11KV HT Panel	2015-2016,2017
8	Ruby General Hospital	11KV HT and LT	2015
9	Alsthom Industries (Dalmia Cement)	33KV S/S	2016
10	T&I Global	Turnkey Project	2015-2016
11	JDB Steel (Unit of Pepsico)	Turnkey Project	2016-2017
12	Emerson Network Power (Bhutan Telecom)	AMF , LT Panels	2014-2015
13	Schneider Infrastructure	HT Panel	2013-2017

Cont...

Sl. No.	Customer List	Type of Project	Year of Supply
14	Real Time Engineering Pvt. Ltd.	LT Panel , Indonesia	2017-2018
15	Danieli India Limited	11KV HT Panel	2017-2018
16	McNally Bharat Engineering Comp. Ltd.	LT Panels	2017-2018
17	Tulsi Speciality Foods	33KV S/S	2017-2018
18	Shree Ganesh Enterprise Project : MES , Ishopore	33KV and LT panels	2017-2018
19	Infinity InfoTech Parks Ltd.	LT Panels	2017-2018
20	Magnacon Electricals India Ltd. A Unit of INFINITY	LT Panel	2017-2018
21	Supreme Infrastructure India Ltd	LT Panels	2017-2018
22	Yavaraj Enterprise , Gelephu , Bhutan	11KV HT Panels	2017-2018
23	LP Traders , Nepal	11KV HT Panels	2017-2018
24	McLEOD Russel Uganda Ltd, Africa	LT Panels	2018-2019

Our Contact

Operating Company	PM Control Equipment Pvt. Ltd.
Address	<u>H.O and Factory :</u> Plot No:658 , Anandapur , Madurdaha East Kolkata Township , Kolkata-700107 <u>Factory :</u> RS No # 460, 461, 480/1 Asoj, Vadodara-Halol Expressway, Vadodara-391 510, Gujarat, India
Contact	Mob: +91 9163517519 (Kolkata)
Facsimile	
Contact Person	Shyam Sundar Jana
E-mail	customerskolkata@powermanagement.co.in
Website	http://www.powermanagement.co.in

Thank you !!

PM Control Equipment Pvt. Ltd.

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