

List of Monitoring & Measuring Equipment [MME] Laboratory & Process (QC) and Plan					Doc.No.	FQA01
					Rev.No.	00
Sr. No.	Description of M & M Equipment	Make	Holder's Name /Dept.	Range/L.C	Acceptance Criteria	Calibrated by
Plug Gauges - 6g						
1	WCP GO Plug Gauge	Baker	QC	M5X0.8-6g	-	Accurate Calibration & Testing Center
2	WCP NG Plug Gauge	Baker	QC	M5X0.8-6g	-	
3	WCP GO Plug Gauge	Baker	QC	M8X1.25-6g	-	
4	WCP NG Plug Gauge	Baker	QC	M8X1.25-6g	-	ZAWAR
5	WCP GO Plug Gauge	Baker	QC	M10X1.5-6g	-	Accurate Calibration & Testing Center
6	WCP NG Plug Gauge	Baker	QC	M10X1.5-6g	-	
7	WCP GO Plug Gauge	Baker	QC	M14X2.0-6g	-	
8	WCP NG Plug Gauge	Baker	QC	M14X2.0-6g	-	
9	WCP GO Plug Gauge	Baker	QC	M16X2.0-6g	-	
10	WCP NG Plug Gauge	Baker	QC	M16X2.0-6g	-	
11	WCP GO Plug Gauge	Baker	QC	M18X2.5-6g	-	
12	WCP NG Plug Gauge	Baker	QC	M18X2.5-6g	-	
13	WCP GO Plug Gauge	Baker	QC	M20X2.5-6g	-	
14	WCP NG Plug Gauge	Baker	QC	M20X2.5-6g	-	
15	WCP GO Plug Gauge	Baker	QC	M22X2.5-6g	-	
16	WCP NG Plug Gauge	Baker	QC	M22X2.5-6g	-	
17	WCP GO Plug Gauge	Baker	QC	M24X3.0-6g	-	
18	WCP NG Plug Gauge	Baker	QC	M24X3.0-6g	-	
19	WCP GO Plug Gauge	Baker	QC	M10X1.25-6g	-	
20	WCP NG Plug Gauge	Baker	QC	M10X1.25-6g	-	
21	WCP GO Plug Gauge	Baker	QC	M10X1.00-6g	-	
22	WCP NG Plug Gauge	Baker	QC	M10X1.00-6g	-	
23	WCP GO Plug Gauge	Baker	QC	M12X1.25-6g	-	
24	WCP NG Plug Gauge	Baker	QC	M12X1.25-6g	-	
25	WCP GO Plug Gauge	Baker	QC	M12X1.5-6g	-	Zawar
26	WCP NG Plug Gauge	Baker	QC	M12X1.5-6g	-	
27	WCP GO Plug Gauge	Baker	QC	M16X1.5-6g	-	Accurate Calibration & Testing Center
28	WCP NG Plug Gauge	Baker	QC	M16X1.5-6g	-	
29	WCP GO Plug Gauge	Zawar	QC	M14X1.5-6g	-	Zawar
30	WCP NG Plug Gauge	Zawar	QC	M14X1.5-6g	-	Zawar
31	WCP GO Plug Gauge	HIP	QC	1/4-28UNF-2A	-	Accurate Calibration & Testing Center
32	WCP NG Plug Gauge	Baker	QC	1/4-28UNF-2A	-	
33	WCP GO Plug Gauge	Baker	QC	5/8"-11UNC-2A	-	

34	WCP NG Plug Gauge	Baker	QC	5/8"-11UNC-2A	-	Zawar	
35	WCP GO Plug Gauge	Zawar	QC	5/16"X24 UNF-2A	-		
36	WCP NG Plug Gauge	Zawar	QC	5/16"X24 UNF-2A	-		
37	WCP GO Plug Gauge	Zawar	QC	7/8"X14 UNF-2B	-		
38	WCP NG Plug Gauge	Zawar	QC	7/8"X14 UNF-2B	-		
NUT WCP							
1	WCP GO Plug Gauge	ZAWAR	QC	M6X1.0-6H	-	ZAWAR	
2	WCP NG Plug Gauge	Zawar	QC	M6X1.0-6H	-		
3	WCP GO Plug Gauge	Zawar	QC	M6X1.0-6H	-		
4	WCP NG Plug Gauge	Zawar	QC	M6X1.0-6H	-		
5	WCP GO Plug Gauge	Zawar	QC	M16X1.5 – 6H	-		
6	WCP NG Plug Gauge	Zawar	QC	M16X1.5 – 6H	-		
7	WCP GO Plug Gauge	Zawar	QC	M16X1.5 – 6H	-		
8	WCP GO Plug Gauge	Zawar	QC	M16X1.5 – 6H	-		
Plug Gauges - 6h							
1	WCP GO Plug Gauge	Baker	QC	M5X0.8-6h	-	Accurate Calibration & Testing Center	
2	WCP NG Plug Gauge	Baker	QC	M5X0.8-6h	-		
3	WCP GO Plug Gauge	Baker	QC	M6X1.0-6h	-		
4	WCP NG Plug Gauge	Baker	QC	M6X1.0-6h	-		
5	WCP GO Plug Gauge	Baker	QC	M8X1.25-6h	-		
6	WCP NG Plug Gauge	Baker	QC	M8X1.25-6h	-		
7	WCP GO Plug Gauge	Baker	QC	M10X1.5-6h	-		
8	WCP NG Plug Gauge	Baker	QC	M10X1.5-6h	-		
9	WCP GO Plug Gauge	Baker	QC	M12 X1.75-6h	-		
10	WCP NG Plug Gauge	Baker	QC	M12X1.75-6h	-		
11	WCP GO Plug Gauge	Baker	QC	M14X2-6h	-	Accurate Calibration & Testing Center	
12	WCP NG Plug Gauge	Baker	QC	M14X2-6h	-		
13	WCP GO Plug Gauge	Baker	QC	M16X2-6h	-		
14	WCP NG Plug Gauge	Baker	QC	M16X2-6h	-		
15	WCP GO Plug Gauge	Baker	QC	M18X2.5-6h	-		
16	WCP NG Plug Gauge	Baker	QC	M18X2.5-6h	-		
17	WCP GO Plug Gauge	Baker	QC	M20X2.5-6h	-		
18	WCP NG Plug Gauge	Baker	QC	M20X2.5-6h	-		
21	WCP GO Plug Gauge	Baker	QC	M10X1.25-6h	-		
22	WCP NG Plug Gauge	Baker	QC	M10X1.25-6h	-		
23	WCP GO Plug Gauge	Baker	QC	M12X1.25-6h	-		
24	WCP NG Plug Gauge	Baker	QC	M12X1.25-6h	-		
25	WCP GO Plug Gauge	Zawar	QC	M14X1.5-6h	-		Zawar

26	WCP NG Plug Gauge	Zawar	QC	M14X1.5-6h	-	Accurate Calibration & Testing Center
27	WCP GO Plug Gauge	Baker	QC	M16X1.5-6h	-	
28	WCP NG Plug Gauge	Baker	QC	M16X1.5-6h	-	
29	WCP GO Plug Gauge	Zawar	QC	M16X2-6az	-	Zawar
30	WCP NG Plug Gauge	Zawar	QC	M16X2-6az	-	
31	WCP GO Plug Gauge	Zawar	QC	M20X2.5-6az	-	
32	WCP NG Plug Gauge	Zawar	QC	M20X2.5-6az	-	
33	WCP GO Plug Gauge	Zawar	QC	5/16"X24 UNF-3A	-	
34	WCP NG Plug Gauge	Zawar	QC	5/16"X24 UNF-3A	-	
Slip Gauges						
1	M1 Slip Gauge	MICRONIX	QC	M1 Slip Gauge	0.1 μ	Accurate Calibration & Testing Center
2	M2 Slip Gauge		QC	M2 Slip Gauge	0.1 μ	
3	M5 Slip Gauge		QC	M5 Slip Gauge	0.1 μ	
4	M10 Slip Gauge		QC	M10 Slip Gauge	0.1 μ	
5	M20 Slip Gauge		QC	M20 Slip Gauge	0.1 μ	
6	M30 Slip Gauge		QC	M30 Slip Gauge	0.1 μ	
7	M50 Slip Gauge		QC	M50 Slip Gauge	0.1 μ	
8	M 0.5 Slip Gauge	K.C.P	QC	M 0.5 Slip Gauge	0.1 μ	Accurate Calibration & Testing Center
9	M 1.05 Slip Gauge		QC	M 1.05 Slip Gauge	0.1 μ	
10	M 1.10 Slip Gauge		QC	M 1.10 Slip Gauge	0.1 μ	
11	M 1.20 Slip Gauge		QC	M 1.20 Slip Gauge	0.1 μ	
12	M 1.30 Slip Gauge		QC	M 1.30 Slip Gauge	0.1 μ	
13	M 1.40 Slip Gauge		QC	M 1.40 Slip Gauge	0.1 μ	
14	M 1.50 Slip Gauge		QC	M 1.50 Slip Gauge	0.1 μ	
15	M 1.60 Slip Gauge		QC	M 1.60 Slip Gauge	0.1 μ	
16	M 1.70 Slip Gauge		QC	M 1.70 Slip Gauge	0.1 μ	
17	M 1.80 Slip Gauge		QC	M 1.80 Slip Gauge	0.1 μ	
18	M 1.90 Slip Gauge	QC	M 1.90 Slip Gauge	0.1 μ		
MICROMETER						
1	Micrometer	Baker	Production	0-25 mm (LC-0.01)	+/- 0.01 mm	
2	Micrometer	Baker	Production	0-25 mm (LC-0.01)	+/- 0.01 mm	
3	Micrometer	Baker	Production	0-25 mm (LC-0.01)	+/- 0.01 mm	
4	Micrometer	Baker	Online Inspector	0-25 mm (LC-0.01)	+/- 0.01 mm	
5	Micrometer	Baker	Design	0-25 mm (LC-0.01)	+/- 0.01 mm	
6	Micrometer	Baker	Wire Draw	0-25 mm (LC-0.01)	+/- 0.01 mm	
7	Micrometer	Baker	Online Inspector	0-25 mm (LC-0.01)	+/- 0.01 mm	

8	Micrometer	Baker	Production	0-25 mm (LC-0.01)	+/- 0.01 mm	Sky Instruments & Control	
9	Micrometer	Baker	Production	0-25 mm (LC-0.01)	+/- 0.01 mm		
10	Micrometer	Baker	QC Lab	0-25 mm (LC-0.01)	+/- 0.01 mm		
11	Micrometer	Baker	QC Lab	0-25 mm (LC-0.01)	+/- 0.01 mm		
12	Micrometer	Baker	Final Inspection	0-25 mm (LC-0.01)	+/- 0.01 mm		
13	Micrometer	Baker	Tool Room	0-25 mm (LC-0.01)	+/- 0.01 mm		
14	Micrometer	Baker	Online Inspector	0-25 mm (LC-0.01)	+/- 0.01 mm		
15	Micrometer	Baker	SPARE	0-25 mm (LC-0.01)	+/- 0.01 mm		
16	Micrometer	Baker	SPARE	0-25 mm (LC-0.01)	+/- 0.01 mm		
17	Micrometer	Baker	QC Lab	0-25 mm (LC-0.001)	+/- 0.001 mm		
18	Micrometer	Baker	Tool Room	50-75mm (LC-0.01)	+/- 0.01 mm		
19	Micrometer	Baker	Tool Room	75-100mm (LC-0.01)	+/- 0.01 mm		
20	Micrometer	Baker	Production	25-50 mm (LC-0.01)	+/- 0.01 mm		
21	Pitch Micrometer	Baker	Online Inspector	0-25 mm (LC-0.01)	+/- 0.01 mm		
22	Thread Rolling Micrometer	Baker	Rolling Production	0-1 inch (LC-0.001 inch)	+/- 0.001 inch		
VERNIER							
1	Dial Vernier	Baker	Final Inspection	0-150 mm (LC-0.02)	+/- 0.020 mm		Sky Instruments & Control
2	Dial Vernier	Baker	DESIGN	0-150 mm (LC-0.02)	+/- 0.020 mm		
3	Dial Vernier	Baker	TOOL ROOM	0-150 mm (LC-0.02)	+/- 0.020 mm		
4	Dial Vernier	Baker	Online Inspector	0-150 mm (LC-0.02)	+/- 0.020 mm		
5	Dial Vernier	Baker	TOOL ROOM	0-150 mm (LC-0.02)	+/- 0.020 mm		
6	Dial Vernier	Baker	Online Inspector	0-150 mm (LC-0.02)	+/- 0.020 mm		
7	Dial Vernier	Baker	TOOL ROOM	0-150 mm (LC-0.02)	+/- 0.020 mm		
8	Dial Vernier	Baker	TOOL ROOM	0-150 mm (LC-0.02)	+/- 0.020 mm		
9	Dial Vernier	Baker	TOOL STORE	0-150 mm (LC-0.02)	+/- 0.020 mm		
10	Dial Vernier	Baker	SPARE	0-150 mm (LC-0.02)	+/- 0.020 mm		
11	Digital Vernier	Baker	Office	0-150 mm (LC-0.02)	+/- 0.020 mm		
12	Digital Vernier	Baker	QC Lab	0-150 mm (LC-0.02)	+/- 0.020 mm		
13	Vernier	Baker	Production	0-150 mm (LC-0.02)	+/- 0.020 mm		
14	Vernier	Baker	Production	0-150 mm (LC-0.02)	+/- 0.020 mm		
15	Vernier	Baker	Rolling Production	0-150 mm (LC-0.02)	+/- 0.020 mm		
16	Vernier	Baker	Online Inspector	0-150 mm (LC-0.02)	+/- 0.020 mm		
17	Vernier	Baker	Production	0-150 mm (LC-0.02)	+/- 0.020 mm		
18	Vernier	Baker	Production	0-150 mm (LC-0.02)	+/- 0.020 mm		

19	Vernier	Baker	Production	0-150 mm (LC-0.02)	+/- 0.020 mm	
20	Vernier	Baker	Production	0-150 mm (LC-0.02)	+/- 0.020 mm	
21	Vernier	Baker	Tool Room	0-150 mm (LC-0.02)	+/- 0.020 mm	
22	Vernier	Baker	SPARE	0-150 mm (LC-0.02)	+/- 0.020 mm	
23	Vernier	Baker	SPARE	0-150 mm (LC-0.02)	+/- 0.020 mm	
24	Vernier	Baker	Production	0-150 mm (LC-0.02)	+/- 0.020 mm	
25	Vernier	Baker	Tool Store	0-200 mm (LC-0.02)	+/- 0.020 mm	
26	Vernier	Kency	Production	0-200 mm (LC-0.02)	+/- 0.020 mm	
27	Vernier	Baker	Production	0-200 mm (LC-0.02)	+/- 0.020 mm	
28	Vernier	Baker	Production	0-200 mm (LC-0.02)	+/- 0.020 mm	
29	Vernier	Baker	Production	0-200 mm (LC-0.02)	+/- 0.020 mm	
30	Vernier	Baker	QC Lab	0-200 mm (LC-0.02)	+/- 0.020 mm	
31	Vernier	Baker	Production	0-300 mm (LC-0.02)	+/- 0.02 upto 100mm & +/- 0.004above 100mm	
32	Vernier	Baker	Tool Room	0-300 mm (LC-0.02)	+/- 0.02 upto 100mm & +/- 0.004above 100mm	
33	Vernier	Baker	Production	0-300 mm (LC-0.02)	+/- 0.02 upto 100mm & +/- 0.004above 100mm	
34	Vernier	Kency	Final Inspection	0-300 mm (LC-0.02)	+/- 0.02 upto 100mm & +/- 0.004above 100mm	

TORQUE WRENCH

1	Torque Wrench	Norbar	QC Lab	0.3 TO 1.5 NM	0.1	Accurate Calibration & Testing Center
2	Torque Wrench	Norbar	QC Lab	1.2 TO 6.0 NM	0.2	
3	Torque Wrench	Norbar	QC Lab	4 TO 20 NM	0.1	
4	Torque Wrench	Park Tool	QC Lab	0 TO 70 NM	5.0	
5	Torque Wrench	Tooluxe	QC Lab	0 TO 20 mkg	1.0	

BORE GAUGES

1	Bore Gauge	Baker	Tool Room	10-18MM(0.4"-0.7")	± 1.9µm	Sky Instruments & Control
	Plunger Dial Indicator	Baker	Tool Room	0 to 2 mm (0.01mm)	± 4.6µm upto 10mm	
2	Bore Gauge	Baker	Tool Room	18-50MM(0.7"-2")	± 1.9µm	
	Plunger Dial Indicator	Baker	Tool Room	0 to 2 mm (0.01mm)	± 4.6µm upto 10mm	

PLUNGER DIAL GAUGES

1	Plunger Dial Gauge	Baker	QC	0 -10mm (LC – 0.01mm)	+/- 0.01mm	Sky Instrument & Control
2	Plunger Dial Gauge	Baker	QC	0 -10mm (LC – 0.01mm)	+/- 0.01mm	
3	Plunger Dial Gauge	Baker	QC	0 -10mm (LC – 0.01mm)	+/- 0.01mm	
4	Plunger Dial Gauge	Baker	QC	0 -10mm (LC – 0.01mm)	+/- 0.01mm	

5	Plunger Dial Gauge	Baker	QC	0 -10mm (LC – 0.01mm)	+/- 0.01mm	
6	Plunger Dial Gauge	Baker	QC	0 -10mm (LC – 0.01mm)	+/- 0.01mm	
7	Plunger Dial Gauge	Baker	QC	0 -10mm (LC – 0.01mm)	+/- 0.01mm	
PRESSURE GAUGES						
1	Pressure Gauge	SMC	VMS 04	0-1 Mpa	+/- 0.01mm	Sky Instruments & Control
2	Pressure Gauge	MC	VMS 05	0-1 Mpa	+/- 0.01mm	
3	Pressure Gauge	MC	VMS 06	0-1 Mpa	+/- 0.01mm	
4	Pressure Gauge	MC	VMS 07	0-1 Mpa	+/- 0.01mm	
5	Pressure Gauge	SMC	VMS 08	0-1 Mpa	+/- 0.01mm	
6	Pressure Gauge	MC	VMS 09	0-1 Mpa	+/- 0.01mm	
7	Pressure Gauge	SMC	VMS 10	0-1 Mpa	+/- 0.01mm	
8	Pressure Gauge	SMC	VMS 11	0-1 Mpa	+/- 0.01mm	
9	Pressure Gauge	SMC	VMS 12	0-1 Mpa	+/- 0.01mm	
10	Pressure Gauge	SMC	VTR 02	0-1 Mpa	+/- 0.01mm	
11	Pressure Gauge	SMC	VTR 04	0-1 Mpa	+/- 0.01mm	
12	Pressure Gauge	SMC	VTR 05	0-1 Mpa	+/- 0.01mm	
13	Pressure Gauge	SMC	VTR 06	0-1 Mpa	+/- 0.01mm	
14	Pressure Gauge	SMC	VTR 07	0-1 Mpa	+/- 0.01mm	
15	Pressure Gauge	SMC	VTR 08	0-1 Mpa	+/- 0.01mm	
16	Pressure Gauge	SMC	VTR 10	0-1 Mpa	+/- 0.01mm	
17	Pressure Gauge	SMC	VTR 11	0-1 Mpa	+/- 0.01mm	
18	Pressure Gauge	SMC	VTR 12	0-1 Mpa	+/- 0.01mm	
19	Pressure Gauge	SMC	VTR 13	0-1 Mpa	+/- 0.01mm	
20	Pressure Gauge	MASS	SST	0-7 kg/cm2	+/- 0.01mm	
EDDY CURRENT TESTER						
1	Multifect – EX Eddy Current Tester	Technofour	QC	Less than 40 mm Dia	-	Technofour
OPTICAL SORTING MACHINE						
1	Optical Sorting Machine	Ching Chong Pvt Ltd	QC	M6 – M12	-	Ching Chong Pvt Ltd
FUME HOOD						
1	Fume Hood	-	QC	-	-	-
SALT SPRAY CHAMBER						
1	Salt Spray Chamber- Korrox III – 250H (SST/HMI/01)	Presto Stantest Pvt LTD	QC Lab	-	-	Sky Instruments & Control
	Digital Timer Hour	GIC/Quart2	QC Lab	0-99999	-	Sky Instruments & Control
UNIVERSAL TESTING MACHINE						

1	Universal Testing Machine-Electronic	Jay	QC	60 Tons(600KN)		Super Calibration Services Pvt.Ltd.
HARDNESS TESTER						
1	Rockwell Hardness Tester	Meta Test Instrument Pvt Ltd	HT SHOP	-	±1.0 HRC ± 1.3 HRB	Super Calibration Services Pvt.Ltd.
2	Rockwell Hardness Tester	Saroj Engineering Udyog Pvt Ltd	QC Lab	-	±1.0 HRC ± 1.3 HRB	Super Calibration Services Pvt.Ltd.
3	Optical Vickers Hardness Tester	Fuel Instrument & Engineers Pvt Ltd	QC Lab	70X (LC-0.001)	HV-5 ±3.0% HV-10±4.0%	Super Calibration Services Pvt.Ltd.
MICROSCOPE						
1	Microscope	Metzer	QC Lab	10X – 80X	-	Metzer
MICRO HARDNESS TESTER						
1		Vertex	QC Lab	40X – 400 X	-	SUN – TECH
PLATING THICKNESS TESTER						
1	Plating Thickness Tester (Simple Destructive Tester)	Para Electronics MFG. Division	QC Lab	0.01 – 0.1 micron	± 1µm =15 µm ±10% above15 µm	Electronics Enterprises (I) Pvt. Ltd
2	Plating Thickness Tester (Simple Destructive Tester)	Para Electronics MFG. Division	Plating Plant	0.01 – 0.1 micron	± 1µm =15 µm ±10% above15 µm	Electronics Enterprises (I) Pvt. Ltd
SPECTROMETER						
1	Spectrometer	Metalpower	QC	-	-	M-Tek Power Analytical Service
PROFILE PROJECTOR						
1	Profile Projector	Innovative Automation Product	QC	X-250, Y-150mm (DRO) (LC-0.005mm)	-	CAL-TECH Calibration Service Pvt Ltd
SURFACE PLATE						
1	Surface plate	Luthra	QC	450X450 mm	-	Luthra Engg Works
2	Surface plate	Luthra	QC	400X400 mm	-	Luthra Engg Works
DIGITAL HEIGHT GAUGE						
1	Digital Height Gauge DH300	Baker	QC Lab	0-300 mm (0.01MM)	0.03mm from 50-300mm, +/-0.04mm from 200-	Sky Instruments & Control

IN HOUSE QUALITY LAB



SALT SPRAY CHAMBER



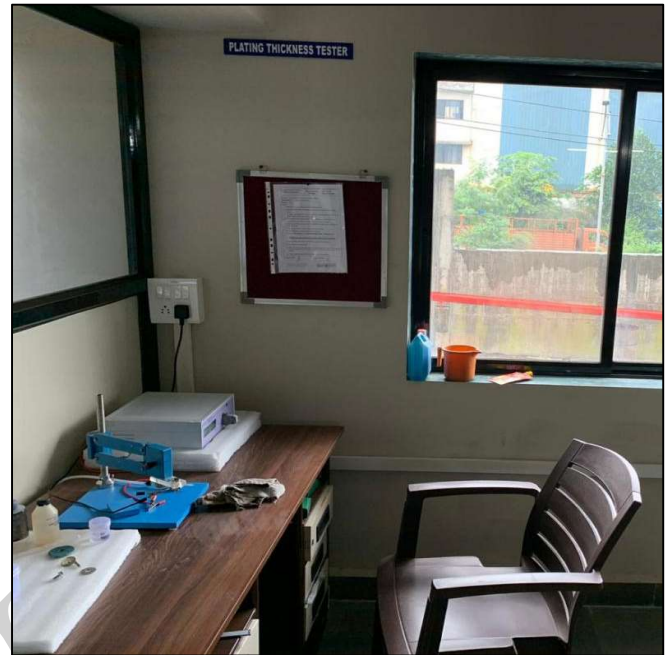
HARDNESS TESTING UNIT



UTM (Universal Testing Machine)



MICROSCOPE & PLATING THICKNESS TESTING UNIT





SPECTROMETER & IMPACT MACHINE



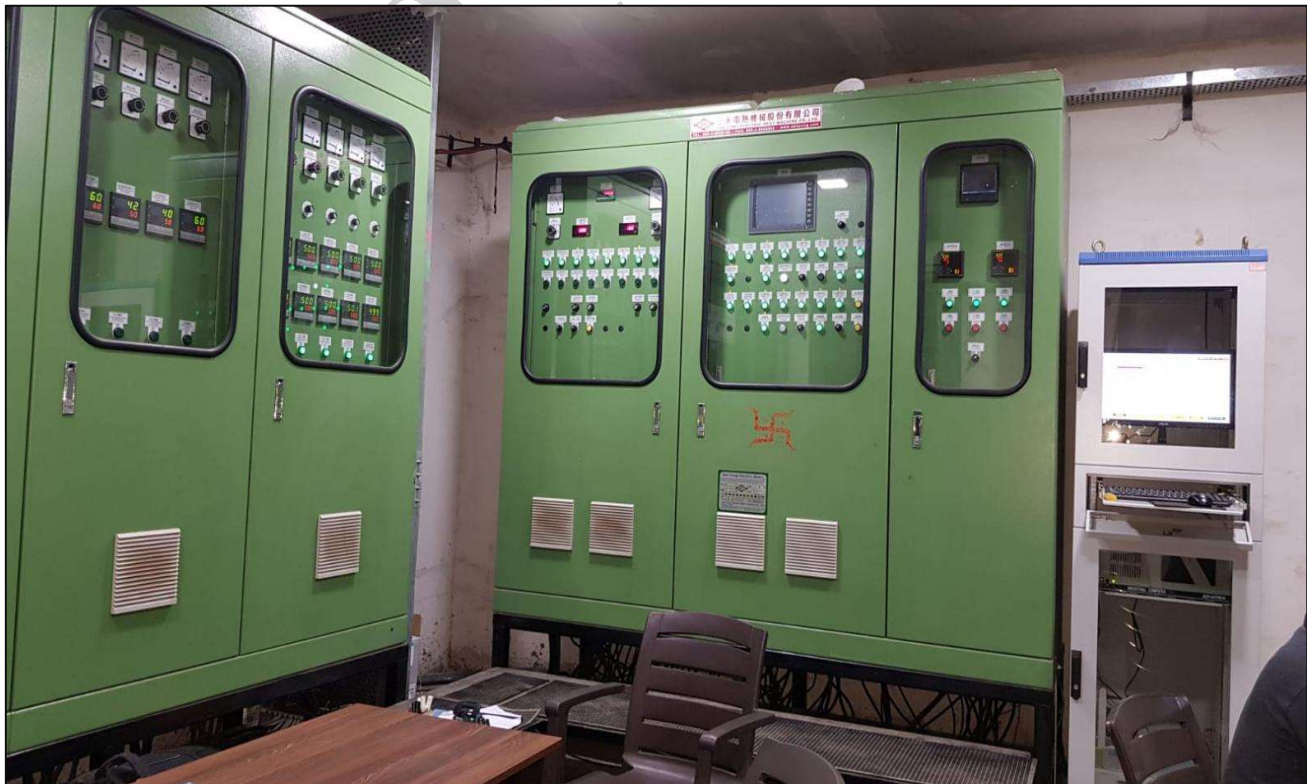
OPTICAL SORTING MACHINE



EDDY CURRENT TESTING



AUTOMATIC TEMPERATURE CONTROL COOLING UNIT



TEST PIECE STORAGE

