22ND NATIONAL AWARD FOR EXCELLENCE IN ENERGY MANAGEMENT

24TH -27TH August 2021

Team Members:

- M P Telang (Sr. Deputy Manager)
- S J Kharade (Manager)
- P Vhade (Manager)

Chinchwad at a Glance

- COMMENCEMENT OF OPERATION : 7 June 1969
- TOTAL FACTORY AREA : 64152.96 Sq.M.(15.85 Acres)
- ANNUAL CAPACITY (MILLION UNITS) : 4.50 (SLI), 4.0 (MC)
- NUMBER OF ASSEMBLY LINES : 6 (SLI) ; 4 (MC)
- PRODUCT RANGE (MC) : 2.5 AH- 14 AH
  (SLI) : 32 AH-150 AH

Vision Statement

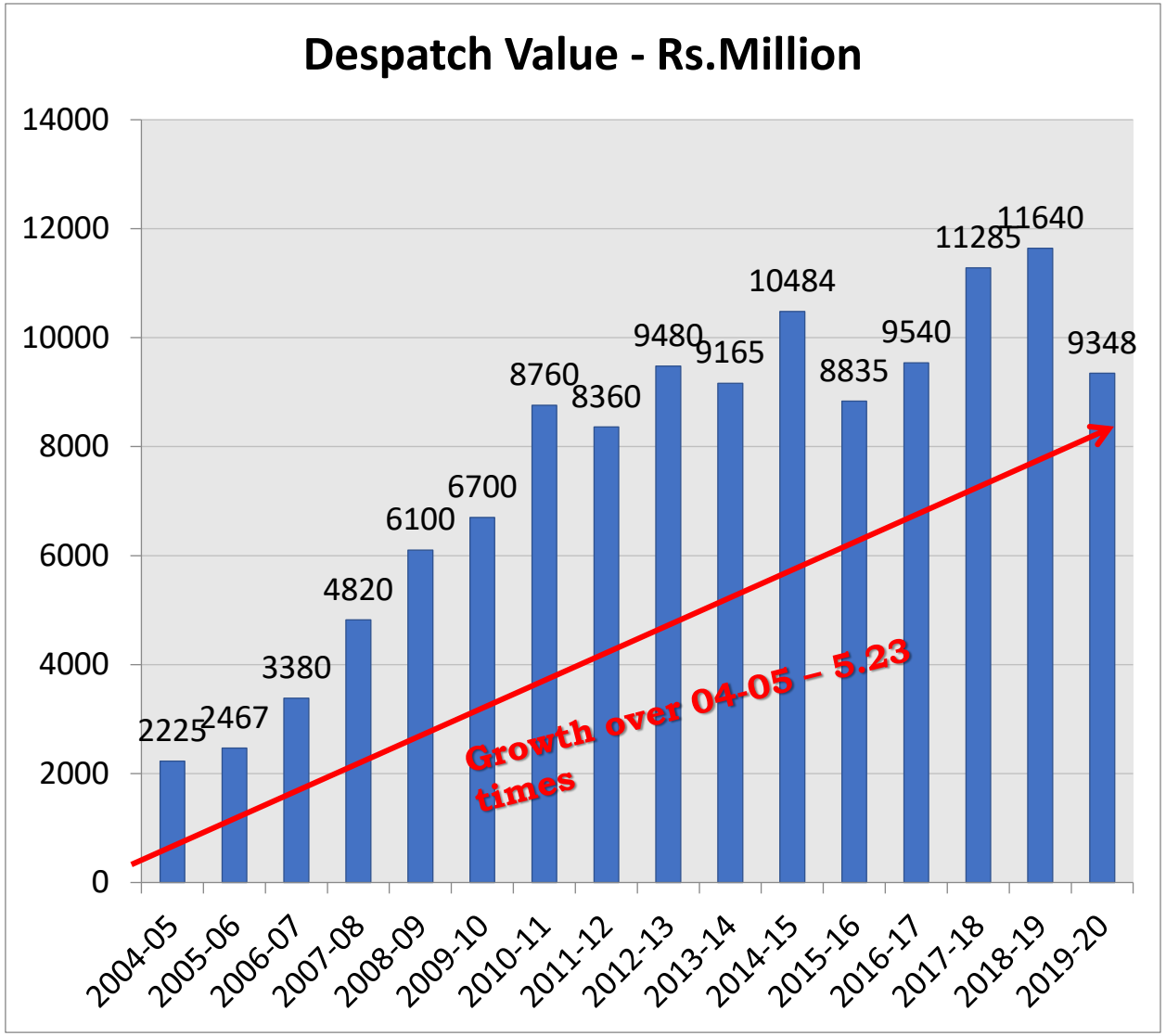
To Be A Preferred Supplier In Domestic And Global Market By Providing Cost Effective And Reliable Products For Sustainable Growth With Motivated Teams And Value Driven Systems

Chinchwad Milestones

2018 – Apex India Environment Excellence Award
2018 – Award for Excellence in Consistent TPM Commitment
2017 – GCI Environment Gold award
2017 – General Motors Supplier Quality Excellence Award
2016 – Super Platinum Award for Quality by M/s Bajaj Auto Ltd.
2015 – Environment Silver Award by Green Tech Foundation
2015 – Awarded OHSAS 18001:2007 Certification
2014 – ZERO PPM Award by M/s Royal Enfield
2013 – PPM Award by M/s John Deere
2014 – Best Supplier for Delivery by Tata Motors & Suzuki Motorcycles
2011 – Quality Award – By Tata Motors
2011 – Superior Performance Award - By M&M
2011 – JIPM TPM Excellence Award
2010 – Best Supplier Award(Pune Forum) by Renault Nissan
2009 – Stores/Warehouse Mgt. Award by IIMM, Pune
2009 – Outstanding Performance Award – By M & M
2008 – Quality Award Gold – By Bajaj Auto
2008 – Best Quality Supplier Award – By Tata Motors
2007 – Quality Award Silver – By Bajaj Auto
2006 – Awarded ISO 14000 Certification
2004 – TPM Journey Started
2004 – Awarded TS 16949 Certification
2000 – Awarded QS 9000 Certification
1999 – ERP-SAP Implementation
1994 – Awarded ISO 9001 Certification
1994 – Technical collaboration with Shinkobe, Japan
1969 – Company Started

Chinchwad Performance and Major Customers

Despatch Value - Rs.Million



Major Customers - Automotive (SLI)

HYUNDAI, MITSUBISHI MOTORS wake up and drive, RENAULT, NISSAN, PIAGGIO VEHICLES PVT. LTD., JOHN DEERE, SAME DEUTZ-FAHR GROUP, TATA, NEW HOLLAND Your success – Our specialty, International Tractors Limited, MARUTI SUZUKI, swaraj SWARAJ ENTERPRISES, Mahindra, FIAT, EICHER

Major Customer - Motor Cycle

SUZUKI, TVS, ROYAL ENFIELD, bajaj auto ltd, YAMAHA, Mahindra 2 Wheelers, PIAGGIO VEHICLES PVT. LTD., LML

Product Range

Automotive (SLI) Batteries

EEZY 700

MTRED75D23L

XP800

PS75T

MRED35L

MRED700R

Motor Cycle Batteries

12BI5LB

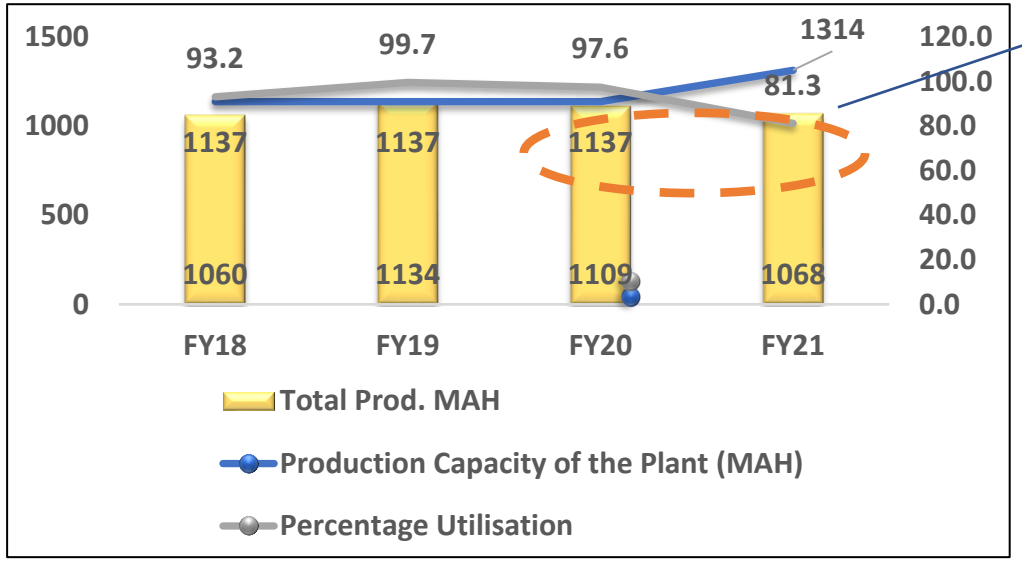
12BI14LA

12XR7BB

DMK540-7BB

12XR9B

12BI2.5LC



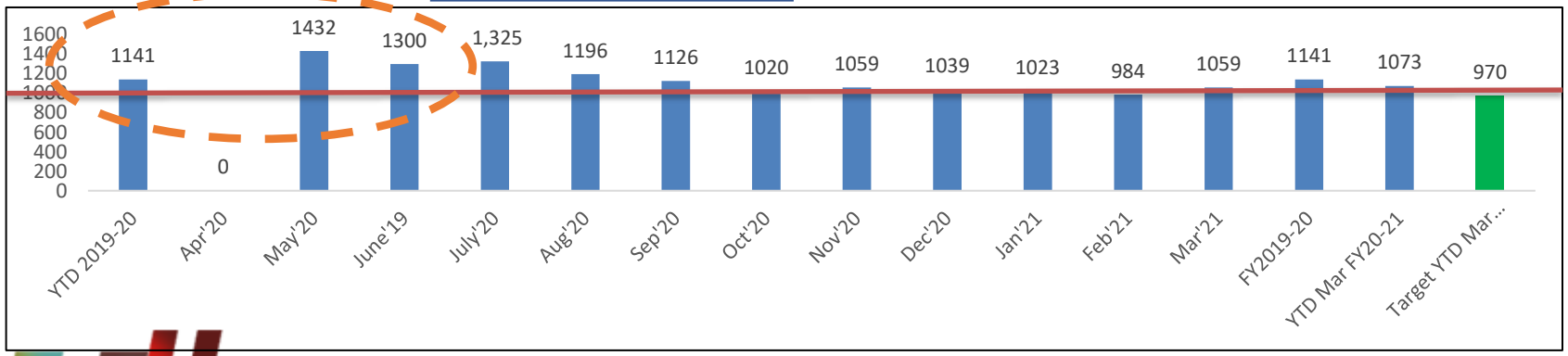
Capacity dropped by 16% due to Covid Impact

Organization Initiatives during Covid-19 Period

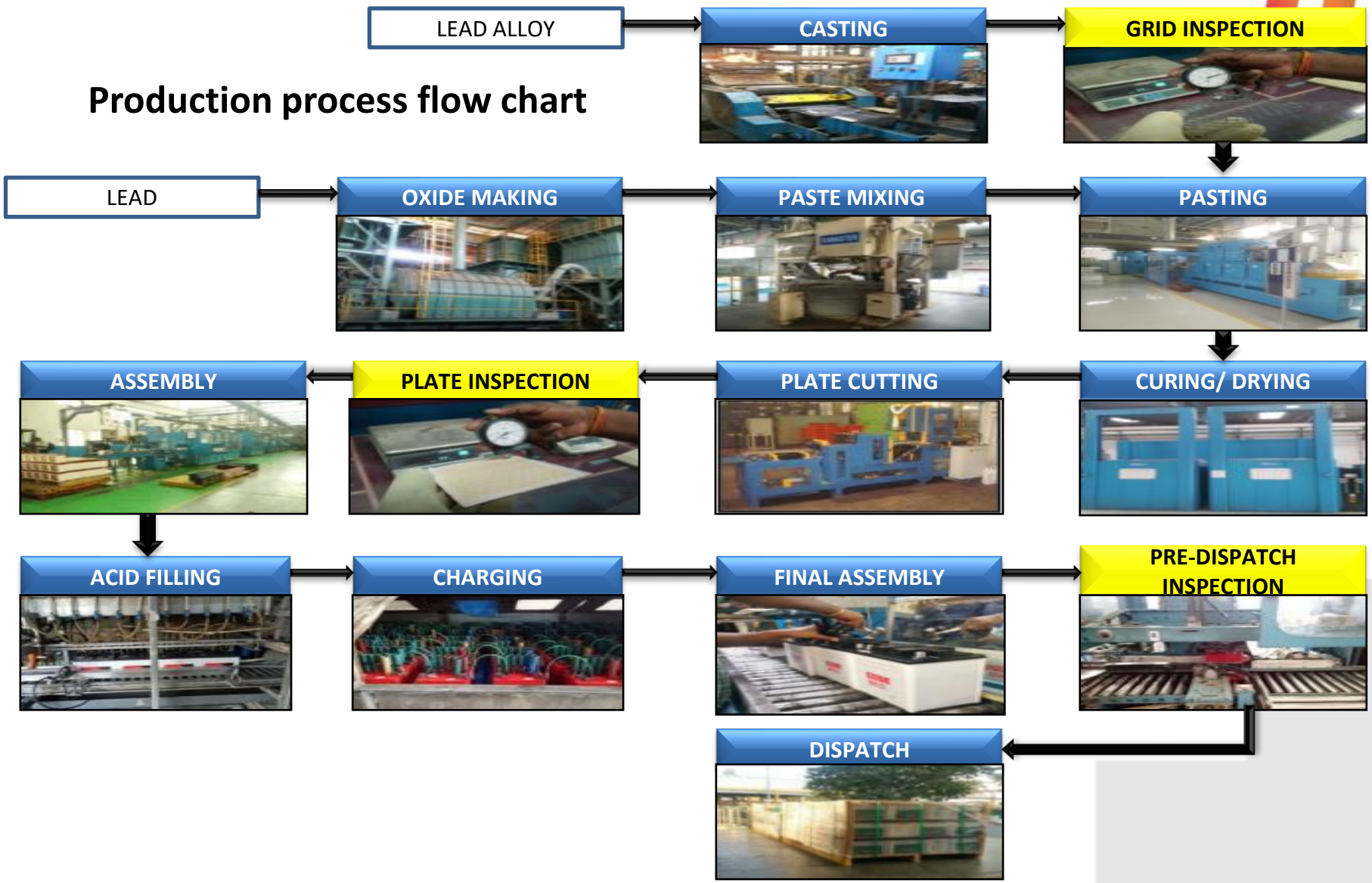
Lesson to Learn

- Pandemic safety norms
- Optimum utilization of Resources
- Reduced Max Demand in-line with Production demand
- Build the trust Circle in organization

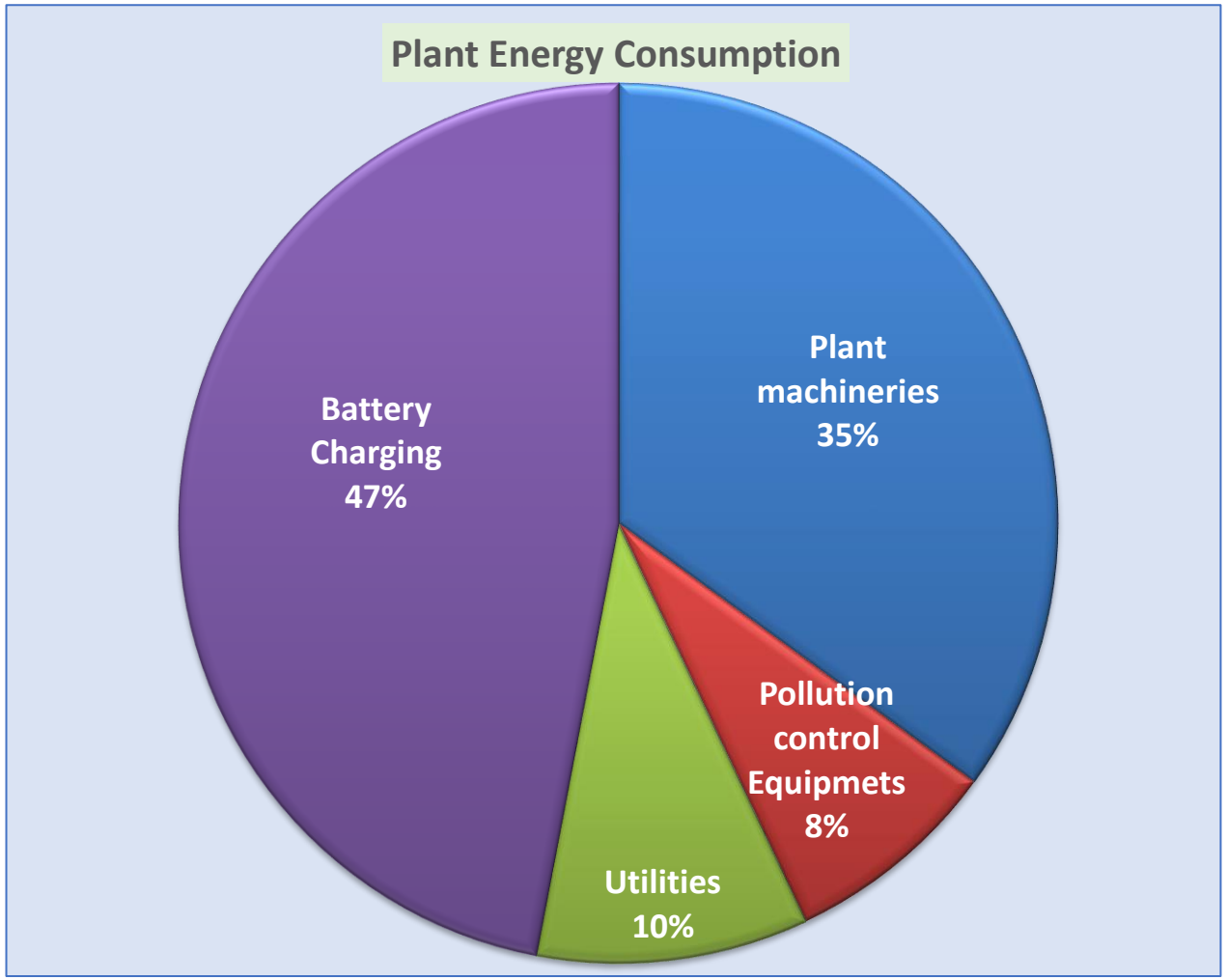
Covid Impact on SEC

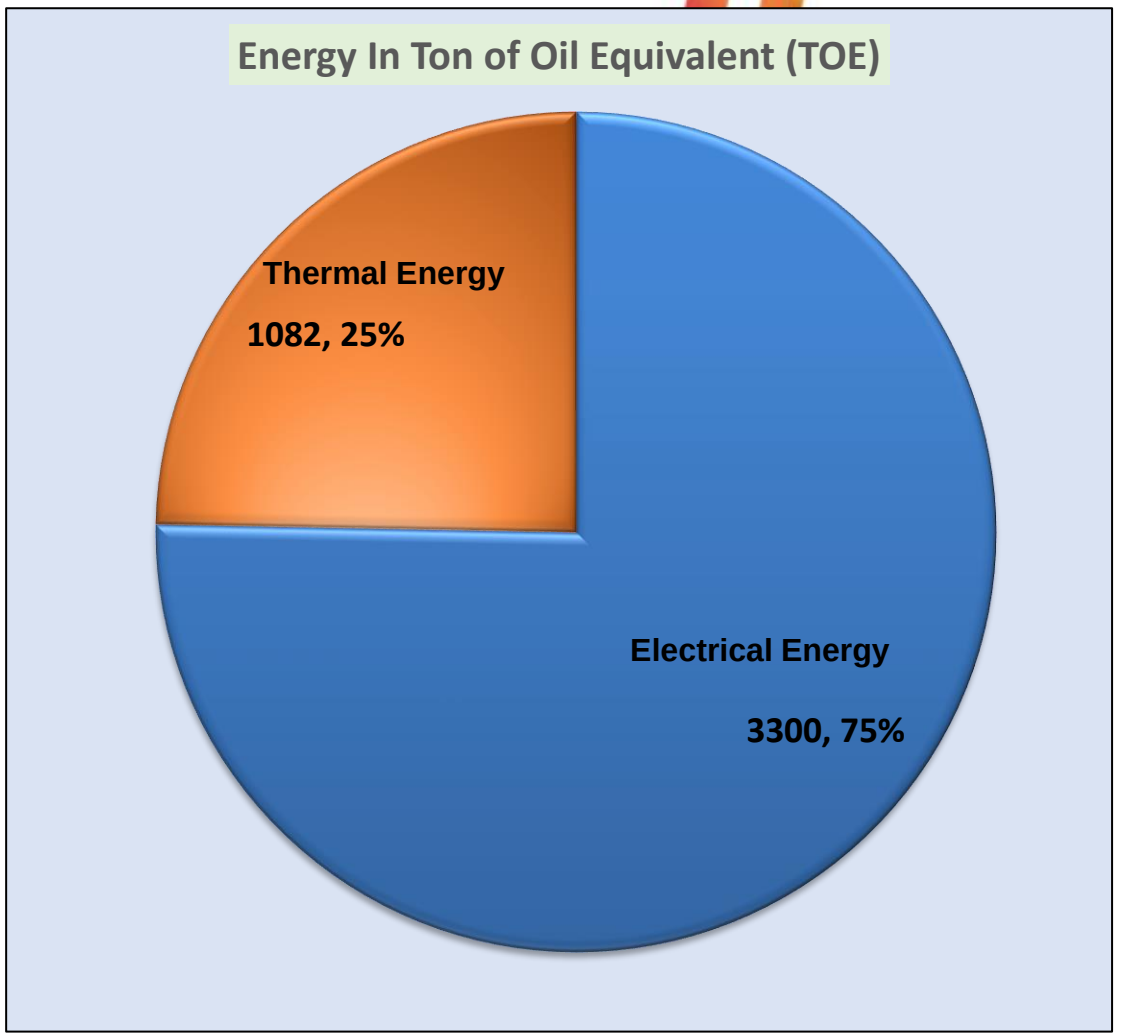


Production process flow chart

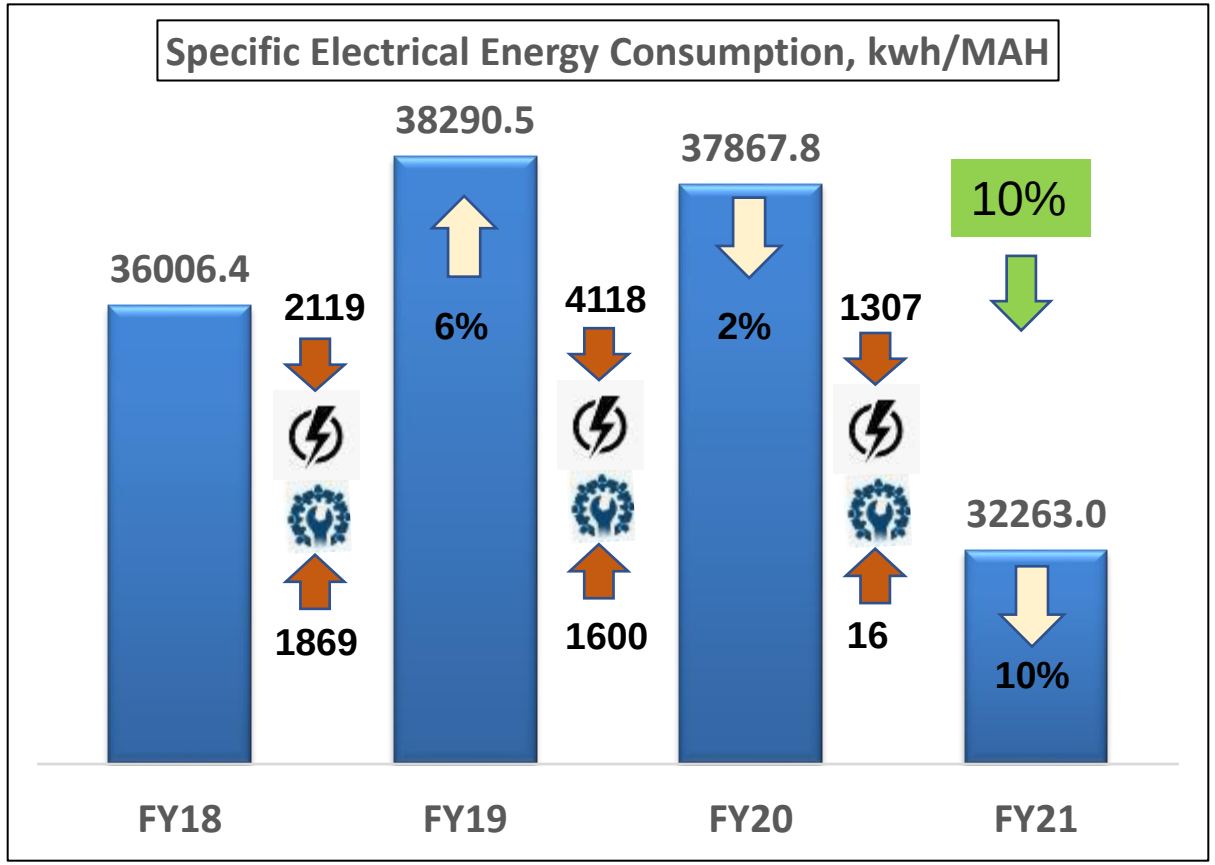


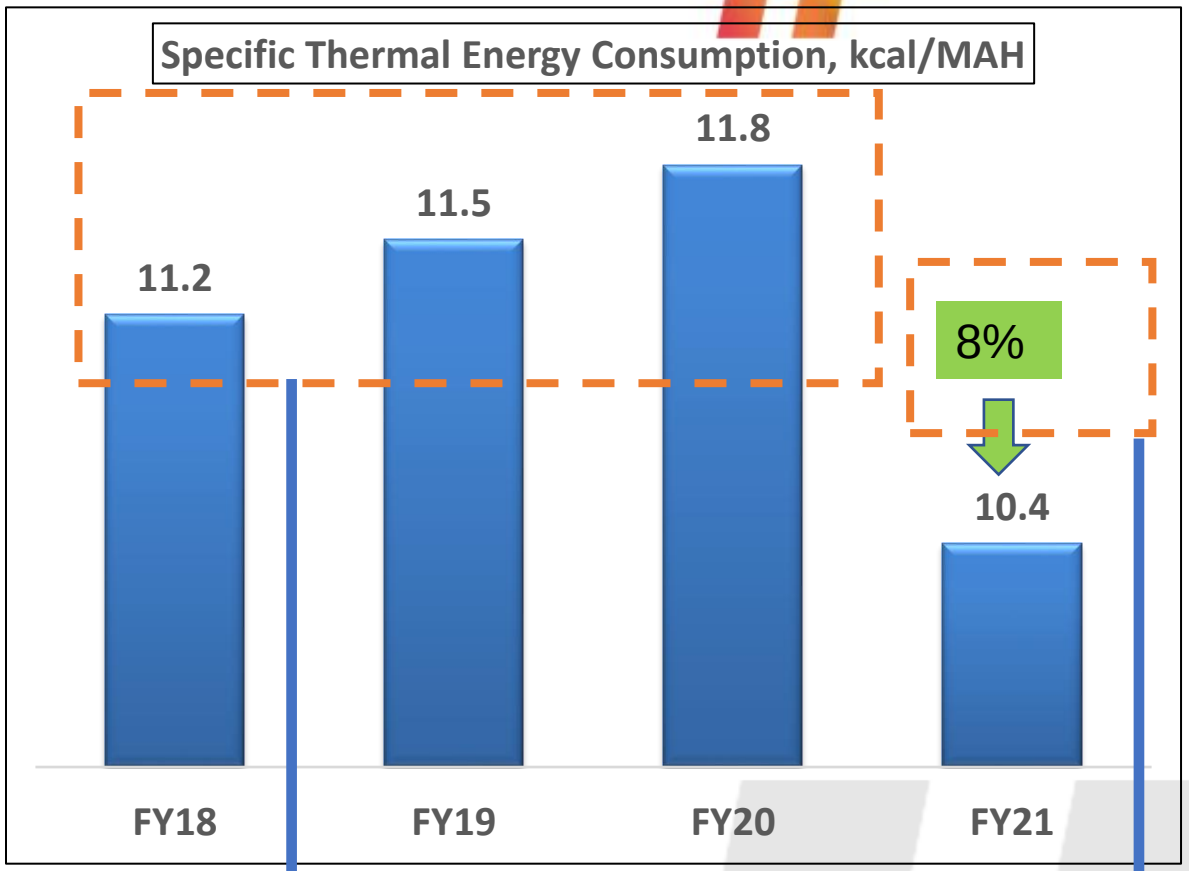
Energy Consumption Overview





Specific Energy Consumption





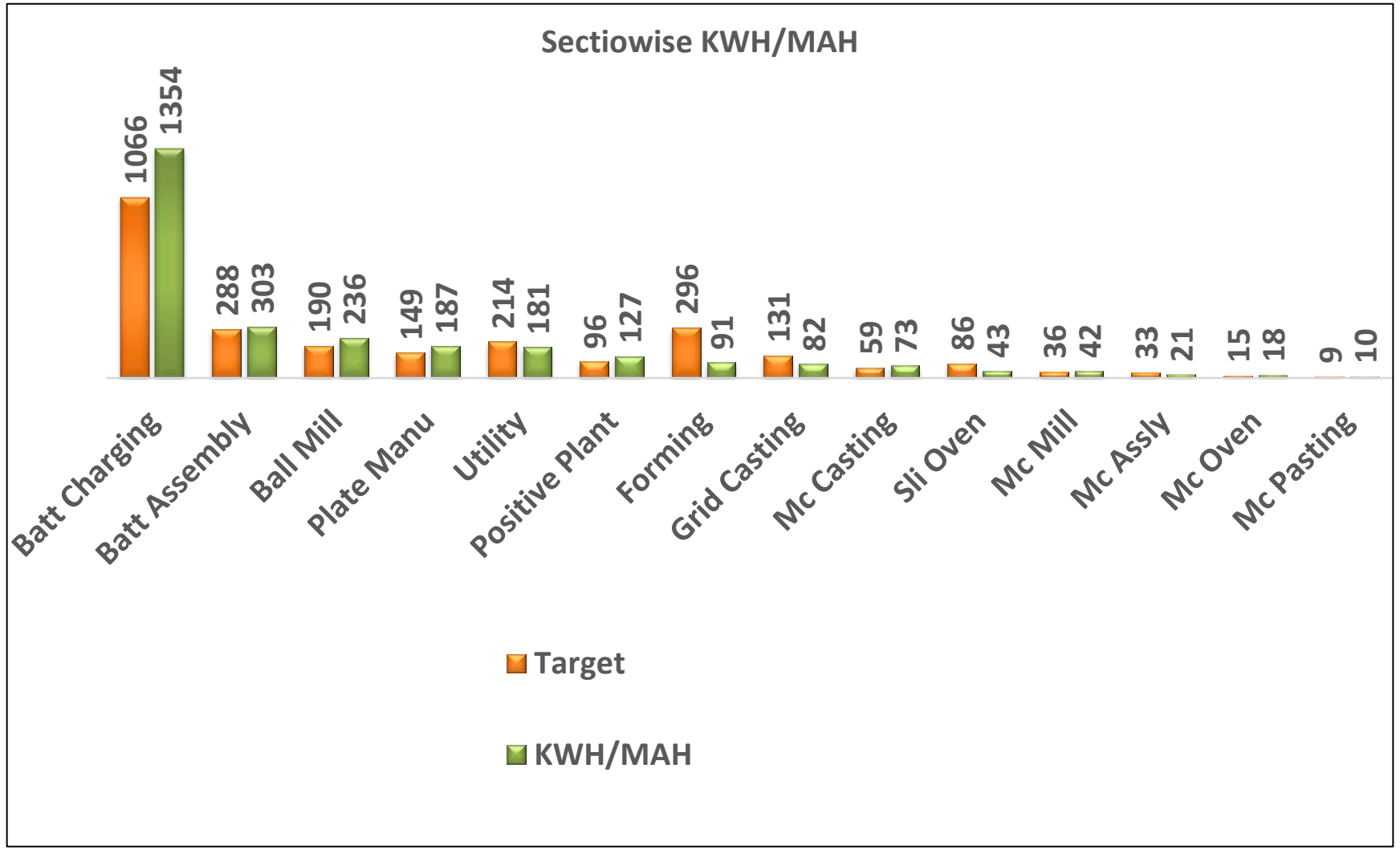
ENCON Projects Kwh/MAH

Additional Machineries Kwh/MAH

Conversion of Heater operated Lead Pot to PNG fired Pot

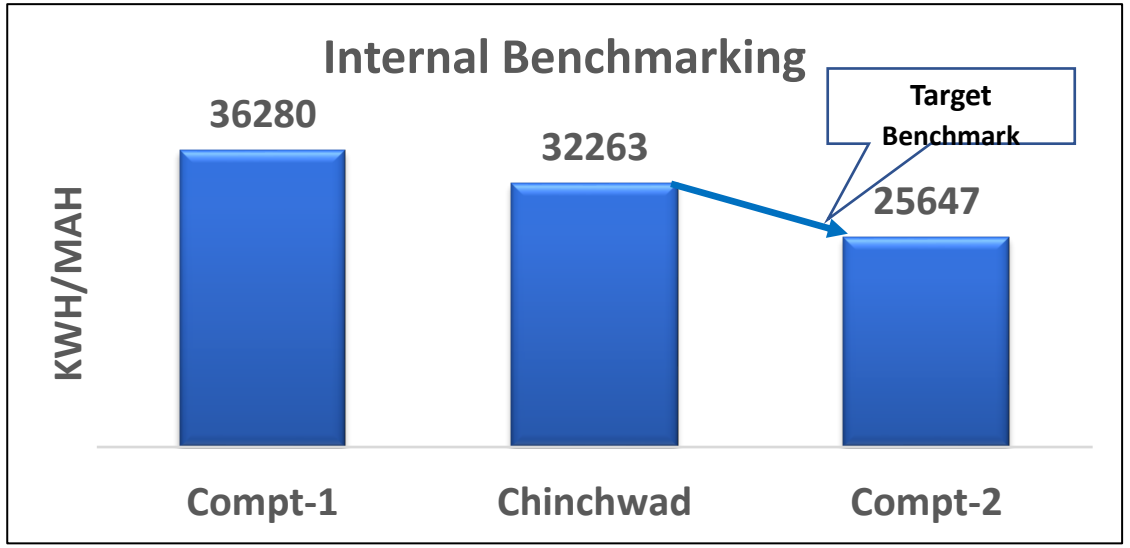
Benefit of ENCON projects
Temperature Optimization
Skin Temp Rectification
Burner Optimizations

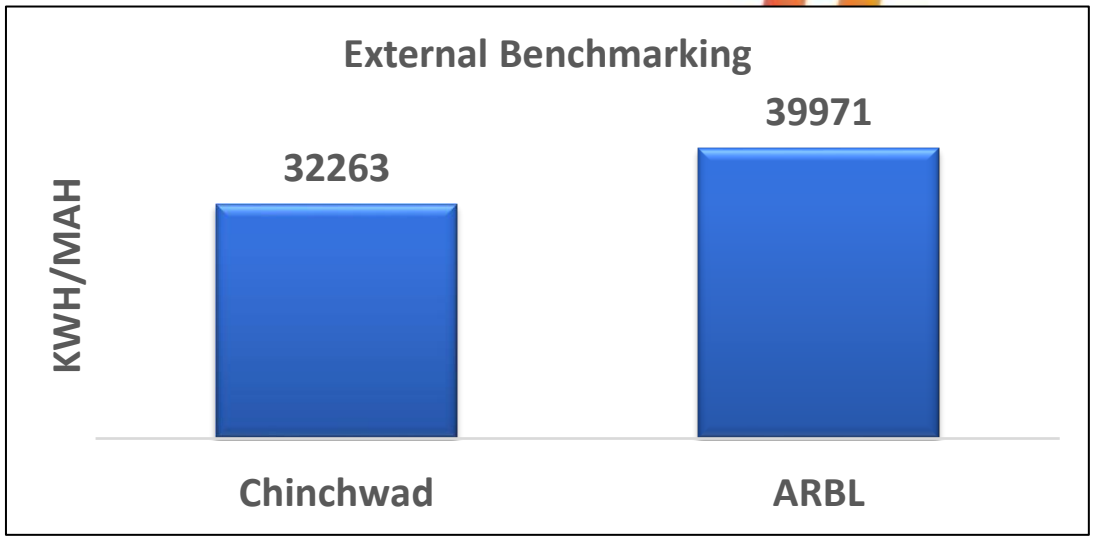
Plant capacity Utilization & Section wise Consumption



- Approach to Reduce Energy
- Formation of Cross functional team
- Energy Circle formation in each Section
- Monthly Review meetings for action plan
- Appreciation for the best projects conducted

Internal and External Benchmarking





Path to Improve the Benchmarking

- Temperature bands Optimize
- Installation of PNG fired Pots

- Installation of renewable energy
- 7.5MW Solar Plant installed

- Positive Expanded technology for target Low cost battery.
- Elimination of Casting machines

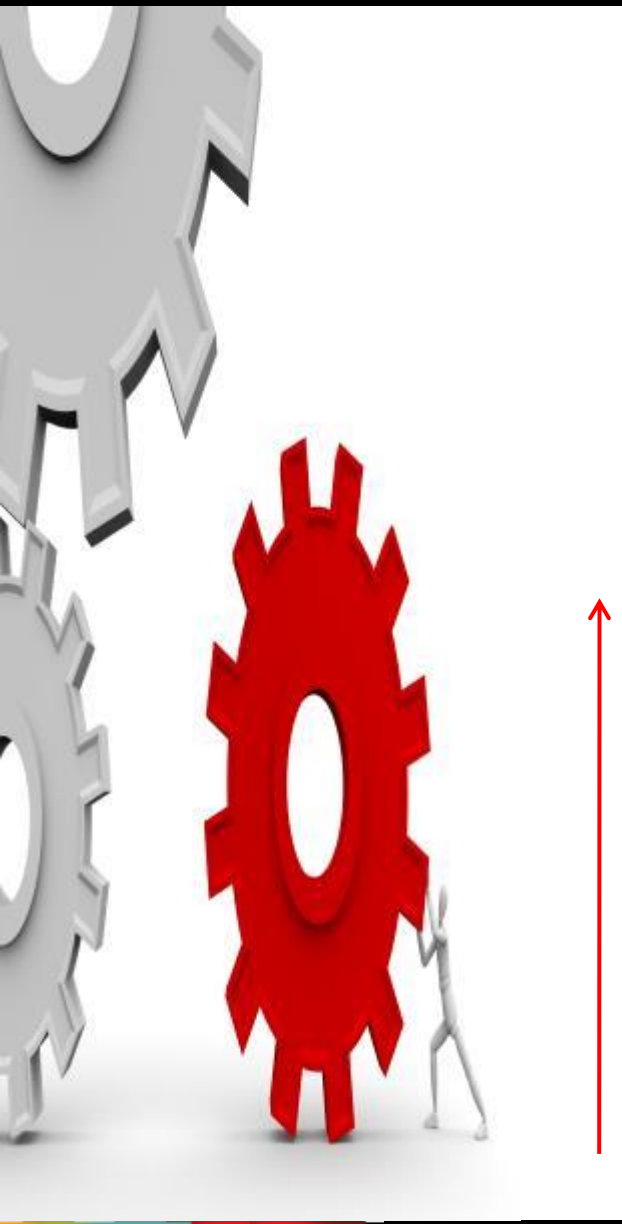
Process optimization → Negative Expanded Technology → Renewable Energy → IGBT Technology Rectifiers → Positive Expanded Technology → IIOT Industrial 4.0

- Eliminating high energy consuming Casting machines

- IGBT Technology based rectifiers High Efficiency and Fast Charging

- Process optimization with further detail monitoring can lead to lower energy requirement

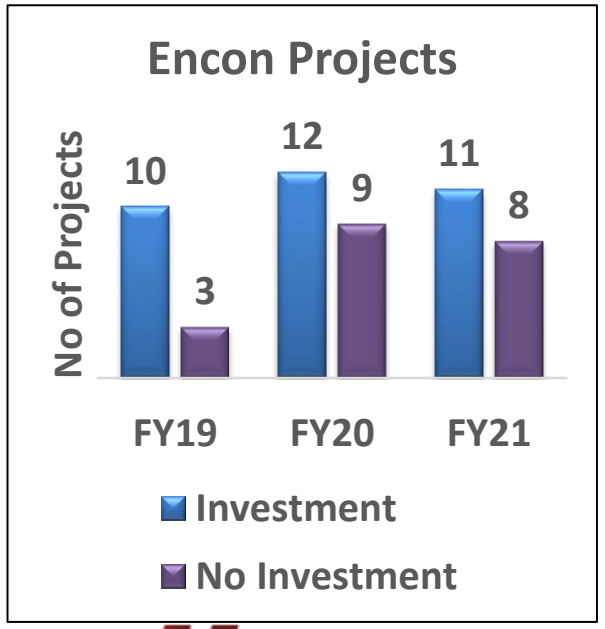
Technology Upgradation to Improve Benchmarking

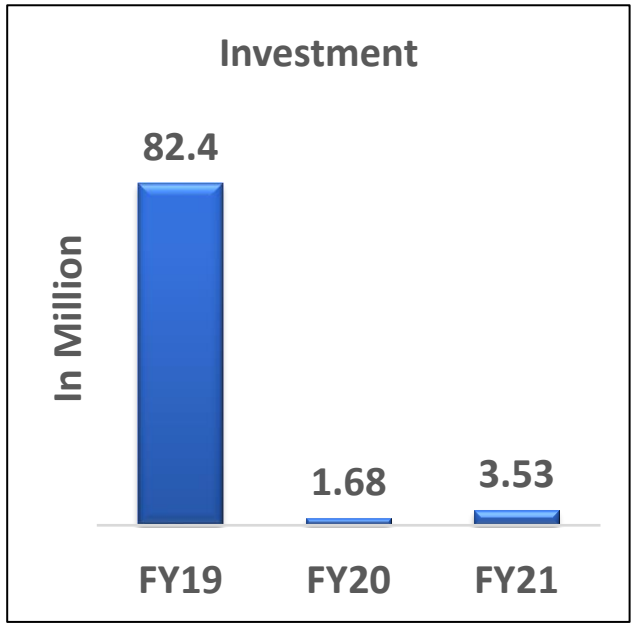


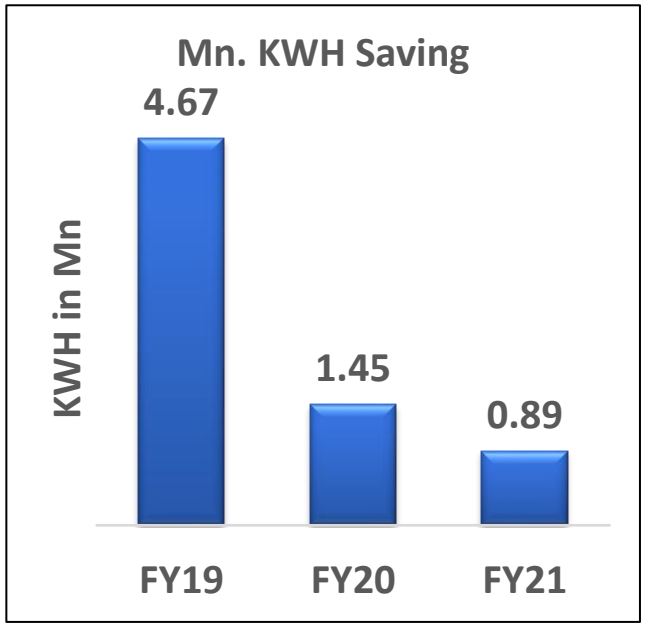
- Moura EFB Batteries - 2020
- Double Lid Batteries - 2016
- Expanded positive plate mfg. -2014
- Idling Stop-Start Batteries - 2010
- Long Life Inverter Batteries - 2009
- Batteries for Solar Application - 2009
- Maintenance Free Motor Cycle Batteries - 2008
- Low Maintenance Hybrid Motor Cycle Batteries - 2006
- Sealed Maintenance Free Ca-Ca SLI Batteries - 2005
- Expanded Plate Technology - 2003
- Low Maintenance Hybrid SLI Batteries - 2000
- Progressive shift to lower antimony levels in grids - 1995
- Motor Cycle Batteries - 1987
- Polypropylene Batteries - 1974
- Hard Rubber Batteries - 1969

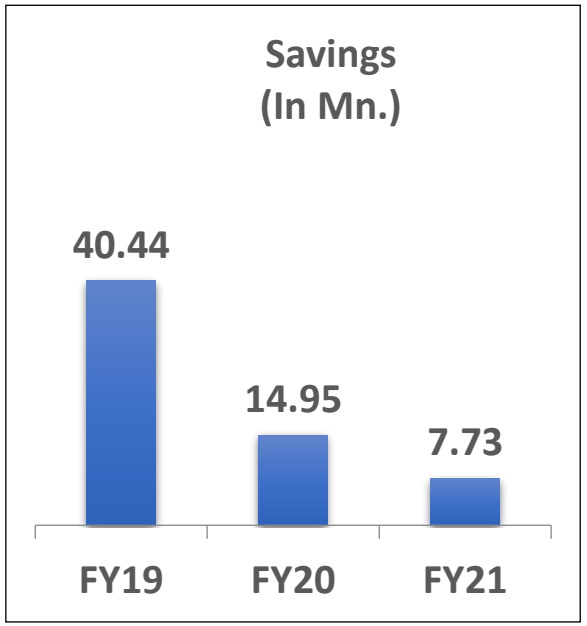
ENCON Projects and Statistics

Year	No. Of ENCON Projects	Investment Rs. Million	Annual Energy Million KWH	Thermal Savings Million Kcal/MTOE	Annual Savings Rs.Million	Impact On SEC (Electrical/Thermal) In Percentage
FY 19	13	37.4	4.7		40.4	17.7
FY 20	21	11.8	1.4		12.1	4.5
FY 21	19	2.2	1.4	0.4	6.3	2.0
Total	53.0	51.4	7.5	0.4	58.9	24.2









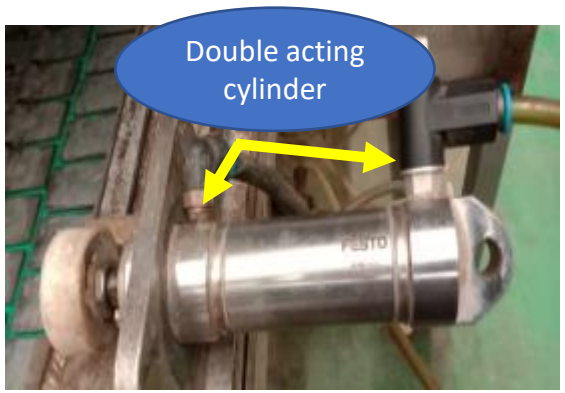
Description and Savings	Before	After
1. Derating of Motor from 7.5HP to 1HP Pump motor was derated from 7.5 HP to 1 HP by using large size Impeller to motor. Energy Saving Per Annum- Rs 0.21 Mn. Horizontal Deployment – Rs.2.1 Mn.		
2. Ball Mill Productivity enhancement from 24T per day to 26T per day Inlet Air Reaction blower damper setting was modified by changing the angle of damper to 1deg higher side which improved the production from 24T to 26T. Energy Saving Per Annum- Rs.0.8 Mn. Horizontal Deployment – Rs.1.6 Mn.	 	
3. COS-8 Machine conversion of heater operated lead pot to PNG fired pot Heater operated pot was converted to PNG fired burner operated lead Pot. Energy Saving Per Annum- Rs 2.1 Mn. Horizontal Deployment – Rs.4.2 Mn.		

Description and Savings

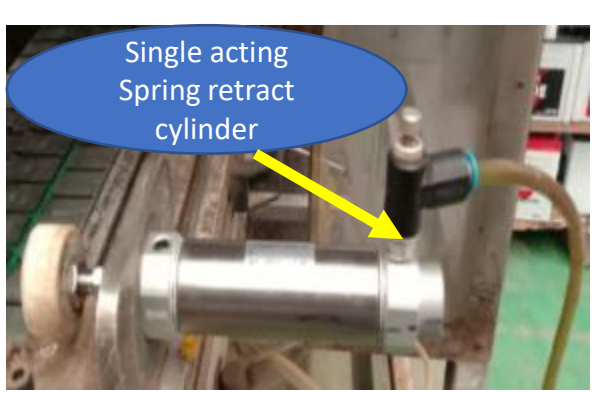
4. Stopper Cylinders to be replaced by spring retracted cylinders.
Conversion of single acting cylinders to spring retracted cylinders benefitted in Compressed air reduction.
Energy Saving Per Annum- Rs.0.19 Mn.
Horizontal Deployment – Rs. 3.24 Mn.

5. Ball Mill Motor derated from 50HP to 40HP.
Reaction Blower motor derated from 50HP to 40HP maintaining all PBO quality parameters.
Energy Saving Per Annum- Rs.0.14 Mn.
Horizontal Deployment – Rs.0.28 Mn.

Before

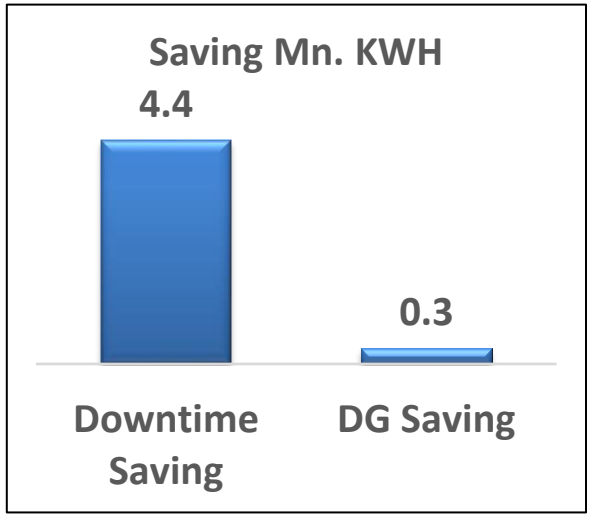


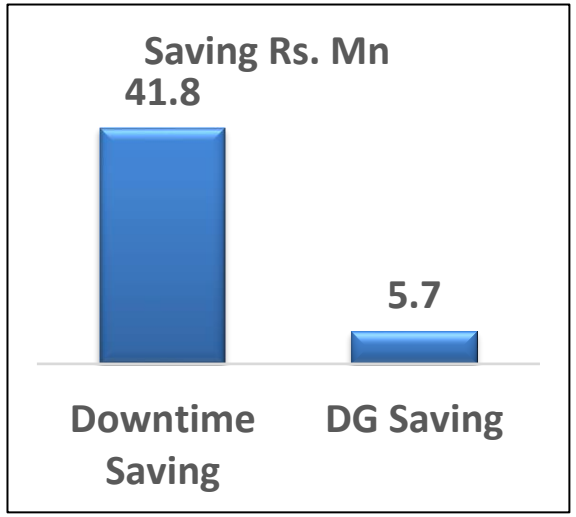
After



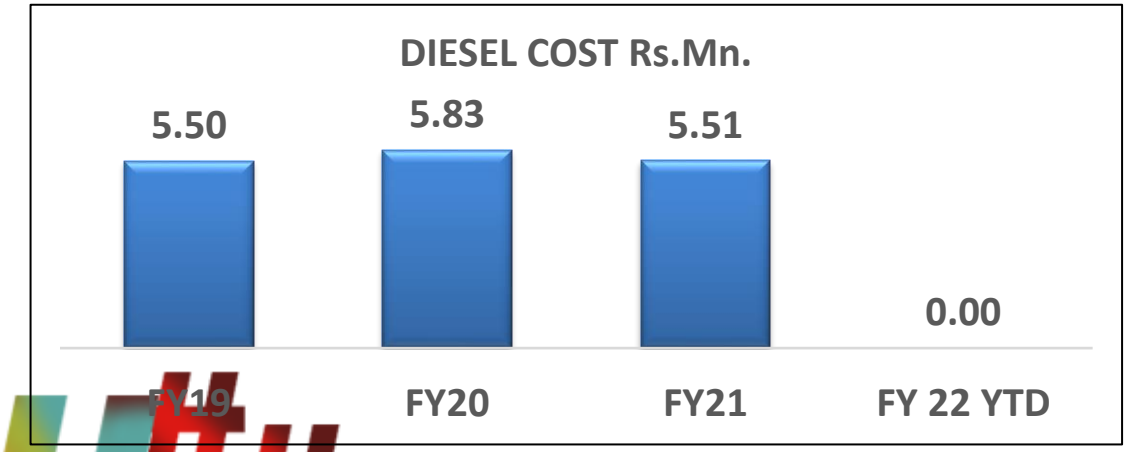
Inauguration of Express Feeder

Benefit Of Express Feeder





Running Cost Of Diesel Generator



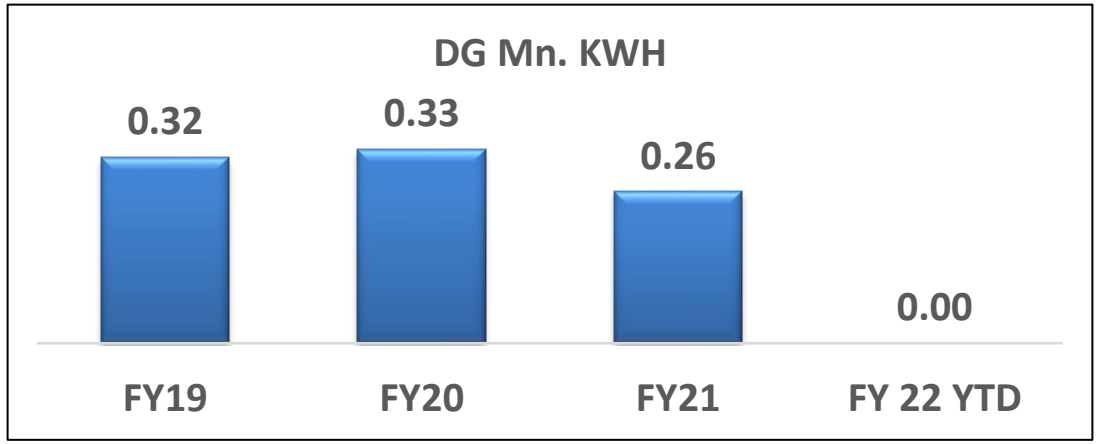


Plate Curing and Drying Cycle Of Ovens

Plate Loading Cycle → Waiting for all Skids to load → Plate Auto Curing Cycle → Plate Auto Drying Cycle → Plate Unloading

Plates are Loaded by Operator

After loading of Oven is complete

Auto cycle was not able to start unless production supervisor starts it

Hence Oven remains in Loading Cycle which is waste of energy as blowers and heating is ON Unless Supervisor approaches or starts Auto cycle of Oven

Loss Of 8794KWH/Month for 20 Ovens

Innovative ENCON Project

Loading Cycle is required but it is not actual Auto Cycle hence energy utilized in loading cycle is complete waste if it is not shifted to Auto cycle Immediately after last Skid is loaded

Team Discussion Production, Maintenance, Quality, Energy CFT

Points Discussed

Idea 1
- Supervisor presence during loading cycle to be improved

Fail Idea 1
- Supervisor has multiple task as complete area is supervised by only single supervisor

Idea 2
- Operator to be trained to switch from Loading cycle to auto cycle.

Fail Idea 2
- Operator are not permanent who is responsible to load the oven hence cannot work in long duration

Idea 3
- Oven should automatically switch to Auto Cycle from loading Cycle as soon as operator has loaded last Plate Skid

Before

No Provision For Push Button

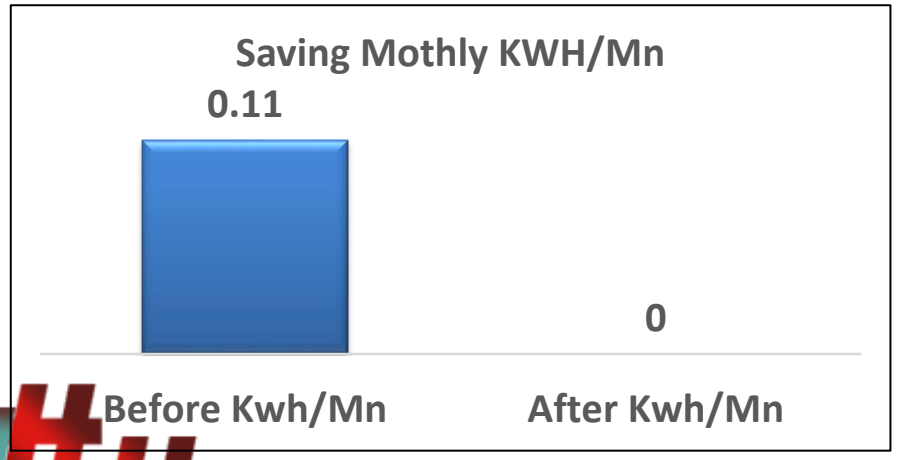
Operator

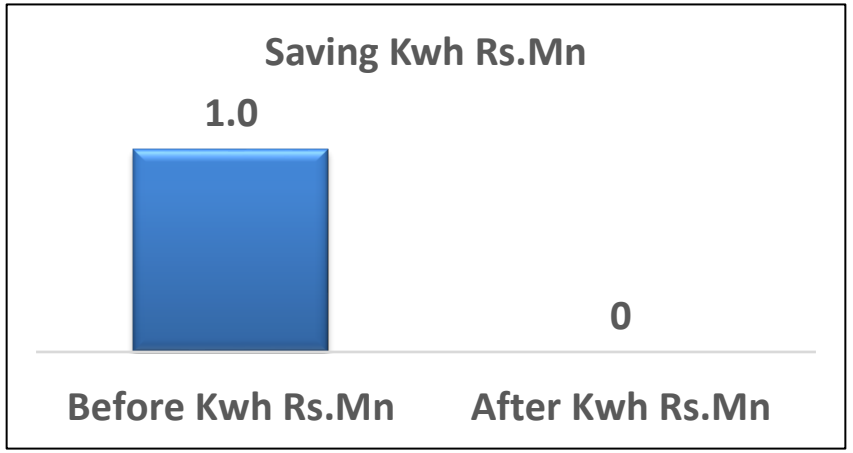
- 5 Skids allowed to load
- Operator to press button after loading each skid
- After loading 5th skid Auto cycle starts
- Oven is programmed for this provision

Provision of Push Button given to switch from Loading cycle to Auto Cycle

After

Benefit



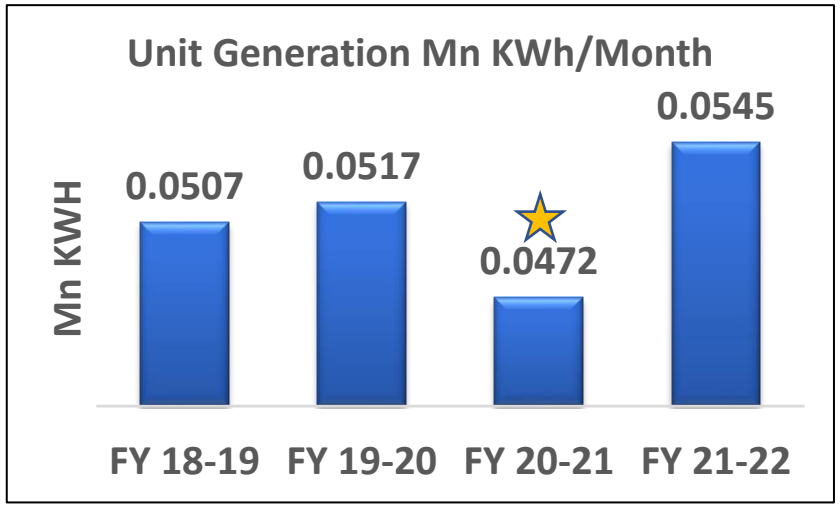


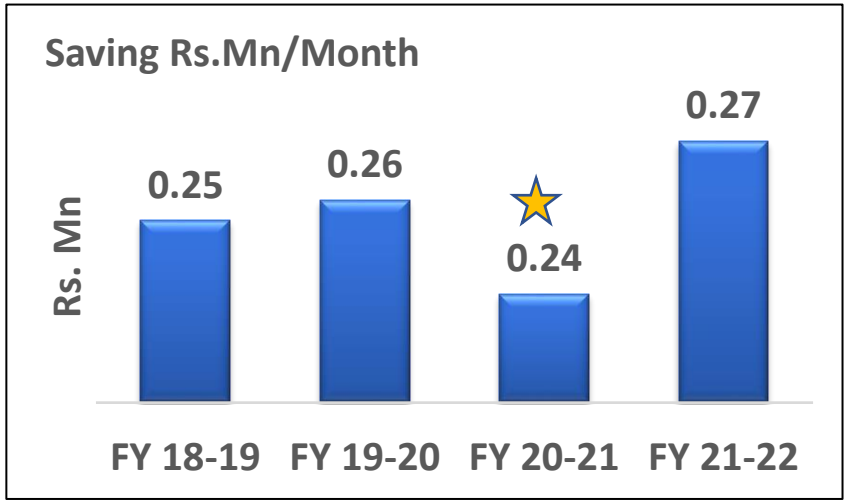
ENCON Projects Planned in FY 2021-22

ENCON Project 2021-22	Annual Energy Million KWH	Annual Savings Rs.Million	Investment Rs. Million	Pay back In Months	Impact On SEC (Electrical/Thermal) In Percentage	Year
Areawise installation of air flow meter to monitor and restrict usage of compressed air	0.10	0.87	0.50	6.92	0.24	FY'2021-22
Installation of Energy efficient Compressor replacing 3 Small Size compressor	0.06	0.56	2.55	54.53	0.15	FY'2021-22
Lead Pot to be converted to PNG fired Pipe heating burner	0.99	8.61	5.00	6.97	2.37	FY'2021-22
50 HP Hydraullic power pack to be replaced with 20HP	0.09	0.81	1.50	22.19	0.22	FY'2021-22
Gravity ball conveyor for intermediate transfer conveyors	0.09	0.79	0.30	4.58	0.22	FY'2021-22
Stopper cylinders to be replaced by spring retracted cylinders	0.02	0.20	0.44	26.24	0.06	FY'2021-22
Online monitoring of Rectifier effiency and loading the charger as per efficiency pattern	0.03	0.25	2.00	95.43	0.07	FY'2021-22
VFD for FDO to stop Circulation blower when machine is ideal	0.10	0.89	5.00	67.68	0.24	FY'2021-22
Capacity enhancement from 24T to 26T	0.21	1.82	0.00	0.00	0.50	FY'2021-22
Dust collectors & Fresh Air fan damper to be interlocked with machine	0.07	0.57	5.00	105.74	0.16	FY'2021-22
Dust collectors to be Direct Coupled to Fan	0.03	0.25	2.00	95.43	0.07	FY'2021-22
New ball Mill with all IE3 Motors	0.06	0.48	5.00	125.57	0.13	FY'2021-22
Online Plate cutting on Grid Pasting machine	0.28	2.39	1.00	5.00	0.66	FY'2021-22
Total	**2.13**	**18.49**	**30.29**		**5.08**	

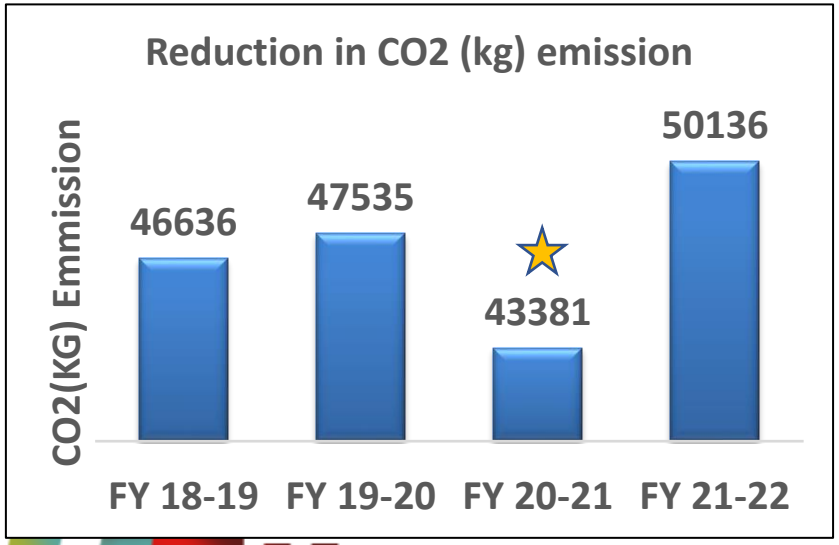
ENCON Project 2021-22	Annual Energy Million.Kcal	Annual Savings Rs.Million	Investment Rs. Million	Pay back In Months	Impact On SEC (Electrical/Thermal) In Percentage	Year
Installation of Fuel Catalyst inline with Burners	326.5	1.65	54.5	33.03	2.8	FY'2021-22

Roof Top Solar Power Installed Capacity 476.52 Kwp



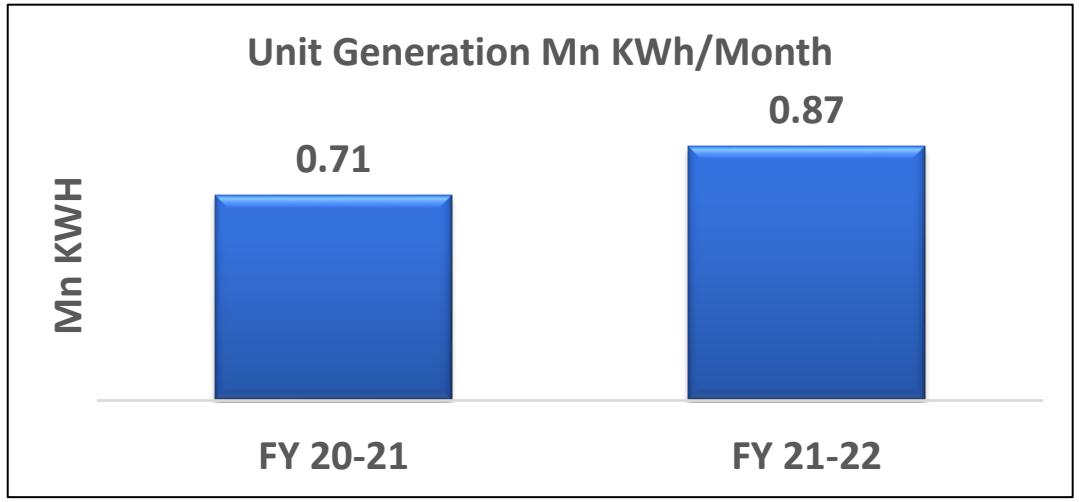


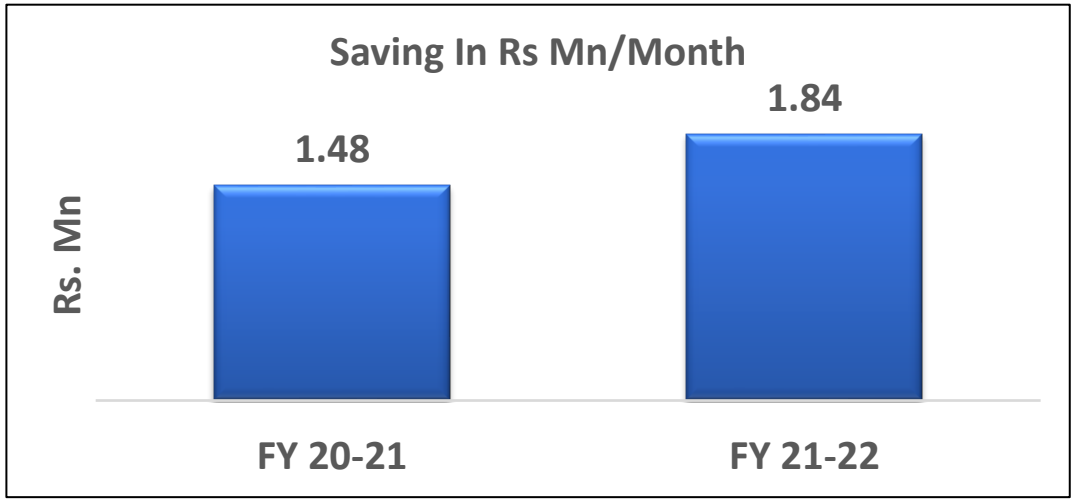
Row Labels	Sum of Reduction in CO2 (kg) emission	Solar Unit Generation Mn KWh	Saving In Rs Mn
FY 18-19	46636	0.0507	0.25
FY 19-20	47535	0.0517	0.26
FY 20-21	43381	0.0472	0.24
FY 21-22	50136	0.0545	0.27
Grand Total	187687	0.2040	1.02

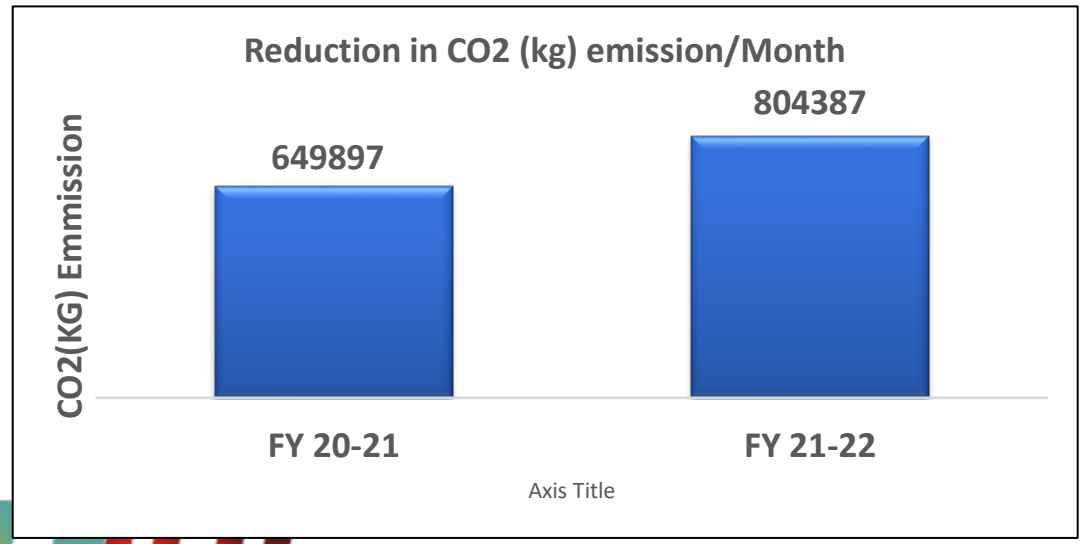


★ Plant was shutdown due to Covid which affected in results

Ground Mounted Solar Power Installed Capacity 6994 Kwp







Row Labels	Sum of Reduction in CO2 (kg) emission	Solar Unit Generation Mn KWh	Saving In Rs Mn
FY 20-21	649897	0.71	3.53
FY 21-22	804387	0.87	4.37
Grand Total	1454284	1.58	7.90

Utilization of Waste Material

Type of waste generated	Quantity of waste generated (MT/year)			Disposal method
	FY 19	FY 20	FY 21	FY 19 to FY 21
Used or Spent Oil	0.21	5.1	0.21	Sale to Authorized Recycler
Lead Bearing Residue	2139	2581	3087	Sale to Authorized Recycler
Empty barrels/containers/liners contaminated with hazardous chemicals /wastes	1.02	1	0	Sale to Authorized Recycler
Sludge from treatment of waste water	132.28	231.6	202.97	CHWTSDF
Other Hazardous Waste (Glass Wool)	75.79	45.6	44.33	CHWTSDF
Rejected Batteries	922.26	612.924	482.1	Sale to Authorized Recycler

ACID RECYCLE PLANT GENERATION IN M3

FINANCIAL YEAR	TOTAL GENERATION(M3)	SAVING IN RS
FY 2018-2019	600.7 M3	Rs 53.55 Lacs
FY 2019-2020	487.8 M3	Rs. 43.48 Lacs
FY 2020-2021	241.5 M3	Rs. 21.53 Lacs
FY 2021-2022 YTD	260.7 M3	Rs. 28.28 Lacs ytd

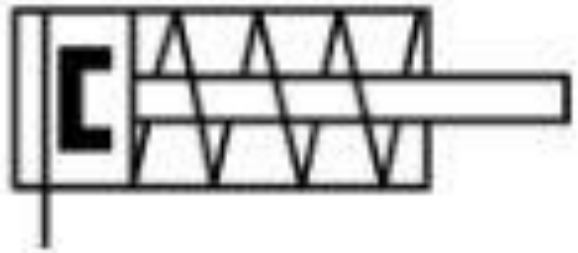
Acid Recycling used to recycle acid mixed water.

Utilization of Waste Material

Conversion of Residual Lead to Compact Lead Blocks

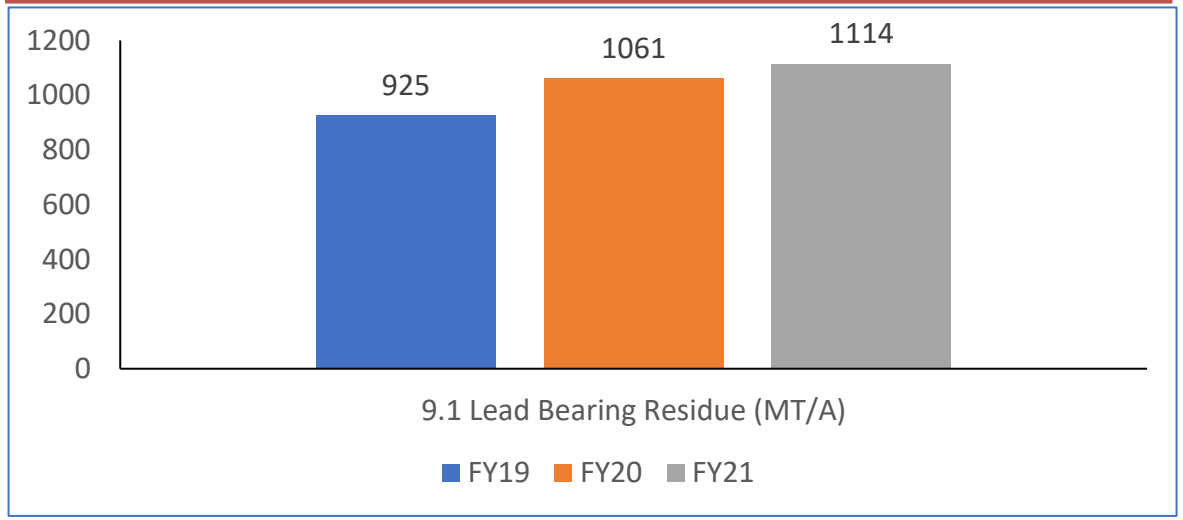
Tumbling machine for recycle lead.

Hydraulic Compactor



Compacted Grid Blocks for dispatch

1. Lead Bearing Residue Reused

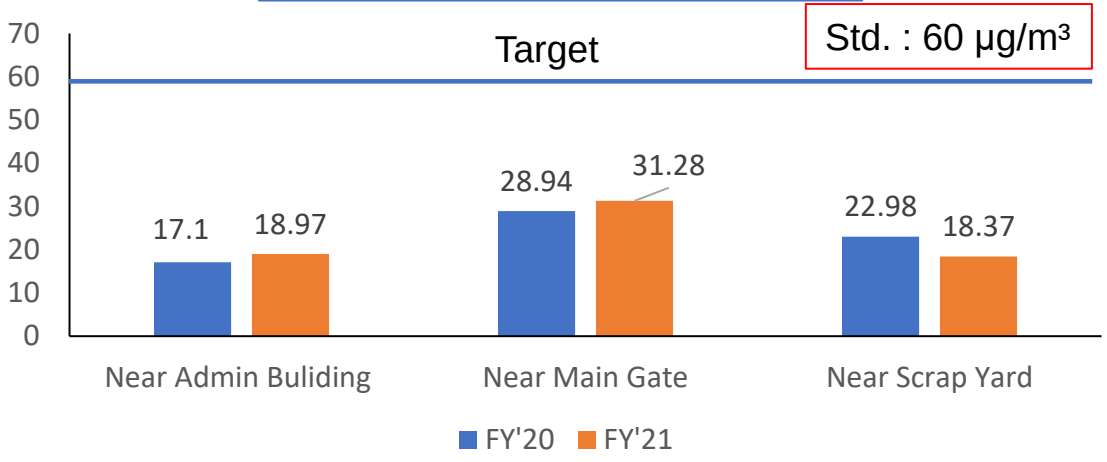


Benefits

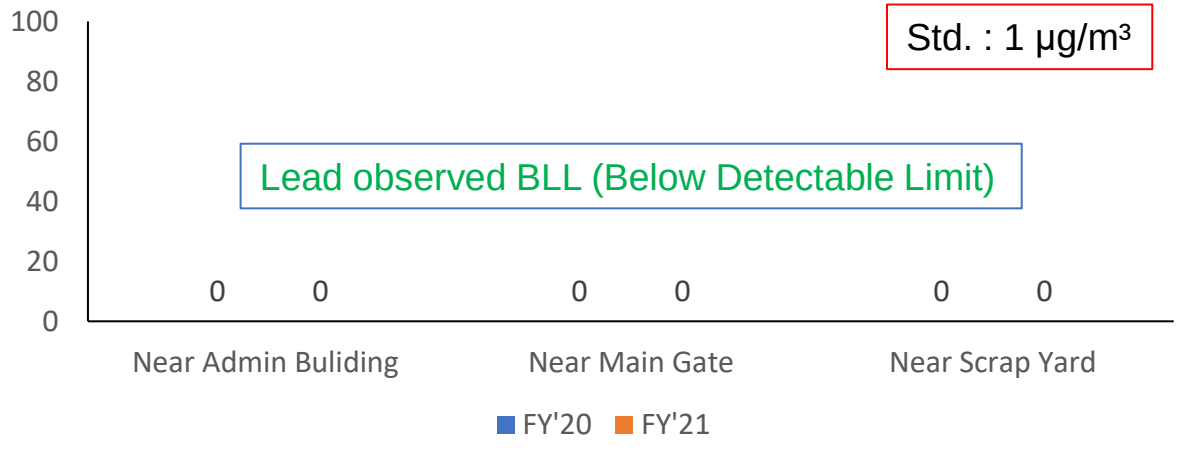
- Transportation and Handling cost reduced
- Spillage and contamination reduced
- Lead Recovery improved

Emission – Air Quality Monitoring

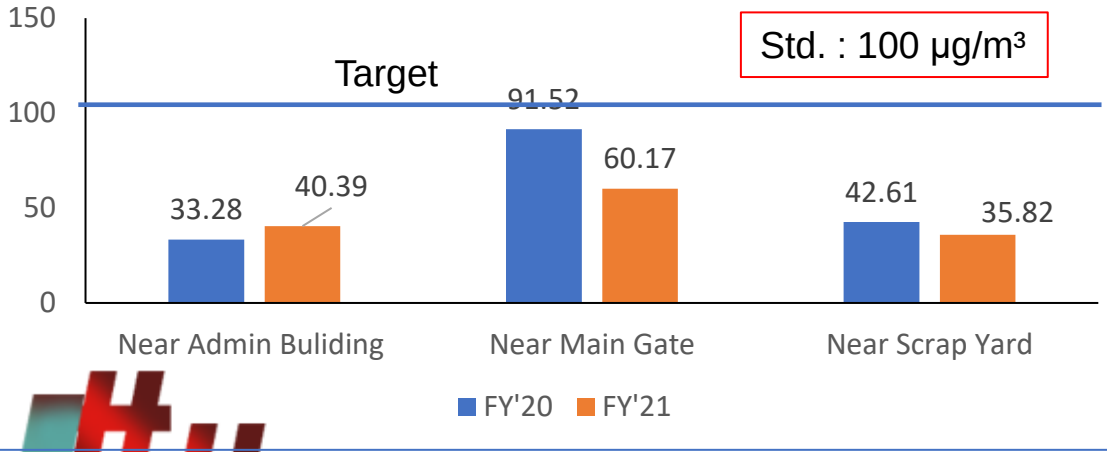
Ambient Air Quality – PM 2.5



Ambient Air Quality – Lead



Ambient Air Quality – PM 10



Fine Dust Sampler, Sr. No. 2218

Date of calibration:- 03.03.2021
Next calibration due:- 02.03.2022

Waste Utilization- Wooden Pallet Replacement

Wooden Pallet damages during internal logistics

Stage-1

Wooden Pallets are repaired and used for internal logistics of battery almost
Recovery of Pallet by repairing – 5%
Cost saving per Year – Rs. 0.25 Mn/Yr

Elimination of Wooden Pallet from internal logistics

Elimination of battery storage racks

Stage-2

Internal Battery Handling – Cage Pallet Rack
Newly developed for internal & reverse logistics for local godowns.
Elimination of Wooden pallet – 14%
Cost saving per Year – Rs. 0.70 Mn/Yr.

New Pallet Implementation

BEFORE

Internal Battery Handling – Wooden Pallet
(Chance of damages during internal logistics)

AFTER

Internal Battery Handling – Cage Pallet Rack
(Internal Handling Damage rejection reduced to ‘0’)
Elimination Of Plastic Stretch Wrapping

- LAYOUT – Showing Green Area Development in Last one year

BEFORE

AFTER

Area indicating in red colour was not developed as green

Area indicating in Green colour is developed in green

Total – 1360 Trees planted in the company premises

Development of Green area in surrounding

BEFORE	AFTER

LOCATION – BACK OF JF

BEFORE	AFTER

LOCATION– FORNT OF JF

BEFORE	AFTER

LOCATION _MC DISPATCH AREA

BEFORE	AFTER

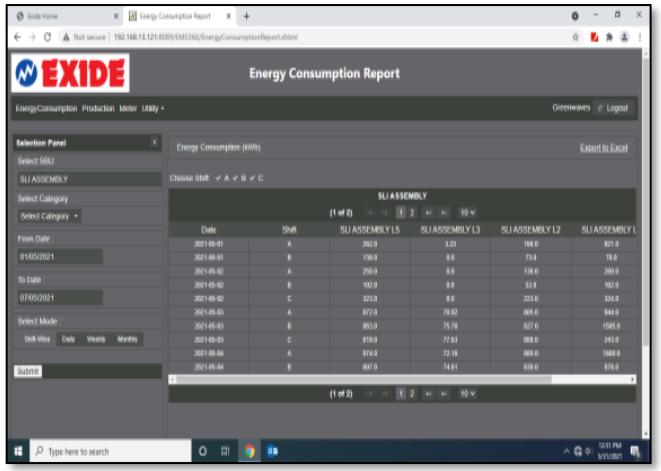
LOCATION– MC DISPATCH AREA

Energy Review Meeting and Appreciation for Achievement

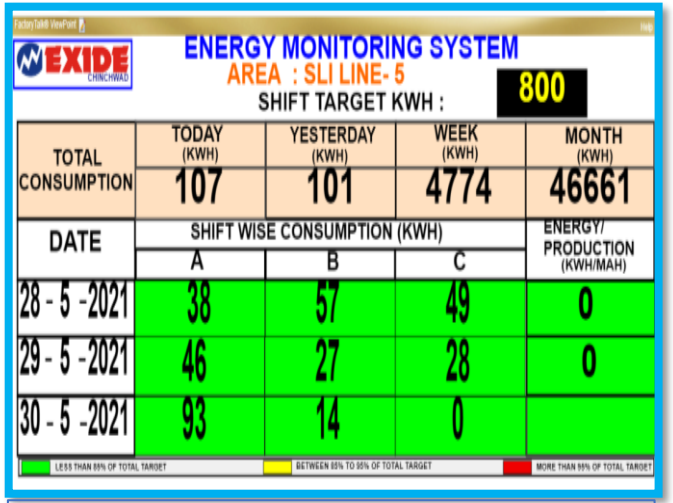
- IDENTIFICATION OF TRAINING NEEDS /SKILL GAP ON THE BASIS OF THEORETICAL & PRACTICAL KNOWLEDGE
- PREPARATION OF TRAINING MODULE/MATERIAL/METHODOLOGY
- PREPARATION OF TRAINING CALENDAR
- TECHNICAL SKILL DEVEP, CLASS ROOM, ON THE JOB TRAINING, ONE POINT LESSON
- EVALUATION / ASSESSMENT
- REVIEW THROUGH FEED BACK

Token of Appreciation

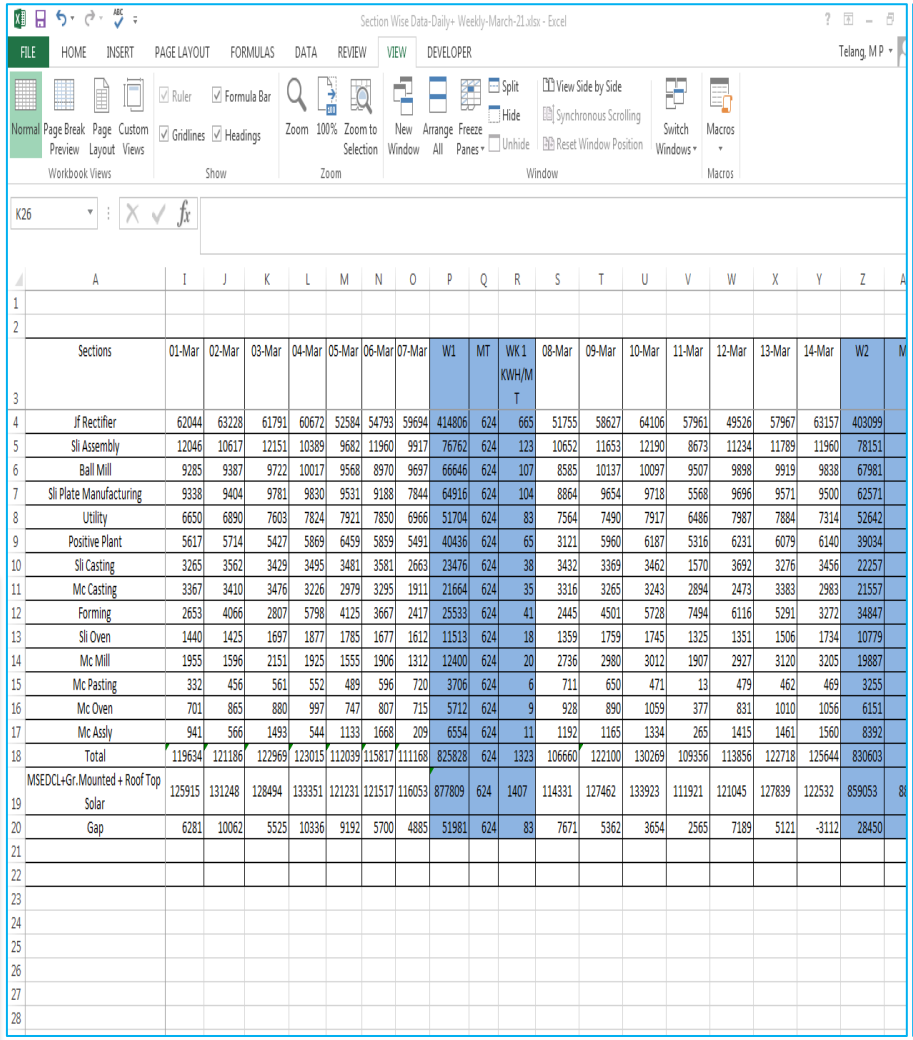
Team Discussion



EMS Software

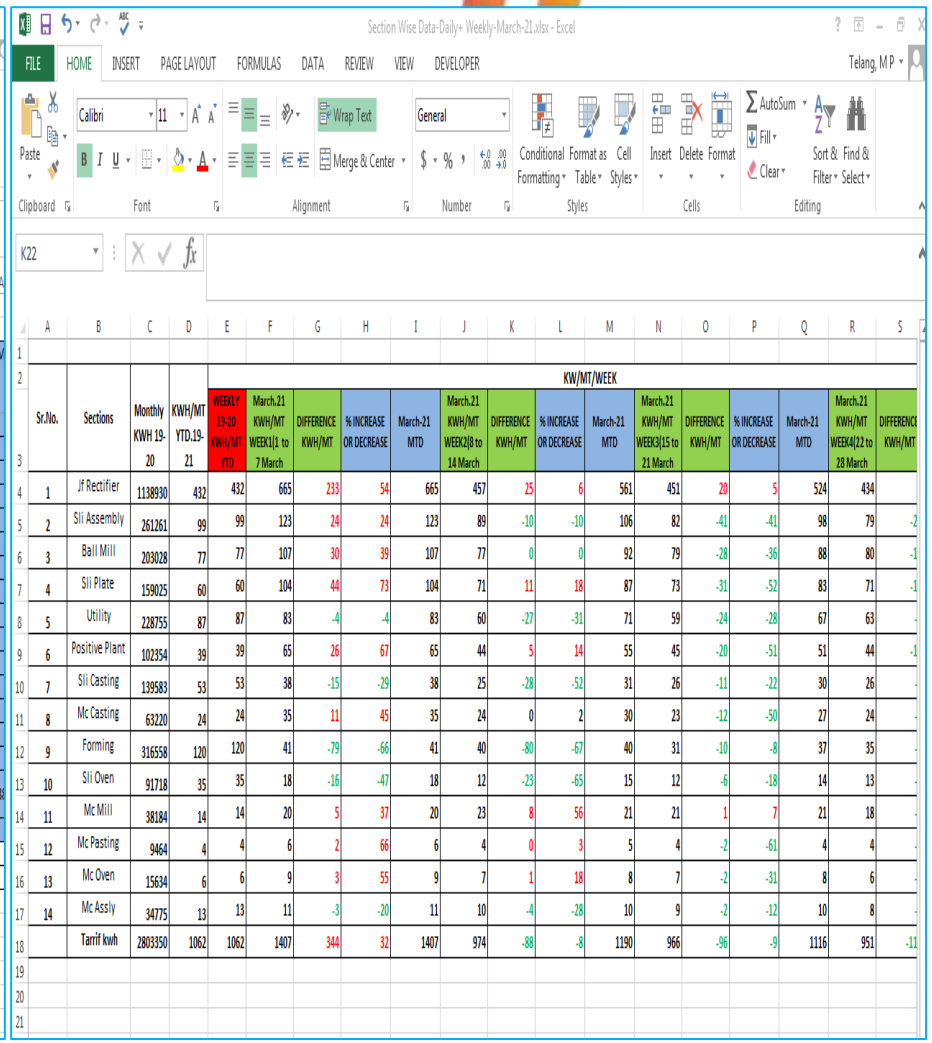


Section-wise Display



Sections	01-Mar	02-Mar	03-Mar	04-Mar	05-Mar	06-Mar	07-Mar	W1	MT	WK 1 KWH/MT	08-Mar	09-Mar	10-Mar	11-Mar	12-Mar	13-Mar	14-Mar	W2
Jf Rectifier	62044	63228	61791	60672	52584	54793	59694	414806	624	665	51755	58627	64106	57961	49526	57967	63157	403099
Sli Assembly	12046	10617	12151	10389	9682	11960	9917	76762	624	123	10652	11653	12190	8673	11234	11789	11960	78151
Ball Mill	9285	9387	9722	10017	9568	8970	9697	66646	624	107	8585	10137	10097	9507	9898	9919	9838	67981
Sli Plate Manufacturing	9338	9404	9781	9830	9531	9188	7844	64916	624	104	8864	9654	9718	5568	9696	9571	9500	62571
Utility	6650	6890	7603	7824	7921	7850	6966	51704	624	83	7564	7490	7917	6486	7987	7884	7314	52642
Positive Plant	5617	5714	5427	5869	6459	5859	5491	40436	624	65	3121	5960	6187	5316	6231	6079	6140	39034
Sli Casting	3265	3562	3429	3495	3481	3581	2663	23476	624	38	3432	3369	3462	1570	3692	3276	3456	22257
Mc Casting	3367	3410	3476	3226	2979	3295	1911	21664	624	35	3316	3265	3243	2894	2473	3383	2983	21557
Forming	2653	4066	2807	5798	4125	3667	2417	25533	624	41	2445	4501	5728	7494	6116	5291	3272	34847
Sli Oven	1440	1425	1697	1877	1785	1677	1612	11513	624	18	1359	1759	1745	1325	1351	1506	1734	10779
Mc Mill	1955	1596	2151	1925	1555	1906	1312	12400	624	20	2736	2980	3012	1907	2927	3120	3205	19887
Mc Pasting	332	456	561	552	489	596	720	3706	624	6	711	650	471	13	479	462	469	3255
Mc Oven	701	865	880	997	747	807	715	5712	624	9	928	890	1059	377	831	1010	1056	6151
Mc Assly	941	566	1493	544	1133	1668	209	6554	624	11	1192	1165	1334	265	1415	1461	1560	8392
Total	119634	121186	122969	123015	112039	115817	111168	825828	624	1323	106660	122100	130269	109356	113856	122718	125644	830603
MSEDCL+Gr.Mounted + Roof Top Solar	125915	131248	128494	133351	121231	121517	116053	877809	624	1407	114331	127462	133923	111921	121045	127839	122532	859053
Gap	6281	10062	5525	10336	9192	5700	4885	51981	624	83	7671	5362	3654	2565	7189	5121	-3112	28450

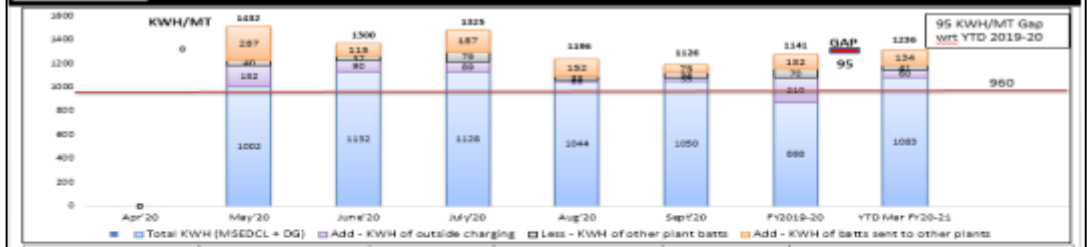
Daily Monitoring Data



Sr.No.	Sections	Monthly KWH 19-20	KWH/MT YTD.19-21	KW/MT/WEEK															
				WEEKLY 19-20 KWH/MT YTD	March.21 KWH/MT WEEK1(1 to 7 March	DIFFERENCE KWH/MT	% INCREASE OR DECREASE	March-21 MTD	March.21 KWH/MT WEEK2(8 to 14 March	DIFFERENCE KWH/MT	% INCREASE OR DECREASE	March-21 MTD	March.21 KWH/MT WEEK3(15 to 21 March	DIFFERENCE KWH/MT	% INCREASE OR DECREASE	March-21 MTD	March.21 KWH/MT WEEK4(22 to 28 March	DIFFERENCE KWH/MT
1	Jf Rectifier	1138930	432	432	665	233	54	665	457	25	6	561	451	20	5	524	434	
2	Sli Assembly	261161	99	99	123	24	24	123	89	-10	-10	106	82	-41	-41	98	79	-2
3	Ball Mill	203028	77	77	107	30	39	107	77	0	0	92	79	-28	-36	88	80	-1
4	Sli Plate	159025	60	60	104	44	73	104	71	11	18	87	73	-31	-52	83	71	-1
5	Utility	228755	87	87	83	-4	-4	83	60	-27	-31	71	59	-24	-28	67	63	
6	Positive Plant	102354	39	39	65	26	67	65	44	5	14	55	45	-20	-51	51	44	-1
7	Sli Casting	139583	53	53	38	-15	-29	38	25	-28	-52	31	26	-11	-22	30	26	
8	Mc Casting	63220	24	24	35	11	45	35	24	0	2	30	23	-12	-50	27	24	
9	Forming	316558	120	120	41	-79	-66	41	40	-80	-67	40	31	-10	-8	37	35	
10	Sli Oven	91718	35	35	18	-16	-47	18	12	-23	-65	15	12	-6	-18	14	13	
11	Mc Mill	38184	14	14	20	5	37	20	23	8	56	21	21	1	7	21	18	
12	Mc Pasting	9464	4	4	6	2	66	6	4	0	3	5	4	-2	-61	4	4	
13	Mc Oven	15634	6	6	9	3	55	9	7	1	18	8	7	-2	-31	8	6	
14	Mc Assly	34775	13	13	11	-3	-20	11	10	-4	-28	10	9	-2	-12	10	8	
	Tarrif kwh	2803350	1062	1062	1407	344	32	1407	974	-88	-8	1190	966	-96	-9	1116	951	-11

Weekly Monitoring Data

KWH/MT Plant Trend & Gap Analysis — CHINCHWAD



Particulars	FY 2019-20 KWH/MT	Sep'20 KWH/MT	YTD Mar 2020-21 KWH/MT	Gap wrt FY20-21& YTD Mar'19-20	Remark
Total KWH (MSEDCL + DG)	831	1050	1083		
Add - KWH of outside charging	273	35	60		
Total Chinchwad KWH/MT	1104	1085	1143	39	To bridge this 95KWH/MT gap we have trapped three categories 1. Low cost project- Saving 24KWH/MT. 2. Optimized of machine- Saving 50 KWH/MT 3. Capex Projects- Saving 124KWH/MT
Less - KWH of other plant batts	61	54	41	-20	Reduced OEM offtake for other plant batt
Add - KWH of batts sent to other plants	96	75	134	38	Chinchwad Plant battery which was send for charging to other plant was charged extra due to which Chinchwad Plant charging cost increased by 58KWH/MT Planning to charge all Battery in house

Jar formation Department Action Plan — CHINCHWAD

Section Leader – Soham Choudhury

Department	Machine	Action Plan	AMPS	KW	KWH/Month	KWH/MT	Target Date	KWH Unit rate Rs.9	Investment in Rs.	Pay Back in Month	Responsibility	Status
Jar Formation	Washing Machine-1	Top Blower piping to be modified and 10HP blower to be removed	7.0	2.8	2049.8	1.02	25/08/2020	19473	0	0.0	SDC	
Jar Formation	Washing Machine-2	Top Blower piping to be modified and 10HP blower to be removed	7.0	2.8	2049.8	1.02	25/08/2020	19473	0	0.0	SDC	
Jar Formation	Leak testing-1	One test valve and hold valve to be removed per header	2.0	0.8	585.6	0.29	15/07/2020	5564	0	0.0	SDC	
Jar Formation	Leak testing-2	One test valve and hold valve to be removed per header	2.0	0.8	585.6	0.29	15/07/2020	5564	0	0.0	SDC	
Jar Formation	Leak testing-1	Top setting cyclinder to be removed and mechanical Lead screw to be provided	5.0	2.0	1464.1	0.73	30/10/2020	13909	0	0.0	SDC	
Jar Formation	Leak testing-2	Top setting cyclinder to be removed and mechanical Lead screw to be provided	5.0	2.0	1464.1	0.73	30/10/2020	13909	0	0.0	SDC	
Jar Formation	Washing Machine-1	5hp Pump motor to be reduced to 1HP	3.0	1.2	878.5	0.44	30/10/2020	8345	0	0.0	SDC	
Jar Formation	Washing Machine-3	5hp Pump motor to be reduced to 1HP	3.0	1.2	878.5	0.44	30/10/2020	8345	0	0.0	SDC	
Jar Formation	JF Fume Extractor-4	Vertical charging Blower Frequncy reduced to 25Hz	57.0	23.2	16691.0	8.35	12/08/2020	158564	0	0.0	TW	
Jar Formation	JF Fume Extractor-6	Vertical charging Blower Frequncy reduced to 25Hz	57.0	23.2	16691.0	8.35	12/08/2020	158564	0	0.0	TW	

SLI Assembly Department Action Plan — CHINCHWAD

Section Leader – D S Shukla

Department	Machine	Action Plan	KWH/MT	Target Date	Responsibility	Status
SLI Assembly	Dust collector-1	Rotary valve to be operated with Cyclic timer	0.10	25/08/2020	AS	
SLI Assembly	Dust collector-2	Rotary valve to be operated with Cyclic timer	0.10	25/08/2020	AS	
SLI Assembly	Dust collector-3	Rotary valve to be operated with Cyclic timer	0.10	25/08/2020	AS	
SLI Assembly	Dust collector-4	Rotary valve to be operated with Cyclic timer	0.10	25/08/2020	AS	
SLI Assembly	Dust collector-5	Rotary valve to be operated with Cyclic timer	0.10	25/08/2020	AS	
SLI Assembly	COS Line-1	Bottom Anchoring to be interlocked with Battery Reciepe to avoid unecessary heating	0.09	25/09/2020	SRT	
SLI Assembly	COS Line-4	Bottom Anchoring to be interlocked with Battery Reciepe to avoid unecessary heating	0.09	25/09/2020	SRT	
SLI Assembly	Heat Sealing -1	Spare Platen to be switched off automatically when not in operation	1.27	30/10/2020	SRT	
SLI Assembly	Heat Sealing -2	Spare Platen to be switched off automatically when not in operation	1.27	30/10/2020	SRT	
SLI Assembly	Heat Sealing -3	Spare Platen to be switched off automatically when not in operation	1.27	30/10/2020	SRT	
SLI Assembly	Heat Sealing -4	Spare Platen to be switched off automatically when not in operation	1.27	30/10/2020	SRT	
SLI Assembly	Heat Sealing -5	Spare Platen to be switched off automatically when not in operation	1.27	30/10/2020	SRT	
SLI Assembly	Fresh Air Fan-1	VFD to be installed & Speed to be reduced in Rainy and winter manually	0.44	30/10/2020	SRT	
SLI Assembly	Fresh Air Fan-2	VFD to be installed & Speed to be reduced in Rainy and winter manually	0.44	15/10/2020	SRT	
SLI Assembly	Fresh Air Fan-3	VFD to be installed & Speed to be reduced in Rainy and winter manually	0.44	15/10/2020	SRT	
SLI Assembly	Fresh Air Fan-4	VFD to be installed & Speed to be reduced in Rainy and winter manually	0.44	15/11/2020	SRT	
SLI Assembly	Fresh Air Fan-5	VFD to be installed & Speed to be reduced in Rainy and winter manually	0.44	15/11/2020	SRT	
SLI Assembly	COS Line-1	Pot Surface temp to be reduced by Providing extra insulation	1.46	25/10/2020	PPK	
SLI Assembly	COS Line-2	Pot Surface temp to be reduced by Providing extra insulation	1.46	25/10/2020	PPK	
SLI Assembly	COS Line-3	Pot Surface temp to be reduced by Providing extra insulation	1.46	25/10/2020	PPK	
SLI Assembly	COS Line-4	Pot Surface temp to be reduced by Providing extra insulation	1.46	25/10/2020	PPK	
SLI Assembly	COS Line-5	Pot Surface temp to be reduced by Providing extra insulation	1.46	25/10/2020	PPK	

Journey Towards Excellence

2018 – Apex India Environment Excellence Award
2018 – Award for Excellence in Consistent TPM Commitment
2017 – GCI Environment Gold award
2017 – General Motors Supplier Quality Excellence Award
2016 – Super Platinum Award for Quality by M/s Bajaj Auto Ltd.
2015 – Environment Silver Award by Green Tech Foundation
2015 – Awarded OHSAS 18001:2007 Certification
2014 – ZERO PPM Award by M/s Royal Enfield
2013 – PPM Award by M/s John Deere
2014 – Best Supplier for Delivery by Tata Motors & Suzuki Motorcycles
2011 – Quality Award – By Tata Motors
2011 – Superior Performance Award - By M&M
2011 – JIPM TPM Excellence Award
2010 – Best Supplier Award(Pune Forum) by Renault Nissan
2009 – Stores/Warehouse Mgt. Award by IIMM, Pune
2009 – Outstanding Performance Award – By M & M
2008 – Quality Award Gold – By Bajaj Auto
2008 – Best Quality Supplier Award – By Tata Motors
2007 – Quality Award Silver – By Bajaj Auto
2006 – Awarded ISO 14000 Certification
2004 – TPM Journey Started
2004 – Awarded TS 16949 Certification
2000 – Awarded QS 9000 Certification
1999 – ERP-SAP Implementation
1994 – Awarded ISO 9001 Certification
1994 – Technical collaboration with Shinkobe, Japan
1969 – Company Started

Thank You