

# ME Connect

Bi-monthly Newsletter

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# From Executive Chairman's Desk:

In the Annual CME Digital Conference conducted on 6<sup>th</sup> June'2020, it was observed that all plants have spent a huge amount on Repair & maintenance activities in last year. Many of these expenses were certainly avoidable. In manufacturing units, Breakdown are bound to occur. We need to analyze for every breakdown – why it happened & how we can eliminate this permanently. Plants have to focus on Preventive maintenance seriously to avoid breakdowns. . Our maintenance team does less repair & maintenance work but prefer only to replace the spares/ parts. Then what is the use of so many years of experience? I observed huge expense in last year on simple items like Cables, V-belts, gears, chains etc.

Wire plants put together down time are huge 53125 minutes (August-19 to March'20) which is equivalent to Full 37 days. Imagine the loss of Production due to this. Repair & Maintenance expense for wire plants were INR 41.17 Lac. Wire plants to reduce it by half in current year.

Do you all think this is justified? This will not be acceptable in this year. 50% saving on such cost (Spare, Plant & machinery repair, Consumables, Raw material) are very much achievable. This is the target for every plant.

Use CME tools, Quality Circle, Kaizen approach to reduce these non-value added activities & make your plant more efficient. Rejections are also very high in Sleeper, Wire & Insert plant. Plants must have more focus & control on Process.

We are fortunate to have good orders in hand but if we will not become Smart & more efficient then we will simply waste our hard earned money.

CME activities will also be monitored through SAP in Future. Every plant to practice now & daily working on SAP to make it successful after go-live.

CME & CHQ will be very closely monitoring activities of every plant.

Be Aware, Be safe & Go ahead

All the Best!!

L S Patil

**Executive Chairman, Patil Group** 

# ANNUAL CME DIGITAL CONFERENCE-"MANTHAN-2020"

CME had organized its first ever "Annual Digital Conference "on 6<sup>th</sup> June '2020. In opening meeting, Honorable EC sir explained about Present Business scenario & our orders with railways. EC sir has mentioned five different pillars (Health & Safety, Training, Quality, Repair & maintenance, Raw material & other wastage) as Brahmastra tools to get out of this Chakrvyuh and become Self dependent (Atmanirbhar).

COO sir explained how & where to cut cost on these. There is saving potential of Rs 5 CR on these & all Sleeper Plants together to work for Saving of Rs. 5 cr this year. This is need of the hour & target for year 2020.

It has been a journey full of Ups & Downs. CME has shared the Work done by plants on various ME pillars such as Safety, kaizen, 5S, Focused Maintenance & Quality circle. It is very much evident that the plants who have inculcated ME tools & techniques in their daily routine, got excellent results on Control of Rejections, Lesser breakdown, less Consumption of Motors, Bearing & achieved multi directional benefits.

# **QUALITY CIRCLE PROJECTS**

Total 65 Quality circle Projects has been finalized including all sleeper, wire, Insert & FBW plants for Next quarter related to reduction of breakdowns, cost saving, increase productivity. New Projects have greater focus on reduction of maintenance cost, Parts & machinery & various wastages in manufacturing units on Raw material & consumables. It was observed that there were huge expense on these in last year. Potential is there for straight away 50 % reduction & this is the Target for CME as well as for individual plant to achieve this by Quality Circle methodology.

| Plant   | Maintenance | Cost | <b>Productivity</b> | Quality | Total |
|---------|-------------|------|---------------------|---------|-------|
| Sleeper | 28          | 21   | 0                   | 1       | 50    |
| Wire    | 4           | 4    | 0                   |         | 8     |
| Insert  | 1           | 2    | 0                   | 1       | 4     |
| FBW     | 0           | 2    | 1                   | 0       | 3     |
| Total   | 33          | 29   | 1                   | 2       | 65    |

# QUALITY CIRCLE REFERENCE PROJECT IMPLEMENTATION

Some Successful projects like Reduction of rejection (End broken, Crack & IS/IT) and Reduction of breakdown (Vibrator burning & screw conveyor breakdown) have been shared to all plant for direct implementation. These need to be immediately implemented by following the action taken in these Quality circles.

# PLANT CME RATING

Plant ratings has been shared by CME to all, which is based on Individual plant's work done (till March'2020) on different CME pillars i.e. Safety, 5S, Quality Circle, Focused maintenance, Process control, Training & development. Timely report & response is also a factor for plant rating.

Rating is done on scale of 1-5 where 5 being the best.



# **Some Success story from Plants**

Udvada had completed very good Quality Circle on Vibrator & Screw conveyer with very impressive results. Both these projects had been shared with all sleeper plants for Horizontal deployment.



Plants who are sincerely deploying these Quality circle in their plant are showing sign of less breakdown. e.g. Pathri plant after Implementing both these Quality circle Project has achieved Zero breakdown for Screw conveyer & only one Vibrator burning in the month of June'20.

Kaipadar plant has maintained One & Zero IS/IT rejection respectively in the month of May & June'20. EB rejection control is on good track with only 2 EB in June month. Additionally KPXR has been very effective in Process Control, Safety awareness among team.



Kallakal plant's last year spare & maintenance cost is fairly satisfactory. Being such a big unit of Foundry, it is appreciable. Plant's breakdown has come down to around 2.5 % as compared to 8-9% break down per month in last year. Very high focus has been consistently given on Preventive Maintenance. Multiskilling of Maintenance technician, Spare parts planning has helped plant achieve this status.



# VC & REFRESHER TRAINING

CME has conducted exclusive Refresher training on all CME activities, tools & techniques with ACPL & Roopangarh Units in the month of June'2020. They were shown the many works done by other plants on manufacturing Excellence. Re-Implementation on such activities will give immediate jump start to these two plants.

Complete team of Bokaro (17 person) have been given extensive training (8 training session) in the month of May'2020 on all Manufacturing Excellence tools & Techniques with numerous examples of work done on 5S, quality Circle, Safety, Process control etc... Bokaro team will be very well capable in implementing all these ME systems with help of CME since very beginning of Plant resuming operation very soon.

# **BREAKDOWN & FOCUSED MAINTENANCE**

CME has started monitoring maintenance reports, Preventive activities & spare cost also for Crusher units. Time based & Quantity based critical spare parts replacement after completing life cycle is important. But still sharp eye is required to really gauge the actual condition of parts before blindly changing these. Crusher maintenance data started receiving from TMQ, Mirza & Anara.

### KAIZEN INITIATIVE

In addition to existing tools & techniques, CME has introduced "KAIZEN" to resolve various minor issues in plant. Kaizen to be implemented by the help of Deming wheel (PDCA cycle).

By the help of this approach FBW plant has successfully completed two kaizen and made considerable saving on Cost, Man hour saving & reduced idle time of FBW machine.

# **5S MODEL AREA**

For progress on 5S activity in the plant, CME has advised to go for model area concept systematically. Every plant has to take up one workplace for improving all aspects of 5S. After achieving 3S standard in model area it has to be horizontally deployed in other workplace. The next work area will be called as expansion model area.

Wadiyaram team have made their LAB as model 5 S area with this concept.



|           |  |                       |   |   |    |    |   |     |    |   |    |    |    |    |    |    |    | W         | iont | th: | 2  | υL | 1 - | 20 | 120 | ,    |    |    |    |    |    |    |    |
|-----------|--|-----------------------|---|---|----|----|---|-----|----|---|----|----|----|----|----|----|----|-----------|------|-----|----|----|-----|----|-----|------|----|----|----|----|----|----|----|
| 51.<br>NO | LAB MACHINERY                                  | Cleaning<br>Frequency | 1 | 2 | 3  | 4  | 5 | 6   | 7  | 8 | 9  | 10 | 11 | 12 | 13 | 14 | 15 | Dar<br>16 | -    | 18  | 19 | 20 | 21  | 22 | 2 2 | 3 24 | 25 | 25 | 27 | 28 | 29 | 30 | T. |
| 1         | CUBE TESTING MACHINE                           | Daily                 | 1 | 1 | 1  | 1  |   | 1   | V  | V | V  | -  |    |    | Н  |    |    |           |      |     | r  | t  | t   | t  | t   | T    | T  |    |    |    |    | -  | f  |
| 2         | FLEXURAL BEAM TESTING MACHINE                  | Daily                 | 1 | 1 | 1  | 1  |   | 1   | 1  | V | V  |    |    |    |    |    |    |           |      |     |    |    |     |    | T   |      |    | 1  |    | 1  | 1  | 1  | H  |
| 3         | MORTOR CUBE CATING MACHINE                     | Daily                 | 1 | 1 | 1  | 5  |   | J   | d  | V | V  |    |    |    |    |    |    |           |      |     |    |    |     |    |     |      |    | 1  | 1  | 1  | 1  | 1  |    |
| 4         | IMPACT TESTING MACHINE                         | Daily                 | 1 | 1 | V  | 1  | Т | 5   | V  | 1 | V  |    |    | П  |    |    | 7  |           |      |     |    |    | T   | 1  |     | П    |    |    | 1  | 1  | +  | t  | 7  |
| 5         | SIEVE SHAKER                                   | Daily                 | 1 | V | 1  | 11 | Г | V   | V  | V | V  |    | ī  |    |    |    |    |           |      | T   |    | П  |     |    |     |      | 1  |    | +  | Ť  | t  | t  | 1  |
| 5         | WATER BATH APPARATUS                           | Daily                 | V | 1 | 1  | 1  |   | 5   | 1  | 1 | V  | П  |    | П  | 1  |    | T  |           | 1    |     |    |    | T   |    |     |      |    |    | 1  | Ť  | t  | t  |    |
| 7         | OVEN   | Daily                 | V | V | 1  | 1  |   | 1   | V  | V | V  |    |    |    |    |    |    |           |      |     | T  |    |     | 1  | П   |      |    |    | T  | t  | +  | +  | _  |
| 8         | MASTER, DIMENSION GIUAGES                      | Daily                 | 1 | V | V  | 11 |   |     | V  | V | V  |    |    |    |    |    |    |           |      | T   | T  |    |     |    | П   |      |    |    | T  | 1  | 1  | 1  |    |
| 9         | SBT TESTING MACHINE                            | Daily                 | J | V | 1  | 1  |   | ſ   | 1  | 1 | V  |    |    |    |    |    |    |           |      |     |    |    |     |    | П   |      |    |    | T  | 1  | 1  | T  | Ī  |
| 10        | ABRASSION TESTING MACHINE                      | Daily                 | 1 | V | 1  | 17 |   | 1   | 1  | 5 | V  |    |    |    |    |    |    |           |      |     | T  |    |     |    |     |      |    |    | 1  |    |    |    | T  |
| 11        | MTM  | Daily                 | V | V | V  | 1  |   | V   | V  | V | V  |    |    |    |    |    |    |           |      |     |    |    |     |    |     |      |    | П  | П  |    | П  | ī  | t  |
| 12        | COMPUTER CABIN                                 | Daily                 | 1 | 0 | 1  | 1  |   | 1   | 1  | V | V  | •  |    |    |    | П  |    |           |      |     |    |    |     |    | Г   |      |    |    |    |    |    |    | t  |
| 13        | FLOOR, TABLES& CHAIRS                          | Daily                 | 1 | V | V  | 1  |   | 1   | V  | 1 | V  |    |    |    |    |    |    |           |      |     |    |    |     |    |     |      |    |    | П  |    |    |    | t  |
|           | Cleaned By(Signature)<br>Checked By(signature) |                       | 步 | ď | 65 | *  |   | fa. | 18 | 1 | 13 |    |    |    | 4  | -  | 7  |           |      | 4   |    |    |     |    |     |      |    |    |    |    |    | Ac | 1  |

# TRAINING & DEVELOPMENT

Training to every Staff & workmen on Sleeper manufacturing process & Quality aspects are now a regular feature at every plant. Audio Visual training are provided with help of big screen TV / Projector & will continue as new people keep joining.

Report from all plants are regularly received at CME with Photo/ video of actual training session.





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