

# **VRM ROLLER TYRE & TABLE BUTTONING JOB**

## **UTCL CUTTACK CEMENT WORKS**

**JOB COMPLETED BY :-  
DIFFUSION ENGINEERS LTD.**

# CEMENT MILL -VRM

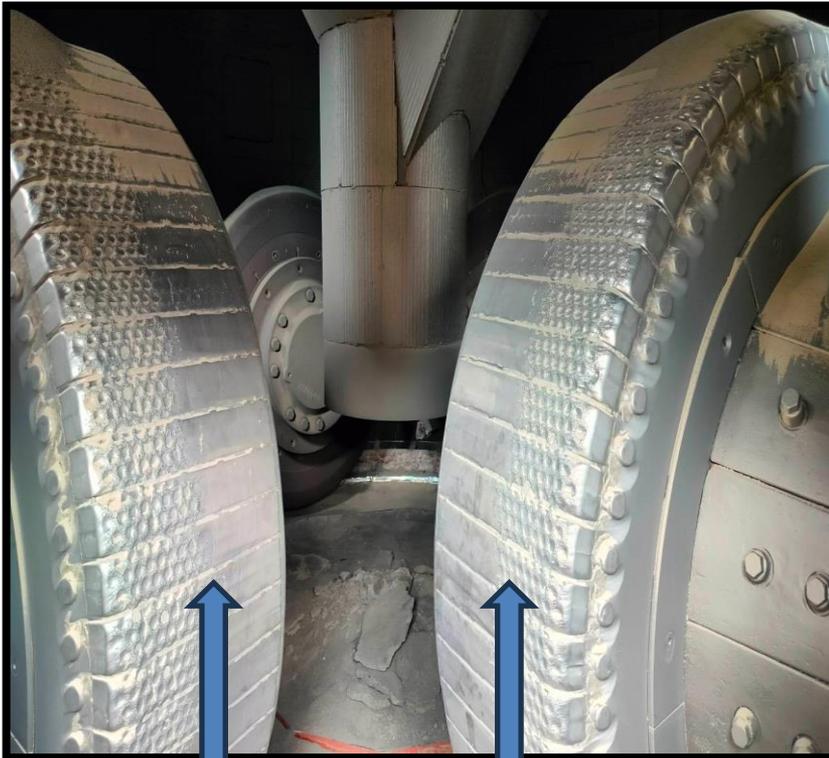
<b>MAKE</b>	<b>:- GEBR. PFEIFFER SE</b>
<b>TYPE</b>	<b>:- VRM</b>
<b>MODEL</b>	<b>:- MVR 6000 C-6/SLS 5600 BC</b>
<b>NUMBER OF ROLLER</b>	<b>:- 6 NOS</b>
<b>TABLE DIA.</b>	<b>:- 6 MTR</b>

<b>MATERIALS HANDLING</b>	<b>:- CLINKERS, SLAG, FLY ASH &amp; GYPSUM</b>
<b>TYPES OF CEMENT</b>	<b>:- PSC ( Clinker- 33% + Slag + 1-2 % Gypsum) CC ( Clinker- 35% + Slag + Fly Ash + 1-2 % Gypsum) PPC ( Clinker- 63% + Fly Ash + 1-2 % Gypsum)</b>
<b>AVG. PRODUCTION</b>	<b>:- 300 TPH</b>

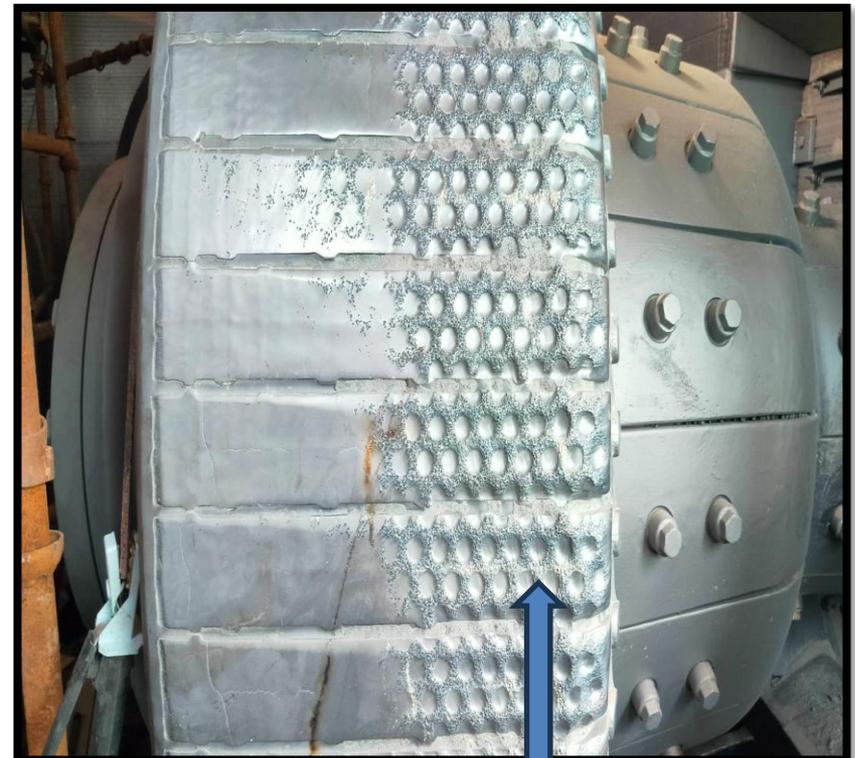
# **CVRM – GEBR. PFEIFFER SE**



## VISUAL INSPECTION OF THE ROLLER TYRE

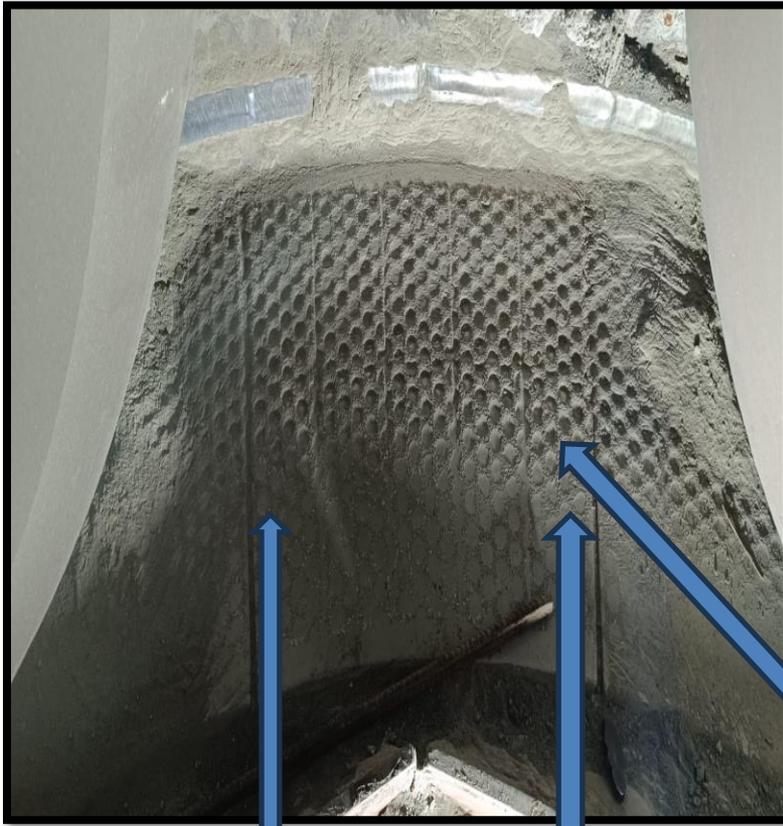


Nos of Strip in 1 Roller  
75 Nos



Nos. of Buttons in 1 Strip  
18-19 Avg.

## VISUAL INSPECTION OF THE TABLE LINER



Nos of Strip in 1 Segment  
5 Nos



Nos. of Buttons in 1 Strip  
75-76 Avg.

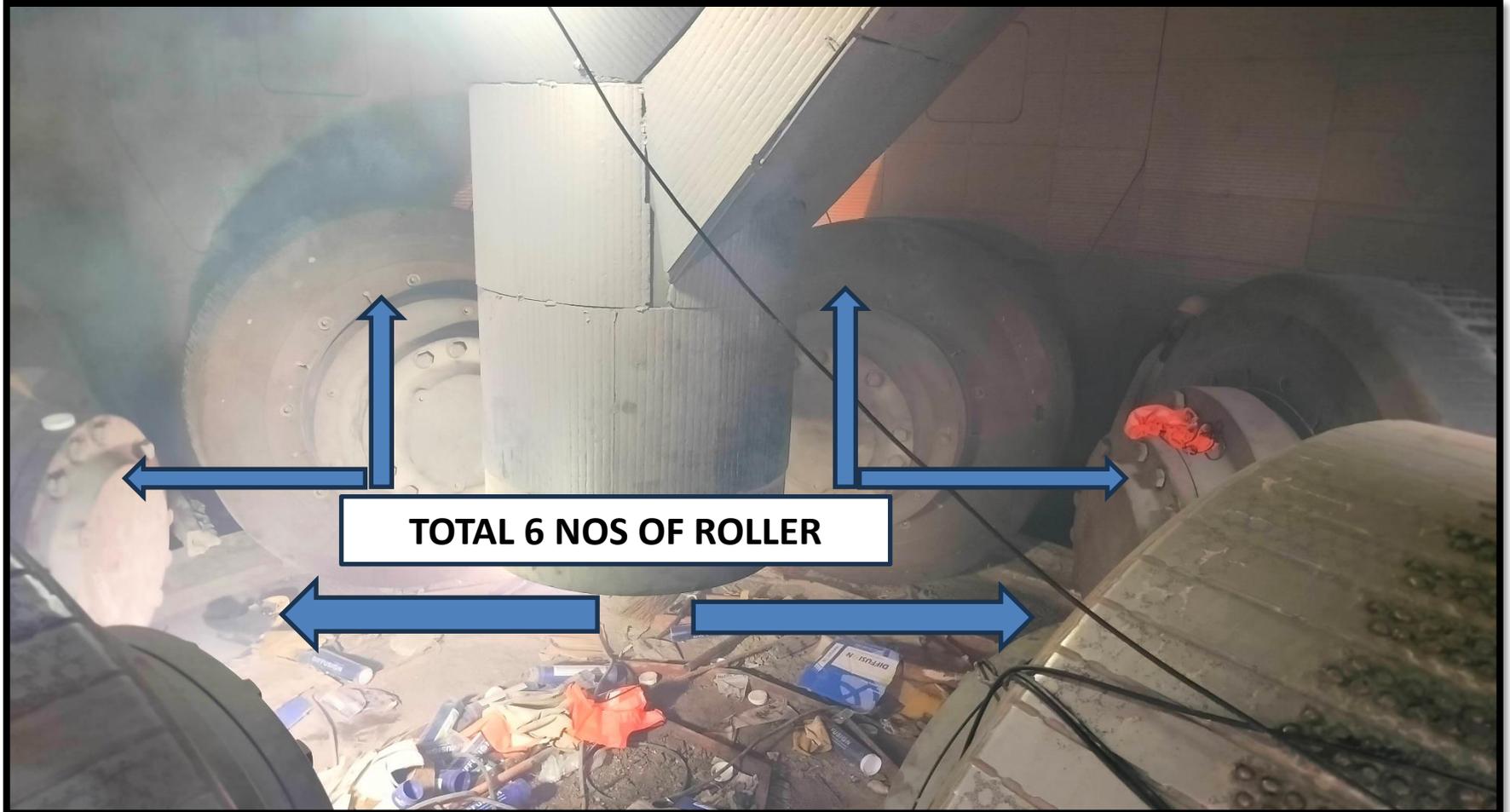
## OBSERVATION AFTER INSPECTION

- Wear on Roller tyre area & Table grinding zone is approx. 3-5 mm.
- Approx 50% of grinding zone worn out.

## CHALLENGES FOR THE EXECUTION

- Completion of the entire job within 4-5 Days only.
- Manpower employment.
- Rotation of Rollers.
- Heat & Fume inside the mill during the execution of the job in summer season.
- Monkey ladder for Up & Down to working area.
- Local Movement (Loading & Boarding Facility available 15 KM away from the plant area).

## MILL INSIDE PICTURE DURING JOB EXECUTION



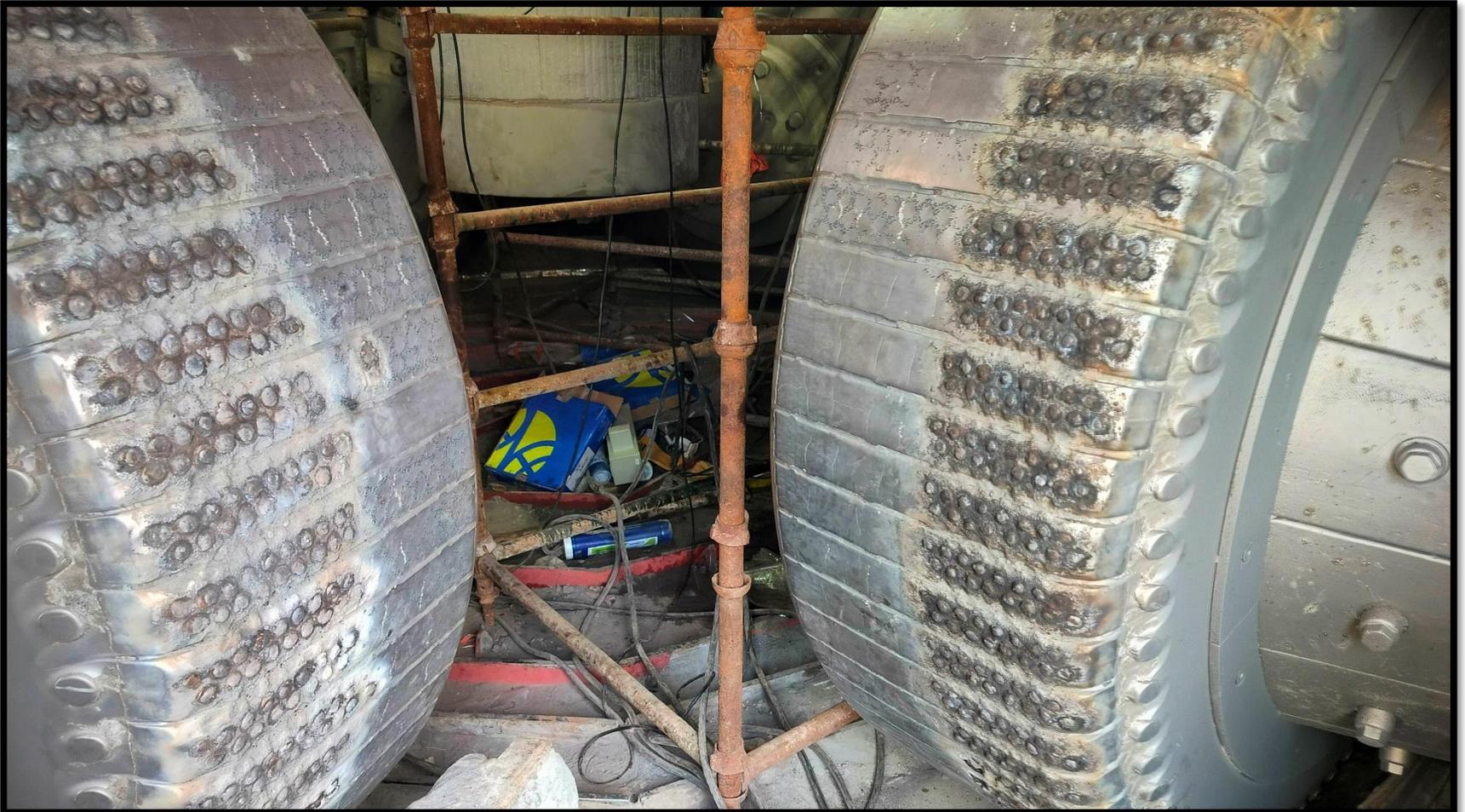
## ROLLER TYRE AFTER BUTTUNING



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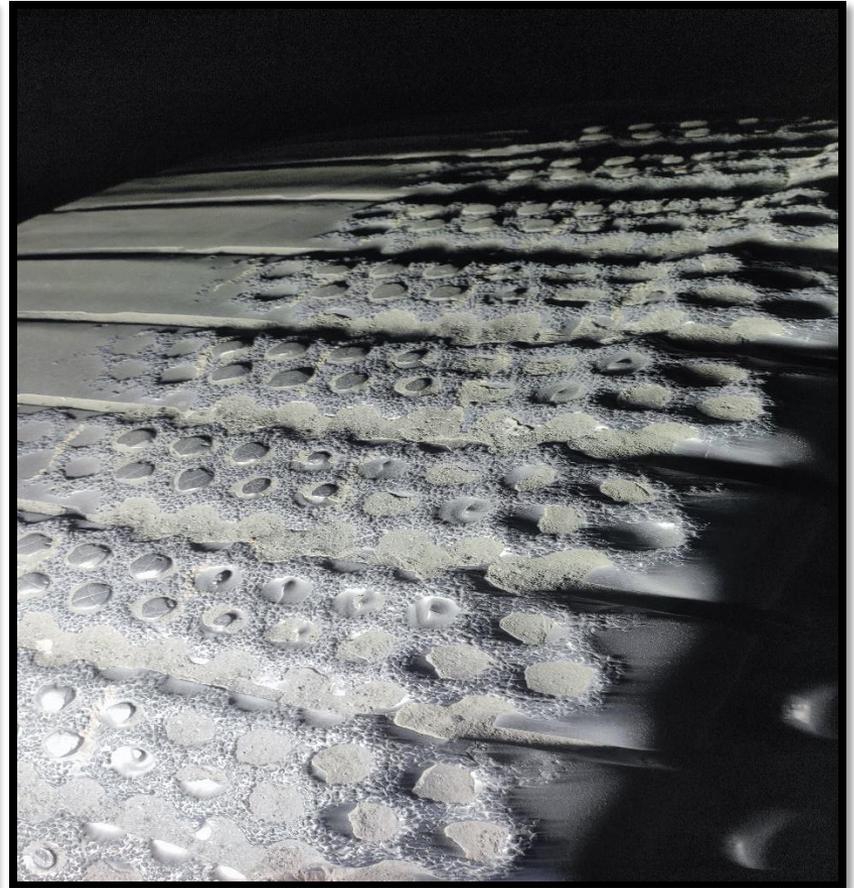
## TABLE LINER AFTER BUTTUNING



## SUMMERY

- Product used for Buttoning of Table Liners & Roller tyre job- **ABRALOY 3000D.**
- Deputed 8 no's of welding technician for the execution of the job.
- 3 Welding Technician deputed on Roller Tyre & 1 no for Table Liner buttoning job.
- Electrodes Consumptions :- 250 KG
- Avg. Approx 3-4 buttons done with 1 no's of ABRALOY 3000D-4MM Welding Alloys.
- Total number of segments in one roller tyre is 75 & approx. 18-19 numbers of avg. buttoning required in each segment which comes approx. 1350 numbers of button in 1 No of Roller Tyre
- Approximate 8100 numbers of buttoning done on complete rollers..
- Table have total 19 segments & in 1 segment total 5 Nos of Strips and 1 strip had 75 Nos. of Button.
- Total number of button on VRM Table is approx.- 7125 Nos and approx. 4400 Nos of buttoning done on Table.

## INSPECTION AFTER 2500 RUNNING Hrs. (Approx)



# TEAM INVOLVE

## SERVICE TEAM

- **DIFFUSION ENGINEERS TEAM**
- **M/s SYMBOISIS**

## MARKETING TEAM

- **MR. SUNNY KUMAR – SALES ENGINEER**
- **MANOJ KR RAY- SR. AREA ENGINEER**