



SJM Vidyapeetha®  
**S J M INSTITUTE OF TECHNOLOGY**  
NH-4 Bypass, P.B.No:73, CHITRADURGA -577502, Karnataka



## INSTITUTION'S INNOVATION COUNCIL (IIC)

### Overall report

on

### “VISIT TO KMF NANDINI MILK CHILLING CENTER- CHITRADURGA”



Organized by  
**Innovation Cell**

*In Association with*

**Department of Mechanical engineering, IIC & IAQC**

**Date: 16-02-2024**

**Time: 11.15 AM**

Nagaraja.B  
IIC Coordinator

Dr.Krishnareddy K,R  
IIC Convener

DR.Jagannath N  
IQAC Coordinator

Dr. Bharath P.B  
Principal

## **Brief Report of the Visit:**

**Industry Visit : KMF Nandini Milk Chilling Centre, Chitradurga**

**Date of Visit :** February 16, 2024

### **Objective:**

1. To assess the operations and facilities at the KMF Nandini Milk Chilling Centre in Chitradurga.
2. Enable students to witness the real-world application of concepts learned in classrooms.
3. Bridge the gap between theory and practice by demonstrating how engineering principles are implemented in industrial settings.
4. Train students in identifying real-world engineering problems and developing effective solutions
5. Encourage a problem-solving mindset by exposing students to the challenges faced by industries and the engineering solutions implemented.

### **Overview :**

Students of Mechanical Engineering Department visited the KMF Nandini Milk Chilling Centre in Chitradurga on February 16, 2024 to evaluate its functioning and infrastructure. The center plays a crucial role in the milk procurement process, ensuring quality control and efficient chilling of milk collected from local dairy farmers.

### **Observations:**

#### **Location and Accessibility:**

The center is conveniently located with easy access from the main roads, facilitating transportation of milk from nearby dairy farms. It is located about 200 Kms away from Bangalore and 107 Kms away from Shivamogga Dairy and it is situated at National Highway NH-4.

#### **Infrastructure:**

The chilling center is well-equipped with modern machinery for milk processing and chilling. In this chilling centre, three compressors are there and each will be operated one after another sequentially in order to avoid continuous running of single compressor. The facility appeared clean and well-maintained, adhering to hygiene standards. No packing is done here. The

#### **Milk Reception:**

Upon arrival, I observed the smooth reception process for incoming milk from farmers carried by the milk tanker. The milk collected from the farmers through milk cooperative society and from other collection points should be made to reach this chilling centre within 4 hours. The staff efficiently handled the milk collection and documentation procedures.

#### **Quality Control:**

Stringent quality control measures were evident throughout the facility. Samples of incoming milk were tested for purity, freshness, and bacterial content to ensure adherence to quality standards. The quality standards of milk are about more than 3% protein, 28.5 density, 4% fat, SLR 38.5 and 8.5 SNF. The smell, odour, taste, appearance is checked. Any disorder is found, it can be rejected.

**Chilling Process:**

The chilling process was carried out promptly to maintain the freshness and quality of the milk. The temperature-controlled environment aided in preserving the milk until further processing. The chilled milk stored in the chilling container is maintained at 4 °c temp until it will be dispatched to the milk taker for further processing. Ammonia cylinder tank is used for chilling purposes. The chiller capacity is about 10 KLPH.

**Storage Facilities:**

Adequate storage facilities were available to store the chilled milk before it is transported to dairy processing units. The storage capacity of each horizontal milk container is about 60,000 litre. The total tanker chilling milk capacity is around 1,80,000 liters per day. The storage area was clean and organized, with proper ventilation.

**Staff Expertise:**

The staff demonstrated proficiency in their respective roles, displaying a good understanding of milk handling protocols and safety procedures.

**Hygiene Practices:**

Hygiene appeared to be a top priority at the center, with staff wearing appropriate protective gear and following sanitation protocols to prevent contamination.

**Community Impact:**

The center plays a vital role in supporting local dairy farmers by providing a reliable market for their milk produce. It contributes to the socio-economic development of the region by creating employment opportunities and sustaining the dairy industry.

**Conclusion:**

Overall, my visit to the KMF Nandini Milk Chilling Centre in Chitradurga was insightful. The center operates efficiently, ensuring the quality and freshness of milk while fostering community engagement and economic growth. It stands as a commendable example of modern dairy infrastructure contributing to the dairy sector's sustainability and development in the region.


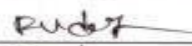
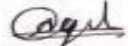

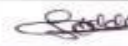

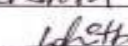
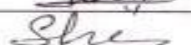





**Suggestions:**


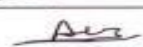
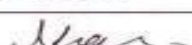
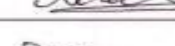
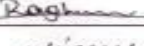
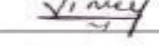
- Continuation of stringent quality control measures.
- Regular maintenance of machinery and infrastructure.
- Continued focus on staff training and development to uphold best practices.
- Exploration of opportunities for expanding outreach to more dairy farmers in the region
- Possibility of packing to be stated in this centre.

## Participant's Details: [Attendance Sheet ]

**SJM Vidyapeetha ®**  
**SJM INSTITUTE OF TECHNOLOGY, CHITRADURGA - 577502**  
**DEPARTMENT OF MECHANICAL ENGINEERING**  
**In Association with IIC organizing**  
**Visit to KMF NANDINI MILK CHILLING CENTER-Chitradurga**

**Date:16/02/2024**

Sl. No.	USN	Name of students	Signature
1	HSM22ME002	Raju. M	
2	4SM22ME003	Rudresh.T	
3	4SM22ME001	Agnih. S	
4	—	Siddesh. B.R	
5	—	E. Samuel pram Sadgun	E. Sadgun
6	—	Munigappa Adike G.K	Mun Ad G.K
7	—	Siddesh. M	
8	—	Karan. R	Karan R
9	—	LU QMIAN	
10	—	YUKTHA.S.BADIGER.	Yuktha.S.Badiger.
11	4SM22ME402	Deekshith Kumar KY	Deekshith Kumar K.Y
12	4SM22ME404	Lohith.y	
13	HSM21ME008	Sha Shank. S	
14	4SM21ME001	chennokeshava.T	
15	4SM21ME004	Manoj. S	
16	4SM22ME404	Keerthi Kumar	
17	4SM21ME003	Lankesh. M.S	
18	4SM21ME009	Sumanth. S.M	
19	4SM22ME400	Abdur Rehman	Abdur Rehman

20	4SM22ME010	Syedabul Razaq	
21	4SM22ME400	Amith G	
22	HSM21ME005	Abgesh	
23	4SM21ME006	RAVHAVENDRA.N	
24	4SM21ME011	Vinay H.S	
25	4SM22ME405	mohammed talib azeez	

**Outcomes of the visit:**

1. Improved understanding of how theoretical concepts are applied in real-world industrial settings
2. Exposure to practical aspects of engineering processes, equipment, and technologies
3. Practical application of problem-solving skills by identifying and addressing real-world engineering challenges.

Overall, industrial exposure visits play a crucial role in shaping well-rounded and industry-ready engineering graduates, fostering a seamless transition from academia to the professional realm

# Photos











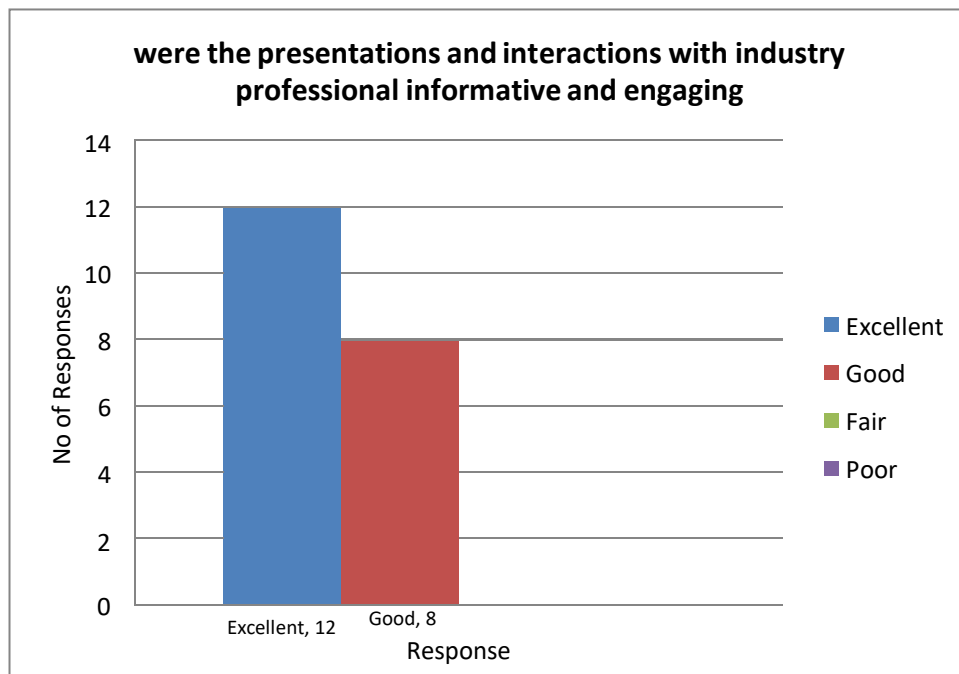
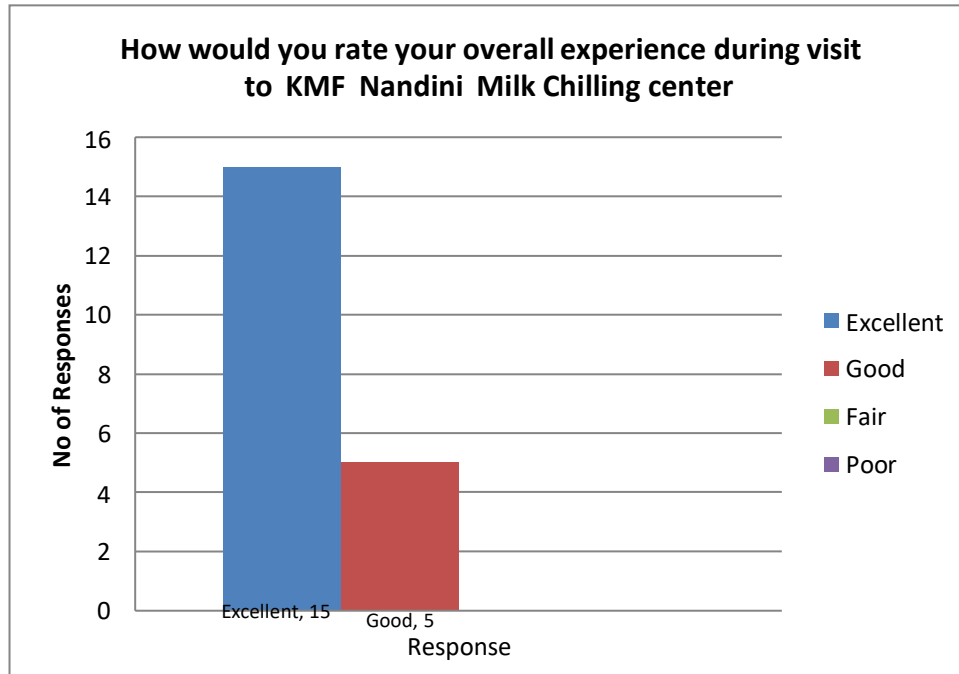
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Mechanical and IP Dept., Hanumantha Nagara, Chitradurga, Karnataka 577502, India  
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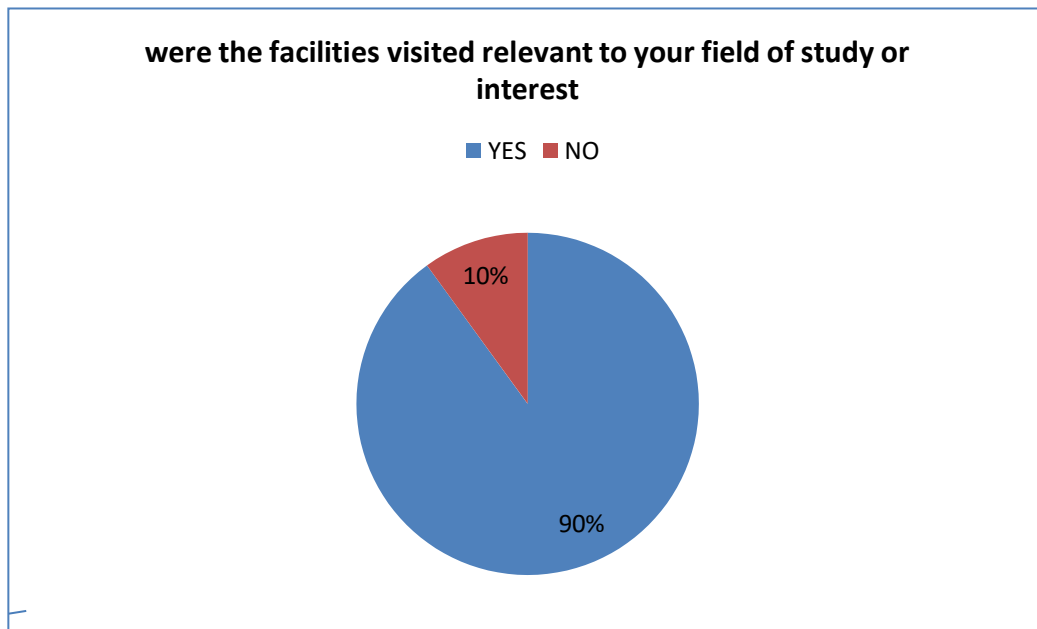


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# Feedback and analysis:

[https://docs.google.com/forms/d/e/1FAIpQLSeT0h2Y2ISxDHCLVKZwmNXKarSl\\_YlIMX84gLg11R-BpCW61A/viewform](https://docs.google.com/forms/d/e/1FAIpQLSeT0h2Y2ISxDHCLVKZwmNXKarSl_YlIMX84gLg11R-BpCW61A/viewform)





comments shared by the students on the visit to KMF Nandini Milk Chilling center

- Good conversation
- I Really enjoy of visiting the KMF Nandini milk chilling center I have seen all the machines and working of milk vasilities of distributing to another places I got the tips of how the milk has been produced in that factory...□
- Nice
- Nice
- Good experiance for visited
- Good and healthy milk
- Milk be purify and it's handle be good
- Good and healthy milk
- I realle excited with that KMF Nandini milk chilling centre i toadoli enjoy with that factory i have seen all milk heating process i have drink one ml milk in factory. Check to milk quality.. Thank you
- How the separate milk and curd
- I have sawn how the milk is produced in that factory I really enjoyed of that factory . Thankyou...