



DON BOSCO INSTITUTE OF TECHNOLOGY

AICTE APPROVED, AFFILIATED TO MUMBAI UNIVERSITY,

ISO 9001:2015, NAAC ACCREDITED WITH B++ GRADE

DEPARTMENT OF MECHANICAL ENGINEERING

ISHRAE THANE

DBIT STUDENT CHAPTER

**REPORT ON INDUSTRIAL VISIT AT
KRUGER VENTILATION**

14 December, 2021

Document Title: ISHRAE DBIT Student Chapter Industrial Visit Report		
Document No. DBIT/MECH/REPORT/SC/ISHRAE/02	Revision No.: 01	Issue No.: 01
Issue Date: 16th Dec 2021		

ISHRAE DBIT Student Chapter under ISHRAE Thane Chapter went for an Industrial Visit on 14th December, 2021 at Kruger Ventilation, Thansit for the student members of ISHRAE DBIT. There were total of 18 students along with two DBIT faculty members Ms. Cleto Pereira and Mr. Mahesh Rajwade. ISHRAE DBIT council members present in the IV were Saurabh Yadav, Tarun Mulani, Gauri Patil, Prajakta Patil and Simran Ahiwale. Kruger Ventilation is a full subsidiary company of Soler & Palau Ventilation Group. Kruger is a leading supplier of energy efficient ventilation solutions for residential and commercial buildings, industrial applications and infrastructures. Most comprehensive range of products available – axial, centrifugal, in-line, roof exhaust, mixed flow, domestic, smoke-spill fans.



The Company official introduced the company and its products. Kruger Asia was established in 1985 and is a fully owned subsidiary company of Soler & Palau Ventilation Group. Since then this company grew a lot, serving its clients with world class high efficiency ventilation products. It is present in India for about 20 years. There are two factories in India located in Delhi and Atgaon. He explained about the various types of fans based on its construction and application.

ISHRAE DBIT members got to know about the various ranges and features of In-line direct driven fans, DIDW Centrifugal fan with forward wheels, PLENUM fans, centrifugal anti-corrosive fans and roof exhaust fans.

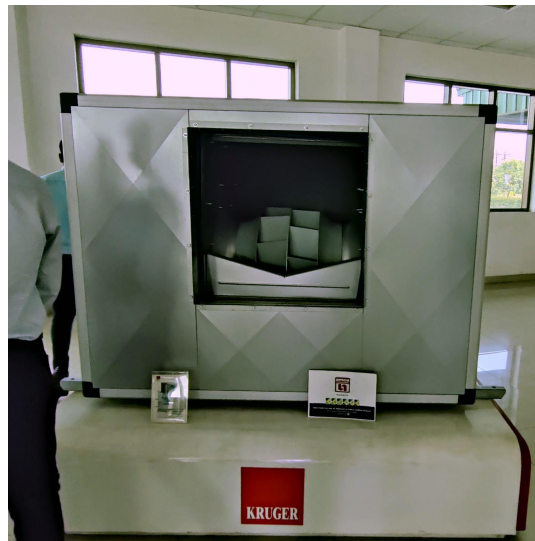
Prepared By:	Lalit Salvi	Reviewed By:	Prof. Cleto Pereira
Checked By:	Saurabh Yadav	Approved By:	Dr. S. Pawar. (HOD)

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The following are the different types of ventilation units along with their range and features manufactured by Kruger Ventilation.

1) In-Line Fan - Belt Driven

- Range : Size - from 200 to 1000mm
- Volume : upto 162,000 m³/h
- Total Pressure : upto 1800 Pa



Features :

- Cabinet is manufactured in galvanized sheet incorporated with a belt driven, high efficiency.
- Internal vibration isolator to assure life long and quiet operation.
- Acoustic lining is available on request.

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2) DIDW Centrifugal fan with forward wheels

- Range : Size - 160 to 1400 mm
- Volume : upto 300,000 m³/h
- Pressure : upto 2400 Pa



Features :

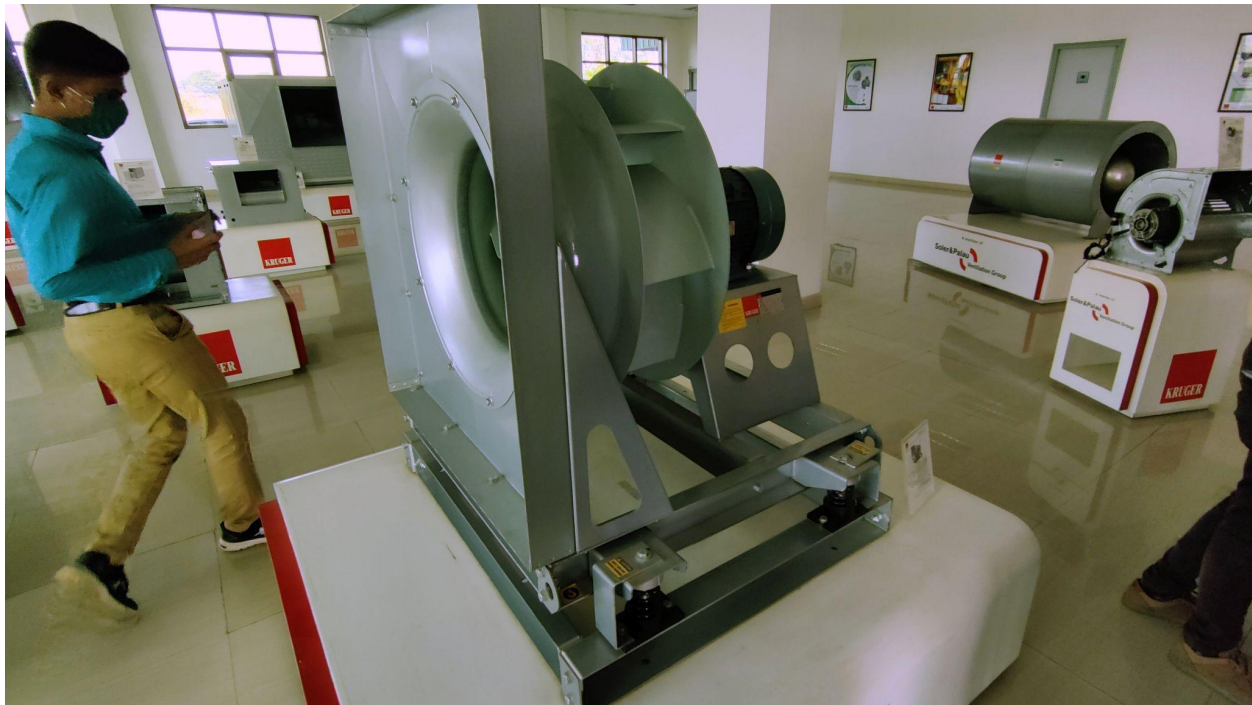
- Shafts are manufactured from C45 carbon steel.
- The wheels of FDA series is made of galvanized steel sheet.
- The fans are suitable for supply or exhaust application in commercial, process and industrial HVAC systems.

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3) PLENUM FAN with backward curved wheels

- Range : Size - 315 to 1800 mm
- Volume - upto 150,000 m³/h
- Static pressure - upto 2500 Pa



Features :

- The fan wheel operates without housing, inside a plenum.
- This construction is mainly used for clean room, with or without VFD, since there is an absence of belt residue which may contaminate the airstreams.
- Impeller is made of cold rolled sheet steel backward curved blades with zinc rich primer and polyester.

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4) Roof Exhaust Fans-Belt/ Direct driven centrifugal type

- Range : Size - 315 to 1000 mm
- Volume - upto 470000 m³/h
- Static Pressure - upto 417 Pa



Features :

- Skirt Structure provides maximum air performance.
- Reinforced guide vanes reduce turbulence.
- Non-overloading, backward inclined aluminium centrifugal wheel achieves high efficiency and minimum sound.
- Enclosed motor compartment isolates motor and drive.
- Typical applications include kitchen exhaust, laboratory fume exhaust and commercial building exhaust.

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5) Circular Duct Attenuator

- Range : Size - 315 to 2000 mm
- Each range is available (1D, 2D) as standard length
- Insertion loss upto 30 dB



Features

- Used to control the passage of noise along an air path.
- Bell mouth air exchange with spun head for minimum entrance and pressure loss.
- Supplied with flanged ends for direct attachment to axial fans or ductwork.
- Made of galvanized sheet cased with inner pod and outside lining manufactured for high density acoustic in fill protected by perforated galvanized steel.

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The Industrial Visit concluded at 02:30 pm.

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