A

VOCATIONAL TRAINING REPORT

ON

AIR COOLED HEAT EXCHANGER

AT

R.S. ENGINEERING, KHAGARIA (BIHAR)



BY AMAN KUMAR SINGH 20104004



BACHELOR OF TECHNOLOGY
IN
MECHANICAL ENGINEERING

DEPARTMENT OF MECHANICAL ENGINEERING

SCHOOL OF STUDIES OF ENGINEERING AND TECHNOLOGY
GURU GHASIDAS VISHWAVIDYALAYA, BILASPUR (Chhattisgarh)

Session 2023-2024



Guru Ghasidas Vishwavidyalaya (A Central University Established by the Central Universities Act 2009 No. 25 of 2009) Koni, Bilaspur – 495009 (C.G.)

INDEX

S. NO.	NAME	PAGE
1.	About R.S. ENGINEERING	5
2.	Introduction	6
3.	Literature Review	8
4.	Fundam entals of Heat Transfer	11
5.	Design Considerations	14
6.	Components of Air- Cooled Heat Exchangers	17
7.	Thermal Performance Analysis	21
8.	Mechanical Design and Structural Analysis	24
9.	Economics and Cost Analysis	27
10.	Maintenance and Reliability	29
11.	Environmental Impact and Sustainability	32
12.	Case Studies and Applications	34
13.	Future Trends and Innovations	37
14.	Condusion	40
15.	References	42

3 Page

About R.S. ENGINEERING

Rs Engineering in Bhagalpur is one of the leading businesses in the Air Cooler Manufacturers. Also known for Diamond Manufacturers, Portable Air Cooler Manufacturers, Plastic Air Cooler Body Manufacturers, Air Cooler Manufacturers and much more.

Rs Engineering in, Bhagalpur is a top player in the category Air Cooler Manufacturers in the Bhagalpur. This well-known establishment acts as a one-stop destination servicing customers both local and from other parts of Bhagalpur.

Over the course of its journey, this business has established a firm foothold in its industry. The belief that customer satisfaction is as important as their products and services, have helped this establishment garner a vast base of customers, which continues to grow by the day. This business employs individuals that are dedicated towards their respective roles and put in a lot of effort to achieve the common vision and larger goals of the company.

Its vision for the future is centered on the development and p	roduction of cutting-edge Air-
Cooled Heat Exchangers (ACHEs).	



Guru Ghasidas Vishwavidyalaya

(A Central University Established by the Central Universities Act 2009 No. 25 of 2009)

Koni, Bilaspur - 495009 (C.G.)

*



THIS IS TO CERTIFY THAT

student of "Guru Ghasidas Vishwavidyalaya, Bilaspur(C.G.)" has undergone
Vocational Industrial Traning in Heat Exchanger at R.S. Engineering in
Mechanical Department from 15.05.2023 to 15.06.2023.

During the period of training, he was very active. He has taken an interest during the training period and I wish him all success.

Chief Executive Officer

Rakesh Roshan

PARTNER
R S ENGINEERING
KHAGARIA (BIHAR)



Shrikshitish Priyan
PARTNER
R S ENGINEERING
KHAGARIA (BIHAR)