

Mechanical Engineer

Muhammad Bilal



Objective

Mechanical Engineering professional with; Strong technical, analytical, leadership, and communication skills with practical experience in engineering, manufacturing, Turnaround, and project management.

Skills: AutoCAD, Excel, Word, Heat Load Calculations, Piping Inspections, Equipment installation, Material inspection.

PASSPORT NO: EJ3708331

CNIC NO: 36303-2130833-9

contact: +923026552695/ muhammadbilal2695@gmail.com

Research & Publications

Title Design & fabrication of bismuth telluride (Bi₂Te₃) based small capacity peltier effect refrigerator.

Author: MUHAMMAD BILAL

Volume: Vol 5, Issue 7; July 2022

DOI: North American Academic Research, 5(7) 01-01-16 July 2022,
<https://doi.org/10.5281/zenodo.6812204>

Publications SITE: NAAR (north American academic research) Monthly Journal from TWASP (The World Association of Scientists & Professionals), USA.

May 2023-current

Trainee Mechanical Engineer, Expertise Contracting Company Jubail KSA

Worked on **SABIC Plant Turnaround (Hadeed steel plant)** with a team of 150 people which included both direct and indirect manpower. My roles are given below:

- Assisting Fabrication team to understand the Piping isometrics.
- To discuss the Piping layout with Project Engineer to understand the piping route.
- Assisting Inspection team to check the parameters as per API 570.
- Understanding the P&ID of the area.
- **Deal the Turnaround also as a material coordinator.**
- Actively participated in Bolt Torquing, Coating, wrapping & Holiday Test
- Hands-on training on PTW and its implementation at the site.

Ensured effective communication with crew members and senior supervisor.

January 2023-May 2023

Trainee Mechanical Engineer, Expertise Contracting Company Jubail KSA

Worked on **Saudi Aramco Plant Project (SASREF)** with a team of 100 people which included both direct and indirect manpower. My roles are given below:

- Assisting Fabrication team to understand the Piping isometrics.
- To discuss the Piping layout with Project Engineer to understand the piping route.
- Assisting Inspection team to check the parameters as per API 570.
- Understanding the P&ID of the area.
- Assisting the Inspection team with material inspection as per ASME and ASTM (MIR).
- Actively participated in Bolt Torquing, Coating, wrapping & Holiday Test activities.
- Hands-on training on PTW and its implementation at the site.

Ensured effective communication with crew members and senior supervisor.

Experience

January 2023-February 2023

Trainee Mechanical Engineer, Expertise Contracting Company Jubail KSA

Worked on **SABIC Plant Turnaround (Yanbu -Yansab)** with a team of 100 people which included both direct and indirect manpower. My roles are given below:

- Assisting Fabrication team to understand the Piping isometrics.
- To discuss the Piping layout with Project Engineer to understand the piping route.
- Assisting Inspection team to check the parameters as per API 570.
- Understanding the P&ID of the area.
- Played an active role as a fire watch man during hot job.
- Actively participated in Bolt Torquing, Coating, wrapping & Holiday Test activities.
- Hands-on training on PTW and its implementation at the site.
- Ensured effective communication with crew members and senior supervisor.

May 2022-December 2022

Trainee Mechanical Engineer, Expertise Contracting Company Jubail KSA

Worked on private Plant project (**Veolia Central Utilities and Waste valorization plant**) with a team of 450 people which included both direct and indirect manpower. My roles are given below:

- Assisting Fabrication team to understand the Piping isometrics.
- To discuss the Piping layout with Project Engineer to understand the piping route.
- Assisting Inspection team to check the parameters as per API 570.
- Understanding the P&ID of the area.
- **Deal with the project also as a material coordinator.**
- Actively participated in Bolt Torquing, Coating, wrapping & Holiday Test activities.
- Hands-on training on PTW and its implementation at the site.
- Ensured effective communication with crew members and senior supervisor.

May 2022-May 2022

Wrapping Applicator Engineer, Three Lions Factory Dammam KSA

Training completed with Three Lion Factory Certificate provided by our client CHASE protective Coatings company. My roles are given below:

- To understand the Method statement for wrapping and coating and implementation on site.
- To understand the content of primer applied on the pipe surface before coating.
- Actively participated in Coating, wrapping & Holiday Test activities.
- Understood the material used in outer and inner wrapping and the overlap between inner and outer wrap.
- Care shall be taken before applying insulation
- Hands-on training on wrapping applicator and its implementation at the site **SABIC Plant Turnaround (Petrokemya-North)** pipeline(ASME B31.4,B31.8).

March 2022-May 2022

Trainee Mechanical Engineer, Expertise Contracting Company Jubail KSA

Worked on **SABIC Plant Turnaround (Petrokemya-North)** with a team of 150 people which included both direct and indirect manpower. My roles are given below:

- Assisting Fabrication team to understand the Piping isometrics.
- To discuss the Piping layout with Project Engineer to understand the piping route.
- Assisting Inspection team to check the parameters as per API 570.
- Understanding the P&ID of the area.
- Played an active role as a fire watch man during hot job.
- Actively participated in Bolt Torquing, Coating, wrapping & Holiday Test activities.
- Hands-on training on PTW and its implementation at the site.
- Ensured effective communication with crew members and senior supervisor.

January 2022-February 2022

Trainee Mechanical Engineer, Expertise Contracting Company Jubail KSA

Worked on SABIC Plant Turnaround (**Petrokemya-South**) with a team of 100 people which included both direct and indirect manpower. My roles are given below:

- Understanding GA drawings of various equipment's.
- Making new nozzles fabrication report of Heat Exchanger, distillation column and pressure vessels.
- Understanding ASME Section VIII coding for inspection.
- Understanding NDE of on-stream equipment as per API 510. Involved in DPT, MP & RT.
- Got hands-on training as a Fire Watch, Permit Receiver.

May 2020-November 2022

Junior Mechanical Engineer Nespak Foundation

Working with the HVAC team to calculate the heat load for various locations. Finding out total tonnage and equipment selection accordingly.

Education

2016-2020

B Sc Mechanical

Engineering

UET Lahore Pakistan

Skills

- AutoCAD
- Microsoft Office
- MATLAB

Interests

API Certification (510,570)
ASTM, ASME
Reading books
Playing Football
Cross culture lover

Contact

Al Jubail City
Kingdom of Saudi Arabia
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muhammadbilal2695@gmail.com

PEC Reg No: MECH/46531
Date of Issuc: June 26, 2021



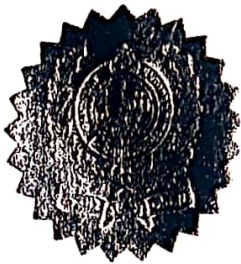
Serial No. 502803
PEC-11

PAKISTAN ENGINEERING COUNCIL

CERTIFICATE OF SUPERVISION



Engr. **MUHAMMAD BILAL** having CNIC No: 3630321308339 resident of **ABDUL SAMAD CHKI MAIN SUI GAS ROAD, CHADNI CHOK NEAR FAIZ-U-RAZA MUDRSA RAHIM YAR KHAN** is eligible to work and supervise engineering works, in employment of constructor/operator firms registered with PEC during validity period of this certificate to gain experience of construction industry related projects/works.



Registrar
Pakistan Engineering Council,
Islamabad.

This certificate is valid upto June 30, 2022.
This certificate is not renewable after expiry.

University of Engineering & Technology Lahore

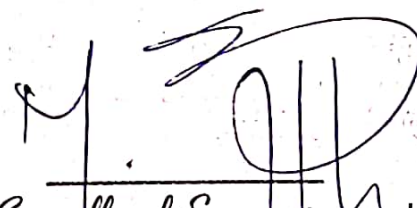


*This is to certify that
Mr. Muhammad Bilal*

*Son of Mr. Ghulam Mustafa
of Swedish College of Engineering and Technology, Rahim Yar Khan
has completed all the requirements for the award of*

*B.Sc. degree in Mechanical Engineering
on 31st August 2020 securing a
CGPA of 3.396 (Three Pt Three Nine Six) /4.0*

*He has accordingly been admitted to the Degree of
Bachelor of Science
in
Mechanical Engineering*


Controller of Examinations

Countersigned



Chancellor

R 2021



Registration No: 2016-UET-SCET-RYK-MECH-34
Student Name: Muhammad Bilal
Father Name: Ghulam Mustafa
CNIC/Passport: 3630321308339
DOB: 29 March, 1997

Session: 2016
Program: B.Sc Mechanical Engineering



Mode of Study: Regular

Course Code	Course Title	CH	Grade	GPs
Fall 2016				
HU-111L	Communication Skills	1.0	B-	2.7
MA-113	Calculus and Analytic Geometry	3.0	B-	8.1
ME-100L	Workshop Practice	1.0	B+	3.3
ME-111	Thermodynamics-I	3.0	B+	9.9
ME-111L	Thermodynamics-I	1.0	A	4.0
ME-121	Engineering Statics	2.0	C	4.0
ME-131	Industrial Materials	2.0	B	6.0
PHY-119	Engineering Physics	2.0	A-	7.4
PHY-119L	Engineering Physics	1.0	A	4.0

Semester CH: 16.0 Cum CH: 16.0 GPA: 3.088 CGPA: 3.088 Status: Promoted

Spring 2017				
CS-101	Computing Fundamentals	2.0	B-	5.4
CS-101L	Computing Fundamentals	1.0	B+	3.3
IS-101	Islamic & Pakistan Studies-I	3.0	B+	9.9
MA-129	Vector and Complex Analysis	3.0	A	12.0
ME-122	Engineering Graphics	2.0	C+	4.6
ME-122L	Engineering Drawing	2.0	B+	6.6
ME-123	Engineering Dynamics	3.0	A	12.0
ME-123L	Engineering Dynamics	1.0	A	4.0

Semester CH: 17.0 Cum CH: 33.0 GPA: 3.400 CGPA: 3.248 Status: Promoted

Fall 2017				
EE-201	Electrical Engineering and Electronics	2.0	A-	7.4
EE-201L	Electrical Engineering and Electronics	1.0	B-	2.7
HU-221	Technical Writing & Presentation Skills	3.0	A	12.0
IS-201	Islamic & Pakistan Studies-II	3.0	B+	9.9
MA-225	Differential Equations and Transforms	3.0	A-	11.1
ME-211	Fluid Mechanics-I	2.0	B+	6.6
ME-221	Mechanics of Materials-I	3.0	B	9.0
ME-221L	Mechanics of Materials-I	1.0	A	4.0

Semester CH: 18.0 Cum CH: 51.0 GPA: 3.483 CGPA: 3.331 Status: Promoted

Spring 2018				
MA-242	Engineering Statistics	3.0	B+	9.9
ME-212	Thermodynamics-II	3.0	B-	8.1
ME-212L	Thermodynamics-II	1.0	B	3.0
ME-213	Fluid Mechanics-II	2.0	A-	7.4
ME-213L	Fluid Mechanics-II	1.0	A-	3.7
ME-222	Mechanics of Materials-II	3.0	A-	11.1
ME-222L	Mechanics of Materials-II	1.0	A	4.0
ME-231	Manufacturing Processes	3.0	B+	9.9
ME-231L	Manufacturing Processes	1.0	B+	3.3

Semester CH: 18.0 Cum CH: 69.0 GPA: 3.356 CGPA: 3.338 Status: Promoted

Fall 2018				
ME-311	Hydraulic Machines	2.0	A-	7.4
ME-311L	Hydraulic Machines	1.0	B+	3.3
ME-312	Heat and Mass Transfer	3.0	A	12.0
ME-312L	Heat and Mass Transfer	1.0	B+	3.3
ME-321	Theory of Machines-I	3.0	A-	11.1
ME-322	Machine Design and CAD-I	3.0	A-	11.1
ME-322L	Machine Design and CAD-I	1.0	B	3.0
ME-331	Machine Tool and Machining	2.0	B+	6.6
ME-331L	Machine Tool and Machining	1.0	B	3.0

Semester CH: 17.0 Cum CH: 86.0 GPA: 3.576 CGPA: 3.385 Status: Promoted

Course Code	Course Title	CH	Grade	GPs
Spring 2019				
MA-345	Numerical Methods in Computing	3.0	A	12.0
MA-345L	Numerical Methods in Computing	1.0	B+	3.3
ME-323	Machine Design and CAD-II	3.0	B+	9.9
ME-323L	Machine Design and CAD-II	1.0	B+	3.3
ME-324	Theory of Machines-II	3.0	A-	11.1
ME-324L	Theory of Machines-II	1.0	A-	3.7
ME-332	Metrology and Quality Assurance	2.0	B+	6.6
ME-332L	Metrology and Quality Assurance	1.0	B+	3.3
MGT-316	Project Management and Economics	3.0	B-	8.1

Semester CH: 18.0 Cum CH: 104.0 GPA: 3.406 CGPA: 3.388 Status: Promoted

Fall 2019				
ME-411	IC Engines	2.0	B	6.0
ME-411L	IC Engines	1.0	A	4.0
ME-414	Energy Resources and Utilization	2.0	B	6.0
ME-421	Mechanical Vibrations	2.0	C+	4.6
ME-424	Advanced Mechanics of Materials	2.0	B+	6.6
ME-424L	Advanced Mechanics of Materials	1.0	A-	3.7
ME-441	Instrumentation and Control	2.0	B	6.0
ME-441L	Instrumentation and Control	1.0	A	4.0
ME-498	Project I	3.0	A-	11.1

Semester CH: 16.0 Cum CH: 120.0 GPA: 3.250 CGPA: 3.370 Status: Promoted

Spring 2020				
ME-412	Refrigeration and Air Conditioning	3.0	B+	9.9
ME-412L	Refrigeration and Air Conditioning	1.0	A-	3.7
ME-413	Power Plants	3.0	B+	9.9
ME-413L	Power Plants	1.0	A-	3.7
ME-431	Production and Operations Management	2.0	A	8.0
ME-451	Finite Element Analysis	2.0	A-	7.4
ME-451L	Finite Element Analysis	1.0	A-	3.7
ME-499	Project II	3.0	A-	11.1

Semester CH: 16.0 Cum CH: 136.0 GPA: 3.588 CGPA: 3.396 Status: Promoted

Degree Complete

Admin. Officer (Exams)
for Controller of Examinations

Dated: November 27, 2020

ADMINISTRATIVE OFFICER
(Examinations)
University of Engineering
and Technology, Lahore

93607^s

سابك
sabik



ID. C1617754

Exp.10-Jul-22

ISSUE BY \ PETROKEMYA

محمد بيلام

MUHAMMAD BILAM

عامل

Nationality: Pakistan

الجنسية: باكستان

National ID

الهوية الوطنية

Iqama:

3708331

الإقامة

Blood Type:

B+

فصيلة الدم:

Contract Name:

EXPERTISE CONTR

اسم المفاوض:

Contract No:

4801992238

رقم العقد:

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P.O. Box 10002

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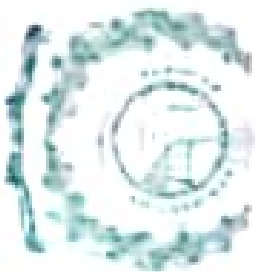
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Tel: 013-3587000

الجبيل الصناعية 31961

Serial No: J10 - 1617754

هاتف: 013-3587000



REGISTERED ENGINEER

ENGR. MUHAMMAD BILAL

CNIC: 3630321308339

Reg No: MEC/H/46531

Expiry: DEC EMBER 31, 2021

Address: ABDUL SAMAD KHAN MASTIGAS

ROAD CHANDNICHOK NEAR LAJZ-

E-KVZ AMIDRASKAHNA VAB

KHAY



Signature of Holder

Registrar

Sr. No. 219298

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petrokemya

MUHAMMAD BILAL

NAME

EJ3708331

BADGE NO.

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AUTHORIZED BY

EXPIRY DATE

PIPING FOREMAN

27-Mar-23

Authorization level or
Category

Authorization level or
Category

Authorization level or
Category

Authorization level or
Category

Authorization level or
Category

سابك
sabik



ID. 1799941

Exp. 4/30/2023

Issued by: YANSAB


محمد بلال

MUHAMMAD BILAL

مركب انابيب

Pipe Installation

Nationality: Pakistan	الجنسية: باكستان
National ID/Iqama: 3708331	الهوية الوطنية / الإقامة
Blood Type: ID+	فصيلة الدم:
Emergency No : 0568608777	رقم الطوارئ :
Contract Name: شركة تيمرس	اسم المقاول:
Contract No: 4300534128	العقد:
ID Holder Sginature	مع صاحب البطاقة

Security Dept. Signature:  توقيع إدارة الأمن:

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Company	للبتروكيماويات
P.O. Box 31396	صندوق بريد 31396
Yanbu Industrial City 41912	ينبع الصناعية 41912
Tel: 014-3259000	هاتف: 014-3259000
Serial No: 1799941	

Certificate of Publication



THIS IS TO CERTIFY THAT NAAR EDITORIAL, ADVISORY, AND REVIEW BOARD
ACCEPTED THE MANUSCRIPT OF DR./MR./MS.

Muhammad Imran Lashari, Hamza Naseer, Muhammad Bilal, Zohaib Ali, Quratulann Ilyas, Zakim Hussain, Hina farooq

Article: Design & fabrication of bismuth telluride (Bi₂Te₃) based small capacity peltier effect refrigerator

Volume: Vol 5, Issue 7; July 2022

DOI: North American Academic Research, 5(7) 01-16 July 2022, <https://doi.org/10.5281/zenodo.6812204>

Cite this article as: Muhammad Imran Lashari, Hamza Naseer, Muhammad Bilal, Zohaib Ali, Quratulann Ilyas, Zakim Hussain, Hina farooq ; Design & fabrication of bismuth telluride (Bi₂Te₃) based small capacity peltier effect refrigerator ; North American Academic Research, 5(7) 01-16 July 2022, <https://doi.org/10.5281/zenodo.6812204>


Prof Philip Cardinal, PhD
EDITOR IN CHIEF



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سابك
sabc



ID. C1799941
Exp.13-Sep-23
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محمد بلال

MUHAMMAD BILAL

مركب انابيب

Pipe Installation

الجنسية: باكستان
National ID/قامع: 3708331 الهوية الوطنية / الاقامة
Blood Type: O+ فصيلة الدم:
Emergency No: 0568608777 رقم الطوارئ:
Contract Name: شركة تيرس اسم العقول:
Contract No: 4300545363 رقم العقد:
ID Holder Signature توقيع صاحب البطاقة

Security Dept. Signature:

توقيع إدارة الأمن:

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SAUDI IRON & STEEL CO.

الشركة السعودية للحديد والصلب

P.O. Box 10053

طابق بريد 10053

Al-Jubail Industrial City 31961

الجبيل الصناعية 31961

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إدارة الأمن الصناعي
والسلامة من الحريق

ص.ب ١٠٨٨

تلفون: ٣٥٧٢٢٥٦ / ٣٥٧٢٢٠٩ (٣)

5810

الرقم التسلسلي :

محمد بلال

الاسم :

باكستاني

الجنسية :

مركز تدريب

الوظيفة :

O+

فصيلة الدم :

رقم بطاقة الأحوال / الإقامة / الجواز : ٤١٣٦٥٨٣٣١

محمد بلال

اسم المقول :

الإدارة المشرفة : MPE رقم البطاقة الإلكترونية : 57474

تاريخ الإصدار : ٢٠٢٣ / ٢ / ٢٠٢٣ تاريخ الانتهاء : ٢٠٢٣ / ٦ / ٢٠٢٣

مدير إدارة الأمن الصناعي
والسلامة من الحريق

مدير إدارة الأمن الصناعي
والسلامة من الحريق

شركة مصفاة أرامكو السعودية الجبيل
Saudi Aramco Jubail Refinery Co.

ساسرف
SASREF

مدينة الجبيل الصناعية ٣١٩٦١
ص.ب ١٠٨٨
Jubail Industrial City 31961
P.O. Box 10088

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We certify,

Mr. Muhammad Bilal

ID # C1617754

Work for

THREE LIONS FACTORY

for successfully completing his training as a,

Wrapping Applicator Engineer

using *CHASE Tape Wrapping System*.



Ramy Hassanin
Regional Manager (MEASA)

This certificate is issued in May 2022

