

Title	Junior Mechanical Design Engineer
Job Opportunity Code	GR-TCD01-21
Department	Design
Reporting to	Department Manager
Main Location	Elefsina, Greece
Form of Employment	Full time
Final Submission Date	03.10.2021, 17:00 GMT+2

Part 01 / Job Description and Purpose

The position requires creativity and alternative thinking to design and develop new ideas, resolve work-related problems or equipment upgrade. The candidate will be involved with the design & development of equipment, ranging from small component designs to extremely large plant, such as components or vehicles. The candidate will start from on-site measurements works and will engage to all stages of the product development, from study through design and manufacture, to installation and final commissioning. The candidate will learn how to design and manufacture, components of excellence & innovation.

Important Note

As part of your role, you will be handling sensitive information in terms of Group's private information. Please be aware that you will be subject to system monitoring, and supervisory evaluation to ensure continuous adherence to security clearance processes and procedures. All company systems users are subject to a zero-tolerance policy for security violations.

Part 02 / Major Responsibilities

- o Design
 - Conducts on-site measurements
 - Works closely with manufacturing and production engineers to ensure products are designed for manufacture
 - Carries out detailed mechanical design work including 3D modelling, as required
 - Carries out design change requests in a timely manner
 - Carries out design validation and verification, which includes analyses and tests as required
 - Prepares and presents mechanical designs at technical reviews of requirements, specifications, designs and codes
 - Agrees on the mechanical design approach with the Department's Manager
 - Assures the specification compliance of designs
 - Conducts all necessary calculations and highlights all technical risks to the Department's Manager
 - Assists in the design, development and evaluation of new and existing products
 - Ensures design files and information are kept up to date, and stored in accordance with departmental procedures
- o Technical
 - Prepares construction plans (cutting contours, assembly plans, design configurations, etc.)

- Develops manufacturing processes by designing and modifying equipment for fabricating, building, assembling and installing components
- Creates equipment manuals and BoM (bill of materials) for the equipment constructed
- Creates technical reports and documentation as required for Company's Projects
- Assists in finding solutions for the determination of developing forces and moments in order to use them in strength tests, by the method of finite elements (FEA), and for the sizing of a component or construction (choice of material, thickness, geometry, etc.)
- General
 - Follows departmental processes relating to management of designs
 - Checks regularly that drawing/parts libraries are up to date and correct
 - Performs other related duties as assigned for the purpose of ensuring the efficient and effective functioning of the work unit
 - Assists with special projects as required
 - Keeps up to date with the latest manufacturing techniques and drawing standards
 - Reviews regularly the departmental design processes and identifies any updates required
 - Liaises with other departments to ensure that the required information is available when needed
- Other
 - Possibility of traveling to employer sites (domestically and globally) as required to implement projects/repairs

Part 03 / Position Requirements

03.1. Education & Training

(The extent or level of knowledge or training obtained by formal education or outside study that is necessary to achieve normal job performance and proficiency. Such knowledge is to be considered the minimum education required for performing the position responsibilities.)

- Degree in Mechanical Engineering or similar field of expertise and advance training in mechanical design, such as one would receive at a university, technical trade school, etc., or even by multiple years of on-the-job training
- Excellent knowledge of Autodesk Inventor and Autodesk AutoCAD
- Familiarity with milling/lathing machines and manufacturing processes
- Knowledge of engineering analysis tools (ANSYS, Nastran or similar) is considered as extra skills
- Knowledge of animation tools (3D studio MAX or similar) is considered as extra skills
- Solid understanding of core concepts including mechanics, kinematics, thermodynamics, materials science etc.
- Proficient knowledge of Microsoft Office required
- Clear and effective oral and written communication skills both in Greek and English language
- Additional working knowledge of foreign languages, (e.g., Italian, German, French etc.) are to be considered as extra skills

03.2. Experience

(The minimum experience required to perform the job. This experience can be gained in previous employment in a similar job and/or on the job with the current employer. Experience in this factor is measured in time periods e.g., 3-6 months, 3-5 years, 10-15 years etc.)

- Up to 3 years working experience in mechanical design
- Other working experience is under consideration as well

03.3. Skills & Personal Qualities

(The minimum set of skills and personal qualities required to perform the job. Skills required are presenting the expertise or talent to do a job or task. Personal qualities describe the life skills need to be used to communicate and interact with other people, both individually and in groups. Both indicate the candidate's qualifications as they relate to the job and how they fit in the company culture.)

- Conceptual and analytical skills
- Problem-solving skills
- Ability and willingness to learn new skills
- Ability to quickly assimilate new information
- Ability to communicate technical knowledge in a clear and understandable manner
- Ability to identify the variables acting on a system and the relationships between them as part of one or more equations which, depending on the values of their variables, will perfectly describe the current or predict the upcoming behavior of the system
- Ability to compose equations using well-known individual mathematical expressions but also by creating new ones where the application requires it
- Technical writing skills
- Must be able to work both as part of a team or independently
- Must possess problem solving skills, strong digital and design skills, ability to troubleshoot in a logical manner
- Must be able to exercise judgment within procedures and practices to determine appropriate action
- Strong interpersonal and analytical skills operating with high level of responsibility and independency
- Must be flexible in work habits and work schedule
- Must have the ability to maintain good working relationships with other employees

03.4. Decision Making & Problem Solving

(The mental skills and mental effort required to perform the job. The complexity of decisions and ingenuity required describes the variety and routine involved with assigned tasks and responsibilities, the frequency of problems and the extent to which the work requires analytical ability and exercise of judgement.)

- Tasks are diversified and follow a wide range of standardized slightly complex procedures
- Tasks are considered semi-routine and may be of several varieties
- Judgement exercise within procedures and practices to determine appropriate action; (common sense)
- Analysis of data generally applied to the solution of specific problems

- Problems may occur as a regular part of the job
- Candidate works on assigned objectives and may work occasionally independently on special projects
- Candidate must possess problem solving skills and ability to troubleshoot in a logical manner

03.5. Supervisory & Management Responsibility

(Job responsibilities in regard to directing, controlling and coordinating the efforts of employees e.g., supervisory, training, management and advisory responsibilities. Describes the responsibilities for advising management, providing functional advice and control for coordinating activities or groups. Indicates the number of direct and indirect reports and their position(s).)

- No direct or indirect reports

03.6. Independence of Action

(Describes the extent and closeness of supervision required and received, as well as the availability and involvement of the immediate supervisor. Consideration should be given to standard practices, instruction and procedures, as well as built in checks and reports that provide the employees with controls and restricts independence of action.)

- Occasional supervision required. Candidate would work along on routine work and checks with supervisor only when in doubt. Production generally precedes a check on the quality of work.
- Methods and procedures are clearly established, and general instructions provided.

03.7. Consequence of Error

(Describes the responsibility for loss to the organization due to any single error resulting from actions or decisions involving the work function. Includes financial and material responsibility, responsibility for accuracy, and the safety of other. Describes the responsibility for establishing a budget and final accountability for its control. In some cases, budget responsibility may be indirect or influential.)

- Errors are usually discovered during installation, as well as actual testing of the designed systems
- The effect is usually affecting manufacturing departments and may cause a significant impact to Company's project executions in terms of time and income

03.8. Confidentiality

(Describes the integrity and discretion necessary to safeguard confidential data handled or obtained as a regular part of the job.)

- Frequent contact with confidential data or sensitive information where disclosure will have a potent adverse internal and/or external effect

03.9. Contacts-Internal & External

(Describes the responsibility for meeting, dealing with and influencing others. Contacts may be internal and external. The nature, purpose, frequency and level of contacts should be described. The level of difficulty and importance of the contacts should be described.)

- Contacts of importance are not a regular part of the responsibilities of the position
- Tact and judgement are required when dealing with others
- Excellent communication skills are required, both written & oral, when dealing with others
- Clear and effective oral and written communication skills in English language
- Ability to react well at all communication levels is important
- Internal Contacts – Presenting information where tact and judgement is required to obtain approval of action, cooperation or secure a decision
- External Contacts – No regular contact with outside contacts however, procedures and standards are established and are to be followed if there is any external contact

Part 04 / Standard Job Requirements

- All individuals are expected to be flexible in undertaking the duties and responsibilities attached to their job and may be asked to perform other duties which reasonably correspond to the general character of their job and their level of responsibility
- All individuals are expected to maintain personal and professional development to meet the changing demands of the job and participate in appropriate learning and development activities
- To recognize health and safety is a responsibility of every individual, to take reasonable care of self and others and to comply with Health, Safety and Environmental policies and procedures and compliance with all audits and inspections
- To promote equality as part of the job and to treat everyone with fairness and dignity
- All individuals are expected to carry out their duties and responsibilities by adhering to all compliance and auditing requirements for the conduct of ethical and transparent operations including the compliance to all Asso Group policies, guidelines, and procedures

Part 05 / Work Schedule

- The Junior Mechanical Design Engineer has a schedule that flexes around the need but typically is based on a Monday-Friday 08:00 to 16:00 availability
- Travelling and overseas stays may be required in the line of business duties

Part 06 / Working Conditions

06.1. Physical Demands

(The nature of physical effort leading to physical fatigue)

The Junior Mechanical Design Engineer will have to spend long hours sitting and using office equipment and computers, which can cause muscle strain. The candidate may be required to do some lifting of equipment, supplies and materials from time to time, weighting no more than 5kgs.

In general, the job requires 80% sitting, 10% walking and 10% standing.

06.2. Environmental Conditions

(The nature of adverse environmental conditions affecting the person)

The Junior Mechanical Design Engineer may have to manage a number of projects at one time and may be interrupted frequently to meet the needs and requests of other employees or the Department Manager. The candidate may find the environment to be busy, noisy and will need serious organizational and time and stress management skills to complete the required tasks. The job is performed in a generally clean and healthy environment.

06.3. Sensory Demands

(The nature of demands on the person's senses)

Sensory demands include use of the computer, which may cause eyestrain and occasional headaches. The areas of work may be noisy and busy making it difficult for the person to concentrate. Regular sensory effort may be requested in testing and repairing delicate equipment, listening to staff describing symptoms of equipment problems.

06.4. Mental Demands

(Conditions that may lead to mental or emotional fatigue)

There are a number of deadlines associated with this position, which may cause significant stress. The Junior Mechanical Design Engineer must also deal with a wide variety of people on various issues.

	Minimal	Moderate	Extreme
Physical Effort	X		
Health Risk	X		

Sensory Required		X	
Mental Stress		X	

This job description is intended to convey information essential to understand the scope of the job and the general nature and level of work performed by job holders within this job. However, this job description is not intended to be an exhaustive list of qualifications, skills, efforts, duties and responsibilities or working conditions associated with the position. All the above are illustrative duties and the post holder will be expected to become involved in a range of work to enable the department to respond effectively to the requirements of the Company.

We are an equal opportunities employer. We are determined that no job applicant or employee receives less favorable treatment on the grounds of sex, pregnancy or maternity, gender re-assignment, sexual orientation, religion or belief, marriage or civil partnership, age, race, or disability. All information will remain confidential to the Company and will be handled in accordance with the requirements of the Personal Data Protection legislation.