

Panel Specialists Inc.
Job Description

Job Title: Design Engineer
Department: Engineering
Reports To: Engineering Manager
FLSA Status: Exempt-Learned Professional
Prepared By: Human Resources
Prepared Date: September 8, 2017
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SUMMARY

Designs and develops laminated wood core panel furniture, custom products and case goods by performing the following duties.

ESSENTIAL DUTIES AND RESPONSIBILITIES include the following. Other duties may be assigned.

- Analyzes customer and R & D engineering sketches, specifications, drawings, and related data to determine form, fit, and function design factors.
- Uses computer aided design/drafting applications such as AutoCad , Inventor, Microvellum, and additional Company provided software to develop designs.
- Designs products by creating three-dimensional models in Inventor, Microvellum, or other Company provided software.
- Produces two-dimensional engineering drawings from three-dimensional models showing all information necessary for manufacturing to produce the parts required to assemble finished products.
- Prepares material optimizations for products designed.
- Generates bills of material necessary for the assembly of products designed.
- Selects material and hardware appropriate for the cost effective assembly and function of products designed.
- Compiles and analyzes manufacturing data for prototypes, test runs, and production runs and produces information indicating the effectiveness of product designs.
- Meets with production personnel to review new design projects and to solicit input for streamlining product manufacture.
- Assists production personnel during the first production run of new or substantially modified products.
- Participates in the establishment and continuous improvement of company drafting standards. Documents drafting standards and monitors engineering drawings for compliance to drafting standards.

- Participates in the establishment and maintenance of engineering data filing and storage systems within AutoCad, or other Company provided software, and Windows environments.
- Participates in the preparation of detailed product cost estimates.
- Participates in writing Visual Basic computer programs to increase engineering department efficiency in producing AutoCad drawings.
- Participates in the preparation of CNC programs for production wood working equipment.

QUALIFICATIONS

To perform this job successfully, an individual must be able to perform each essential duty satisfactorily. The requirements listed below are representative of the knowledge, skill, and/or ability required. Reasonable accommodations may be made to enable individuals with disabilities to perform the essential functions.

EDUCATION and/or EXPERIENCE

Associate's degree in Mechanical design or related field; or five years related experience or equivalent combination of education and experience.

LANGUAGE SKILLS

Ability to read and interpret documents such as safety rules, operating and maintenance instructions, and procedure manuals. Ability to write routine reports and correspondence. Ability to speak effectively before groups of customers or employees of organization.

MATHEMATICAL SKILLS

Ability to work with mathematical concepts such as probability and statistical inference, and fundamentals of plane and solid geometry and trigonometry. Ability to apply concepts such as fractions, percentages, ratios, and proportions to practical situations.

REASONING ABILITY

Ability to apply common sense understanding to carry out instructions furnished in written, oral, or diagram form. Ability to deal with problems involving several concrete variables in standardized situations.

PHYSICAL DEMANDS

The physical demands described here are representative of those that must be met by an employee to successfully perform the essential functions of this job. Reasonable accommodations may be made to enable individuals with disabilities to perform the essential functions.

While performing the duties of this job, the employee is regularly required to sit; use hands to finger, handle, or feel; and talk or hear. The employee is occasionally required to reach with hands and arms and stoop, kneel, crouch, or crawl. The employee must regularly lift and/or move up to 10 pounds and frequently lift and/or move up to 25 pounds. Specific vision abilities required by this job include close vision, color vision, peripheral vision, depth perception, and ability to adjust focus.

WORK ENVIRONMENT

The work environment characteristics described here are representative of those an employee encounters while performing the essential functions of this job. Reasonable accommodations may be made to enable individuals with disabilities to perform the essential functions. While performing the duties of this job, the employee is occasionally exposed to moving mechanical parts, fumes, or airborne particles, risk of electrical shock, and vibration. Eye protection must be worn in the production areas of the plants. The noise level in the work environment is usually moderate; however, hearing protection must be worn when in the production areas of the plants.