

# James Bittner

## Chief Engineer

Philadelphia, PA - Email me on Indeed: [indeed.com/r/James-Bittner/d0fd521dcd992851](https://www.indeed.com/r/James-Bittner/d0fd521dcd992851)

Seeking an opportunity of employment with a solid, progressive organization where I can integrate my creative design abilities as well as my strong organizational and leadership background to further the growth and prosperity of the business.

A forward thinking multi-talented individual with an extensive background in sheet metal, laboratory and commercial washing machines, commercial heating ventilating and air-conditioning units, test rooms/ equipment design and environmental conditioning products, that desires to be part of a company where we can integrate my creative design abilities to advance the company through the future.

### WORK EXPERIENCE

#### Chief Engineer

Insinger Machine - Philadelphia, PA - February 2007 to July 2014

Responsible for R & D of commercial dishwashers.

- Designed patented steam removal system for exhaust free door class dishwashers.
- Designed energy saving steam removal refrigeration system for exhaust free conveyor dishwashers.
- Designed Touch Screen operating systems.
- Designed PLC operating systems.
- Responsible for mechanical and electrical designs of commercial dishwashers.
- Select and specify all of the components required for the products.
- Designed custom modifications of the products to meet the customer's needs.
- Created bills of material.
- Redesigned sheet metal components for cost reduction, ease of assembly and ease of customer access.
- Supply Technical support to Manufacturing, Purchasing, Sales, and Service.
- Designed custom products to meet the needs of the customer.
- Responsible for obtaining and maintaining safety (ETL), sanitary (NSF), and various States approvals for all models.
- Managed product design from concept through manufacturing.
- Managed two engineers

#### Project Engineer

SP Industries - Warminster, PA - June 2003 to January 2007

Responsible for mechanical and electrical designs of laboratory refrigerators, freezers, incubators, environmental chambers, glassware dryers, glassware washers, and ovens used in the pharmaceutical industry among others.

- Select and specify all of the components required for the above listed products.
- Designed custom modifications of the above products to meet the customer's needs.
- Created, updated and maintained bills of material.
- Redesigned sheet metal components for cost reduction and ease of assembly.
- Supply Technical support to Manufacturing, Purchasing, Sales, and Service.
- Designed custom products to meet the needs of the customer.
- Responsible for obtaining and maintaining safety agency approvals of various units.
- Managed product design from concept through manufacturing.

## **Engineering Manager/Chief Engineer**

Environmental Tectonics Corp - Southampton, PA - July 2001 to April 2003

Supervised the Testing and Simulation Systems Engineering Department.

- Designed and selected all components for Environmental Test Chambers, used for automotive and HVAC testing.
- Conducted design review meetings with staff and customers.
- Managed the projects from concept to final installation.
- Coordinated work flow from engineering to manufacturing to field installation and commissioning.
- Managed two engineers, and four designers.

## **Fredrick, MD**

Dryomatic - March 2001 to July 2001

Product Engineer

- Selected and designed the air handling units for the customer application, which ranged from grain drying to comfort conditioning equipment.
- Introduced new concepts for the use of air handling equipment.
- Worked with the field sales personnel in making the proper recommendation for the required equipment.
- Designed job specific cooling, heating, ventilating, and dehumidifying air handling equipment.

## **Product Engineer/ Manager/Chief Engineer**

Fresh Air Solutions (Engelhard/ICC) - Hatboro, PA - June 1992 to March 2001

Selected the proper heating, cooling, ventilating, humidifying, and dehumidifying units for the customer applications, which ranged from Supermarkets to Schools to Manufacturing Operations.

- Designed and selected all components for Custom Rooftop HVAC Units (20 thru 90 tons of cooling).
- Designed units to meet the customer needs.
- Created submittals defining the unit for customer approval.
- Designed and selected components for Rooftop Desiccant Cooling Units (2000 thru 20000 CFM) for domestic and international markets. These units include fans, blowers, boilers, hydronic loops, desiccant rotors, air to air heat exchangers, and direct expansion or chilled water cooling coils.
- Designed all of the sheet metal required to build the above units.
- Designed unit control systems, and sequence of operation for domestic and international markets.
- Started sheet metal fabrication department.
- Created computer software for CNC sheet metal punch.
- Supervised and performed field service and unit start up.
- Wrote unit specifications, testing procedures, engineering procedures, service procedures and start up procedures.
- Conducted Service and Unit Start Up training for personnel in Japan and Korea.
- Set Up unit model number system, submittal drawings, computerized bills of material, inventory control system, and MRPII system.
- Managed one administrative assistant, two engineers, and five designers on multiple concurrent projects.

## **Project Engineer**

Industrial Valley Controls - Conshohocken, PA - November 1991 to June 1992

Responsible for the design, selection, programming and installation of pneumatic, electrical, and computerized control systems for temperature and humidity control of buildings.

- Supervised two field technicians.

## **Product Engineer**

Mechanical Specialties Inc - Philadelphia, PA - December 1981 to October 1991

Responsible for the design and manufacturing support of the following product lines.

- o Packaged Terminal Air Conditioning/Heat Pump units from 7000 to 24000 Btuh.
- o Unit Ventilators with Air Conditioning, and Heating from 18000 thru 64000 Btuh.
- o Rooftop Air Conditioning units 17 thru 60 tons.

- Started sheet metal fabrication department.
- Integrated purchased product lines into company facility.
- Responsible for obtaining safety agency approval of various units.
- Responsible for field service problems, service manuals, and sales manuals.
- Instituted computerized bills of material and inventory control systems.
- Supervised one engineer, one designer, and two draftsmen.

### **Test Engineer**

Yale Lift Trucks/Eaton Corp - Philadelphia, PA - September 1976 to December 1981

Responsibilities included testing and evaluation of fork lift trucks and their components.

- Wrote testing procedures, test reports, and supervised testing.
- Managed and conducted testing programs required by external consumers such as the Ford Motor Corp, and the US Navy.

### **Adult Education Instructor**

Bucks County Tech School - Levittown, PA - 1975 to 1980

Taught Evening Adult Education Class in Refrigeration and Air Conditioning.

### **Test Engineer**

ITT Nesbitt - Philadelphia, PA - October 1969 to September 1976

Responsibilities included testing and evaluation of air conditioning and heating units from 7000 to 720000 Btuh.

### **STRONG POINTS**

Extensive background in 3-D design of sheet metal.

Strong Knowledge of UL Safety Codes and testing procedures, along with NSF Sanitation Codes and testing procedures.

Proficient in AutoCAD, SolidWorks 3D modeling, Windows, MS Word, MS Excel, MS Project, After, Mysis, Max, and Alere.

Devised and implemented computerized manufacturing inventory systems.

Constructed and started manufacturing assembly lines.

Started sheet metal fabrication departments.

Experienced in managing projects and personnel.

### **EDUCATION**

#### **Mechanical Engineering**

Temple University

### **SKILLS**

Extensive background in 3-D design of sheet metal. Strong Knowledge of UL Safety Codes and testing procedures, along with NSF Sanitation Codes and testing procedures. Proficient in AutoCAD, SolidWorks 3D modeling, Windows, MS Word, MS Excel, MS Project, After, Mysis, Max, and Alere. Devised and implemented computerized manufacturing inventory systems. Constructed and started manufacturing

assembly lines. Started sheet metal fabrication departments. Experienced in managing projects and personnel.

#### ADDITIONAL INFORMATION

- 30+ years' experience in mechanical engineering, sheet metal design, electrical control systems, operational sequences and PLC systems for designs of commercial and laboratory dishwashing, commercial heating ventilating and air conditioning systems, laboratory environmental conditioning and testing equipment.
- Projects that I have designed over the years include
  - o Patented steam removal system for exhaust free door class dishwashers.
  - o Energy saving steam removal and water heating refrigeration system for exhaust free conveyor dishwashers.
  - o Touch Screen and PLC operating systems.
  - o Commercial dishwashers
  - o Laboratory warewashers, sterilizers, environmental chambers
  - o Test rooms, Air flow chambers
  - o Desiccant conditioning equipment of 200 cfm through 10,000 cfm
  - o Heating ventilation and air-conditioning equipment from 7,000 btu to 100 tons.
- Extensive experience with performing the functions associated with Design Engineering, Applications Engineering, Controls Engineering, Manufacturing Engineering, and Service Engineering, as well as experience with establishing and managing the above departments.
- Designed equipment requiring tight temperature and humidity control used in the laboratory testing environments including the pharmaceutical, chemical, automotive, and various scientific and electronic industries.
- Designed equipment used in the HVAC industry for comfort conditioning of spaces for human comfort or for manufacturing process condition control.
- Extensive background in 3-D design of sheet metal.
- Strong Knowledge of UL Safety Codes and testing procedures, along with NSF Sanitation Codes and testing procedures.
- Proficient in AutoCAD, SolidWorks 3D modeling, Windows, MS Word, MS Excel, MS Project, Aftac, Mysis, Max, and Alere.
- Devised and implemented computerized manufacturing inventory systems.
- Constructed and started manufacturing assembly lines.
- Started sheet metal fabrication departments.
- Degree in Mechanical Engineering from Temple University. Additional courses taken in Accounting, Management, and Engineering