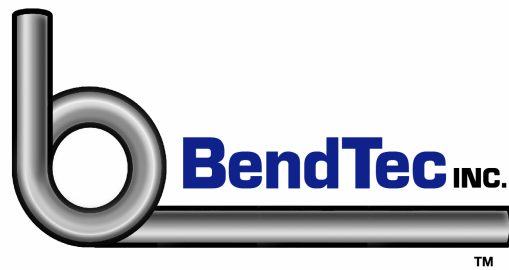


# BendTec, Inc.

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## COMPANY PROFILE



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# Team

**Robert Meierhoff..... President/CEO**  
**Tom Conrad..... Vice President/CFO**  
**Clint Zimpel..... Chief Engineer**  
**Charlie Robinson.....Plant Supervisor**  
**Kyle Dodds ..... Plant Manager**  
**David Meierhoff..... Sales Manager**  
**Jeff Schliep.....Bending Sales & Estimating**  
**Wendy Meierhoff ..... Sales & Marketing**  
**Mike Finn.....Quality Assurance Manager**  
**Sharon Hahn.....Accounting Manager**  
**Len Anderson ..... Safety Manager**

## General Information

**LOCATION:** Duluth, Minnesota

**BUSINESS:** BendTec is a metal fabrication business specializing in the fabrication of piping assemblies and the production of pipe bends for pipelines and steam electric power generating plants. BendTec is known internationally throughout the piping industry for its ability to bend large diameter pipe for these and other critical service applications. The curving of structural shapes for architectural applications is another of BendTec's specialties. In addition to bending, BendTec also provides many other fabrication services such as engineering, nondestructive testing, welding, cutting, rolling cylinders, machining, heat treating, blasting, pickling, painting, ceramic lining and fusion bond epoxy coating. These additional services, which are necessary to complete many pipe bending projects, many times are sold separately from the bending service.

**MARKETS:** Petroleum (mostly pipeline), electric utility, mining, general industry and structural and architectural.

## **Bending Capability**

**BendTec operates eight pipe-bending machines and has more induction bending experience than any other company operating in the United States. BendTec designed and built two induction benders, one handles pipe up to 27", the other up to 66" in diameter.**

## **Other Fabrication Capabilities**

**The Company has complementary capabilities in the areas of: engineering, metallurgical analysis, nondestructive testing, cylinder rolling, welding, machining, heat treating, pickling, blasting, painting, ceramic lining and fusion bond epoxy coating.**

## **Experienced Work Force**

**BendTec is the technological leader in the induction bending process with a staff that is recognized as authorities within the piping field.**

**The 100 employees that form the BendTec workforce have an average of over 12 years of service with the company and/or its parent companies.**

## **Location**

**The Company's location gives it a competitive advantage especially for the pipeline and other business in Canada and the Upper Midwest. The Central East/West location in the United States makes it possible to receive materials and ship fabricated components economically to all parts of the United States and Canada. BendTec is located near the harbor in Duluth, Minnesota, only one mile from the Duluth-Port Terminal. This allows materials to be brought in and sent out by ship through the St. Lawrence Seaway. This is especially economical for trade with European countries including Asian, Western and Eastern Countries.**

# **History**

**The beginning of the Company dates back to 1906 when Rubin Meierhoff started a company called Modern Plumbing & Heating Co. The business prior to World War II was primarily involved in the conversion of building heating systems from coal to oil. During World War II, the business installed piping systems in many of the ships constructed in Duluth, Minnesota, for the U.S. Navy and U.S. Coast Guard. After World War II, the business expanded in the mechanical contracting field under the name of Modern Constructors. Modern Constructors constructed piping for tank farms and oil terminals throughout the Midwest and installed refrigeration-piping systems in ice skating rinks across the United States.**

**After the discovery of oil in Western Canada in 1946, a crude oil pipeline system was constructed in order to transport the oil to markets located in Eastern Canada. Construction of this pipeline system, known as the Interprovincial Pipeline in Canada and the Lakehead Pipeline in the United States, started in 1947 and still continues to expand today. Modern Constructors installed piping in the pumping stations, tank farms and terminals along the United States portion of the pipeline beginning at the Canadian border continuing through Northwestern Minnesota crossing over to Detroit, Michigan, and then crossing back into Canada. The pipeline passes through the United States due to extremely rugged terrain on the north side of Lake Superior on the Canada side.**

**In addition to this pipeline work, Modern Constructors installed mechanical systems in refineries, steel plants, taconite plants and other heavy industrial and commercial construction projects throughout the Upper Midwest. In 1967 construction of a large natural gas pipeline system was started to carry the Canadian gas to markets located in Eastern Canada once again traveling through the United States. The natural gas pipeline was constructed parallel to the crude oil pipeline system. Modern Constructors provided the construction services and built many of the compressor stations along the Minnesota, Wisconsin and Michigan portions of the pipeline. This pipeline system, known as the Great Lakes Gas Transmission Company, has undergone continuous growth, also providing Modern Constructors with a market for its services.**

**In order to efficiently construct the piping systems on these projects, Modern Constructors built a pipe fabricating plant to preassemble the piping components off-site in a controlled environment. Over the years, this fabrication facility grew to the point that economic considerations began to argue for operation year-round, as opposed to operation only during the summer construction period. Therefore, Modern Constructors started providing fabrication services to other contractors for construction projects throughout the United States.**

**Robert Meierhoff grew up working on construction projects for his father's company during school vacation periods. He joined the company on a full-time basis in 1968 after receiving a degree in Welding Engineering from Ohio State University (OSU). His first two years were spent primarily working on oil and gas pipeline construction projects, and the problem areas he encountered during this time involved the bending of large diameter pipe.**

**In 1970, Mr. Meierhoff and his father began investigating the technology for bending large diameter pipe in order to improve the Company's pipe bending capability. After traveling to Japan in 1971 and Europe in 1972 to observe small bending machines being used the induction bending process. They decided to design a machine using the same process, but would bend larger diameter pipe and build it (themselves) to service the expanding pipeline industry.**

**The Meierhoff's formed Pipe Benders, Inc., in 1972 to design and build the machines and market the bending service. In March of 1973 Pipe Benders, Inc., put its first induction-bending machine, which was capable of bending pipe up to 66 inches in diameter, into operation. In August of 1975, as the market grew, Pipe Benders built and installed a second machine, which was capable of bending pipe up to 27 inches in diameter.**

**In 1980, Tulsa Tube Bending Company bought and installed an induction-bending machine, which bent pipe up to 24 inches in diameter. It was the first that any company other than Pipe Benders offered the service of bending pipe using the induction process in the Western Hemisphere.**

**The Duluth, Minnesota, based pipe-bending operation provided bending services to nearly all of the pipe fabrication companies in North America and continued to grow during the 1970s. The bending capabilities led the company into many new markets. One of these new areas was the design and fabrication of abrasion-resistant piping systems for the pneumatic conveying of pulverized coal in steam electric generating plants. BendTec is now considered to be the leader in this field. Another new area that the bending capability opened was that of making rubber and urethane lined piping components. These linings are used to reduce abrasion and wear in slurry conveying systems and the bends provide smooth direction changes which also provide for lower wear rates. The primary market for these components is in the mining industry.**

**In 1986 Bob Meierhoff merged Pipe Benders and Modern Constructors. The combined entity concentrated on the pipe bending and the fabricating aspects of the piping industry. Pipeline construction in the region had slowed down considerably and what limited work remained was very competitive.**

**In mid 1989, Pipe Benders and The Vectura Group formed BendTec, each having a 50% interest in the Company. Bob Meierhoff wanted to expand and move the operation to a new location and Vectura's pipe fabricating division, Connex, wanted to vertically integrate to more effectively serve the power generation industry.**

**In 1989 BendTec moved to a new plant facility that was more efficient and better suited to meet future needs. In 1991 Vectura changed directions, decided to concentrate its efforts in the maritime industry, and sold Connex to the Whessoe Group of Great Britain.**

**In 1995 Bob Meierhoff and Tom Conrad, a Duluth banker, purchased Vectura's interest in BendTec. Tom Conrad then became BendTec's vice president and chief financial officer.**

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## **Products & Services**

- **Pipeline Bends**
- **Abrasion Resistant Piping Systems**
- **Large Diameter, 3R, High Yield Elbows**
- **Fusion Bond Epoxy Coating**
- **Shop Fabricated Piping**
- **Blasting & Painting**
- **Specialty Pipeline Components**
- **Structural & Architectural Bending & Fabrication**

## **Union Affiliation**

**Local Union No. 11 of the United Association of Journeymen and Apprentices of the Plumbing and Pipe Fitting Industry of the United States and Canada.**

## **Certificates**

- **ASME AS@Stamp, for ASME I Construction Certificate No. 24,590**
- **ASME AU@Stamp, for ASME VIII Construction Certificate No. 24,591**
- **ASME APP@Stamp, ASME Code for Pressure Piping B31.1  
Construction Certificate No. 24,589**
- **AISC -Certification for Conventional Steel Building Structures**
  - Complex Steel Building Structures
  - Simple Steel Bridges
  - Complex Steel Bridges

## **Engineering Services**

- **Piping Design**
- **Piping Component Design**
- **Pressure Vessel Design**
- **Metallurgical & Welding Consulting**

# CAD Capabilities

**AUTOCAD 14 and AUTOCAD 2000 with Electronic Data Exchange Capability  
Accrender 3 and Rhinoceros solid modeling**

## Facilities

BendTec has two plants; both of which are located on the Waterfront in Duluth, Minnesota. The main office is located at 366 Garfield Avenue. The manufacturing facility totals 160,000 sq. ft. with an outside storage area of approximately (5) acres. The following is a description of the plant areas and overhead crane capacities.

### Garfield Avenue Plant

- **Bay 1 (Cutting & Maintenance)**  
20' x 230'  
10 Ton, 5 Ton, 2 Ton
- **Bay 2 (Fabrication)**  
40' x 275'  
20 Ton, 20 Ton, 20 Ton
- **Bay 3 (Painting, Coating & Inspection)**  
40' x 275'  
5 Ton, 5 Ton
- **Bending Building**  
80' x 300'  
22 Ton, 15 Ton

### Railroad Street Plant

- **Machine Shop**  
80' x 300'  
6-5 Ton, 1-3 Ton
- **Painting, Coating & Inspection Area**  
42' x 180'  
10 Ton, 15 Ton
- **Fabricating and Welding Area**  
2 Bays, Each 80' x 300'  
20 Ton, 17-Ton Cranes in North Bay  
17 Ton, 10-Ton Crane in South Bay
- **Receiving and Storage Building**  
42' x 142'  
5 Ton

## Mobile Cranes

- (1) Link Belt HC 138 – 60 Ton Truck Crane
- (1) Lorain RT450 - 50 Ton Rough Terrain Crane
- (1) Pettibone Model 30 – 15 Ton Rough Terrain Crane
- (2) Drott - 6 Ton - Carry Deck Cranes

## Plant Equipment

### **PIPE BENDING**

- **Induction Benders**
  - 66" OD Induction Bender
  - 27" OD Induction Bender
- **Rotary Draw Benders**
  - Pines #6 - 8" Rotary Draw Bender
  - Unibol 8" Rotary Draw Bender
  - Coast Model 6RD - 8" Rotary Draw Bender
  - Eaton Leonard VB - 300E, 3"OD, CNC Rotary Draw Bender
- **Roto-Form Bender**
  - Pines 5"-12"
- **Wheel Benders**
  - 4" & 2"

### **HEAT TREATING**

- 50' long x 20' wide x 15' high gas fired oven, to 2,000°F
- 9' long x 9' wide x 4' high, gas fired oven, to 2,100°F
- 1000 kw Westinghouse, 1kc Induction Heater
- 300 kw Pillar, 3kc Induction Heater
- 25 kw Electric Arc, 60 cycle Induction Heater
- 50 kw Hobart, Model M50, 400 cycle Induction Heater
- 3 - Stresstech QZ1000 - 6, Resistance Stress Relieving Units
- 4 - Reliant Resistance Stress Relieving Units

## **MACHINGING**

### **Milling Machines**

- **Farrel Horizontal Inline Boring Mill**
  - 23" diameter spindle
  - 192" boring depth
  - 13" ID to 110" ID boring diameter range
- **Carlton Model 6HCS - CNC Floor Type 6" Horizontal Mill**
  - Travel - x = 360", y = 120", z = 42", w = 30"
  - Giddings & Lewis 6ft x 8ft Powered Rotary Table
  - 48" facing head
- **Cincinnati Gilbert Floor Type 5" Horizontal Mill**
  - Travel - x = 132", y = 92", z = 24"
  - Cincinnati Gilbert 4ft x 6ft Air Lift Rotary Table
  - 36" facing head
- **DeVlieg 4" Horizontal Table Type Jig Mill**
  - Travel - x (table) = 72", y = 48", z = 20"
  - 24" tilting rotary table
  - 24" facing head
- **K&T Model MM200 CNC Machining Center**
- **Cincinnati Milacron Cintimatic Model 10VC 1250, 3AXIS, CNC Vertical Machining Center**
- **Dixi Model 60 - 3" Table Type Jig Mill**
- **Gray 60" x 20' Open-Side Milling Planer**
  - With Horizontal & Vertical Milling Heads
  - Maximum work piece dimensions –
  - 78" wide x 48" high x 264" long
- **Cincinnati Milacron Model 420-16 Plain Vertical Mill Series E**
- **Cincinnati Milacron Model 315-16 Plain Horizontal Mill Series E**
- **K&T Model SA-205 Plain Horizontal Mill**
- **K&T Model K, #2 Plain Horizontal Mill**
- **Index Model 847 Universal Mill**
- **Bridgeport Series 1 Universal Mill**

### **Lathes**

- **American 42" x 25'**
- **Warner & Swasey Model M-470 Saddle Type, Heavy Duty, Universal Turret Lathe -- " spindle hole, 16" swing**
- **Barber Coleman Model 1610 Lathe -- 16" swing, 30" long**

### Pipe End Facing Machines

- Sanriku Model YSF 1400 - 60" End Facing Machine
- Sanriku Model YSD 800 - 32" End Facing Machine
- Harris Machine Tool - 6" End Facing Machine

### Drills

- American Hole Wizard Radial Arm Drill
- Kaukauna Model 125U Universal Drill
- Current EDM Model MT 305 EDM Drill
- Wilton Model 2025
- G & L Bickford Model 8-19, Radial Arm Drill

### Grinders

- KO Lee Model S13300 Surface Grinder
- Gallmeyer & Livingston No. 35, Surface Grinder
- Brown & Sharpe Model #5 Surface Grinder
- Grinding & Polishing 4" Belt Grinder

### Saws

- Marvel 25" Vertical Band Saw
- HydMech Model S-25A, 18" Horizontal Band Saw
- Wellsaw Model 1016 Horizontal Bend Saw

### Presses

- Hannifin 150 Ton "C" Frame Press
- Fahrquar 500 Ton Straightening Press
- Racine 50 Ton "C" Frame Press

## **WELDING EQUIPMENT**

### Positioners

- (1) - Aronson Elevating Head & Tail Stock 120 Ton Capacity
- (1) - Aronson GE-1200, Geared Elevation, 60 Ton Positioner
- (1) - Aronson GE-500, Geared Elevation, 25 Ton Positioner
- (2) - Ransom #7, Elevating Head & Tail Stocks, 12 Ton Capacity
- (1) - Aronson Model HD100A, 10,000# Capacity
- (1) - Aronson Model HD120A, 12,000# Capacity
- (1) - Pandjiris 10,000# Capacity Positioner
- (2) - Pandjiris 10,000# Elevating Head Stocks
- (1) - Aronson Model SHD 60A, 6000# Positioner
- (1) - Cayuga 1500# Positioner
- (2) - Cullen Friested 20,000# Positioners

## **Manipulators**

- **Yoder Model SPY, 17' x 12'**
- **Pandjiris 12' x 10'**
- **Pandjiris 10' x 10'**
- **Aronson GEM 8' x 6'**
- **Herrick 8' x 8'**
- **(3) Pandjiris 8' x 8'**
- **(2) Pandjiris Model 172 “Head Director” Manipulators**
- **(2) Capitol Welders 6' x 6' “Jimmy Jammer” Manipulators**

## **Turning Rolls**

- **(1) - Ransom 50,000# Set of Power and Idler Rolls**
- **(3) - Pandjiris 20,000# Sets of Power and Idler Rolls**
- **(2) - Capitol Weders 20,000# Set of Power and Idler Rolls**
- **(2) - Aronson 200 Ton Idler Rolls**
- **(1) - Aronson Model WRU10PT 10,000# Tilting Turning Rolls**

## **WELDING MACHINES**

- **Submerged Arc**
- **(5) Lincoln NA – 5- Wire Feeders with DC-655 Power Sources**
- **(2) Lincoln LT – 7- Wire Feeders with DC-600 Power Sources**
- **Flux Cored & MIG**
- **(5) L-Tec 450 Power Sources with Wire Feeders on Booms**
- **(5) Lincoln DC-400 Power Sources with Lincoln DH-10, Dual Wire Feeders**
- **(1) Lincoln DC-400 Power Sources with Lincoln LN-7 Wire Feeder**
- **Orbital Pipe Welders**
- **(1) ARC Machines, Model 225, 2"- 6" Orbital Cold Wire Programmable TIG Welder**
- **(1) ARC Machines, Model 415, 6" and Larger Cold Wire Programmable TIG Welder**
- **Hot Wire TIG**
- **(1) Linde Mechanized Hot Wire TIG Welding Machine**
- **ID Pipe Welder**
- **Magnatech Remote Controlled FCAW Welder**
- **Nozzle Welder**
- **Cyprus Model CW5AX SAW & FCAW Nozzle Welder**

## **FABRICATING EQUIPMENT**

### **Plate Roll**

- **Birtsch #24, 1" x 20' Plate Roll**

### **Plate Burning Machine**

- **ESAB-Heath 16' x 60' Oxy-Acetylene & Plasma Cutting Machine with Water Table**

### **Pipe Cutting Machine**

- **Vernon Model G, 42" Pantograph Oxy-Acetylene & Plasma Cutting Machine**

### **Blasting Equipment**

- **Guttman 4-Wheel Pipe Blasting Machine with Conveyor**
- **Grit Blast Room 30' long x 12' wide x 15' high with recovery system**
- **Grit Blast Room 40' long x 15' wide x 10' high with recovery system**
- **(2) I.D. Pipe Grit Blast Stations with Recovery systems**
- **Sand Blasting Equipment**

## **LABORATORY EQUIPMENT**

- **Tinius Olsen 400,000# Universal Tensile Testing Machine**
- **Tinius Olsen 400lb-ft Impact Testing Machine**
- **Tinius Olsen 260lb-ft Impact Testing Machine**
- **Unitron Series N Metallograph**
- **Buehler Micromet Micro-hardness Tester**
- **Metonix Arc-Met 900 Chemical Analyzer**
- **Wilson Rockwell Hardness Tester**
- **Wilson Vickers Hardness Tester**
- **King Brinnell Hardness Tester**

## **INSPECTION EQUIPMENT**

- **SMX Laser Tracker Coordinate Measuring Machine**
- **Krautkramer USPC2100, 4-Channel Recording Ultrasonic Inspection Unit**
- **Staveley Instruments Sonic 10005 Ultrasonic Flaw Detector**
- **Radiographic Testing Equipment**
- **Magnetic Particle Testing Equipment**
- **Hydrostatic Testing Equipment to 10,000 psi**
- **Liquid Penetrant Testing Equipment**

# **Transportation**

**Truck: Contract Haul Truck Lines**

**Rail: Burlington Northern Railroad & Canadian Pacific**

**Water: Lykes Lines, U.S. Flag & Foreign Flag Ships**

**The plant has dock facilities on the Duluth harbor. The Seaway Port Authority Terminal, of Duluth is located within one mile of the plant.**