

A large field of white wind turbines in a hazy, open landscape. The turbines are arranged in rows, stretching towards the horizon. The sky is a pale, overcast blue, and the ground is a flat, light brown color. The overall scene is a vast, open field of renewable energy infrastructure.

# **Windpower 2010**

**Pacific Northwest Wind Team  
Member Profiles**

# Columbia Machine

Columbia Machine is the world's leading manufacturer of concrete products equipment, serving customers in over 100 countries. From concrete products equipment and plants to mixing and batching to automatic cubing - Columbia builds a complete line of equipment to outfit your entire concrete products plant.

- Year Established:** 1937
  - Web Site:** [www.columbiamachine.com](http://www.columbiamachine.com)
  - Local Address & Phone:** 107 Grand Blvd.  
Vancouver, WA 98661  
Clark County  
United States  
(360) 694-1501
  - Mailing Address:** P.O. Box 8950  
Vancouver, WA 98668  
United States
  - Key Personnel:** Rick Goode - President & CEO  
Bryan Goodman - VP Manufacturing
  - Facility:** Over 300,000 sq. ft.
  - Capabilities:** Products for Automated Concrete block production:
    - Concrete Product Masonry Solutions
    - Large Pallet Machines
    - Mixing and Batching
    - Pallet Handling
    - Cubing
    - Splitters
    - Tumblers  
Custom Design and manufacture of molds
  - Certifications:** DLIS CCR (CAGE#34462)
  - Customer Base:** Columbia serves customers in over 90 countries worldwide, including North America, Latin America and South America, Africa, Europe, the Middle East, India, China, the Pacific Rim and Canada
- Industry Sectors***  
Construction & Construction Materials
- Geographic Area:** Worldwide

# Energetic Drives

We are a collection of mostly engineer-types that believe in the generation of clean power from alternative energies as well as the reclamation of energy from existing systems. Our focus is on providing highly efficient solutions in the 10 KW to 1.5 MW range using cutting-edge technologies and the highest quality drives and grid-tie inverters available.

**Year Established:** 2009  
**Web Site:** [www.energeticdrives.com](http://www.energeticdrives.com)  
**Email:** [info@energeticdrives.com](mailto:info@energeticdrives.com)

**Local Address & Phone:** 2870 NE Hogan Rd  
Suite E 158  
Gresham, OR 97030  
(360) 601-3978  
(503) 961-8225

**Key Personnel:** Ian Griffiths – VP of Sales and Engineering

**Capabilities:** Redefining what the term “Reconditioned” means, our turbines combine quality restored equipment with new, state-of-the-art, permanent magnet generators, high-efficiency grid-tie inverters and cutting-edge electronics. The result is more power, cleaner power and greater access to data in a user-friendly environment than any other system on the market today.

Our Grid-tie Inverter provides the solution to your clean power needs. The design can be implemented into your wind farm in months not years. All of your existing components are used by this GTI: Gearbox, braking system, generator and sensors. Your investment will bring your energy into compliance with Utility requirements (eliminating penalties for dirty power). Our turn key solution converts your existing fixed wind generators into state-of-the-art variable wind generators at a fraction of the cost of a new turbine and far quicker.

# Hydra-Power Systems Inc.

Hydra-Power Systems, Inc. is a manufacturer of custom hydraulic equipment. We serve the defense, subsea, offshore, electric power generation and mobile equipment markets. Additionally, we are a distributor for Sun, Wandfluh, Moog, Hydra-Force and Schroeder. Products are shipped world-wide.

**Year Established:** 1970  
**Web Site:** www.hpsx.com  
**Email:** pherder@hpsx.com  
**Local Employees:** 75-99  
**Corporate Employees:** 75-99  
**Annual Revenue:** \$50M - \$100M  
**Local Address & Phone:** 5445 NE 122nd Ave.  
Portland, OR 97086  
Multnomah County  
United States  
(503) 777-3361  
(800) 777-5047 (Toll Free)  
(503) 775-6447 (Fax)

**Mailing Address:** PO Box 20549  
Portland, OR 97249  
United States

**Key Personnel:** Lynn Stuart – CEO  
Jeff Stuart - President  
Dan Sowards - VP of Sales  
Mike Achterman - Systems Division Manager  
Pete Herder - Outside Technical Sales

**Facility:** 50,000 - 74,999 sq. ft.  
Hydra-Power Systems facility includes a large distribution warehouse, manifold manufacturing facility and hydraulic power unit manufacturing facility. Manifold manufacturing includes CNC machinery, tooling, proprietary manifold wash and prep also complete assembly and testing. Hydraulic power unit fabrication includes, metal fabrication area, assembly area, paint unit and testing area.

**Capabilities:** Hydra-Power Systems has the ability to produce manifolds up to 2200 lbs. Hydraulic power units up to 1000 hp. Manifolds can be assembled and tested. Hydraulic Power units can be certified to ABS, DNV and BV specifications. We offer manifold design and verification services.

**Customer Base:**

***Industries***

- Industrial
- Mobile
- Marine & Boat Building
- Electrical Power Generation
- Forest Products Presses & Forging
- Garbage & Waste Processing
- Hydraulic Valve Manufacturers
- Heat Treating & Metal Furnaces
- Injection Molding
- Food Processing
- Agricultural
- Pipe & Culvert Manufacturing
- Metals
- Sewage Treatment

***Industry Sectors***

- Agribusiness
- Defense/Military/National Security
- Energy/Utilities
- Environmental
- Manufacturing
- Telecommunications Products (Including Wireless)
- Transportation

**Geographic Area:**

Worldwide

# JH Kelly

JH Kelly is a fourth generation, family-owned construction company that provides HVAC and plumbing services to commercial facility owners and acts as a self-performing industrial general contractor at process plants throughout the greater Pacific Northwest.

- Year Established:** 1923
- Web Site:** [www.jhkelly.com](http://www.jhkelly.com)
- Local Employees:** 1,000 – 1,499
- Annual Revenue:** \$100M - \$250M
- Local Address & Phone:** 821 Third Ave  
Longview, WA 98632  
Cowlitz County  
United States  
(360) 423-5510  
(360) 423-9170 (Fax)
- Mailing Address:** PO Box 2038  
Longview, WA 98632  
United States
- Key Personnel:** Mason Evans - President  
Terry Major - Senior Vice President  
Robert Harris - Vice President  
Paul Furth - VP and CFO
- Capabilities:**
  - Boilermaker Services***  
Erection/installation  
Casing repair/replacement  
Firing system installation  
Electrostatic precipitator installation/repair
  - Pressure Vessel Services:***  
Erection/installation
  - Tank Services:***  
Installation  
Repair
  - Civil & Concrete Construction Services:***  
Excavation  
Tilt-up construction  
Concrete building foundations and flat slab work  
Equipment and structural foundations  
Clarifiers  
Underground utilities

***Module and Pipe Fabrication:***

Complete program management  
Design and engineering (3rd Party)  
Budget estimates and planning  
Quality assurance and control programs  
Materials specification, procurement and management  
Structural design and fabrication (3rd Party)  
Structural steel erection  
Process piping fabrication and design  
Material handling  
Process controls  
Electrical  
Instrumentation and controls  
Non-destructive testing  
Installation and start-up

***High-Purity Pipe Fabrication:***

Process piping, tanks, and equipment  
    Welding research  
    Food grade orbital welding  
    Custom bending  
    Field installation

Capacity

    Class 10/100 cleanroom facility  
    Purified gas supply  
    RO/DI water supply

Fabricated Assemblies

    Valve manifold boxes and panels  
    Chemical distribution boxes  
    Gas sticks  
    Gas cabinets

Skid Fabrication

    Water  
    Gas  
    Exhaust  
    Chemical

Cleaning

    Chemical cleaning  
    Water cleaning

Materials

    PVDF  
    PFA

Polypropylene  
Teflon  
Stainless steel  
Titanium  
Copper  
Monel  
Hastelloy

***Industrial Pipe Fabrication:***

Industrial Pipe Fabrication Facility:

Over 55,000 square feet of climate-controlled material receiving, fabrication, assembly and loading space. Easy access to road and rail; air and deep sea ports are within minutes of our facility.

Weld stations are flexibly designed to handle individual pipe spools through 96" diameter.

Equipped with automated, semi-automated and manual machines to complete each cut, prep and weld with the highest degree of accuracy and quality.

Bulk Gas Distribution System directly supplies stations the necessary weld gasses to perform qualified welding processes.

Weld stations are serviced by jib and bridge cranes to allow ease of movement of material both in and out of the shop.

Pre-Fabrication Services:

BIM  
Project planning  
Cost estimates  
Scheduling  
Layout  
Drafting  
Integrated 3D modeling and spool detailing  
Procurement  
PMI (Positive Material Identification) testing  
Koslow testing  
Material and equipment staging

Fabrication Capabilities:

Industrial Pipe Fabrication  
Commercial Pipe Systems  
Clean Room Pipe Fabrication  
Modules and Skids  
Pressure Vessels  
Supports

- Plate Work
- Specialty Blinds
- Cold pipe bending
- Machining

Document Control Services:

- Electronic Traceability
- Specifications
- MTRs (Material Test Report)/Certificates of Conformance
- Purchasing documents
- FabTrak (proprietary software for fabrication management)
- Spool status and traceability
- Weld tracking
- Welder certifications and continuity
- Weld maps and As-Builts
- Inspection and testing documents
- Project turnover package (available electronically or hard copy)

Welding Processes

- SMAW (Shielded Metal Arc Welding)
- SAW (Submerged Arc Welding)
- GMAW (Gas Metal Arc Welding)
- GTAW (Gas Tungsten Arc Welding)
- FCAW (Flux Core Arc Welding)
- Orbital
- Plastic Fusion
- Overlay
- Brazing
- Soldering

Wall Thickness Range

1/16" through 8" maximum wall thickness

Piping Materials – Metals

- Carbon Steels
- Stainless Steels
- Alloy 20
- Inconel
- Monel
- Titanium
- Hastelloy
- Chrome Moly
- Aluminum
- Titanium

## Copper

### Piping Materials - Non-Metal

- PFA
- PVDF
- C/PVC
- FRP
- HDPE
- Poly-propylene
- Eslo-clean

### Post-Fabrication Services Inspection

- Full-time CWI and Level II Inspectors on property
- All welds 100% visually inspected by Level II

### Non-Destructive Testing

- Hydrostatic and pneumatic testing
- Magnetic particle, dye-penetrant, ultra sonic and radiographic testing
- Post-weld heat treat
- Brinnell Testing

### Surface Prep - Interior/Exterior Coatings, Finishes and Cleaning:

- Sand and bead blasting
- Cotton ball interior finish
- Oxygen cleaning
- Passivation
- Prime and paint, including specialty finishes
- Coating and wrapping
- Insulation

### Shipping and Delivery

- Road
- Rail
- Air
- Water

### Web-Based Project Tracking (PWC - Project Web Collaboration)

- Electronic interface allows you to view your project

### ***HVAC Heating and Plumbing Contractor:***

#### Pre-Construction Services

- Design Build – Design Assist
- Value Engineering and Constructability Assistance
- Estimating and Project Scheduling

## Construction Services

- Procurement
- Piping Pre-fabrication
- Project Management
- Piping Installation
- Instrumentation & Controls
- HVAC Equipment Installation
  - Chillers
  - Boilers
  - Air Handling Units
- Subcontract Management
- Sheet Metal
- Insulation
- Start-Up & Commissioning

## Instrumentation & Controls:

- Design/build
- Design assistance and/or review
- Instrument selection and procurement
- Installation and calibration
- Pre-commissioning and start-up
- Troubleshooting
- Routine maintenance and calibration

## Millwright Services:

- Heavy rigging
- Equipment moving/setting
- Optical services
- Laser alignment
- Fabrication
- Shutdown and maintenance work

## Process Piping:

- Design/build
- Design assistance and/or review
- Complete CAD services
- Pre-commissioning and start-up assistance
- ANSI, API, and ASME codes
- Routine maintenance and repair
- External boiler piping
- Piping support systems
- Seismic restraints and system upgrades

## Steel Erection & Rigging:

- Detailing and fabrication
- Rigging and installation

Certified welding  
Coatings  
Constructability assistance

**Certifications:** DLIS CCR (CAGE#0R433)

**Customer Base:**

***Industries***

Commercial Mechanical  
Corrections  
Education  
Healthcare  
Multi-Unit Housing  
Semiconductor  
Industrial General Contracting  
Chemicals  
Renewable Energies  
Solar  
Ethanol  
Biodiesel  
Food Processing  
Metals  
Power  
Pulp & Paper  
Refining

***Industry Sectors***

Construction & Construction Materials  
Energy/Utilities

**Geographic Area:** Regionally

**Awards:** 2009  
Occupational Excellence Achievement Award - from The National Safety Council

2008  
Thomas J. Reynolds Award For Construction Safety and Health - from The Association of Union Constructors  
Mechanical Contractors Association of America (MCAA) Category 5 Safety Award

2007  
National Safety Council Industry Leader Award - 2006 Occupational Level 1: Green Cross for Safety Excellence Achievement Award

2006  
Northwest Construction Consumers Council (NWCCC) Patrick Lyneis Safety Excellence Award - for the Shell Puget Sound Refinery Flare Gas Recovery Project.  
National Safety Council Industry Leader Award - 2005 Occupational Level 1: Green Cross for Safety Excellence Achievement Award

2005  
Mechanical Contractors Association of America (MCAA) Category 5 Safety Award - for achieving one million hours without a lost time injury  
National Safety Council Industry Leader Award - 2004 Occupational Level 1: Green Cross for Safety Excellence Achievement Award  
National Petroleum Refiners Association (NPRA) Award - for safety excellence on the BP ISOM project

# Miles Fiberglass & Composites

Miles Fiberglass and Composites (MFC) is a forward thinking company devoted to finding innovative solutions using fiberglass and other composites to meet customer needs. A team consisting of pattern makers, toolers, fabricators and finishers work together to create custom products to fit unique needs.

- Year Established:** 1963
- Web Site:** [www.milesfiberglass.com](http://www.milesfiberglass.com)
- Local Employees:** 50 – 74
- Local Address & Phone:** 8855 SE Otty Rd  
Portland, OR 97086  
Clackamas County  
United States  
(503) 775-7755  
(503) 774-2561 (Fax)
- Mailing Address:** 8855 SE Otty Rd  
Portland, OR 97086  
United States
- Key Personnel:** Lowell Miles - CEO & Owner  
Lori Luchak - President  
Joe Luchak - General Manager and CFO  
Craig Hinkle - Chief Operations Officer  
John Aiello - Engineering & Project Manager  
Dan Bellanger - Scheduler & Planner Coordinator  
Tim Mumby - Shop Facilitator  
Merilee Miles-Hinkle - Human Resources Manager
- Equipment:** *Thermoforming Machine*  
Can process molds as large as 110" x 110". The largest of its type in the Pacific Northwest.
- Products / Lines Carried:** Components for Windmills  
Composite Flat Sheet  
Custom Antenna Covers  
Emergency Relief Shelter (Intershelter Inc)  
Fiberglass & Composite Ballistic Panels  
Fiberglass & Composite Engine & Generator Covers  
Fiberglass & Composite Equipment Covers (Utility work)  
HMMWV Composite Hood Repair  
Ice Bear (Ice Energy)  
Industrial Fiberglass Tanks  
Marine Industry: marine hatches, staircases, and one-piece shower booths.  
Outdoor Planter Boxes



There are many exotic resins and fibers that are used in advanced composites, but epoxy resin and reinforcement fiber of aramid, carbon, or graphite dominates the market.

***Industry Sectors***

Automotive & Transport Equipment  
Construction & Construction Materials  
Consumer Products - Durables  
Defense/Military/National Security  
Energy/Utilities  
Environmental  
Government/Public Sector/Non-Profits  
Manufacturing  
Materials & Construction  
Transportation  
Utilities

**Geographic Area:**

Locally

**Affiliations:**

Pacific Northwest Defense Coalition (PNDC)  
Associated Oregon Industries  
Austin Family Business Program  
American Composites Manufacturers Association  
National Association of Manufacturers  
National Federation of Independent Business  
Clackamas Community College  
Oregon City Chamber of Commerce  
Oregon State Austin Family Business Program  
Portland Business Alliance  
American Composite Manufacturer Association  
Clackamas County Chamber of Commerce

**Awards:**

2002 & 2003 recognized as, "100 Best Companies To Work For" presented by Oregon Business Magazine

2003 MFC earns the, "Innovation In Employee Recognition & Training" award presented by E&I

2005 CEO & Owner Lowell Miles receives, "Businessman Of The Year Award" presented by the National Republican Convention Committee

2007 MFC earns the coveted Philanthropy Award presented by Portland Business Journal

# Premier Gear and Machine Works

Premier Gear and Machine Works (PGW) manufactures, upgrades and retrofits a diverse line of industrial equipment dedicated to the wood processing and paper machine repair fields.

**Year Established:** 1923  
**Web Site:** [www.premier-gear.com/](http://www.premier-gear.com/)  
**Local Address & Phone:** 1700 N.W. Thurman St.  
Portland, OR 97209  
Multnomah County  
United States  
(503) 227-3514  
(503) 227-1611 (Fax)

**Key Personnel:** Ed Smith - Shop Manager  
Don Adams - Sales  
Russ Cole

**Capabilities:** ***Machinery***  
PGW manufactures a diverse line of equipment, ranging from the wood processing industry to the paper machine repair industry. They can generally be broken into four categories:

## Softwood and Processing

- Slicers
- Stay Logs (Half Round)
- Lathes & Accessories
- Toyo Knife Grinder
- Knife Honer
- Setup Gauges

## Hardwood Processing

- Bi-axial Backroll
- Charger
- By-Line Clipper
- Clipper Controls for Durand-Raute

Wallboard Recycling (PREMIER Knez Gypsum Recycling Machine)  
Efficiently separates the paper from the gypsum whether the material is wet or dry.

Tests have shown that approximately 90% of the waste gypsum is acceptable for use in new wallboard.

## Roll Drilling

### ***Gear Shop***

#### Bevel Pinion and Miter Gears

- Diametral, circular, module, spiral
- 54" diameter max., 0.75 diametral pitch max

#### Helical Gears

External only  
72" diameter max., 1 diametral pitch max  
Splines  
Diametral  
Module  
Fellow  
Straight sided  
External and Internal Spur Gears  
Worm Gears

**Controls**

The Premier Gear & Machine Works' machine controller is a computer-based industrial control system utilizing an Intel-platform computer running Windows.

The computer lives on a compact-PCI bus, which is an industrial-grade PCI-bus platform.

The software is designed to load and run on any PCI desktop running Windows NT or Windows 2000.

This makes it easy to familiarize oneself with the software without running the risk of interrupting production.

**Service (Major and Minor Repairs)**

Mechanical Design  
Milling Machines  
Gearbox Rebuilding  
Boring Mills  
Veener Lathe Decks  
Planers  
Presses  
Hydraulics  
Grinding  
EDM Machine  
On-site Preventive Maintenance  
Veener Lathe & Peel Trouble Shooting

**Products / Lines Carried:** PREMIER Knez Gypsum Recycling Machine

**Customer Base:** **Industry Sectors**  
Manufacturing  
Materials & Construction  
Mining/Quarrying

**Geographic Area:** Local



# Specialty Finishes

Specialty Finishes is a contract painting and coating company specializing in surface preparation, powder coating, liquid coating, chemical coating, and pre-treatment.

**Web Site:** [www.specfinishes.com/](http://www.specfinishes.com/)

**Local Address & Phone:** 5555 N Channel Ave.  
Portland, OR 97217  
Multnomah County  
United States  
(503) 247-1727  
(503) 247-1924 (Fax)

**Mailing Address:** 5555 N Channel Ave.  
Portland, OR 97217  
United States

**Key Personnel:** Dan Molyneux - General Manager

**Facility:** 50,000 - 74,999 sq. ft.  
  
2 Production Lines  
Over 65,000 square feet  
Easy access to truck, rail, and marine berthage  
40,000 square foot laydown area

**Equipment:** *52,000 CFM Heated Air Make-up units (3 units)*  
Capable of maintaining our booth temperatures at 85 degrees above ambient during cold weather.

*Forklifts*  
15 ton lift capacity

*Horizontal Wheelabrator*  
Capable of handling material up to 6' x 3

*Industrial Paint Booth*  
158' long by 70' wide and 60' tall

*Cranes*  
Lift Capacity of 223 tons

**Capabilities:** ***Surface Preparation Technologies***  
Anti-Rust and Anti-Corrosion  
Metal 5-Stage Iron Phosphate Pretreatment System  
Sandblasting (Steel Grit, Diamond Grits, & Black Walnut)  
Wipe Down  
Air Knife  
Plastics: Tack and Blow

***Powder Coating (Some coating options)***

Epoxy  
TGIC Polyesters  
Polyurethanes  
Modified Powders  
ScotchKote Fusion Bond Epoxy  
PVC

***Painting Services. Coatings for every industry, including:***

Polane  
CARC  
Low VOC/Green  
Powder Coats  
Customer Color Matching  
Federal Standards  
Industry Mandated Coatings

***Industrial Blasting and Coating***

3 large blast booths (largest being a self recovering pressurized blast system that is 75'x60'x30')  
A horizontal Wheelabrator (capable of handling material up to 6' x 3')

***Industrial Painting***

Main paint booth is 158' long, 70' wide, and 60' tall.  
Spray area of over 11,000 square feet

**Special Materials / Capabilities:**

***Blasting Media includes (but is not limited to):***

steel grit  
steel shot  
green diamond  
black diamond  
garnet  
walnut shell

***Can process the following types of metal (Blasting):***

Steel  
Stainless steel  
Iron  
Brass  
Aluminum  
Copper



# Stack Metallurgical Services, Inc.

Stack Metallurgical Services is the most versatile provider of heat treating services in the Pacific Northwest.

**Year Established:** 1984  
**Web Site:** www.stackmet.com  
**Local Employees:** 50 – 74  
**Local Address & Phone:** 5938 N. Basin Avenue  
Portland , OR 97217  
Multnomah County  
United States  
(503) 285-7703  
(503) 285-2785 (Fax)

**Key Personnel:** Nels Plough - President  
Bruce Davis  
Dave Ederer  
Tom Ederer

**Capabilities:** **Products**  
Wind Turbines  
Aircraft  
Hunting knives

**Special Materials**  
Aluminum  
Stainless Steel  
Titanium  
Nickel/Cobalt Alloys

**Certifications:** Boeing Specs           AMS 2762/SPS-203    BAC 5617  
Boeing Specs           MIL-H-6875           BAC 5613  
Douglas Aircraft Specs       MIL-H-6875    DPS 5.00-1HI  
FAA                    MIL-I-45208    Part 145 CRS KQ9R266B  
McDonnell Specs       MIL-I-45208    HP1-1  
NADCAP               AC7101/4  
NADCAP               AC7004

**Customer Base:** **Industry Sectors**  
Aerospace  
Defense/Military/National Security  
Energy/Utilities  
Environmental  
Government/Public Sector/Non-Profits  
Transportation

**Geographic Area:** Worldwide

**Affiliations:**

ASM International  
Heat Treating Network  
Metal Treating Institute  
National Association of Manufacturing