

Dynamic Power™



Built in the U.S.A



Partners in Fluid Power Engineering and Manufacturing Solutions!

Power Dynamics Innovations

1301 Martin Luther King Blvd.

Picayune, Mississippi, 39466

Telephone 601-229-0960

Email: sales@powerdynamicsllc.com

www.powerdynamicsllc.com
www.offshorepipelaying.com

www.marinewinches.com
www.redoxinc.com

www.pdihddrugs.com
www.pdiequipment.rentals

Power Dynamics Innovations LLC

Partners in Engineering and Manufacturing Solutions

POWER DYNAMICS INNOVATIONS LLC was established with the asset purchase of Power Dynamics LLC in June 2015 by Carl Liberty. Prior to the purchase Carl had been Vice President of operations for ten years and has played an integral part in building PDI's position as an industry leader in the Fluid Power Industry.



In 2019 PDI moved from **John C. Stennis Space Center** to their new home in Picayune Mississippi, an 89,000 sq. ft. facility in **Southwest Mississippi**. With a team of 60 full time employees provide worldwide **engineering and manufacturing solutions to the fluid power industry**.

The Picayune Industrial Park encompasses 126 total acres and is located adjacent to the western right-of-way of U.S. Highway 11 and approximately one mile from Interstate 59. The Park is within 50 miles of Gulfport, New Orleans, and Port Bienville.

In addition to access to major highways, Norfolk Southern Railroad line runs right through the heart of the Park. The Industrial Park is fully served by water, sewer, natural gas, electricity.

FLUID POWER INDUSTRY LEADER

Power Dynamics Innovations **engineering and manufacturing expertise** is known and respected throughout the fluid power industry. Key to PDI's success has been our team of dedicated employees providing successful fluid power solutions for over thirty years. PDI stands today as a leader in the industry, engineering **custom hydraulic power units (HPUs)**, **custom winches and pipeline tensioning equipment** along with **horizontal directional drilling units (HDDs)**, as well as providing **worldwide repair and maintenance field service**.



PDI's team of professionals understands the challenges of the diverse and ever-changing needs of our customers. As aging equipment infrastructures deteriorate, the repair and / or rebuilding might be the best "Cost Effective Solution" extending the life cycle of the equipment. As PDI began modifying and repairing other manufacture's HDD's in 2012, customers began to request new units that could be customized in a way that made them Simple, Reliable and Easy to Maintain. PDI has since developed a line of HDD drilling solutions available from 500,000 to 1,000,000 pounds of pull-back. With PDI's on-site service and maintenance options, clients experience minimal equipment downtime.

In addition to offering custom design, PDI also manufactures a wide range of fluid power light duty and heavy duty equipment, including its own line of **50, 80, and 100 KIP track-type tensioners, endo and stern rollers, conveyor systems, coil tubing reels, tensioner laydown winches and electronic control systems.**

In 2019, after years of being a Redox customer, Power Dynamics Innovations LLC had the opportunity to purchase the assets of Redox Inc. Our experience with this superior piping product made our decision to purchase the assets very easy. The Redox manufacturing process is a “trade secret” which had been developed, refined and has improved over the years. The REDOX process maintains the engineered cleanliness properties of the ID OF THE PIPE, (pictured to the right). The years of performance that Redox Piping Products deliver will speak for itself.



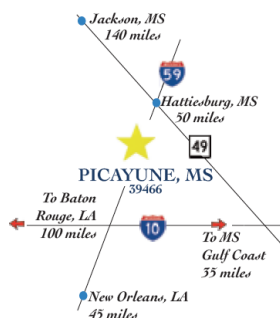
Our capabilities include hydraulic piping systems. Our expertise includes: design services based on fluid power design standards, shop and field fabrication, site installation, hydro-testing, flushing and qualification of completed product. Our knowledge of manufacturing hydraulic equipment fully qualifies us in the practices and procedures needed to produce reliable hydraulic systems to meet our client's needs.

REDOX is committed to offering you the best hydraulic pipe, as well as the technical information necessary to realize the full potential of your system.

To better serve our customers, PDI has developed a **twelve step manufacturing process** aimed at improving efficiency while insuring quality. An expert team of engineers provides superior design. Skilled craftsmen implement the design. Utilizing up-to-date computer technology, engineering drawings and job files that are readily available, assures little interruption in production. PDI's integrated manufacturing system works to provide customers with **safety, high performance, and cost effectiveness.**

Building reliable and cost effective custom equipment has been PDI's expertise for over 30 years. We appreciate our customers and their continued trust in PDI. We are proud to help them find solutions to complex problems and to extend their own capabilities. We can and do provide 24/7 worldwide Repair and Maintenance Services. **We have experienced service technicians and sales professionals available 24 hours a day, 7 days a week to meet these needs.** What makes PDI different is we can work on all manufactures equipment and can dispatch our service technicians within a few hours. PDI also offers repair and rebuilds in our Southwest Mississippi Plant.

Our full service Picayune Mississippi **facility** encompasses **89,000 square feet** housing offices, warehouse, machine shop, fabrication, assembly and service areas located on XX acres. From design to delivery, the Southwest Mississippi plant is designed to provide quality products to meet our customers' needs.



Picture of our Facility Here

We invite you to experience the PDI difference; call us today! We look forward to servicing your needs.

Telephone 601-229-0960

Email: sales@powerdynamicsllc.com

www.powerdynamicsllc.com www.pdihddrugs.com www.marinewinches.com www.offshorepipelaying.com

www.redoxinc.com www.pdiequipment.rental

PDI... A FLUID POWER INDUSTRY LEADER PROVIDING THE FOLLOWING PRODUCT LINES

DYNAMIC POWER TM Engineered Solutions for
**WINCHES - HYDRAULIC and ELECTRICAL
POWERED** PAGE 4

DYNAMIC POWER TM Engineered Solutions for
HYDRAULIC POWER UNITS PAGE 6
DIESEL AND ELECRC HPU’S UP TO 1200 HP
And **Hydraulic Piping Systems**

DYNAMIC POWER TM Engineered Solutions for
REDOX ENGINEERED PIPE PAGE 8
For Hydraulic Piping Systems

DYNAMIC POWER TM Engineered Solutions for
LINEAR PIPE TENSIONERSPAGE 9
50, 80, 100 & 200 KIP PIPE TENSIONERS

DYNAMIC POWER TM Engineered Solutions for
PIPE HANDLING EQUIPMENTPAGE 11

DYNAMIC POWER TM Engineered Solutions for
PLC CONTROLS PAGE 12

DYNAMIC POWER TM Engineered Solutions for
MAXI HDD DRILLING RIGS PAGE 13
500K, 750K & 1M RIGS *FOR THE LARGE-DIAMETER HDD DRILLING MARKET*

DYNAMIC POWER TM Engineered Solutions for
**SPECIAL ENGINEERING AND
CONSTRUCTION PROJECTS** PAGE 14

DYNAMIC POWER TM Engineered Solutions for
**Providing 24/7 Worldwide Repair
and Maintenance Services** PAGE 15

We invite you to experience the PDI difference; call us today! We look forward to servicing your needs.

Power Dynamics Innovations

DYNAMIC POWER™

HYDRAULIC / ELECTRIC POWERED WINCHES

PDI designs, engineers and manufactures new Standard and / or Custom Winches, with or without HPU packages. We have a standard line of winch sizes, but can also custom design and fabricate winches to suit our client's requirements (capacity, line pull, configuration, etc.). These winches can be hydraulically, electrically or mechanically driven.

PDI was awarded a contract by the Naval Surface Warfare Center Carderock, for the design and construction of four winch packages consisting of the winch, diesel powered HPU and Controls for SEAFAC, Southeast Alaska Acoustic Measurement Facility, located in Ketchikan, AK. The Winch Packages will be used in a Three Point Mooring System during the handling of underwater equipment.

PDI supplied three positioning winch packages and one anchor winch package. The design includes mounting the major components on a self-supporting master skid, with the operator's station movable to either side of the winch. The master skid foundations have lifting pad eyes that make it very easy to position the winch packages.

Each winch package also contains the primary power source consisting of a diesel Tier 3 marine rated engine, along with local control consisting of engine and hydraulic instruments to operate the winch from a seated position. The design challenge in meeting the winch performance specifications was keeping the winch package to a size and weight that would not require special transporting permits.

PDI was awarded in March 2017 a contract by Conrad Shipyard, Morgan City, LA, for the design and construction of Winches and Winch Controls for the U.S. Army Corps of Engineers "Wicket Lifter Barge" which will be used to raise and lower steel dam wickets and perform maintenance functions at the Olmsted Locks and Dam on the Ohio River. In 2019 PDI was then awarded a second set of winches for their newly constructed backup "Wicket Lifter Barge".



Telephone 601-229-0960 Email: sales@powerdynamicsllc.com

PDI can re-manufacture “older winches” to meet the needs of our clients, converting old “out of service” winches into productive assets. Our experienced team of specialists can re-power and/or overhaul your existing winches to extend the life of your investment. We can tear down and repair/replace/upgrade components, improve lubrication and return your older equipment to like new condition.



Refurbished Skagit



Refurbished Manitowoc 390



Refurbished Amcon

Power Dynamics Innovations is uniquely suited to upgrade and / or refurbish your existing winches. Our design and engineering staff has developed an international reputation for innovative upgrades on major winch manufacturer's equipment, providing precision component designs, robust assemblies and rugged products. Additionally our engineering staff conducts comprehensive testing to assure all products and components perform to client's specifications. Our technicians, fabricators and machinists can refurbish your present equipment, extending their service life for the harsh offshore environment.

PDI Winch Rentals

In addition to being a manufacturer and re-conditioner of **HYDRAULIC POWERED WINCHES**, PDI is offering Winch products for lease. In some cases these winches can be custom configured to meet our customer's requirements (capacity, line pull, configuration, etc.). These winches are hydraulically driven, but PDI might be able to offer an electrically driven winch package.

In addition to winch rental, we can provide technical assistance and service technicians to insure a trouble-free rental installation and can provide training to our client's operators and support personnel. We will provide extensive phone support during the rental and can dispatch our field service technician to our customer's jobsite anywhere in the world.

For more information regarding our winch rental offerings please call us at 601-229-0960.

PDI maintains a service department to repair and troubleshoot client's component systems, such as winches, gear drives, pumps, motors, tensioners, hydraulic power units, etc. We have experienced service technicians and sales professionals available 24 hours a day, 7 days a week to meet our client's critical needs worldwide.

Installation and setup of PDI designed and manufactured systems and components are very important to our client's needs. Power Dynamics Innovations can supply technical assistance and service technicians to insure a trouble-free installation and can provide training to our client's operators and support personnel.

We can also provide extensive support after the sale at our customer's jobsite anywhere in the world.

We build the world's best winches, not simply by meeting industry standards, but by setting the Standard.

Telephone 601-229-0960

Email: sales@powerdynamicsllc.com

www.powerdynamicsllc.com www.marinewinches.com www.offshorepipelaying.com
www.pdiequipment.rentals



Power Dynamics Innovations

DYNAMIC POWER™

HYDRAULIC POWER UNITS

PDI Engineered Hydraulic Power Units provide a reliable high efficiency and long life power source for an extensive range of hydraulic requirements. From Large Complex Hydraulic Systems to Simple Pump / Motor Units, these systems deliver maximum power output in a robust and compact design for both electric and diesel powered operations.

DUAL 200 HP HPU

PERFORMANCE SPECIFICATIONS

Height:	98"
Width:	107"
Length:	109 1/2"
Weight:	13,560 LBS (Wet)
Oil Capacity:	300 GAL.
Prime Mover:	(2) 200 HP 1800 RPM Electric Motors
Required Cooling Water:	50 GPM

Standard features include hydraulic reservoir, suction and return filter, heavy-duty pump, hydraulic cooler, pressure-control valves, pressure gauges, circuit breakers and start/stop controls engineered to client's specifications.



DUAL 150 HP

80 KIP TENSIONER HPU

PERFORMANCE SPECIFICATIONS

Length:	91 1/16"
Width:	91 1/16"
Height:	98 3/16"
Weight:	14,200 lbs.
Oil Capacity:	300 gal.



We invite you to experience the PDI difference; call us today! We look forward to servicing your needs.

Telephone 601-229-0960

Email: sales@powerdynamicsllc.com



Power Dynamics Innovations Engineered Hydraulic Power Units deliver filtered high and low pressure hydraulic fluids and are designed as open framework or fully enclosed. HPUs are comprised of supply/return reservoir with case drain connection, dual electrically driven hydraulic pumps, accumulators, filters and associated control and instrumentation.

The complexity or simplicity of the Hydraulic Power Unit is purely down to the client's request based on the requirements of the project. PDI can offer a fully standalone autonomous power unit, whereby all control and instrumentation devices are terminated within a Programmable Logic Controller (PLC). This allows fully automatic control of the system or allows it to be coupled together with communication links to a Master Control

System for operation control and monitoring.

These systems can be built strictly in accordance with client specifications or PDI can offer a fully functional design specification in the absence of any specific requirements. This will be detailed by our team of engineers while working directly with the client, ensuring the best possible technical and commercial solution.

Power Dynamics Innovations has expanded our capabilities to include hydraulic piping systems. Our expertise includes: design services based on fluid power design standards, shop and field fabrication, site installation, hydro-testing, flushing and qualification of completed product. Our knowledge of manufacturing hydraulic equipment fully qualifies us in the practices and procedures needed to produce reliable hydraulic systems to meet our client's needs.





Power Dynamics Innovations LLC

DYNAMIC POWER™

Piping Products

REDOX

REDOX is committed to offering you the best hydraulic pipe, as well as the technical information necessary to realize the full potential of your system.

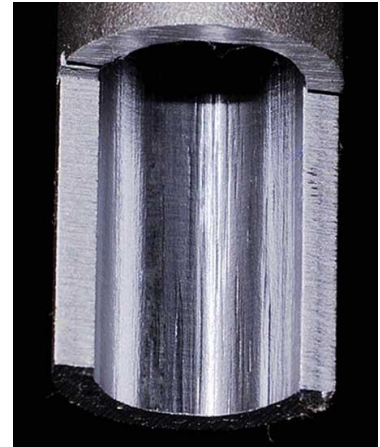
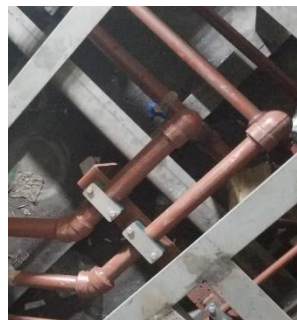
Companies will benefit and profit from the efficiency that only a properly engineered hydraulic system can offer. With over 90% of the wetted surface of your system composed of pipe and fittings—the decisions that are made today on the selection of the piping will have an impact on the profitability of your company for years to come.

Make the right choice for your pipe; always use REDOX Piping Products. We are committed to supplying the best piping for hydraulic systems. We provide a superior alternative to pickled and oiled pipe and tubing, (pictured to the right).

We consistently follow hydraulic standards such as SAE J 1227, ASTM D4174, which assures you of receiving pipe for your system that will meet the ISO 14/12 cleanliness standard.

No longer do you have to subject your sensitive servo valves, pumps and actuators to rust and destructive gross contamination. Because flushing costs will be reduced by virtue of you not having to flush unwanted contamination from your system, REDOX piping will start saving you money even before initial start-up.

Our capabilities include hydraulic piping systems. Our expertise includes: design services based on fluid power design standards, shop and field fabrication, site installation, hydro-testing, flushing and qualification of completed product. Our knowledge of manufacturing hydraulic equipment fully qualifies us in the practices and procedures needed to produce reliable hydraulic systems to meet our client's needs. **We have experienced service technicians and sales professionals available 24 hours a day, 7 days a week to meet these needs.**



Redox Pipe



Pickled and Oiled

We invite you to experience the PDI difference; call us today! We look forward to servicing your needs.

Telephone 601-229-0960

Email: sales@powerdynamicsllc.com

www.powerdynamicsllc.com www.redoxinc.com www.marinewinches.com

PAGE 8

Power Dynamics Innovations LLC

DYNAMIC POWER™

LINEAR PIPE TENSIONER

**Equipment - 50 KIP, 80 KIP, 100 KIP and 200 KIP
PIPE TENSIONERS**

Pipe lay track tensioner designs date back to the late 1960s when track machines first started replacing the original wheel designs. Tensioners are the key element of pipe lay systems and are used onboard pipe lay vessels to keep tension on the pipeline while it is being lowered onto the seabed.

PDI designed, engineered and manufactured tensioner products offer significant improvements in productivity and safety while achieving maximum work flow efficiency. PDI Tensioners are custom built to our client's needs and performance specifications.

Track tensioners have two vertically or horizontally opposed tracks that squeeze the pipe to generate the necessary traction for linear pull while achieving an equal circumferential squeeze on the pipe. PDI tensioners employ Electrical - Hydraulic power with PD controller by which the tension in the pipe can be controlled even when the vessel is subject to motions.

Along with tensioners and their control systems, PDI offers a full turnkey package of handling equipment that includes HPUs, pipe handling equipment, line-up systems, pipe transfer carts and winches. In addition, our Engineers are continuously researching new techniques and applications to offer our clients the most efficient equipment in the market.

Our capabilities also include hydraulic piping

systems. Our REDOX piping products maintain the engineered cleanliness properties of the ID OF THE PIPE and is superior to pickled and oil oiled pipe. Our expertise in piping systems includes: design services based on fluid power design standards, shop and field fabrication, site installation, hydro-testing, flushing and qualification of completed product.

We Can Provide 24/7 Worldwide Maintenance and Repair Services

What makes PDI different is we can work on all manufacturers equipment and can dispatch our service technicians within a few hours. PDI also offers repair and rebuilds in our Southwest Mississippi plant.

As aging equipment infrastructures deteriorate, the repair and / or rebuilding might be the most "Cost Effective Solution" to extending the life cycle of your equipment. Equipment "Breakdowns" can also be very costly. With PDI's on-site service our clients experience minimal equipment "Downtime".

We invite you to experience the PDI difference; call us today!

Telephone 601-229-0690

Email: sales@powerdynamicsllc.com

www.powerdynamicsllc.com www.reduxinc.com www.offshorepipelaying.com



PDI LINEAR PIPE TENSIONER SPECIFICATIONS

50 KIP LINEAR PIPE TENSIONER – PERFORMANCE SPECIFICATION

Design Type:	Vertical Enclosed
Maximum Linear Tension:	50,000 lbs.
Maximum Lay Speed:	0-80 feet per minute recovery & 0-75 feet per minute pay out
Number of Tracks:	2
Pipe Size Range:	2 – 24 inches (2 3/8- 24 inches includes coating)
Nominal Tensioner Opening:	30 inches wide x 36 inches high
Pipe Contact Length:	120 inches
Maximum Clamp:	80,000 lbs.
Maximum Clamp per Foot:	12,800 lbs. per foot
Pipe B.O.P.:	58 15/16 inches
Controls:	Electronic Digital
Operation Weight:	28,000 lbs.
Height:	141 1/4 inches (11 feet- 9 1/4 inches)
Width:	91 3/16 inches (7 feet-7 3/16 inches)
Length:	180 inches (15 feet)



100 KIP LINEAR PIPE TENSIONER – PERFORMANCE SPECIFICATION

Design Type:	Vertical Enclosed
Maximum Linear Tension:	100,000 lbs.
Maximum Lay Speed:	0-80 feet per minute recovery & 0-90 feet per minute pay-out
Number of Tracks:	2
Pipe Size Range:	4 – 40 inches (40 inches includes coating)
Nominal Tensioner Opening:	56 inches wide x 56 inches high
Pipe Contact Length:	150 inches
Maximum Clamp:	200,000 lbs.
Maximum Clamp per Foot:	16,000 lbs. per foot
Pipe B.O.P.:	56 15/16 inches
Controls:	Electronic Digital
Operation Weight:	55,090 lbs.
Height:	173 9/16 inches (14 feet-5 9/16 inches)
Width:	103 1/4 inches (8 feet-7 1/4 inches)
Length:	245 7/16 inches (20 feet -5 7/16 inches)

Telephone 601-229-0960

Email: sales@powerdynamicsllc.com

1301 Martin Luther King Blvd., Picayune MS. 39466

www.powerdynamicsllc.com www.marinewinches.com www.offshorepipelaying.com
www.pdihddrills.com www.redoxinc.com www.pdiequipment.rentals



Power Dynamics Innovations

DYNAMIC POWER™

PIPE HANDLING

EQUIPMENT

PDI designs, engineers and manufactures pipe handling equipment for pipe lay vessels, control cabs, workstations and more. Our expertise includes knowledge of pipe laying processes for a large variety of clients and barges.

Our experience allows us to optimize the complete pipe laying process for both existing and newly built barges. We start by setting up a 3D model of the complete production facility and by simulating all production steps, including all related equipment. Based on this simulation, all process equipment can be developed to achieve maximum work flow efficiency under safe working conditions. Our equipment offers a significant improvement in productivity and safety by moving floor hands out of harm's way. Mechanizing the pipe handling process improves efficiency and operating consistency. Our products include:

Traverse Pipe Conveyor

Endo Conveyor Roller Hydraulic Elevated / Hydraulic Powered

Endo Conveyor Roller Manual Elevated / Hydraulic Powered

Endo Conveyor Roller Hydraulic Elevated / No Power

Endo Conveyor Roller Manually Elevated / No Power

Transport Carts

Five Axis Line-Up Modules

Adjustable Height Pipe Rollers

Adjustable Height Pipe Support Half Track

In addition to pipe laying production handling equipment, PDI has successfully designed and delivered stand-alone equipment varying from handling and lifting equipment to a variety of winch systems with custom equipped HPUs and controls.

We invite you to experience the PDI difference; call us today!

Telephone 601-229-0960

Email: sales@powerdynamicsllc.com

1301 Martin Luther King Blvd., Picayune MS. 39466

www.powerdynamicsllc.com www.marinewinches.com

www.offshorepipelaying.com

www.pdihddrugs.com

www.pdiequipment.rentals





Power Dynamics Innovations

DYNAMIC POWER™

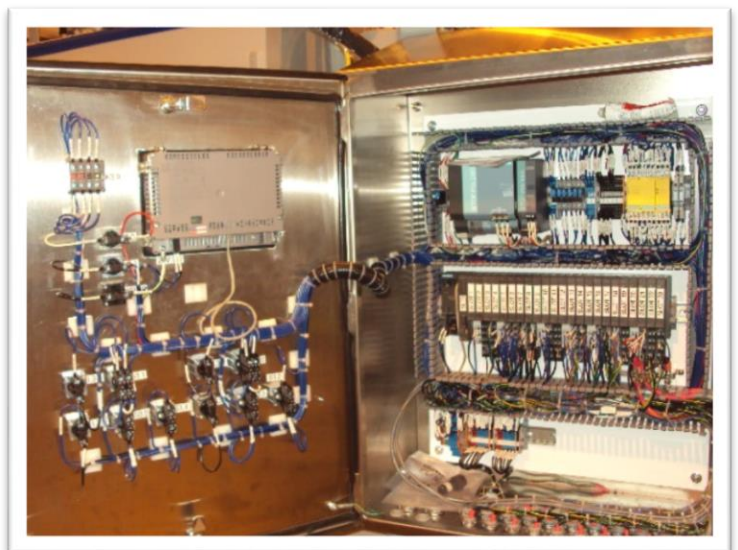
PLC CONTROLS

PDI offers a complete line of Automation and Process Control Systems. From Dual and Triple Winch Control Systems and Hydraulic Power Units to Linear Pipe Tensioners and HDD Drilling Rigs, PLC controlled, hardwired or wireless, including remote service and monitoring communication capabilities. PDI can design, engineer and

manufacture a complete solution. If you are planning a new control system or upgrade of an existing system, PDI is the answer.

PDI is the complete System Integrator with knowledge and expertise to incorporate all of today's complex components into your Process Control System design. PDI is the complete Automation answer whether you need constant tension control or a SCADA (Supervisory Control and Data Acquisition) system for your production platform.

PDI believes that in today's global market, equipment design should be dependable, upgradeable, safe and should provide user-friendly operation. So whether you need to upgrade an old control console to an HMI (Human Machine Interface) or a new RMHS (Robotic Material Handling System), PDI can deliver a complete



solution.

We invite you to experience the PDI difference; call us today! We look forward to servicing your needs.



Power Dynamics Innovations

DYNAMIC POWER™

500K, 750K and 1M HDD Rigs

As aging underground infrastructures deteriorates, repair and rebuilding requires equipment that creates as little disruption and environmental damage as possible. **Horizontal Directional Drilling Rigs (HDD)** can lessen that impact. These HDD Drilling solutions are available from 500,000 to 1,000,000 pounds of pull back.



Building time proven, reliable and cost effective custom equipment has been PDI's expertise for over 30 years.

500K DRILLING RIG

DIMENSIONS (TRANSPORT)

Curb Weight: Approx. 70,000 lbs.

Length: 45 ft.

Width: 8 ft. 6 inches

Suspension: 60,000 lb. dual axle

Drill Rack Angle: 8 - 12 degrees

FRONT BREAKOUT VISE

Max clamp force: 452,395 -lbs.

Max rotating force: 150,000 -lbs.

Three to Six Jaw Clamp

Travel = 72"

OPERATIONAL

Max Thrust: 500,000 lbs.

Max Pullback: 500,000 lbs.

Max Spindle Torque: 50,000 -lbs.

Max Spindle Speed: 68 rpm.

Max Carriage Speed: 70 ft. /min

REAR BREAKOUT VISE

Max clamp force: 301,593 -lbs.

OPTIONAL: FRONT DEADMAN

LARGE: 16 ' long x 5' wide x 2' high

HDD 500K POWER SOURCE

Engine: Caterpillar C-27

Gross horsepower (max): 800 HP

Max Engine Speed: 2100 rpm

EPA Certification Family: Tier 2

Fuel Type: Diesel

Fuel Capacity: up to 1150 Gal

Weight: 30,700 lbs. (No Fuel)

Weight: 38,800 lbs. (Full Fuel)

Hydraulic Tank Capacity: 450 Gal.

Length: 20 ft. Width: 6.33 ft. Height: 10 ft.





Power Dynamics Innovations

DYNAMIC POWER™

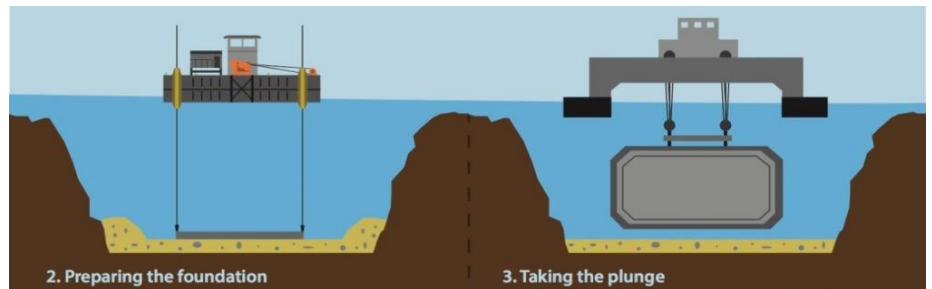
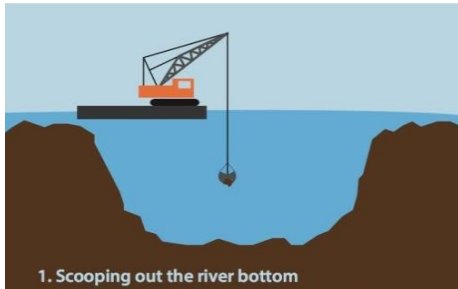
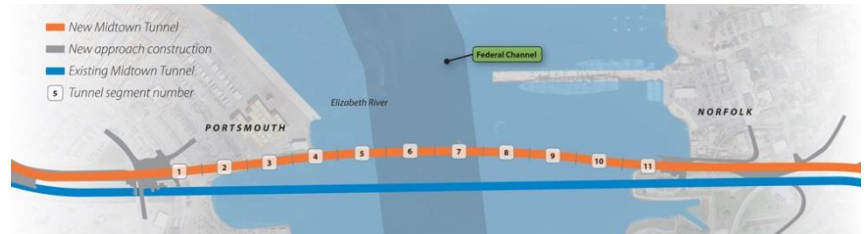
Special Engineering and Construction Projects

SKW Constructors (a Skanska, Kiewit, and Weeks Marine Joint Venture) is the design-build contractor for the **Elizabeth River Tunnels (ERT) Project**. The Project is technically challenging and the new Midtown Tunnel must be built under an active waterway and federal channel. Power Dynamics has been contracted by our Client SKW to provide Fluid Power Engineering and Design on key pieces of the Hydraulic Systems to meet these technical challenges. PDI was also contracted to manufacture these key system components.

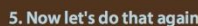
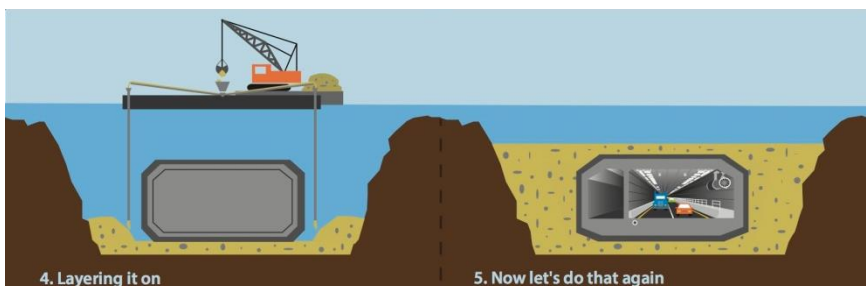
The **Elizabeth River Tunnels (ERT) Project** was named the #1 Road Project in North America in 2014 by Roads & Bridges magazine. The magazine highlighted ERT's commitment to quality construction of the new Midtown Tunnel, which will carry two lanes of westbound traffic from Norfolk to Portsmouth. The Project's Design-Build partner, SKW Constructors, a Skanska, Kiewit, Weeks Joint Venture (JV), was recognized for the successful implementation of the Project's more challenging and complex elements.

Midtown Tunnel

The existing US 58 Midtown Tunnel is the most heavily traveled two-lane road east of the Mississippi. Since it opened in 1952, population has increased nearly 70% and tunnel usage by 600%. A second tunnel is being built to relieve congestion and improve safety by eliminating bi-directional traffic in the existing Midtown Tunnel. The new Midtown Tunnel will increase capacity and reduce congestion on US 58 between Norfolk and Portsmouth. PDI provided key components including the Raker Pile Driving System, the Screed Barge and Backfill Barge Hydraulic and Control Systems and the Lay Barge Winch Refurbishment and New



Control Systems. PDI also updated the Hydraulic Piping Systems and provided Containerized Climate Controlled Operation Control Structures. (Copyright Graphics used with the permission of ERT)



Learn about the ERT Project at www.midowntunnel.org
We invite you to experience the PDI difference; call us today!

Telephone 601-229-0960

Email: sales@powerdynamicsllc.com

Power Dynamics Innovations LLC

We Can Provide 24/7 Worldwide Maintenance and Repair Services

PDI provides worldwide Custom Engineering and Manufacturing solutions and is known and respected throughout the fluid power industry. As aging equipment infrastructures deteriorate, the repair and / or rebuilding might be the most “Cost Effective Solution” to extending the life cycle of your equipment. Equipment “Breakdowns” can also be very costly. With PDI’s on-site service our clients experience minimal equipment “Downtime”.

What makes PDI different is we can work on all manufacturers’ equipment and can dispatch our service technicians within a few hours. PDI also offers repair and rebuilds in our Southwest Mississippi plant. Our team of experts can offer “Quality Cost Effective Solutions” to your equipment repair issues. Our expertise includes the following types of products but is not limited to those product types. If you have equipment reliability issues give us a call. 601- 229-0960 Or drop us an email at sales@powerdynamicsllc.com.

Our expert team can Custom Engineer, Manufacture, Re-manufacture and provide service for the following equipment types.

- HDD “Maxi” Drilling Rigs
- HDD Assist Pipe Pushers and Pullers
- Power Cable Pulling Units
- Track Type Cable Tensioners
- Nitrogen Pumping / Pulling Units
- Electronic Controls, Load Monitoring and Logging Systems
- Thermal Cooling Oil Transfer Units
- Linear Pipe Tensioners
- Hydraulic Power Units - Diesel & Electric
- Cable Reeling Units
- Winches – Hydraulic & Electrical Powered
- Hydraulic Piping Systems
- Custom Equipment Design & Engineering
- All Manufactures Hydraulic Equipment

And Worldwide 24/7 Field Service.



We invite you

to experience the PDI difference; call us today!

1301 Martin Luther King Blvd., Picayune Mississippi, 39466

Telephone 601-229-0960

Email: sales@powerdynamicsllc.com

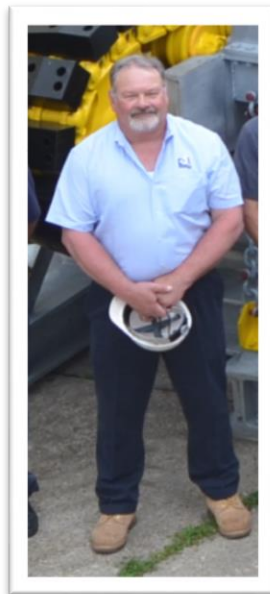


Power Dynamics Innovations LLC

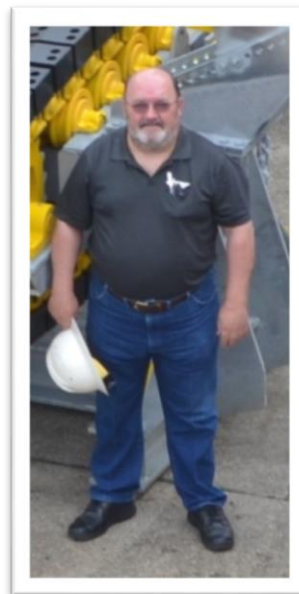
Partners in Engineering and Manufacturing Solutions



Senior Management Staff



Lionel Broudreux
SENIOR VICE PRESENT



Carl Liberty
MANAGING MEMBER

Larry Metting
VP ENGINEERING

We invite you to experience the PDI difference; call us today! We look forward to servicing your needs.

1301 Martin Luther King Blvd., Picayune Mississippi, 39466

Telephone 601-229-0960 Email: sales@powerdynamicsllc.com

www.powerdynamicsllc.com www.pdihddrugs.com www.marinewinches.com www.offshorepipelaying.com