

Delivering Intelligent Solutions

PORTFOLIO OF APPLICATIONS & PRODUCTS

Defense: Shipboard Automation

- Aircraft, weapons and cargo elevators Steering gear Anchor windlasses, capstans
- Stabilizers
 - Automated boat handling and
 - COMFIRE[®] passive fire protection

Hazardous Environments (DOE, Nuclear)

- - waste material • Nuclear manipulators and crane
 - products Detonator inspection
 - Ordnance handling
 - Wet and dry size reduction

Consumer Goods Material Handling

- Palletizing and depalletizing
- Order picking
- Case packing and cartoning
- High speed packaging
- Tray loading Layer formation

I-STIR[™] Technology: Friction Stir Welding

- FSW force & motion control
- Robotic weld systems
- Research machines
- Aerospace production
- Process development
- FSW fixtures and tooling
- Friction plug and spot welding

Life Science & Process Automation

- Lab automation Laser processing
 - Robotics and precision motion control
 - Vision systems • Hydrophilic coatings

• Aerospace precision drilling Trimming of aerospace materials

Aerospace/Custom Integrated Processes

- Ultrasonic cutting Adaptive milling
- Laser scribing Automation of custom processes Non-destructive inspection (LaserUT[®])

Industrial Manufacturing



Laser Technology (sdilasers[™])

- Laser ultrasonic inspection LIDAR
- High energy physics THz imaging
 - Laser isotope separation Coating removal/cleaning

Heavy Lift Equipment (Specialty Cranes)

- Bridge cranes • Overhead gantry cranes
- Cableways • Large scale automated
- transporters
- Custom traveling roof systems

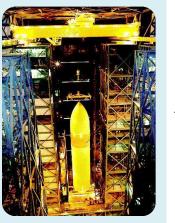
Offshore Oil & Gas

- Boat launch and recovery
- Cranes and hoists Doors
- Hatches/scuttles/manholes



Fireproof modular systems

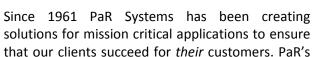












clients come from many diverse industries including aerospace, marine/defense, hazardous environments/nuclear, consumer goods, heavy lift/specialized cranes, life science and process automation, and industrial.

Company Profile

PaR thrives on finding the right, and many times first-of-a-kind solution for high-precision and highaccuracy robotic and remote material handling applications. With thousands of installations around the world, PaR has developed processes to successfully deliver the custom equipment solution that guarantees its clients will succeed.

Since being taken private in 1993, PaR has been consistently profitable with steady, year-after-year revenue growth. PaR's success is based on delivering challenging projects by focusing on business processes, growth initiatives, and leadership development.





PaR Systems is an integrated group of businesses that specialize in advanced engineered systems. Clients come to PaR for equipment solutions that add real value for their customers.

Headquartered in Shoreview. Minnesota, PaR serves customers worldwide.

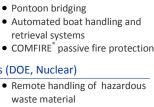


Market Segments

- Robotics Aerospace
- Energy (DOE),
- Environmental /
- Nuclear
- Industrial Life Sciences
- Material Handling
- Food & Beveraae
- Manufacturing
- Specialty Cranes

Marine/Defense

- Naval Shipyards
- Defense/Navy
- Commercial
- Shipyards
- Marine Services
- Offshore Oil & Gas
- Specialty Industrial











KEEPING THE WORLD SAFE



In the late 1950's, General Mills (GMI) developed remote handling equipment for nuclear applications. When GMI decided to divest from this business, four engineers spun off from GMI and started PaR Systems, Inc. in 1961. The growth of the nuclear industry created more demand for remote handling equipment, and PaR began supplying their manipulator systems to clients around the world. This manipulator technology also evolved for use in remote fuel handling. During the 1980's, PaR continued to develop their robotic technology for use in other industries, beginning with aerospace, for applications that require drilling, milling, routing, non-destructive inspection (NDI), waterjet cutting and general material handling, while continuing to provide remote handling equipment to the nuclear industry. PaR continues to advance their robotic technologies and can provide equipment for a variety of specialized applications across a wide range of demanding commercial, government, and defense segments.

PaR Systems' clients seek solutions to challenging automation needs and characterize the company and its people as being truly committed to assuring customer satisfaction every step of the way. PaR's clients know that designing, building and delivering complex automation systems requires commitment to successfully manage the technical, schedule, and processes in order to satisfy the required throughput, quality and safety specifications for the project.

PaR has increased its focus on its defense and marine clients and continues to

deepen its expertise in material handling and automation in other key segments. PaR's acquisitions have aided their vision of being recognized as the preferred custom integrated automation equipment provider in a

number of critical industries. These acquisitions have included businesses which provide specialized on-board equipment for Navy ships (Jered, Unidynamics, and American Heavy Industries), high integrity custom crane and heavy material handling equipment (Ederer), lab automation and semiconductor automation systems (SSi Robotics and MöZAK), a patented non-destructive



composites inspection technology from Lockheed Martin (LaserUT[®]), a high repetition rate TE CO₂ laser technology (SDI Lasers), a composite technology (COMFIRE[®]) for passive fire protection in marine applications (Marine Systems Technology and MST Engineering), and a Non-Destructive Testing (NDT) Services business located at NASA's facility on the Cape Canaveral Air Force Station, FL.

CREATIVITY AND PASSION

With around 500 employees (over 75% of whom are technical); PaR has the engineering and manufacturing capabilities to address a wide range of requirements. PaR's highly skilled and long tenured employees are the key to the company's well-earned reputation for systems reliability and client satisfaction. With their depth of experience, PaR's engineers can work creatively and responsively with the client's engineers from conception through design, installation, and post-sale support. PaR regularly draws on expertise across its specialty segments to solve first-time automation challenges. As a successful, consistently profitable



company, PaR has proven it can meet its commitments, and over history, has established a reputation for a 100% project success rate.

PaR's robotic systems are performing critical manufacturing or inspection processes on the latest aircraft, including Airbus A380, Boeing 787, JSF (F-35), F-18, and many others. X-ray systems are inspecting intact aircraft and space shuttle components, and 5-axis industrial removal systems are used to make a wide variety of critical parts. Robotic material handling systems automatically package, stack, and palletize a wide range of products, while remote handling systems are used throughout the DOE complex and many nuclear sites worldwide to reliably handle and process hazardous materials.



PaR is also delivering automated vial cappers and labelers for clinical laboratories, and integrated solutions for the life sciences and process automation markets. The Navy uses PaR's elevators to move aircraft, weapons and cargo, launch and recover, manned and unmanned surface and subsurface vehicles, and equipment to steer and anchor their largest ships. PaR's cranes move the heaviest loads like the 5,100 ton crane for the Olmsted Dam project, and provide new expertise for crane designs into Navy applications.