

▶ Touchdown, Parker

The team behind better landings



Aircraft Wheel & Brake Division





Regional aviation

More and more regional aircraft manufacturers are turning to Cleveland Wheels & Brakes for cost and performance advantages. You'll find our brand on planes made by Beech, Cessna, and deHavilland.



Rotorcraft

New applications by Bell, Sikorsky, Agusta, Stork SP Aerospace, and Boeing are flying high and landing dependably with Parker landing gear and brake control systems, due in part to our global sourcing, reliability programs, and teaming agreements.



Very light jets

This new class of aircraft for four to six passengers, including the Eclipse, relies on the premium performance of Parker for a best-value, cost-per-landing program.



General aviation

Virtually all general aviation OEMs specify our wheels and brakes under the Cleveland Wheels & Brakes brand, including Beech, Cessna, Cirrus, Diamond, Grob, Lancair, Mooney, Piper, Vans, and the U.S. government.



An integrated approach to the needs of individual aircraft

Performance driven

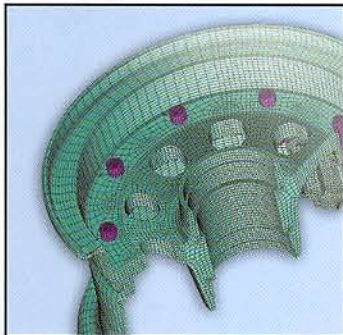
From landing gear actuators, shimmy dampers, parking valves, power packs, and master cylinders to internal, single- and double-caliper external and rotor brakes; from main-wheel, nose-wheel, and tail-wheel assemblies to landing gear and brake control systems, it's our job to deliver better landings through premium performance.

Team solutions

Whether as components, assemblies, or systems, our designs minimize risk and maximize solutions, meeting your requirements and specifications to a T. Our cross-functional teams of specialists work with your people, as well as other Parker divisions and leading aircraft and aircraft landing gear assembly manufacturers, to optimize designs for aircraft weight, operating temperatures, wear, reliability, cost effectiveness, and delivery. These teams have been charged with full responsibility for system specification, design, integration, and qualification, including FAA certification.

Engineering, development, and testing

The integrity of our work begins with translating customer application requirements into production design. Advanced engineering tools like computational fluid dynamics and finite element analysis combine with static and dynamic performance testing to increase efficiency and total quality from the start of a project. Custom-designed data analysis and simulation tools work to optimize product performance. And the completion of thousands of cycles under extreme conditions verifies the quality of every wheel and brake system and hydraulic assembly we produce.



Big picture thinking

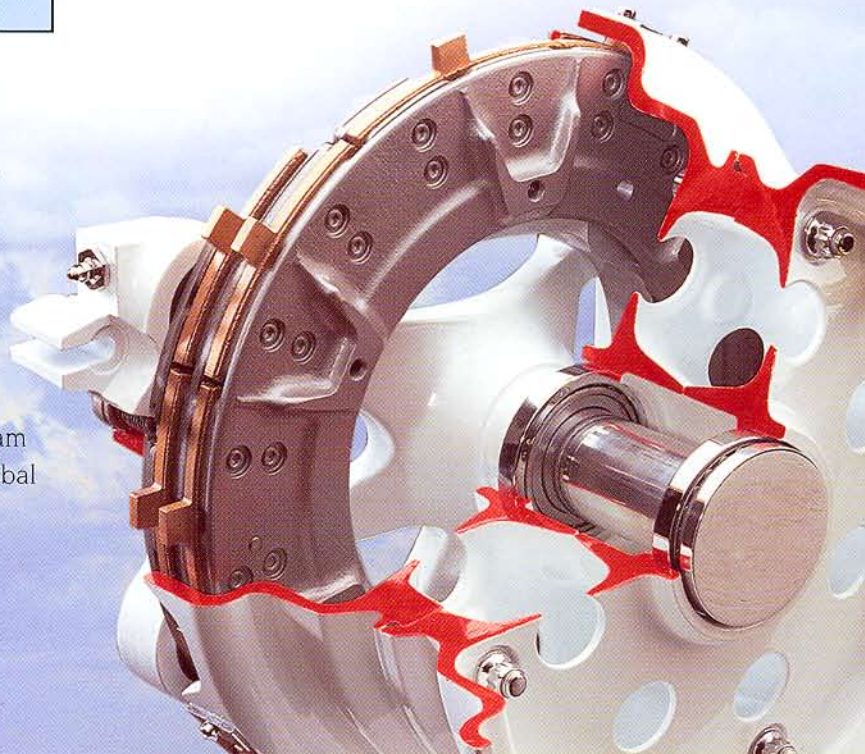
At Parker, we understand what today's aircraft manufacturers need to succeed. Our capabilities have evolved to meet the demanding requirements of the marketplace, and now include such critical initiatives as global sourcing strategies, cost-per-brake-landing programs, and teaming agreements to provide total landing gear and brake control systems. We employ the strategic use of forging families, reliability validation, rapid prototyping, and full program management. What's more, our success in utilizing global supply channels has allowed us to provide the lowest total cost of ownership and minimized lead times for development and production.



Branded for excellence

Cleveland Wheels & Brakes is one of the most respected names in aviation wheels and brakes. It is a name that carries with it over 60 years of safe landings through hundreds of FAA TSO qualifications on single- and twin-engine products.

The brand is synonymous with better braking, smoother and more reliable landings, convenient availability of products and services, including conversion kits and spares, and welcome savings on maintenance, downtime, and labor. With applications on corporate jets, turboprops, rotorcraft, tilt rotors, and most light twin- and single-engine aircraft, Cleveland wheels and brakes are found on over 80 percent of the current general aviation fleet.



Lifetime customer support

You can count on full support from the Aircraft Wheel & Brake Division, as well as our authorized distributors worldwide.

From spares, repairs, and rotatable pools, to training and field service engineering, our dedicated global organization provides you with a complete range of system-level support services. These include the flexibility of customizable options that share the risk of lifetime support. Take for example, our cost-per-brake-landing program. This program actually guarantees performance, both in the air and on the books.

For immediate overhaul and repair needs, customers rely on our Cleveland factory direct service center, which is FAA, JAA, and ISO certified, as well as many distributor wheel and brake shops.

Extended service and support are available through the following:

- Our Aircraft Wheel & Brake web site, www.clevelandwheelsandbrakes.com
- Our technical service hotline, (800) 272-5464
- Technical service e-mail, techhelp@parker.com
- Our product applications catalog and maintenance manual, available in hard copy, CD-ROM, and on our web site

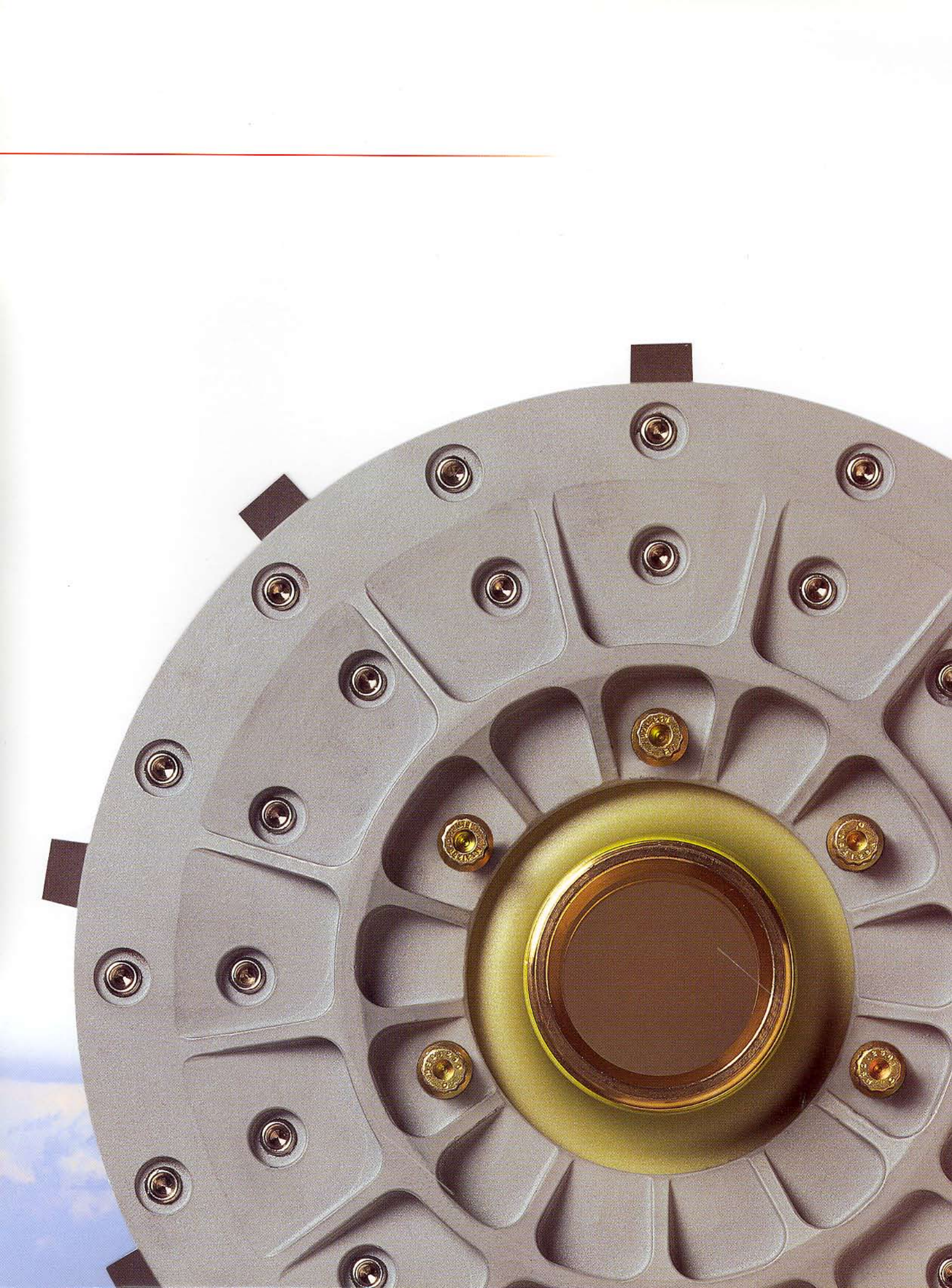


Family connections

Backed by Parker Hannifin Corporation and the Parker Aerospace Group, the Aircraft Wheel & Brake Division is ISO 9001/AS9100 certified. We are an organization with the connections to deliver mature equipment at entry into service, and add value to both the process and the product. **Want to know more about us?**

Call (440) 937-6211.







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Cleveland
Wheels & Brakes



Building competitive advantage

Parker Aircraft Wheel & Brake is a complete brake control system supplier working with other Parker divisions and recognized industry leaders to build competitive advantage every step of the way. From design and development, through integration, certification, and lifetime support, we're the team to trust for the best landings.

Decades of service, millions of installed hours



Business aviation

Many of the world's leading business aircraft manufacturers rely on our respected Cleveland Wheels & Brakes brand. These include Adam, Beech, Cessna, deHavilland, Eclipse, Pilatus, Piper, and many others.



Military

Helicopters, military trainers, and unmanned aerial vehicles (UAVs) benefit from our safe, reliable braking both at home and abroad. You'll find us on the AH-64 Apache, UH-60 Black Hawk, CH-53 Sea Hawk, and V-22 tilt-rotor programs, among others.



1936
Cleveland Aircraft Products founded by Elmer VanSickle.

1956
First Cleveland external disc brake system installed.

1978
VanSickle purchased by Parker Hannifin Corporation and renamed Aircraft Wheel & Brake Division.

1985
AH-64 Apache, our first military application, soon followed by the Sikorsky Black Hawk.



1990
V-22 Osprey first carbon brake used in tilt-rotor landing gear application.

2000
Pilatus PC-12 conversion effort.

2004
Eclipse very-light jet wheels, brakes, and hydraulic equipment.

2005
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