

The logo for Prex Custom Test Systems, featuring a stylized green diamond shape with a white outline.

Prex Custom Test Systems



Prex test systems are manufactured with the same strong commitment to customer satisfaction that has made Uson a dominant name in the leak testing industry. Prex engineering experience provides the optimal solution for your applications.

Uson has been at the forefront of leak detection and leak testing for over 40 years. As pioneers of automated leak detection equipment for the automotive, industrial, medical and pharmaceutical industries, we have more experience in these specialized fields than any other company anywhere in the world.

Uson is the recognized leader in leak detection and Prex is the recognized leader in leak detection systems. Prex specializes in the design and manufacture of solutions addressing our customers' requirements with leak detection as a central component.

Prex has designed over several hundred solutions ranging from simple fixtures to highly precise tooling to complex multi-station high speed systems incorporating assembly technologies, assembly validation, part marking, and one or more leak detection methods.

Automotive

Uson has been supplying leak detection equipment to virtually every major automotive manufacturer or their supplier over the past five decades. In many applications, Prex has supplied the tooling and/or seals required to interface the customer part with the leak detection equipment. Below is a sample list of parts.

- Engine assemblies
- Axle assemblies
- Ball check valves
- Cylinder blocks
- Fluid lines
- Clutch housings
- Oil pans
- Catalytic converters
- Fuel regulators
- Exhaust pipes
- Injectors
- Cylinder heads
- Transmission assemblies
- Air cleaners
- Brake calipers
- Input shafts
- Front cam seals
- Master cylinders
- Converters
- Oil pumps
- Emission controls
- Rollover valves
- Intake manifold
- Fuel rail

Medical

Uson continues to play an important part in the advancement of medical science. With over 40 years of leak detection experience, Uson continues to play a key role in detecting minute leaks in equipment, instruments and packaging, insuring the success of life saving procedures we have come to expect. Prex leak detection systems worldwide continue to insure the intended performance of the products and services of our customers. Below is a sample list of parts.

- Catheters/Single lumen
- Catheters/Multi lumen
- Centrifuges
- Blood dialyses
- Condoms
- Catch bags
- Drug pumps
- Oxygen pumps
- Irrigation tools
- Drip chambers
- Colostomy bags
- Insulin pumps balloon (expansion/deflation)
- Aspirators
- Blood cassettes
- Heat exchangers
- Implant devices
- Gloves
- Syringes/Needles
- Chemotherapy pumps
- Fiber optic scopes
- Evacuation tools
- Complete IV sets
- Blood oxygenator

Industrial

Manufacturers of the products that have improved the quality of our lives rely on Prex Leak Detection Systems. Through innovation and experience, Prex assists the manufactures of freezers to cool more efficiently, the washing machines to clean better, the thermostats sense more accurately, and camping equipment to be safer. Prex systems continue to assure the quality of the products we use every day. Below is a sample list of parts.

- AC & refrigeration
- Burners
- Coffee makers
- Compressors
- Disk drives
- Expansion valves
- Filters
- Inkjet cartridges
- Manifolds
- Gas meters
- Sump pumps
- Toner cartridges
- Industrial sensors
- Dunnage bags
- Beverage dispensers
- Camping equipment
- Coils
- Dishwashers
- Diving equipment
- Faucets
- Hydraulic motors
- Irons
- Water meters
- Printer heads
- Thermostats
- Water heaters
- Gas appliance



Packaging

Prex has designed and manufactured non-destructive test systems for many different applications. By applying burst, creep, vacuum, or pressure decay, Prex has the correct technology and the experience to match your packaging application. Below is a sample list of parts.

- Bottles
- Vials
- Tubes
- Pouches
- Lidded trays
- Syringes
- Blister packs
- Blood bags
- Catch bags
- Sealed food trays



Prex Capabilities

Test Methods

- Differential
- Flow
- Helium Mass Spectrometry
- Pressure and vacuum increase
- Burst
- Force decay
- Pressure and vacuum decay

Fixtures

- Nests
- Clamping
- Guarding
- Chambers
- Hydraulic die sets

Bases

- Table top
- Welded tubular
- Extruded aluminum

Material Handling

- Slide transfer
- Dial index table
- Conveyors
- Walking beam
- Pick and place

Controls

- HMI
- Stack pole lamp indicators
- Pneumatic controls
- Programmable logic controller
- Servo/Stepper controls
- Bin counters
- Hydraulic controls

Sealing

- Pad
- Molded
- 90 degree angles
- Production seal
- Male/Female
- Oval/Square geometry
- Volume plugs
- Clam shell

Assembly

- Ultra sonic weld
- Fasteners
- Oil fill
- Press fit
- Laser weld
- Cutting
- Hot plate weld
- Gasket installation

Verifications

- Poke yoke
- Dimensional
- Oil fill
- Hypot test
- Stroke

Part Marking

- Impact
- Laser
- Impact pin
- Pad
- Thermal
- Bar code labels

Manufacturing Standards

- To ISO 9001:2000
- Certified to CE requirements (components)

PrexSEALS Standard Sizes

Seal Range	Female		Male		
	Filling	Plug	Filling	Plug	
MM/DIA	Auto	Manual	Manual	Auto	Manual
2-4	550200	550100	550140		
5-7	101500	550101	550141		
7-9	101501	550102	550142		
9-11	101502	550103	550143		
11-13	101503	550104	550144		
12-14				101300	550021
14-16				101301	550022
13-15	101504	550105	550145		
15-17	101505	550106	550146		
16-18		550107	550147	101302	550023
17-19	101506	550108	550148		
18-20				101316	550024
19-21	101507	550109	550149		
20-22				101303	550025
21-23	101508	550110	550150		
22-24				101304	550026
23-26	101509	550111	550151		
24-26				101305	550027
26-28	101510	550112	550152	101306	550028
28-30	101511	550113	550153	101307	550029
30-32	101512	550114	550154	101308	550030
32-34	101513	550115	550155	101309	550031
34-36	101514	550116	550156		
34-37				101310	550032
36-38	101515	550117	550157		
37-40				101311	550033
38-41	101516	550118	550158		550038
40-43				101312	550034
43-47				101313	550035
41-44	101517	550119	550159		
44-47	101518	550120	550160		
47-50	101519	550121	550161		
47-51				101314	550036
48-52					550018
50-53	101520	101522	550162		
51-55				101315	550037

Standard sizes and custom made PrexSEALS cover a wide range of applications from automotive engines and automobile emission systems to catheters and other small medical devices.

Because we are a company that manufactures leak testers and leak detection systems, we recognize the importance of good sealing and connection to the test part.

Standard Seals

PrexSEALS are available in male or female configurations with either a pneumatic push button or a mechanical release.

Custom Seals

PrexSeals can take a variety of forms including twin connectors, twist and lock, and even connection to square or irregular ports. All of the custom PrexSEALS are purpose designed based upon application, environment and test pressure.

Guarantee

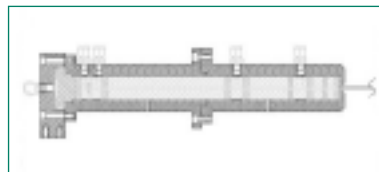
The standard PrexSEALS family is backed by a fit for purpose guarantee. If we recommend a standard PrexSEAL and it does not suit the application, we will take it back and credit the price towards the cost of a custom PrexSEAL.



Standard sizes cover from 12 mm to 55 mm (male) and 2 mm to 53 mm (female).



This PrexSEAL was designed to seal the inner diameter of an exhaust port on an "as-cast" aluminum cylinder head.



This special connector was designed for testing catheters. The device seals around and isolates the skives.

Due to a program of continuous development, specifications may be changed without notice.

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Uson Delivers.