



D o m a i l l e E n g i n e e r i n g L L C

EZ Check MK10100 Precision Wear Gage Kit User's Guide

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Welcome

Congratulations on selecting the EZ Check Precision Wear Gage Kit. This kit is designed to measure various wear points on the Domaille Engineering brand fiber optic connector polishing machine and fixtures.

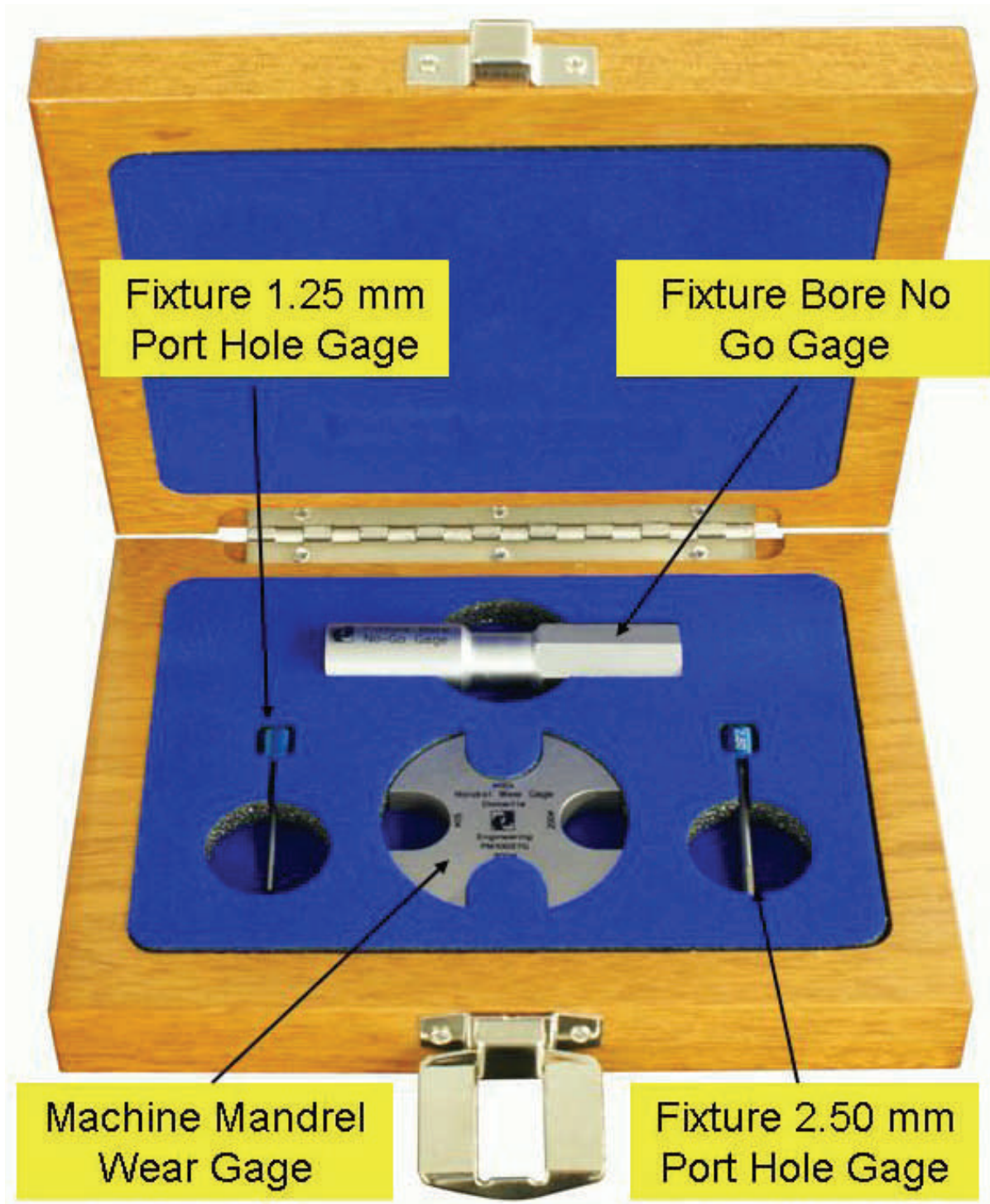
This User's Guide will assist you with the operation and maintenance of the kit to maximize the use and life of this precision gage kit.

Overview

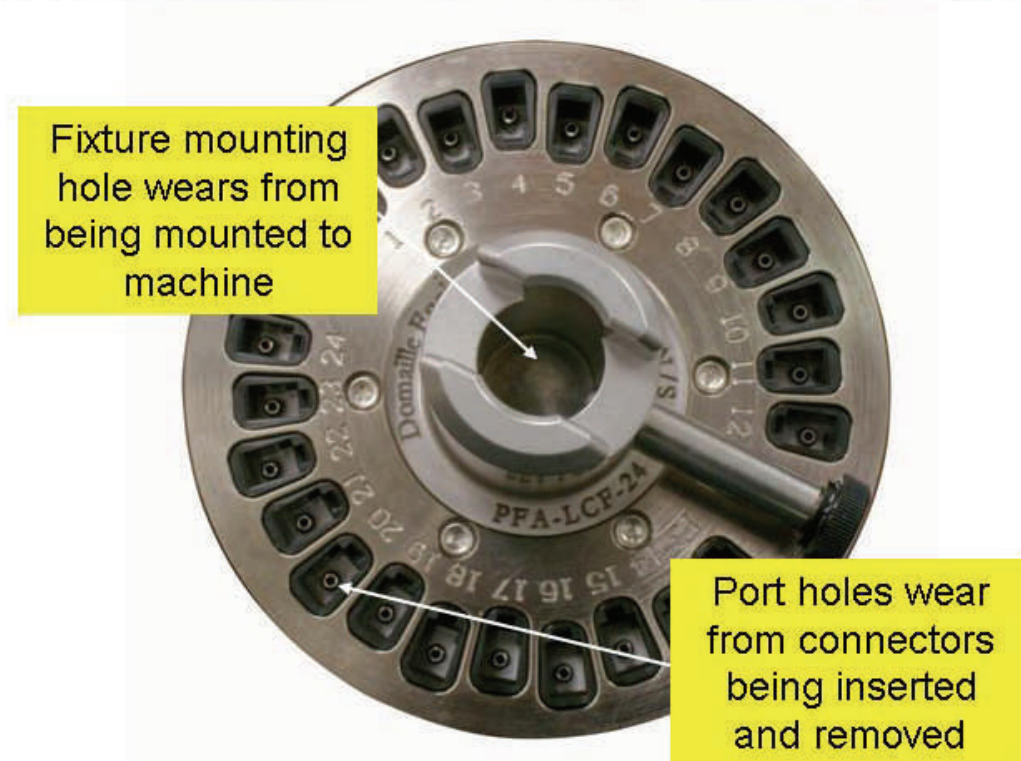
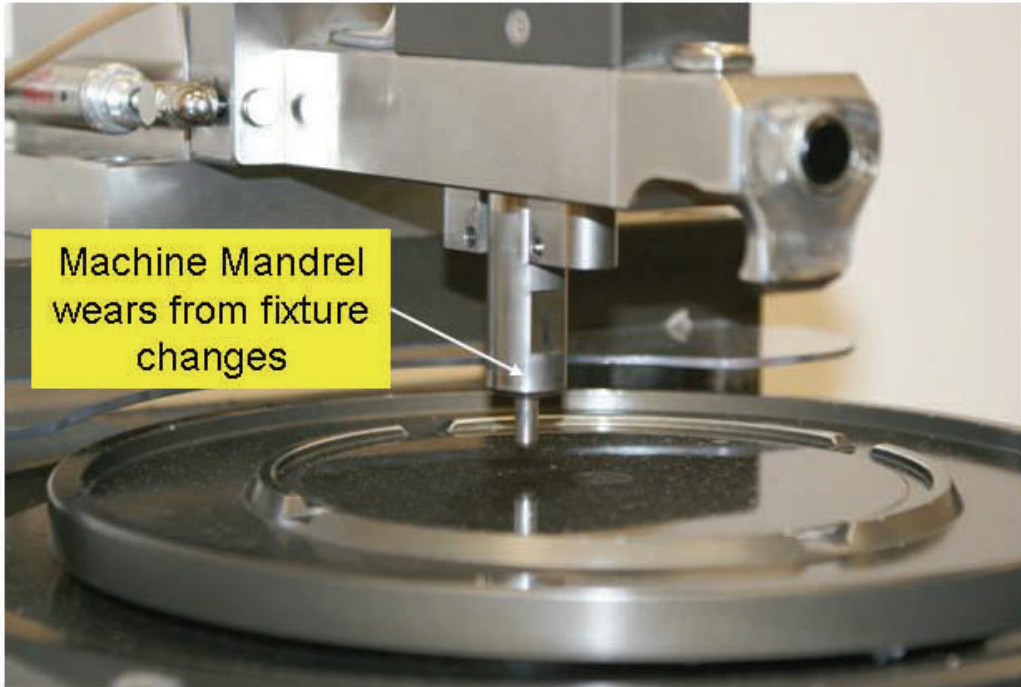
The EZ Check Precision Wear Gage Kit is designed to provide users with a method to measure the naturally occurring deterioration on critical interfaces caused by friction. These areas of friction occur between the machine mandrel and fixture plate, plus between the connectors and the fixture ports. The gage is a simple Go or No Go design.

This manual will help users understand the precision interface points and how to determine if they are still within original manufacturing specifications.

Kit Contents



Wear Points



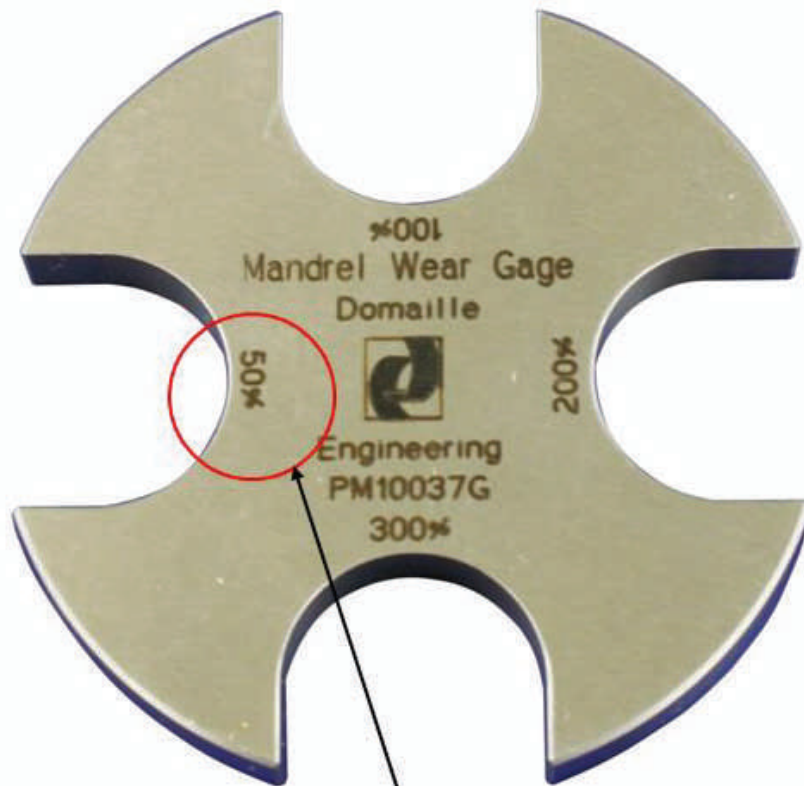
Machine Mandrel Wear Gage

The Machine Mandrel Wear Gage is used to measure the natural deterioration that occurs when the fixture is mounted to the machine repeatedly over time. Both the machine mandrel outer diameter and the fixture mounting hole are affected by friction. The Machine Mandrel Wear Gage has four measuring slots. They are labeled 50%, 100%, 200% and 300%. These represent wear from the OEM specifications. The machine mandrel should be replaced at 100% as production yields will begin to decline.

Using the Mandrel Wear Gage

The Wear Gage should be held perpendicular to the mandrel and gently slid onto the machine mandrel near the end. If the mandrel is larger than the Wear Gage, the gage will not fully engage (mandrel will not seat on the bottom of the slot). The Mandrel Wear Gage can be used with the machine over arm in any position. The Wear Gage should be started at 300% setting and checked at multiple locations around the mandrel (360° check) since the mandrel may not wear evenly. If the Wear Gage does not fully seat, continue checking in decreasing increments (200%, 100% then 50%) to get correct wear reading.

Using the Mandrel Wear Gage

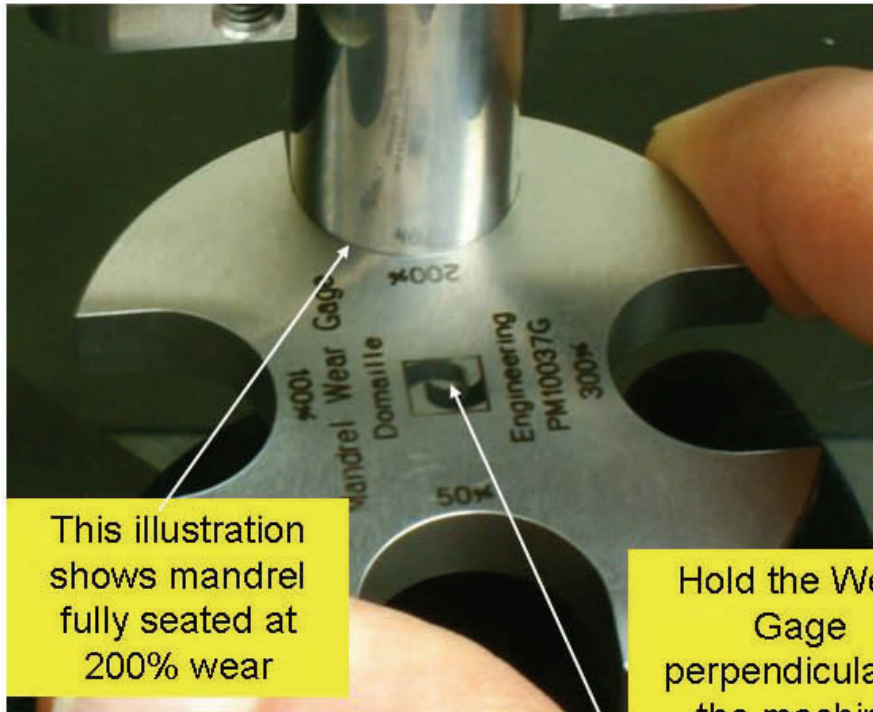


Each slot has different percentage of wear assigned to it.

50% - mandrel is within OEM specifications

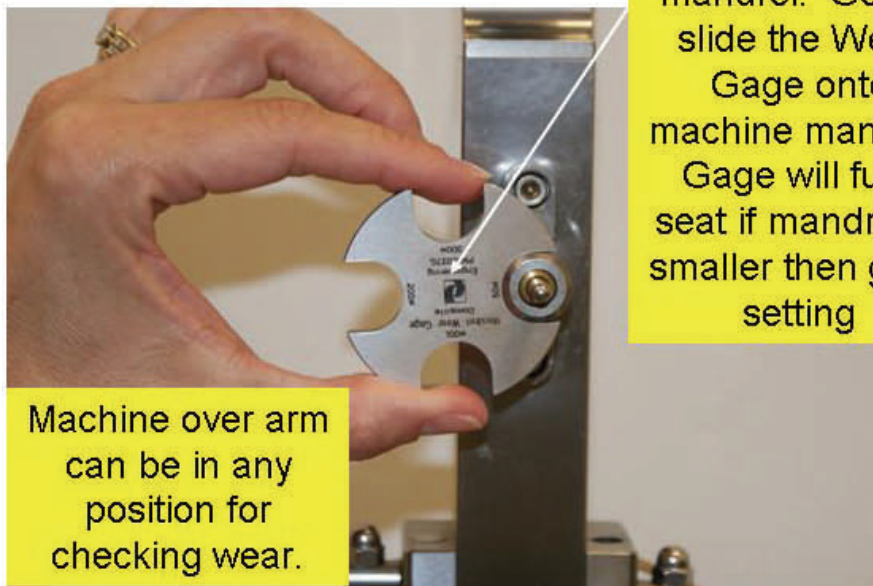
100% - 300% Mandrel is out of tolerance and needs to be replaced

Using the Mandrel Wear Gage



This illustration shows mandrel fully seated at 200% wear

Hold the Wear Gage perpendicular to the machine mandrel. Gently slide the Wear Gage onto machine mandrel. Gage will fully seat if mandrel is smaller than gage setting



Machine over arm can be in any position for checking wear.

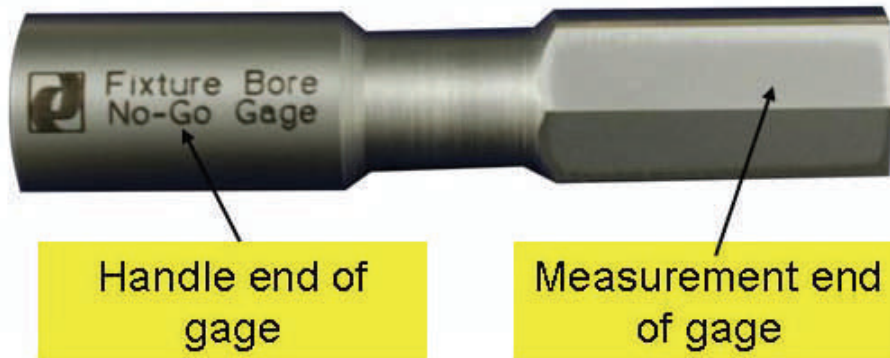
Fixture Bore No-Go Gage

The Fixture Bore No-Go Gage is used to measure the natural deterioration that occurs when the fixture is mounted to the machine repeatedly over time. Both the machine mandrel outer diameter and the fixture mounting hole are affected by friction. The Fixture Bore No-Go Gage is designed to let the user know when the fixture bore is out of OEM tolerance.

Using the Fixture Bore No-Go Gage

The Fixture Bore No-Go Gage should be held by the round end. The diamond shaped end is used to measure wear in the fixture mounting hole. Gently insert the diamond end into the fixture mounting hole. If the Fixture Bore No-Go Gage goes in the bore past the keyway in the fixture, then the fixture needs to be replaced. The fixture mounting hole should be checked with the Fixture Bore No-Go Gage in multiple locations (360° of the hole) due to the possibility of uneven wear pattern.

Using the Fixture Bore No-Go Gage



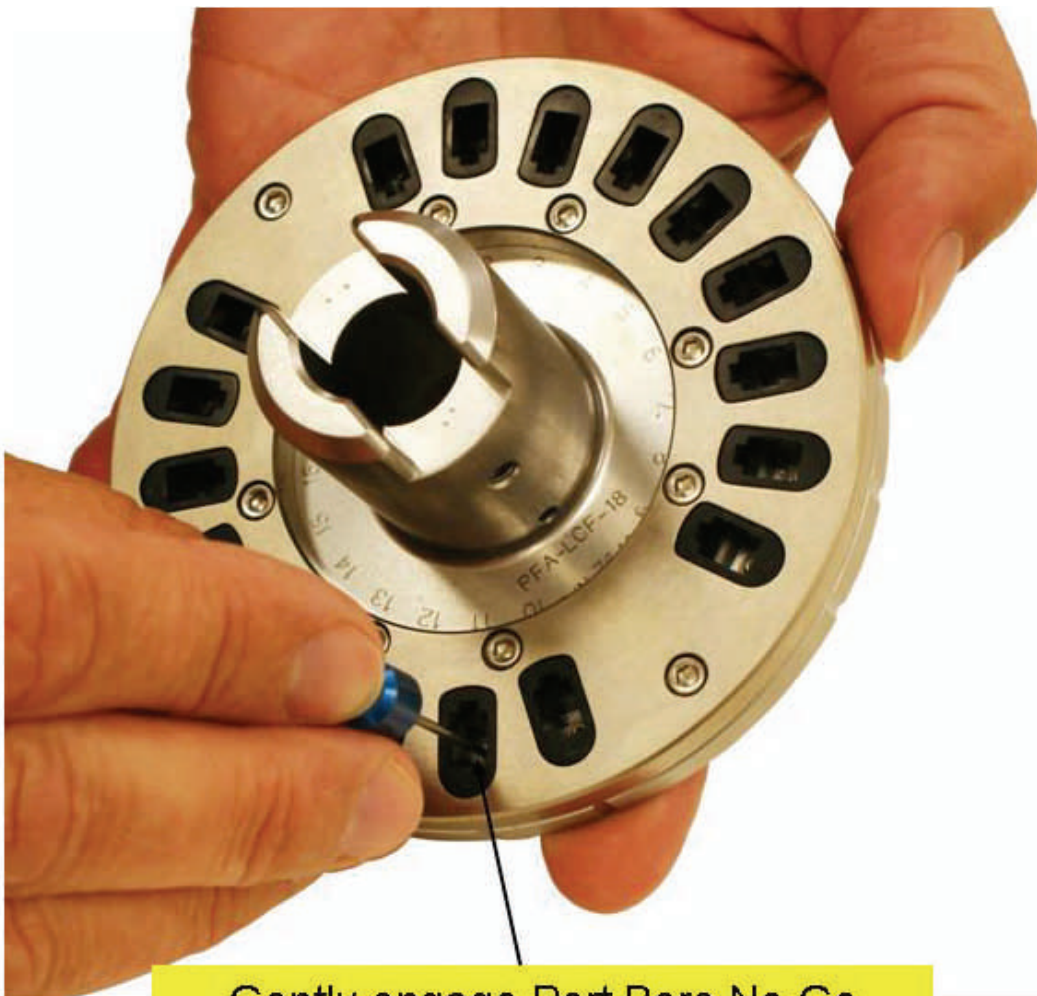
Port Bore No-Go Gage

The Port Bore No-Go Gage is used to measure the natural deterioration that occurs when the connectors or fiber is mounted to the fixture repeatedly over time. Over time, the resulting friction will cause the hole to enlarge. This will lead to poor yields when using the fixture. The Port Bore No-Go Gage is designed to let the user know when the fixture bore is out of OEM tolerance

Using the Port Bore No-Go Gage

The Port Bore No-Go Gage comes in two sizes, 1.25mm and 2.5mm. This covers most fiber optic configurations. The user should first determine which diameter is needed. The Port Bore No-Go Gage is very simple to use. Gently insert the pin into the fixture port hole. If the Port Bore No-Go Gage goes in the hole, then the fixture needs to be repaired or replaced. The fixture port holes should be checked with the Port Bore No-Go Gage in multiple locations (360° of the hole) due to the possibility of uneven wear pattern. All holes in a fixture should be checked.

Using the Port Bore No-Go Gage



Gently engage Port Bore No-Go Gage into port fixture hole. If gage goes in, fixture needs repair or replacement. All ports in fixture need to be checked.

Maintenance and Calibration

The EZ Check Precision Wear Gage Kit consists of highly precise calibrated gages that need to be sent back to Domaille Engineering annually for re-certification. Care should be taken when handling the gages. Any nicks, scratches or dings will result in false measurements. All gages require a light oil for corrosion resistance.

Service and Support

Domaille Engineering LLC is an ultra precision manufacturer distinguished by the accuracy of our products and services. One of our critical goals is to provide excellent customer service. Please contact us for service, support or input on how we can improve our service to you.

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