

Western Instruments

Since 1965

Bridge Type Pit Gauges

Western's advanced *Bridging Pit Gauge System*® and our new *Jr. Bridging Pit Gauge*® take over, where the capabilities of our standard Pit Gauges fall short, for evaluating large areas of Weightloss Corrosion. These *Bridging Bar* type Pit Gauges can also be used to measure Dents and Buckles on Pipelines, Shell Settlement on Storage Tanks, etc. These various forms of *Bridging Bars* can utilize any of our exclusive Dial Indicators (Imperial, Metric, or Digital), with any of our Custom Engineered Contact Points.

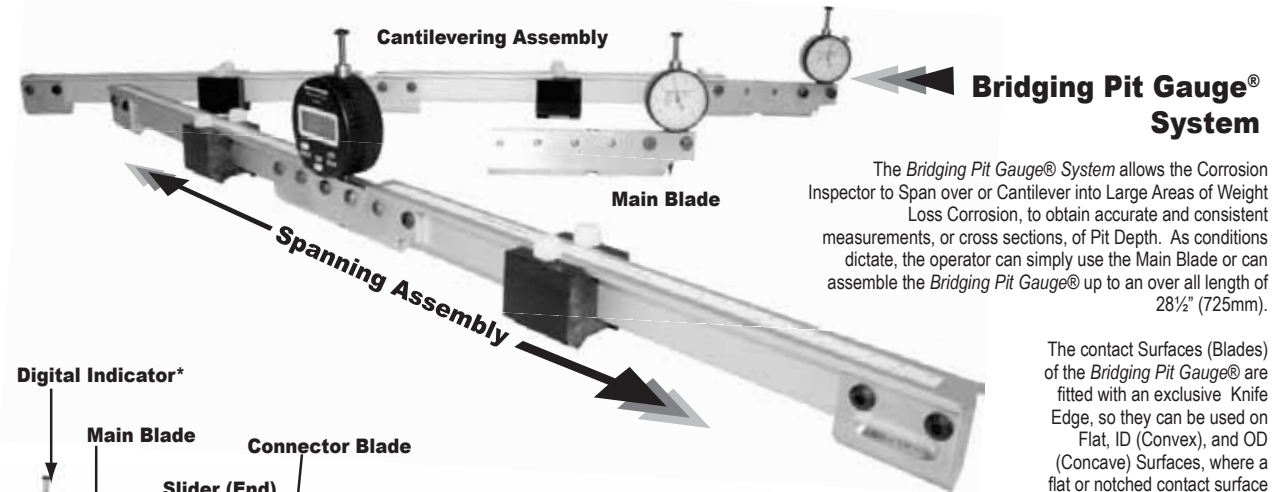
There are several important features to a *Segmented Bridge*, where various elements (Blades and Tee's) are assembled to form a *Bridging Bar*. Firstly, they can be assembled to follow the contour of a slightly irregular surface. This contouring feature is important for Pipeline, Storage Tank, and Pressure Vessel inspections, where 'hills and valleys' always exist. Secondly, the models listed below are of a given length, however extra elements can be added to increase their over all length. As illustrated, these units can be assembled in Spanning or Cantilevering configurations, and finally, the Main Blade can be used individually for isolated or cone type Pitting.

Jr. Bridging Pit Gauge® Group

The *Jr. Bridging Pit Gauge*® Group provides Inspectors with an Economical Alternative to the *Bridging Pit Gauge System*®. The new *Jr. Bridging Pit Gauge*® is available as 3 models; the standard *Jr. Bridging Pit Gauge*®, the *Plus*, and the *Super*. The standard *Jr. Bridging Pit Gauge*® assembles to an overall length of 13½" (340mm). The *Jr. Bridging Pit Gauge Plus*® can be assembled in either Spanning or Cantilevering Configurations up to 15 ½" (394mm) long. While the *Jr. Bridging Pit Gauge Super*® can also be assembled in both Spanning or Cantilevering Configurations, up to 27" (685mm) long.

The *Junior's* Main Blade, and the optional Extender Blades are fitted with strong magnets that secure any of the *Jr. Bridging Pit Gauges*® to the surface of the workpiece. These Magnetic Hold Downs have several benefits, such as; Aligning the unit to Concave or Convex surfaces, keeping the operator free to record readings or manipulate the assembly when Scanning through Pits and Weight loss Corrosion. These features position the *Plus*, and the *Super* far ahead of any competitive units.

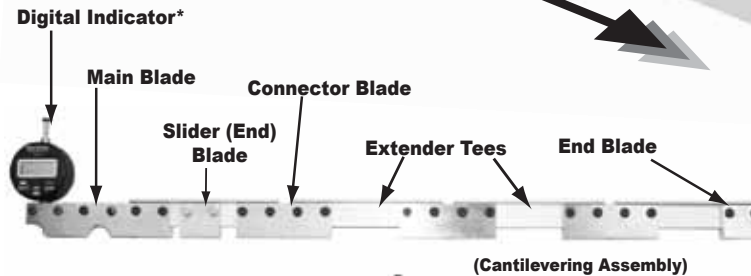
Name	Part #	Description
Jr. Bridging Pit Gauge®	N88-11	Main Blade, Imperial Dial Indicator, 2-Extender Tees, 2-End Blades, Hardware, Extra Contact Point, and Carrying Case.
Jr. Bridging Pit Gauge Plus®	N88-11P	Main Blade, Imperial Dial Indicator, Connector Blade, 2-Extender Tees, 2-End Blades, Hardware, Extra Contact Point, and Carrying Case.
Jr. Bridging Pit Gauge Super®	N88-11S	Main Blade, Imperial Dial Indicator, 3-Connector Blades, 4-Extender Tees, 2-End Blades, Hardware, Extra Contact Point, and Carrying Case.
Main Blade	N88-11-1	Center and End Dial Indicator Mounting Positions, Fitted Permanent Magnets. Cutaway Nose for next to welds. 5.5" (144mm) long.
Connector Blade	N88-11-2	Joins Tee Sections to increase length. Fitted Permanent Magnet. 3.5" (90mm) long.
End Blade	N88-11-3	Mounts on end of Tee for extra contact. 1.5" (38mm) long. Doubles as Slider Blade for <i>Plus</i> ® and <i>Super</i> ® models.
Extender Tee	N88-11-5	Extends effective length of all models. 5.5" (140mm) long (Longer Tees are optional).
Fastener Kit	N88-11-7	Fasteners, Allen Key, Nylon Thumb Screws, Contact Point.
Carrying Case	N88-11-8	Hard Sided Plastic Carrying Case for entire kit.



The *Bridging Pit Gauge*® System allows the Corrosion Inspector to Span over or Cantilever into Large Areas of Weight Loss Corrosion, to obtain accurate and consistent measurements, or cross sections, of Pit Depth. As conditions dictate, the operator can simply use the Main Blade or can assemble the *Bridging Pit Gauge*® up to an over all length of 28½" (725mm).

The contact Surfaces (Blades) of the *Bridging Pit Gauge*® are fitted with an exclusive Knife Edge, so they can be used on Flat, ID (Convex), and OD (Concave) Surfaces, where a flat or notched contact surface can introduce error on Convex Surfaces. Like our Standard Pit Gauges, the Knife Edge gives the operator a clear view of the contact point, and the area being inspected.

With the addition of the optional Magnetic Hold Downs, the operator uses their width to quickly align the *Bridging Pit Gauge System*® to a curved surface. This leaves his hands free to scan through very large areas of weight loss corrosion. This holds true when the Bridge Elements have been assembled with a slight contour on an irregular surface.



Junior Bridging Pit Gauge Super®

(Spanning Assembly)



Junior Bridging Pit Gauge Plus® (Cantilevering Assembly)

Junior Bridging Pit Gauge® & Plus® (Spanning Assembly)*



Junior Bridging Pit Gauge® (Cantilevering Assembly)

*Digital Indicator Optional for Bridging Pit Gauges.



Bridging Pit Gauge® Kit w/Magnetic Hold Downs

Name	Part #	Description
Bridging Pit Gauge®	N88-9	Main Blade, Imperial Dial Indicator, Connector Blade, 2-Extender Tees, End Blade, Slider Blade, Hardware, Extra Contact Point, and Carrying Case.
Main Blade	N88-9-1	Center and End Dial Indicator Mounting Positions, Cutaway Nose for next to welds. 5.5" (144mm) long.
Connector Blade	N88-9-2	Joins Tee Sections to increase length. 3.5" (90mm) long.
End Blade	N88-9-3	Mounts on end of Tee for extra contact. 1.5" (38mm) long.
Slider Blade	N88-9-4	Extra Point of Contact and doubles as an End Blade in Spanning Configuration. 1.5" (38mm) long.
Extender Tee	N88-9-5	Extends effective length of all models. 12" (305mm) long (Longer Tees are optional).
Magnetic Hold Downs	N88-9-6	1 required for each Tee Section used. 1.5½" (41mm) long.
Fastener Kit	N88-9-7	Fasteners, Allen Key, Nylon Thumb Screws, Contact Point.
Carrying Case	N88-9-8	Hard Sided Plastic Carrying Case for entire kit.