

# Fred V. Fowler Company, Inc.

**Fowler**<sup>®</sup>

## Superbore System



**Bowers Superbore Gages combine the Sylvac electronic measuring system with Bowers Bore Gages for the world's finest and easiest to use electronic bore gaging system.**

Select Bowers Superbore Gages as accessories to your existing Sylvac measuring system or start with electronic bore gaging as your primary application. Probes and other components can be added later to develop a custom, multi-purpose measuring system.

Components of the Bowers System: Superbore Gage Head, Electronic Transducer/Handle or Pistol Grip System, Extra-Length Extensions, Setting Rings and a Sylvac Digital Indication Unit.

### Special Features:

- The system utilizes a 3-point contact system for sizes .236" (6mm) and up. A 2-point "split cylinder" system is used for .040" (1mm) through .236" (6mm) sizes.
- Sizes above .630" (16mm) are ceramic measuring anvils.
- Every head is serialized and includes a test certificate.
- Quick, one-hand operation is foolproof and allows even unskilled operators to measure and read clearly the exact size of the bore on the digital readout.
- The ample five-foot length cable allows use at the machine or an inspection center. If needed, an optional nine foot extension cable is also available.
- High accuracy/wide range transducers allow a much wider range per gage head—fewer gage heads and rings are needed to cover the total size range. No need for air or expensive sleeves.
- Choice of Digital Indication Units or Pistol Grip Handle.
- Resolution to .00001" (.0001mm).
- Preset facility allows measurements of either actual size or deviation from zero.
- Output signals from the Sylvac units connect with printers and computers. Direct RS232 available.
- Rugged, shockproof design allows use in the most rigorous shop environment.
- Sets in wooden cases are available for convenient tool crib storage.
- Blind bore capability on most sizes.
- Special design heads available. Contact our Technical Department for details.



**5-YEAR WARRANTY** **INTERFACE RS-232 DIRECT**

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## Superbore System Gage Heads

Order No.	A. Range Inch	A. Range Metric (mm)	B. Min. Capacity	C. Depth Capacity	Head Accuracy
54-555-210	.040—.045"	1—1.15mm	B.B.	.230"	.00007"
54-555-212	.045—.051"	1.15—1.3mm	B.B.	.230"	.00007"
54-555-215	.051—.059"	1.3—1.5mm	B.B.	.230"	.00007"
54-555-218	.059—.068"	1.5—1.7mm	B.B.	.310"	.00007"
54-555-220	.068—.078"	1.75—2.00mm	B.B.	.310"	.00007"
54-555-222	.078—.098"	2—2.5mm	B.B.	.390"	.00007"
54-555-223	.098—.118"	2.5—3mm	B.B.	.390"	.00007"
54-555-224	.118—.157"	3—4mm	B.B.	.470"	.00007"
54-555-225	.157—.197"	4—5mm	B.B.	.790"	.00007"
54-555-226	.197—.236"	5—6mm	B.B.	.790"	.00007"
54-555-008	.236—.315"	6—8mm	.157"	2.300"	.0001"
54-555-009	.315—.393"	8—10mm	.157"	2.300"	.00007"
54-555-010	.393—.472"	10—12mm	.157"	2.300"	.00007"
54-555-011	.472—.550"	12—14mm	B.B.	2.300"	.00007"
54-555-012	.550—.630"	14—16mm	B.B.	2.300"	.00007"
54-555-015	.630—.710"	16—18mm	B.B.	2.500"	.00006"
54-555-018	.710—.825"	18—21mm	B.B.	2.500"	.00006"
54-555-021	.825—.945"	21—24mm	B.B.	2.500"	.00006"
54-555-024	.945—1.062"	24—27mm	B.B.	2.500"	.00006"
54-555-027	1.062—1.180"	27—30mm	B.B.	2.500"	.00006"
54-555-030	1.180—1.340"	30—34mm	B.B.	2.500"	.00006"
54-555-034	1.340—1.500"	34—38mm	B.B.	2.500"	.00006"
54-555-038	1.500—1.650"	38—42mm	B.B.	2.500"	.00006"
54-555-042	1.650—1.810"	42—46mm	B.B.	2.500"	.00006"
54-555-046	1.810—1.970"	46—50mm	B.B.	2.500"	.00006"
54-555-050	1.970—2.165"	50—55mm	B.B.	3.150"	.00008"
54-555-055	2.165—2.360"	55—60mm	B.B.	3.150"	.00008"
54-555-060	2.360—2.560"	60—65mm	B.B.	3.150"	.00008"
54-555-065	2.560—2.756"	65—70mm	B.B.	3.150"	.00008"
54-555-070	2.756—2.950"	70—75mm	B.B.	3.150"	.00008"
54-555-075	2.950—3.150"	75—80mm	B.B.	3.150"	.00008"
54-555-080	3.150—3.346"	80—85mm	B.B.	3.150"	.00008"
54-555-085	3.346—3.543"	85—90mm	B.B.	3.150"	.00008"
54-555-090	3.543—3.740"	90—95mm	B.B.	3.150"	.00008"
54-555-095	3.740—3.940"	95—100mm	B.B.	3.150"	.00008"
54-555-102	3.940—4.330"	100—110mm	B.B.	3.150"	.0001"
54-555-107	4.330—4.725"	110—120mm	B.B.	3.150"	.0001"
54-555-112	4.725—5.120"	120—130mm	B.B.	3.150"	.0001"
54-555-117	5.120—5.510"	130—140mm	B.B.	3.150"	.0001"
54-555-122	5.510—5.900"	140—150mm	B.B.	3.150"	.0001"
54-555-127	5.900—6.300"	150—160mm	B.B.	3.150"	.0001"
54-555-132	6.300—6.690"	160—170mm	B.B.	3.150"	.0001"
54-555-137	6.690—7.090"	170—180mm	B.B.	3.150"	.0001"
54-555-142	7.090—7.480"	180—190mm	B.B.	3.150"	.0001"
54-555-146	7.480—7.875"	190—200mm	B.B.	3.150"	.0001"
54-555-148	7.875—8.270"	200—210mm	B.B.	3.150"	.0001"
54-555-152	8.270—8.661"	210—220mm	B.B.	4.625"	.00015"
54-555-154	8.661—9.055"	220—230mm	B.B.	4.625"	.00015"
54-555-156	9.055—9.449"	230—240mm	B.B.	4.625"	.00015"
54-555-158	9.449—9.842"	240—250mm	B.B.	4.625"	.00015"
54-555-160	9.842—10.236"	250—260mm	B.B.	4.625"	.00015"
54-555-162	10.236—10.630"	260—270mm	B.B.	4.625"	.00015"
54-555-164	10.630—11.024"	270—280mm	B.B.	4.625"	.00015"
54-555-168	11.024—11.417"	280—290mm	B.B.	4.625"	.00015"
54-555-170	11.417—11.811"	290—300mm	B.B.	4.625"	.00015"
54-555-172	11.811—12.200"	300—310mm	B.B.	4.625"	.00015"

B.B.=Blind bore reading: on all heads except .236—.472"(6-12mm).

Bowers Electronic Bore Gage Heads cover a wider range of hole sizes than conventional air or electronic plug gages. Bowers' system needs fewer setting rings and no sleeves.

Superbore anvils above .630" are made from Zirconia ceramic which offers high strength, low coefficient of friction, better wear resistance than carbide, excellent abrasion resistance (1.5 x carbide), better corrosion resistance than carbide, coefficient expansion similar to steel, and it's non-magnetic.

Bowers Gage Heads thread onto the transducer/handle. Optional extensions in sizes 2-1/2"—6" increase the measuring depth. Connect extensions to each other to further increase depth. Extensions can be used on heads above .236" diameter.

Range sizes: .040"/1mm—12.126"/310mm. For smaller sizes (.040"/1mm—.236"/6mm), a 2-point or "split cylinder" system is utilized. A 3-point contact wedge system is used for larger sizes (.236"/6mm—12.126"/310mm). The 3-point contact is designed for indicating lobing. The 2-point design is for indicating out-of-roundness. See chart for "A", "B" and "C" dimensions.



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