

# Quality Digest

# 2004 Quality Sourcebook

## Gages

**G**age manufacturers are as important to the quality profession as automobile manufacturers are to the commuting public. Without them, the world just wouldn't run smoothly. Gage manufacturers are responsible for providing industry with a plethora of tools to help maintain quality control, including micrometers, thread gages, depth gages, digital indicators, height gages and dial indicators, to name a few.

Gages help keep all processes and instruments in check. They tell manufacturers which of their materials, instruments and tools are out of tolerance; they indicate whether a certain part should move on to the production line or be scrapped; and they measure the length of time a part is still usable. Essentially, gages are manufacturers' fact-checkers.

Because of this hefty responsibility, it's important for organizations to use the gages that will most benefit their company. The companies listed in the Gage Manufacturers Directory specialize in providing you with the right tool for the job. Not only can they supply your organization with the gages you need, but many of them also provide technical support, calibration services and on-site training to help you learn how to use the instruments. To see these tools in action, you may want to consider attending a trade show or two, which occur frequently throughout the year. If unable to do so, many of these companies are willing to either host an online demonstration or come to your facility.

The *Quality Sourcebook's* Gage Manufacturers Guide presents a wide assortment of gages from more than 220 manufacturers.

### Gages Guide

Gage Manufacturers Directory.....page 66

*This directory of gage manufacturers includes the company name, address, phone and fax numbers, and Web address. Also listed, if provided, are the types of gages each manufacturer provides.*

As with all *Quality Digest* directories, the Gages Guide is in no way meant to endorse or exclude a particular organization. Rather, it's meant to be used as the starting point in the data-gathering process. Readers are encouraged to contact the companies directly for more information and to ask for—and check—references.

### Glossary

**A2LA**—American Association for Laboratory Accreditation

**ACIL**—American Council for Independent Laboratories

**Accuracy**—the deviation of a part or measuring system from a known standard

**Actual value**—the measured value of a feature

**ANSI**—American National Standards Institute

**Comparator**—a measuring component that compares workpiece characteristics to a reference

**Deviation**—the difference between the actual measured dimension and the nominal dimension

**IEEE**—Institute of Electrical and Electronics Engineers

**Interpreter**—a processor, either human or electronic, that assesses information from the measuring device's comparator

**LAB**—Laboratory Accreditation Bureau

**Micrometer**—a caliper that has a spindle moved by a finely threaded screw

**NIST**—National Institute of Standards and Technology

**Nominal**—the standard or desired dimension or size of a feature. The print values for the measurement as opposed to the measured values.

**Repeatability**—a measure of the ability of an instrument to produce the same measured value when sequentially sensing the same quantity under similar measurement conditions

**SCC**—Standards Council of Canada

**SRM**—standard reference material

**Touch probe**—an electronic contact measuring device that is mounted on a machine tool, gage or coordinate measuring machine

**UL**—Underwriters Laboratories

The information contained in *Quality Digest* directories, plus some additional information, is available online at [www.qualitydigest.com/directories](http://www.qualitydigest.com/directories).

Key to Directory Abbreviations

Air.....AR	Height.....HT
Angle.....ANG	Humidity.....HUM
Ball.....BL	Laser Profiling.....LAP
Bore.....BR	Length of Travel.....LTV
Centering.....CNT	Noncontact Thickness.....NCT
Chamfer.....CHM	pH.....PH
Custom.....CUS	Plug.....PLG
Depth.....DP	Pressure.....PRS
Dial Indicator.....DI	Ring.....RNG
Electronic.....E	Roundness.....RND
Electronic Column.....EC	Spline.....SPL
Flush.....FSH	Strain.....STN
Force/Torque/Tension.....FTT	Tapped Hole.....TPH
Gap.....GP	Temperature.....TMP
Gear.....GER	Thickness.....THK
Groove.....GRV	Thread.....T
Hand-Held Dimensional..HHD	Vacuum.....V
Hardness.....HRD	

[www.betalasermike.com](http://www.betalasermike.com)  
CNT, GP, LAP, NCT, RND, THK, T, CUS

**Blanchette Tool & Gage Manufacturing Corp.**  
845 Bloomfield Ave.  
Clifton, NJ 07012  
Ph. 973-471-2100 Fax 973-471-2104  
[www.blanchettetool.com](http://www.blanchettetool.com)  
AR, BR, DI, E, HHD, HT, NCT, PLG, RNG,  
THK, T, CUS

**BLUM Laser Measuring Technology Inc.**  
4144 Olympic Blvd.  
Erlanger, KY 41018  
Ph. 859-344-6789 Fax 859-344-6799  
[www.blumlmt.com](http://www.blumlmt.com)  
ANG, BR

**Boeckeler Instruments Inc.**  
4650 S. Butterfield Drive  
Tucson, AZ 85714  
Ph. 800-552-2262 Fax 520-745-0004  
[www.boeckeler.com](http://www.boeckeler.com)  
DI, LTV, V

**Brooklyn Thermometer Co. Inc.**  
90 Verdi St.  
Farmingdale, NY 11735  
Ph. 877-282-9925 Fax 631-694-6329  
[www.brooklynthermometer.com](http://www.brooklynthermometer.com)  
ANG, AR, DI, E, HUM, PH, TMP, CUS

**Brown & Sharpe**  
200 Frenchtown Road  
North Kingstown, RI 02852  
Ph. 800-766-4673 Fax 401-886-2727  
[www.brownandsharpe.com](http://www.brownandsharpe.com)  
BL, BR, CNT, DP, DI, E, GER, GRV, HHD, HT,  
PLG, SPL, THK, T

**Brown & Sharpe TESA**  
200 Frenchtown Road  
North Kingstown, RI 02852  
Ph. 800-283-3600 Fax 401-886-2553  
[www.brownandsharpe.com](http://www.brownandsharpe.com)  
ANG, BR, DP, DI, EC, E, GER, GRV, HHD, HT,  
PLG, RND, SPL, THK, T

**Brunswick Instrument Inc.**  
6150 W. Mulford St.  
Niles, IL 60714  
Ph. 847-965-9191 Fax 847-965-9193  
[www.brunswickinstrument.com](http://www.brunswickinstrument.com)  
ANG, CHM, DP, DI, E, GER, HHD, HT, THK,  
CUS

**BYK-Gardner USA**  
9104 Guilford Road, Rivers Park II  
Columbia, MD 21046  
Ph. 800-343-7721 Fax 800-394-8215  
[www.bykgardner.com](http://www.bykgardner.com)  
E, FTT, HRD, TMP, THK

**Bytewise Measurement Systems**  
1150 Brookstone Centre Parkway  
Columbus, GA 31904  
Ph. 706-323-5142 Fax 706-323-0178  
[www.bytewise.com](http://www.bytewise.com)  
ANG, FSH, GP, GRV, HT, LAP, NCT, RND,  
THK, CUS

**Capacitec Inc.**  
P.O. Box 819  
Ayer, MA 01432  
Ph. 978-772-6033 Fax 978-772-6036  
[www.capacitec.com](http://www.capacitec.com)  
BR, E, GP, HHD, HT, NCT, RND, THK, CUS

**Carbide Probes Inc.**  
1328 Research Park Drive  
Dayton, OH 45432  
Ph. 800-347-4980 Fax 937-429-2103  
[www.carbideprobes.com](http://www.carbideprobes.com)  
BL, DI, E, HHD, HT, CUS

**Centurion NDT Inc.**  
1400 Yorkshire Drive  
Streamwood, IL 60107  
Ph. 630-736-5500 Fax 630-736-5700  
[www.centurionndt.com](http://www.centurionndt.com)  
THK

**Chicago Dial Indicator Co. Inc.**  
1372 Redeker Road

Des Plaines, IL 60016  
Ph. 847-827-7186 Fax 847-827-0478  
[www.dialindicator.com](http://www.dialindicator.com)  
DP, DI, E, HHD, HT, RND, THK, CUS

**Com-Ten Industries**  
6405 49th St. N.  
Pinellas Park, FL 33781  
Ph. 800-552-5546 Fax 727-520-0299  
[www.com-ten.com](http://www.com-ten.com)  
LTV, CUS

**Comtorgage Corp.**  
58 N.S. Industrial Drive  
Slatersville, RI 02876  
Ph. 401-765-0900 Fax 401-765-2846  
[www.comtorgage.com](http://www.comtorgage.com)  
BR, DP, DI, E, GP, GER, GRV, HHD, PLG, RNG,  
SPL, TPH, T, CUS

**Control Gaging Inc.**  
5200 Venture Drive  
Ann Arbor, MI 48108  
Ph. 734-669-6595 Fax 734-994-1335  
[www.controlgaging.com](http://www.controlgaging.com)  
E

**Critical Operations**  
3043 S. Oak St.  
Santa Ana, CA 92707  
Ph. 714-957-1215 Fax 714-957-1567

**CSC Force Measurement Inc.**  
84 Ramah Circle N.  
Agawam, MA 01001  
Ph. 800-866-3672 Fax 413-789-3598  
[www.cscforce.com](http://www.cscforce.com)  
FTT

**Cygnus Instruments Inc.**  
P.O. Box 6417  
Annapolis, MD 21401  
Ph. 888-294-6875 Fax 410-268-2013  
[www.cygnusinstruments.com](http://www.cygnusinstruments.com)  
DP, PRS, THK, V

**Dakota Ultrasonics**  
300 El Pueblo Road, No. 100  
Scotts Valley, CA 95066  
Ph. 831-431-9722 Fax 831-431-9723  
[www.dakotaultrasonics.com](http://www.dakotaultrasonics.com)  
BR, DP, E, FTT, THK

**Data Optics Inc.**  
115 Holmes Road  
Ypsilanti, MI 48198  
Ph. 800-321-9026 Fax 734-483-9879  
[www.dataoptics.com](http://www.dataoptics.com)  
HHD

**Data Physics Corp.**  
2025 Gateway Place, Ste. 260  
San Jose, CA 95110  
Ph. 408-437-0100 Fax 408-437-0509  
[www.dataphysics.com](http://www.dataphysics.com)  
FTT

**Dave Jones Machinists**  
1815 N. Cedar St.  
Mishawaka, IN 46545  
Ph. 574-256-5500 Fax 574-256-1543  
[www.sight-pipe.com](http://www.sight-pipe.com)  
CHM, DP, GP, GRV, HHD, HT, NCT, TPH, T,  
CUS

**Defelsko Corp.**  
802 Proctor Ave.  
Ogdensburg, NY 13669  
Ph. 800-448-3835 Fax 315-393-8471  
[www.defelsko.com](http://www.defelsko.com)  
E, HUM, TMP, THK

**Deltronic Corp.**  
3900 W. Segerstrom Ave.  
Santa Ana, CA 92704  
Ph. 800-451-6922 Fax 714-641-0946  
[www.deltronic.com](http://www.deltronic.com)  
PLG, RNG, T

**Detek Inc.**  
6805 Coolidge Drive  
Temple Hills, MD 20748  
Ph. 800-638-0554 Fax 301-449-7011  
[www.detek.com](http://www.detek.com)

**A.G. Davis/AA Gage**  
6533 Sims Drive  
Sterling Heights, MI 48313  
Ph. 586-977-9000 Fax 586-977-9190  
[www.agdavis.com](http://www.agdavis.com)

ANG, AR, BL, BR, CNT, CHM, DP, DI, EC, E,  
FSH, FTT, GP, GER, GRV, HHD, HT, LAP, LTV,  
NCT, PLG, PRS, RNG, SPL, STN, TPH, TMP,  
THK, T, CUS

**Abitec Co.**  
22800 Lakeland Blvd.  
Cleveland, OH 44132  
Ph. 800-878-9122 Fax 216-289-9198  
[www.abitecco.com](http://www.abitecco.com)  
LAP, LTV, NCT, THK

**Acu-Gage Systems**  
P.O. Box 6178  
Manchester, NH 03108  
Ph. 800-422-2283 Fax 603-626-1277  
[www.acu-gage.com](http://www.acu-gage.com)  
LAP, NCT, CUS

**Agfa NDT Inc.**  
50 Industrial Park Road  
Lewistown, PA 17044  
Ph. 866-243-2638 Fax 717-242-2606  
[www.agfandt.com](http://www.agfandt.com)  
HRD, THK

**Airtronics Gage & Machine Co.**  
516 Slade Ave.  
Elgin, IL 60120  
Ph. 847-695-0911 Fax 847-695-8745  
[www.airtronicsgage.com](http://www.airtronicsgage.com)  
BR, DP, E, HT, NCT, THK, CUS

**American NDT Inc.**  
671 E. Walnut St.  
Lancaster, OH 43130  
Ph. 740-687-5276  
[www.americanndtinc.com](http://www.americanndtinc.com)

**American Stress Technologies**  
267 Kappa Drive  
Pittsburgh, PA 15238  
Ph. 412-963-0676 Fax 412-963-7552  
[www.astresstech.com](http://www.astresstech.com)  
BL, FTT, STN, CUS

**AMETEK Inc.**  
34 North Valley Road, Building 4  
Paoli, PA 19301  
Ph. 727-536-7831 Fax 727-539-6882  
[www.chatillon.com](http://www.chatillon.com)  
FTT, STN

**AMETEK Test & Calibration Instruments**  
8600 Somerset Drive  
Largo, FL 33773  
Ph. 800-527-9999 Fax 727-539-6882  
[www.chatillon.com](http://www.chatillon.com)  
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**Apco Mossberg Torque Tool Co.**  
104 County St.  
Attleboro, MA 02703  
Ph. 800-322-5605 Fax 508-222-0126  
[www.apcomossberg.com](http://www.apcomossberg.com)  
CUS

**Assurance Technologies Inc.**  
396 Fenton Lane, Ste. 605  
West Chicago, IL 60185  
Ph. 630-231-4800 Fax 630-231-8844  
[www.atiquality.com](http://www.atiquality.com)  
ANG, AR, BL, BR, CNT, CHM, DP, DI, FTT, GP,  
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RNG, RND, SPL, TPH, TMP, THK, T, CUS

**Atlantic Metrology Inc.**  
270 Lafayette St.  
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**Atlas Material Testing Technology LLC**  
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Ph. 773-327-4520 Fax 773-327-5787  
[www.atlas-mts.com](http://www.atlas-mts.com)

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3337-3 Air Park Road  
Fuquay-Varina, NC 27526  
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RND, SPL, STN, TPH, THK, T, CUS

**B.C. Ames Inc.**  
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**BETA LaserMike**  
8001 Technology Blvd.  
Dayton, OH 45424  
Ph. 937-233-9935 Fax 937-233-7284

**Diatest Precision Gages**

11 W. College Drive  
Arlington Heights, IL 60004  
Ph. 800-342-8378 Fax 847-392-2197  
[www.diatest.com](http://www.diatest.com)  
AR, BR, CHM, DI, E, GP, GER, HHD, RNG, SPL

**Dillon, a division of Weigh-Tronix**

1000 Armstrong Drive  
Fairmont, MN 56031  
Ph. 800-368-2039 Fax 507-238-8258  
[www.quantrol.com](http://www.quantrol.com)  
FTT

**Dimensional Data Systems**

3387 Woodman Drive  
Dayton, OH 45429  
Ph. 937-299-5225 Fax 937-299-0698  
[www.stardds.com](http://www.stardds.com)  
AR, BR, DI, EC, FSH, GP, GRV, NCT, PLG, RNG, RND, THK, CUS

**Dimensional Inspection Labs**

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Fremont, CA 94538  
Ph. 510-623-8940 Fax 510-623-8655  
[www.d-i-l.com](http://www.d-i-l.com)  
HHD, HRD, CUS

**Dorsey Metrology International**

53 Oakley St.  
Poughkeepsie, NY 12601  
Ph. 845-454-3111 Fax 845-454-3888  
[www.dorseymetrology.com](http://www.dorseymetrology.com)  
ANG, BL, BR, CNT, CHM, DP, DI, EC, E, FSH, GP, GER, GRV,  
HHD, HT, LTV, PLG, RNG, RND, SPL, TPH, THK, T, CUS

**Dow Mechanical Corp.**

P.O. Box 971  
Enfield, CT 06083  
Ph. 860-745-6000 Fax 860-745-4481  
[www.dowmechanicalcorp.thomasregister.com](http://www.dowmechanicalcorp.thomasregister.com)  
ANG, CHM, DP, DI, E, FSH, HHD, CUS

**Dundick Corp.**

4616 W. 20th St.  
Cicero, IL 60804  
Ph. 800-322-4243 Fax 708-656-2359  
[www.dundick.com](http://www.dundick.com)  
PLG, RNG, T

**Dyer Co.**

1500 McGovernville Road  
Lancaster, PA 17604  
Ph. 800-631-3333 Fax 717-569-6721  
[www.dyergage.com](http://www.dyergage.com)  
BR, CNT, CHM, DP, DI, EC, E, FSH, GP, GER, GRV, HHD, HT,  
LTV, PLG, RNG, RND, SPL, THK, T, CUS

**Edmunds Gages**

45 Spring Lane  
Farmington, CT 06032  
Ph. 860-677-2813 Fax 860-677-4243  
[www.edmundsgages.com](http://www.edmundsgages.com)  
AR, BR, DI, EC, E, HHD, HT, PLG, RNG, RND, THK, CUS

**Elcometer**

1893 Rochester Industrial Drive  
Rochester Hills, MI 48309  
Ph. 800-521-0635 Fax 248-650-0501  
[www.elcometer.com](http://www.elcometer.com)  
HRD, HUM, NCT, TMP, THK

**Electro Standards Laboratories**

36 Western Industrial Drive  
Cranston, RI 02921  
Ph. 401-943-1164 Fax 401-946-5790  
[www.electrostandards.com](http://www.electrostandards.com)

**Electromatic Equipment Co. Inc.**

600 Oakland Ave.  
Cedarhurst, NY 11516  
Ph. 800-645-4330 Fax 516-295-4399  
[www.checkline.com](http://www.checkline.com)  
FTT, NCT, THK

**Electronic Measuring Devices Inc.**

199 Route 46 E.  
Budd Lake, NJ 07828  
Ph. 973-691-4755 Fax 973-691-4745  
[www.emdsceptre.com](http://www.emdsceptre.com)  
ANG, BR, CHM, DP, E, FTT, GER, HRD, LTV, NCT, RND, THK,  
CUS

**ElektroPhysik USA Inc.**

770 W. Algonquin Road  
Arlington Heights, IL 60005  
Ph. 800-782-1506 Fax 847-437-0053  
[www.elektrophysik.com](http://www.elektrophysik.com)  
HRD, THK

**Etamic Corp.**

45333 Five Mile Road  
Plymouth, MI 48170  
Ph. 734-459-7230 Fax 734-459-7097  
[www.etamic.com](http://www.etamic.com)  
AR, BR, EC, E, HHD, NCT, RNG, THK, CUS

**Euro-Tech Corp.**

N. 48 W. 14170 Hampton Ave.  
Menomonee Falls, WI 53051  
Ph. 262-781-6777 Fax 262-781-2822  
[www.eurotechcorp.com](http://www.eurotechcorp.com)  
DP, HHD, LAP, SPL, THK, CUS

**FARO Technologies Inc.**

125 Technology Park  
Lake Mary, FL 32746  
Ph. 800-736-0234 Fax 407-333-4181  
[www.faro.com](http://www.faro.com)  
BR, DP, HHD, HT, RND, THK, CUS

**Fischer Technology Inc.**

750 Marshall Phelps Road  
Windsor, CT 06095  
Ph. 800-243-8417 Fax 860-688-8496  
[www.fischer-technology.com](http://www.fischer-technology.com)  
E, HRD, NCT, THK

**Flexbar Machine Corp.**

250 Gibbs Road  
Islandia, NY 11749  
Ph. 800-879-7575 Fax 631-582-8487  
[www.flexbar.com](http://www.flexbar.com)  
ANG, BL, BR, CHM, DP, DI, FTT, GRV, HHD, HRD, HT, NCT,  
PLG, RNG, RND, TPH, THK, T, CUS

**FLIR Systems Inc.**

16 Esquire Road  
North Billerica, MA 01862  
Ph. 800-464-6372 Fax 978-901-8887  
[www.flirthermography.com](http://www.flirthermography.com)  
TMP

**Ford Tool & Gage Corp.**

5401 N. 118 Court  
Milwaukee, WI 53225  
Ph. 414-466-4243 Fax 414-466-4270  
[www.fordtoolandgage.com](http://www.fordtoolandgage.com)  
ANG, AR, BR, CNT, CHM, DP, DI, EC, E, FSH, FTT, GP, GER,  
GRV, HHD, HRD, HT, HUM, LAP, LTV, NCT, PLG, RNG, RND,  
SPL, TPH, TMP, THK, T, CUS

**Fred V. Fowler Co. Inc.**

66 Rowe St.  
Newton, MA 02466  
Ph. 800-788-2353 Fax 617-332-4137  
[www.fvfowler.com](http://www.fvfowler.com)  
ANG, AR, BL, BR, CHM, DP, DI, EC, E, GP, GER, GRV, HHD,  
HRD, HT, LTV, PLG, RNG, SPL, TPH, THK, T, CUS

**Fryer Co. Inc.**

11177 Dundee Road  
Huntley, IL 60142  
Ph. 800-421-6732 Fax 847-669-2056  
[www.fryerco.com](http://www.fryerco.com)  
ANG, BR, CHM, DP, DI, EC, E, FTT, GP, GER, GRV, HHD, HRD,  
HT, LAP, NCT, PLG, RNG, RND, STN, TPH, THK, T, CUS

**Gaertner Scientific Corp.**

8228 McCormick Blvd.  
Skokie, IL 60076  
Ph. 847-673-5006 Fax 847-673-5009  
[www.gaertnerscientific.com](http://www.gaertnerscientific.com)  
ANG, DP, DI, GP, GRV, HT, LTV, NCT, THK

**Gage Assembly Co.**

3771 W. Morse Ave.  
Lincolnwood, IL 60712  
Ph. 800-232-4243 Fax 847-679-5190  
[www.gageassembly.com](http://www.gageassembly.com)  
PLG, RNG, T

**Dimensional Air Gages**

visit [www.westerngage.com](http://www.westerngage.com)  
call 800-423-5062  
or e-mail: [sales@westerngage.com](mailto:sales@westerngage.com)  
**WESTERN GAGE CORPORATION**  
CAMARILLO, CA



### Morgan Precision Instruments

3375 Miller Park Road  
Akron, OH 44312  
Ph. 330-896-0846 Fax 330-896-3445  
ANG, DP, HHD, HT, CUS

### MSI-Viking Gage LLC

321 Tucapau Road  
Duncan, SC 29334  
Ph. 864-433-9771 Fax 864-433-9775  
[www.msi-viking.com](http://www.msi-viking.com)  
ANG, AR, BL, BR, CNT, CHM, DP, DI, EC, E, FSH, FTT, GER, GRV, HHD, HRD, HT, LAP, LTV, NCT, PLG, PRS, RNG, RND, SPL, STN, TPH, THK, T, CUS

### MTI Instruments Inc.

325 Washington Ave. Ext.  
Albany, NY 12205  
Ph. 800-342-2203 Fax 518-218-2506  
[www.mtinstruments.com](http://www.mtinstruments.com)  
GP, NCT, THK, CUS

### Mueller Gages Co.

318 Agostino Road  
San Gabriel, CA 91776  
Ph. 800-645-8719 Fax 626-286-8693  
[www.mueller-gages.com](http://www.mueller-gages.com)  
BL, BR, DP, DI, GER, GRV, HHD, SPL, CUS

### NDT International Inc.

711 Creek Road  
West Chester, PA 19382  
Ph. 610-793-1700 Fax 610-793-1702  
[www.ndtint.com](http://www.ndtint.com)  
HRD, THK

### Nel Pretech

8420 W. 183rd Place  
Tinley Park, IL 60477  
Ph. 708-429-4887 Fax 708-429-5807  
[www.nelpretech.com](http://www.nelpretech.com)  
CUS

### Nikon Instruments Inc.

1300 Walt Whitman Road  
Melville, NY 11747  
Ph. 800-526-4566 Fax 631-547-8559  
[www.nikonusa.com](http://www.nikonusa.com)  
LAP, NCT

### North American Tool Corp.

215 Elmwood Ave.  
South Beloit, IL 61080  
Ph. 800-872-8277 Fax 815-389-2952  
[www.natool.com](http://www.natool.com)  
RNG, T

### Northern Gauge Inc.

86 Blueberry Crescent  
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