

# Quality

MAGAZINE

IMPROVING YOUR MANUFACTURING PROCESS

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# Quality Takes the Lead

Learn from the best in our annual *Quality Leadership 100*.

BY MICHELLE BANGERT

If you subscribe to *Quality*, it seems safe to assume that quality is a priority for you. But even when it is a priority, achieving high levels of quality is an ongoing challenge that requires effort from every member of the organization every day.

The *Quality Leadership 100* recognizes companies that have accepted this challenge and been successful in their efforts.

This annual survey for *Quality* ranks companies on the following factors: continuous improvement and

internal quality programs; contribution of quality to profitability and shareholder value; average number of hours that employees receive quality training; scrap and rework as a percentage of sales; warranty costs as a percentage of sales; and registration to various standards such as ISO 9001.

Congratulations to all those who were recognized on our list. And now, without further ado, let's take a look at the top companies.



## ALEK INDUSTRIES

Beavercreek, OH

When 95% of your work involves the military, it is clear that quality must be a priority. Scott Morr, the quality manager of Alek Industries, knows that the quality system is going well because customers have told them.

Alek Industries, a small business prime military contractor that manufactures mechanical, electronic and electro-mechanical assemblies, has received 100% satisfaction rankings from customers such as Boeing, Lockheed Martin, and the Department of Defense.

As a small manufacturer that works with larger OEMs, the 17 employees at Alek take quality seriously. In the eight years that Morr has been with the com-

pany, he's presided over a lot of changes in the quality department.

The company has moved from the previous ISO standard to AS9100 certification, completed many Lockheed Martin quality audits, and updated quality processes along the way. Now quality is broken out into 31 operating procedures. While the attention to quality never changes, the products they are manufacturing change all the time. As a job shop, each new contract involves a quality plan and review. In addition, the company's quality policy focuses on customer satisfaction, continual improvement, and training. The company trains new employees, implements cross training and offers refresher courses every year to every employee.



"I'm proud of our quality program," Morr says. "From all of our customers, we've gotten a 100% quality rating, Lockheed, Boeing and even with the government, we've achieved this in the last few years."

For other companies looking to improve quality—and perhaps impress military customers—Morr offers this advice: "Pay attention to your product, contract or purchase order reviews. A lot of things we have in place for quality have really helped us out. That's where we catch a lot of issues that might affect the quality plan." As he noted, failing to address issues in the beginning can create a lot of problems down the road.



## TECNOVA ELECTRONICS INC.

Waukegan, IL

Quality manager Scott Martin took a risk joining Tecnova eleven years ago. He moved from southern Illinois to an area outside Chicago to join the then-35 person company. Today the certified electronic contract manufacturer has about 120 people, and continues to expand. The company specializes in building complex electronic assemblies for commercial and industrial applications.

Sharp-eyed readers of *Quality* may remember hearing about Tecnova in 2014 when the company made the top five list of the *Quality* Leadership 100. Since then the company has expanded the building, adding 20,000 square feet last January, driven by customer demand. In addition, they transitioned to the current ISO 2015 standard, expanded the staff with more engineers and quality staff. "Basically just bigger and better," says Terence Coleman Jr., Tecnova's COO.

Tecnova has a large engineering team of more than 20 engineers and technicians that can build fixtures and simulate real



world conditions. The company invests heavily in training its manufacturing staff, with a dedicated training center as well as ongoing training with a refresher class every year.

The founder's vision included a focus on quality besides building a quality product, offering suggestions to improve it to the client. The company uses a combination of different quality programs, including lean and 5S, in an effort to enhance the inspection capabilities.

Terence Coleman Jr. was nine when his father founded the engineering services company, and his father is still involved in the business every day. "His focus on attention to detail and quality has driven our success," Coleman says.

But Coleman emphasizes that the entire team deserves recognition for their attention to quality, product longevity and customer satisfaction.

James Demar, director of business development, says the company gets a lot of referral business. By developing partnerships with other companies, they've been able to increase their business. Demar says, "My job is to make sure we're not a well-kept secret."



## ORION TECHNOLOGIES

Orlando, FL

Orion Technologies specializes in embedded single board computers (SBC) for industrial, military, and commercial applications, guiding customers from initial business inquiry through board development and design all the way to shipment of the final product. The nearly 30-year-old company also

specializes in quality, with an AS9100 certification for quality assurance through every step of their process.

"We have a quality-first culture," says Olatokunbo Olaniyan, the quality assurance manager at Orion. Though only two Orion employees have the word "quality" in their title, any worker can identify a nonconformance, Olaniyan says, and all embrace the quality mindset. "I've worked for different companies where people are always looking for

ways to circumvent quality processes," he notes—to save time or cut corners—"but it's definitely not like that here."

Each Orion employee is trained to a quality management system, with metrics in place for key processes and data analysis at the end of each month for on-time delivery, quality rating, and design effectiveness. Through this model, Olaniyan says, "each employee strives to keep improving and moving forward from a quality standpoint."

Furthermore, each Orion product is designed and built with a specific test plan, developed by Orion's own hardware engineers and software

developers, to analyze the quality and reliability of each component before the product is shipped. For systems that will be subjected to harsh envi-

ronments, Orion uses burn-in testing to weed out marginal components, keeping failure rates low and SBC performance high.



**GEOMETRIC DESIGN & TECHNOLOGY**

*Meadville, PA*

The four equal partners of Geometric Design and Technology have a combined 80 years of experience in metrology fields, resulting in a A2LA accredited metrology lab that epitomizes quality.

According to their website, GD&T specializes in dimensional inspection of parts via precise 3D measurement, using calibrated equipment that is traceable to NIST. The environmentally-controlled lab, which houses contact and noncontact dimensional inspection equipment, offers first article inspection, reverse engineering with SolidWorks CAD software, and turnkey inspection packages that can be tailored to fit customers' most complex dimensional fixturing, gaging, and programming needs. Additional quality services on offer include gage repeatability studies, PPAP, and SPC.

As the website also notes, customers across industries like medical, automotive, electronics, and plastics outsource their dimensional inspection to GD&T in no small part because of the lab's accreditation and proven track record of quality assurance. In essence, these customers know that GD&T will satisfy their in-house requirements with utmost precision, while also providing a cost-effective solution with a quick turnaround.



**TURNER-INDUSTRIES**

*Baton Rouge, LA*

Turner Industries employees build, maintain and service the nation's heavy industrial sector helping make the life we live possible by supporting the companies that produce fuel, energy, and products essential to our daily existence. Since 1961, Turner has steadily worked to provide one solution for its clients' success. To do this it finds, develops and supports the very best people for the jobs it performs throughout its four divisions: construction; maintenance and turnarounds; fabrication; and equipment and specialty services.

According to Roland M. Troups, executive chairman of Turner Industries, the company's goal is to provide clients with services that allows them to be the best and deliver results that have bottom-line impact. "Our strategic initiatives are simple," he says, "assist our clients in achieving their business objectives, produce bottom-line results by working smarter and faster, and deliver innovative solutions to strengthen our clients' competitive advantage."

Turner Industries also has been named in the 2018 Engineering-News Record (ENR) Rankings, No. 31 on its list of the Top 400 Contractors and No. 119 on its 250 Top Global Contractors.

RANK	COMPANY	LOCATION	WEBSITE
1	Alek Industries	Beavercreek, Ohio	alekcompanies.com
2	Tecnova Electronics, Inc.	Waukegan, Illinois	www.tecnova.com
3	Orion Technologies	Orlando, Florida	www.oriontechnologies.com
4	Geometric Design & Technology, Inc.	Meadville, Pennsylvania	www.gdandtinc.com
5	Turner Industries	Baton Rouge, Louisiana	turner-industries.com
6	RAH Industries	Valencia, California	www.rah-ind.com
7	Quality System Consultants	Santa Clara, California	www.qualitysystemconsultants.com
8	Jackson Tumble Finish	Jackson, Michigan	www.jacksonstumble.com
9	Aerospace Manufacturing Inc	Eagan, Minnesota	aerospacemanufacturing.com
10	Littlestown Foundry, Inc.	Littlestown, Pennsylvania	www.littlestownfoundry.com
11	Electromed, Inc.	New Prague, Minnesota	www.electromed.com
12	Software Engineering Applications Solutions	San Diego, California	www.seas-inc.us
13	LDB Plastics, Inc.	Shelby Township, Michigan	ldbplastics.com
14	Harbor Steel and Supply Corporation	Muskegon, Michigan	harborsteel.com
15	Hydrasearch LLC	Stevensville, Maryland	www.hydrasearch.com
16	NishTech Consultants	Santa Clara, California	www.nishtekcon.com

RANK	COMPANY	LOCATION	WEBSITE
17	Chart Inc.	Ball Ground, Georgia	<a href="http://www.chartindustries.com">www.chartindustries.com</a>
18	Clarke Engineering Inc. (Clarke gear Co.)	North Hollywood, California	<a href="http://clarkegear.com">clarkegear.com</a>
19	Sparqtron Corp	Fremont, California	<a href="http://www.sparqtron.com">www.sparqtron.com</a>
20	Clearwater Engineering	Derby, Kansas	<a href="http://www.clearwateren.com">www.clearwateren.com</a>
21	Film Tech LLC	Stanley, Wisconsin	<a href="http://filmtechllc.com">filmtechllc.com</a>
22	LNS GROUP	Cincinnati, Ohio	<a href="http://www.lns-group.com">www.lns-group.com</a>
23	mpp	Rockwood, Tennessee	<a href="http://mppinnovation.com">mppinnovation.com</a>
24	Lee's Grinding, Inc.	Strongsville, Ohio	<a href="http://www.leesgrinding.com">www.leesgrinding.com</a>
25	Forge Die and Tool	Farmington, Michigan	<a href="http://www.forgeprecision.com">www.forgeprecision.com</a>
26	Kreis Tool	Elgin, Illinois	<a href="http://kreis.com">kreis.com</a>
27	Rochester Metal Products	Rochester, Indiana	<a href="http://rochestermetals.com">rochestermetals.com</a>
28	Royell Manufacturing	Everett, Washington	<a href="http://www.royell.com">www.royell.com</a>
29	Merit Industries, Inc.	Erie, Pennsylvania	<a href="http://www.meritindustriesusa.com">www.meritindustriesusa.com</a>
30	Stark Industrial, LLC	North Canton, Ohio	<a href="http://www.starkindustrial.com/">www.starkindustrial.com/</a>
31	Q-Met-Tech, LLC	Union, KY	<a href="https://www.manta.com/c/mxjkgrv/q-met-tech-llc">https://www.manta.com/c/mxjkgrv/q-met-tech-llc</a>
32	Kapro	Galill, Wisconsin	<a href="http://kapro.com">kapro.com</a>
33	Girtz Industries, Inc.	Monticello, Indiana	<a href="http://www.girtz.com">www.girtz.com</a>
34	BPS Supply Group	Shafter, California	<a href="http://www.bpssg.com">www.bpssg.com</a>
35	Griffin Industries	Green Bay, Wisconsin	<a href="http://www.griffinindustries.com">www.griffinindustries.com</a>
36	Triad Tool Co., Inc.	Branchburg, New Jersey	<a href="http://Triadtool.com">Triadtool.com</a>
37	Truck Accessories Group	Elkhart, Indiana	<a href="http://www.truckgroup.com">www.truckgroup.com</a>
38	ASQ	Milwaukee, Wisconsin	<a href="http://asq.org">asq.org</a>
39	Metal Industries Inc.	Bushnell, Florida	<a href="http://metalindustriesinc.com">metalindustriesinc.com</a>
40	Inscape	Falconer, NY	<a href="http://Inscape.com">Inscape.com</a>
41	Riverside City College	Riverside, California	<a href="http://www.rcc.edu">www.rcc.edu</a>
42	Medtronic	Miami, Florida	<a href="http://Medtronic.com">Medtronic.com</a>
43	Brazonics , Collins Aerospace UTAS	Hampton, New Hampshire	<a href="http://brazonics.com">brazonics.com</a>
44	GE Appliances-Haier	Louisville, Kentucky	<a href="http://www.geappliances.com">www.geappliances.com</a>
45	Colmac Coil Manuf	Colville, Washington	<a href="http://www.Colmaccoil.com">www.Colmaccoil.com</a>
46	MSSC	Troy, MI	<a href="http://masscna.com">http://masscna.com</a>
47	AusculSciences Canada Inc.	Kanata, West Virginia	<a href="http://www.ausculsciences.com">www.ausculsciences.com</a>
48	Edwards Lifesciences	Irvine, California	<a href="http://www.edwards.com">www.edwards.com</a>
49	Mersen	Newburyport, Massachusetts	<a href="http://ep.mersen.com">ep.mersen.com</a>
50	MotoRad	Mount Carmel, Illinois	<a href="http://motorad.com">motorad.com</a>
51	NDT Solutions LLC	NEw Richmond, Wisconsin	<a href="http://www.ndts.com">www.ndts.com</a>
52	Lovejoy-Timken	Downers Grove, Illinois	<a href="http://www.lovejoy-inc.com">www.lovejoy-inc.com</a>
53	Swift Engineering Inc.	San Clemente, California	<a href="http://swiftengineering.com">swiftengineering.com</a>

RANK	COMPANY	LOCATION	WEBSITE
54	BMP America Inc.	Medina, New York	www.bmpworldwide.com
55	Advanced Technology Company	Pasadena, California	at-co.com
56	Lincoln	Utah	linconelectric.co.uk
57	3vfasteners	Corona, California	3vfasteners.com
58	Dill Air Controls Products, LLC	Oxford, North Carolina	dillvalves.com
59	Excelitas Technologies	Waltham, Massachusetts	www.excelitas.com
60	Schrader-Pacific Valves	Altavista, Virginia	www.schrader-pacific.com
61	Bergstrom	Rockford, Illinois	us.bergstrominc.com/
62	Advanced Atomization Technologies	Clyde, New York	advancedatomization.com
63	Smiths Medical	Plymouth, Minnesota	www.smiths-medical.com
64	Primo Medical Group	Stoughton, Massachusetts	www.primomedicalgroup.com/
65	Procyrion, Inc.	Houston, Texas	www.procyrion.com
66	Hans Rudolph inc.	Shawnee, Kansas	www.rudolphkc.com
67	Beretta USA	Gallatin, Tennessee	Berettausa.com
68	Accord Carton	Alsip, Illinois	accordcarton.com
69	Schrader-Pacific Valves	Altavista, VA	http://www.schrader-pacific.com
70	Western Gage Corp	Camarillo, California	westerngage.com
71	WIRIC	Rochester, Michigan	wiric.com
72	Mold Precision Engineering, Inc.	Simi Valley, California	www.moldprecision.com
73	Micro Plating Inc	Erie, Pennsylvania	www.microplating.com
74	Jain Irrigation Inc	Fresno, California	www.jainsusa.com
75	Oceanaire Inc	Morton Grove, Illinois	www.oceanaire-inc.com
76	Divers. Biomedical Tech., Inc.	Palatine, Illinois	www.dbtco.com
77	Sub-Zero Group, Inc.	Madison, Wisconsin	Subzero.com
78	Josheph Mother LLC	Littleville, Wyoming	Noneya.com
79	InnoFlex LLC	Minneapolis, Minnesota	InnoFlexcorp.com
80	Ronan Engineering	Valencia, California	ronan.com
81	American ShiZuki Corporation dba ASC Capacitors	Ogallala, Nebraska	www.ascapacitor.com
82	Faraday	Gardena, California	ff.com
83	Gonzalez Production Systems	Pontiac, Michigan	www.gonzalez-group.com
84	Sharp Packaging by Pregis	Sussex, Wisconsin	pregis.com
85	Automatic SMP	Decatur, Arkansas	www.automaticsmp.com
86	Inscape	Falconer, New York	www.Inscape
87	Merit Industries, Inc.	Erie, Pennsylvania	www.meritindustriesusa.com
88	Beretta USA	Gallatin, Tennessee	berettausa.com
89	Quintel Solutions	San Jose, California	quintelsolution.com
90	Kohler	Kohler, Wisconsin	kohler.com
91	Image Projections West	Denver, Colorado	www.ipwusa.com
92	Rawlings Sporting Goods	St. Louis, MO	http://rawlings.com
93	Multi Products Co., Inc	Racine, Wisconsin	www.multiproducts.com
94	Symbotic LLC	Wilmington, Massachusetts	www.symbotic.com