

Chapter 1 : Forest City Gear - Manufacturing Today

Forest City Gear buys a Hofler EFRS gear checker. All of the new precision equipment lures customers who have more precise demands. To prove the superior quality of Forest City Gear parts, investment in gear-inspection equipment ramps up quickly.

Forest City Gear produced 75 different types of gears for the nuclear-powered Curiosity, which recently touched down on Mars. Curiosity will spend several weeks in tests before it begins a two-year surface exploration to search for signs of life, while studying geology and other scientific research. Forest City Gear also made gears for both the Spirit and Opportunity rovers that were launched in Opportunity continues to roam the Mars surface, but Spirit became stuck in position in and stopped working in Forest City Gear is a family-owned business where gears are the corner stone and excellence is the daily ambition. FCG delivers value and satisfaction for its many customers. Gears for printers, telescopes, tractors, aircraft, defense and medical devices are manufactured for demanding specifications to customers around the world. After graduating from college and completing military service, he returned to the company. Fred assumed control of FCG in the late s. With young children no longer at home, I came on board full time in Today we have three adult daughters, all of whom are involved in the company at various levels of participation. Our middle daughter is our Human Resources Director. As a young girl, she picked up trash from the grounds and was assigned various sundry small jobs. Before our oldest daughter and her husband started their family, she was also employed. So yes, we are a family business with ties to our local community. With increasing costs, long lead times some as far out as 14 to 16 weeks , and ongoing quality issues, company leadership believed it was time to address this segment of vertical integration. Today, there are six pieces of turning equipment and eight employees dedicated to the new department. Along with those additions, however, there is less gear manufacturing floor space, and working conditions are quite close with overcrowding. Along with increased business came a shortage of storage space. The additional storage space will house overflow capacity. Historically, the company has reinvested 25 to 40 percent of gross sales each year for more than 30 years to continue that level of quality. People question our numbers. They question whether we really reinvest as much as we do on equipment. We have to buy new equipment to expand our capabilities and technology. With space restrictions, older equipment is sold to ensure space for new machinery. The Pfauter Horizontal Hobbing machine is used to perform high helix gears to 75 degrees and has carbide re-hobbing capabilities for skiving. We try to secure AA quality hobs to maximize the involute quality, and lead error is controlled by the accuracy of the blank and mounting fixture, and we usually hit AGMA 10 on average. Bear in mind, in fine pitch of gears 72 DP and finer we are only checking against a master gear, which is more forgiving than by analytical inspection, which downgrades the gear quality to that of the lowest parameter. Our average quality is about AGMA 10 for hobbing and shaping. All three brands of shapers or all eight of the shaping equipment in the facility feature CNC helical guideless machines, with two of them accepting face gear attachments, and two of the shapers are used to perform crown shaping. We can grind gears with CBN wheels as small as 20mm. Two of the grinders also do high accuracy thread grind on shafts to a meter in length. Crown hobbing is cut on splines and gears for misalignment correction and noise reduction. The company commonly produces splines for hydraulic wobble motors, which are called the dogbones. We also produced some very high accuracy internals that featured a very small relief that was challenging for this project as well. The tests were to produce some very special high accuracy gears with little lead-time for cutter acquisition and machining. Apparently we came through adequately as they are still in operation well beyond the planned experiment length. We continue to expand our aerospace business, as it requires very accurate gears and splines in exotic materials. That reduces the amount of competition we face. Forest City Gear offers large hobbing, shaping, small gear hobbing, milling, drilling, tapping, boring, honing, lapping, surface grinding and tools for fixturing, and cylindrical grinding. Critical to gear production is quality control. In December , FCG successfully transitioned to and passed its AS Revision C audit promising to continue unparalleled service in a rigorous compliance environment. FCG recognizes that AS is the aerospace equivalent to ISO that requires more

rigorous accounting of parts, quality, review of satisfactory delivery, non-conformance issues and monitoring and reporting for continuous improvement. Whether it be a simple spur gear component or sophisticated worm gear component, our goal is to ensure we contribute to medical device quality, safety, and effectiveness. The company utilizes state of the art Analytical Gear Inspection equipment to verify conformity on every first piece at machine set up prior to machining the parts. In-process inspections are performed in the same manner to guarantee a complete conforming order and final dimensional verifications simulating the actual performance of the gear in a mating scenario in most applications. They also manufacture gears or generate the teeth on blanks supplied from many other gear manufacturers that do not have the capability of producing the quality level needed by their customers. FCG is a leader in gear manufacturing by continuously improving its operations, upgrading its equipment and striving to meet and exceed customer and regulatory requirements. The newest arrival this year is the Klingelnberg P65 on which gear inspectors can measure up to inch gears. Today, on rare occasions, FCG will do gear inspection for other gear houses or for customers requiring product traceability and troubleshooting.

Chapter 2 : Working at Forest City Gear in Roscoe, IL: Employee Reviews | calendrierdelascience.com

More about Forest City Gear Quality Assurance Lab Investment Recognized by Design World Continually re-investing in our capabilities is a hallmark of our business strategy.

Gears are made from aluminum, brass, bronze, cast iron, steel, plastic and stainless steel. Gear blanks, assemblies, ratchets, serrations, shafts, splines, sprockets and worms are also available. Capabilities include gear grinding up to 20 in. OD, thread grinding up to 20 in. OD, spur hobbing up to 20 in. OD, spur shaping up to 24 in. OD, helical hobbing up to 20 in. OD, helical shaping up to 24 in. OD, crown hobbing, carbide re-hobbing, drilling, milling, ultrasonic cleaning, analytical gear inspection and hob sharpening. Gears are suitable for telescopes, tractors, artificial elbows, military lasers, medical examining tables, printers, plotters, power tools, dental drills and space stations. Company Description by Forest City Gear Every production process we perform turns on this principle, and is backed by uncompromised auditing, testing, quality review and packaging from initial blanks and tools to production and final inspection. We believe we have one of the best equipped gear shops in the world. This includes both equipment and employees, a legacy of Forest City Gear for over 50 years. We manufacture gears for diverse industries and a wide range of product applications throughout the world. Our gears are in telescopes and tractors, artificial elbows and aircraft, military lasers and medical examining tables, printers and plotters, power tools and dental drills, as well as the space station to name just a few. We even make gears for our competitors. When it comes to fine- and medium-pitch custom gears, the world comes to Forest More City Gear for the best. Sure, we are passionate about gear manufacturing, leading edge technology and customer satisfaction. World-class quality medium- and fine-pitch gears are the result. Our website provides an introduction to our capabilities and the way we do business. But, if you are still out on a limb about a gear maker, we want you to visit Forest City Gear and see for yourself.

Chapter 3 : Company Profile: Forest City Gear | Gear Solutions Magazine Your Resource to the Gear Industry

Forest City Gear, Roscoe, IL. likes 4 talking about this were here. Forest City Gear is now HIRING!

Chapter 4 : Forest City Gear Achieves ISO Medical Certification

The Forest City Gear Story by Kika Young, , available at Book Depository with free delivery worldwide.

Chapter 5 : Working at Forest City Gear: Employee Reviews | calendrierdelascience.com

The latest Tweets from Forest City Gear (@ForestCityGear). Excellence without exception. Roscoe, IL.

Chapter 6 : Home | Forest City Gear

Forest City Gear Products on Latest Generation of BMW Oracle Racing Yachts. Critical winch crown gears to be used by BMW ORACLE Racing on their state-of-the-art trimaran in the America's Cup match on February 8, in Valencia, Spain The winches on a racing yacht are critical items of equipment.

Chapter 7 : Forest City Gear Co.

"We started out with about 63 and now were about "Other techniques like investing 25 to 40 percent of sales every year to upgrade equipment has been another secret behind Forest City Gear's.

Chapter 8 : Forest City Gear Archives - Precision Plus

Forest City Gear is a family-owned business where gears are the corner stone and excellence is the daily ambition. Young says achieving world-class gear quality is the result of the company's investment in machines, employees and systems. FCG delivers value and satisfaction for its many customers.

Chapter 9 : History | Forest City Gear

Forest City Gear CEO Fred Young said the project is on a fast track because the Mars program is expected to launch in and arrive on Mars the same year.