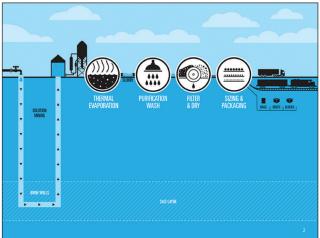
AGRICULTURE & MANUFACTURING



LYONS MANUFACTURING, manufactures parts for Spirit and Lear/ Bombardier. Spirit produces the fuselage and engine nacelles for the Boeing Dreamliner 787 pictured above. Lyons Manufacturing produces some parts that are used in that process. The General Manager of Lyons Manufacturing is Craig Mullins.

<u>Compass Minerals</u> Lyons operation is a supplier of consumer salt products nationwide and major employer in Rice County



Nelson Mandela once said, "Let there be work, bread, water and salt for all." Compass Minerals upholds that maxim and works to provide salt for all.

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Compass Minerals is a leading producer of deicing and water conditioning products, consumer and commercial culinary salt, and mineral-based products for agricultural and industrial applications. While the headquarters are located in Overland Park, the company has numerous production and packaging facilities in the United States, Canada, and the United Kingdom making it one of the largest salt producers in the world.

Compass Minerals owns and operates several of the world's largest and deepest salt mines. The company uses drill-and-blast and continuous mining techniques in their underground mines to extract millions of tons of salt each year. The company also draws thousands of tons of salt, potash and magnesium chloride from the Great Salt Lake in Utah using solar evaporation.

Compass Minerals in Lyons is one of the company's mechanical evaporation operations. Water is pumped through shafts underground (see illustration above) dissolving the solid salt. The salty brine is pumped to the surface. Highefficiency machinery evaporates the water and crystallizes the salt. The Lyons facility produces more than a thousand tons of crystallized salt daily and has an annual capacity of approximately 450,000 tons.

Many American households deal with the effects of hard water. Compass Minerals is there to help. While the company produces table salt, branded under several different labels, Compass Minerals naturally sourced water conditioning salt is a popular selling product. Although not produced at the Lyons facility, the company's top selling product is highway deicing salt.

While salt is generally recognized as safe for human use, all salt producers must meet the Food Chemical Codex's (FCC) recognized standards for purity, and the Food and Drug Administration's (FDA) requirements for safety. Compass Minerals, Lyons, is inspected annually and production meets or exceeds the federal standard of 99.5 percent pure. One of the Lyons' and Rice County's major employers, **Compass Minerals** boasts more than 100 years of business, a consistent workforce, and an excellent safety record at the local plant. Compass Minerals brings prosperity to Rice County and salt to American homes and businesses.

Lyons Manufacturing is still providing parts for the world's jet airliners

Lyons Manufacturing Company continues to provide parts to the Spirt Company for the Boeing 787 Dreamliner program, the Boeing 737, 747, and 777 programs. Craig Mullins, general manager of the company said recently they had purchased two new machines allowing them to improve productivity and add to their manufacturing capacity. They are also making more parts for the 787 through GKN Aerospace in Wellington, KS.

Currently Mullins said the company is providing structural component parts for the 737 at the rate of 40-42 aircraft per month.

Their other product lines have been maintaining. As they enter into their fourth year with Bombardier Lear Jet in Wichita, they have continued to grow their customer service and spare parts manufacturing relationship with the company as they build spare parts for Lear Jets in service. Mullins explained that recent layoffs by Bombardier have not affected this program. The project is to span four years, of which they have just completed three.

In addition to those product lines Lyons Manufacturing produces parts for the Gulfstream line of corporate jet aircraft. They also have expanded into doing job shop work for companies or individuals that need a specialty item.

Mullins said that customers who might need any kind of precision part manufactured can look to them. They also have the ability to reverse engineer and manufacture parts that are no longer produced. Manufacturing a one of or two of is not uncommon for the company.

Lyons Manufacturing Company employees up to 21people and runs 10 hour shifts Monday through Thursday. Friday is their overtime day, and is also busy with production most weeks.





Mechanical Evaporation

- Inject water into an underground salt deposit to create saturated brine
- Brine is thermally evaporated to form salt crystals
- The crystals are then washed to remove impurities, filtered and dried
- This high-purity salt is then processed into a variety of products sold through our consumer and industrial business
 - Animal nutrition
 - Culinary salt
 - Pool salt
 - Water conditioning

THESE TWO MACHINES were purchasedrecently by Lyons manufacturing. The machine above is a Hwacheon Cutex-240 turning center. This machine is equipped with two spindles and is capable of machining a complete part in one operation. This machine is used for turning titanium bolts used on the Boeing 777. At the left is a Haas UMC-750 machining center. This is machine is equipped with a 12,000 RPM, 30 HP spindle. This machine is used for high speed 5-axis machining of complex aircraft parts for the Boeing 737 & 787.

