The use of Stainless Steel for processing equipment:

DCI, Inc. offers a variety of stainless steel equipment that is 100% recyclable. In addition the origin of our material comes from 60-80% post-consumer use. Stainless steel has become an increasingly favored material in the manufacturing industry not only for its unique properties such as high strengths and resistance to corrosion, but with many companies striving to reduce their negative impact on the environment, stainless steel is becoming a green choice for material because of its longevity and environmental friendliness. In fact, stainless steel is thought to be the most recyclable man-made material on the planet.

Even with all of the benefits associated with it, many consumers and companies tend to overlook the use of stainless steel because of the higher initial cost when compared to other materials. However, when considering the total life of a project and the costs involved, stainless steel is often the best option when it comes to value; both for the consumer and the environment.

- Stainless steel is 100% recyclable
  - Retains value even after a very long life as capital goods or consumer products
  - Less concern about disposal of old material

- Over 60% of new stainless steel comes from post-consumer material that has been melted down
  - Does not require as much processing which reduces pollutant emissions
  - Recycled stainless steel can be made to the same quality as the original and is not “downgraded” as is the case with many recycled materials

- The alloying composition of stainless steel creates a layer of chromium oxide which is a natural corrosion resistant film
  - The protective chrome oxide layer is too thin to be visible but allows the metal to stay aesthetically pleasing as well as maintaining the passive film to be corrosion resistant
  - If damaged mechanically or chemically, this passive film layer is self-healing in the presence of oxygen
  - Does not require a surface coating that could deteriorate to possibly pollute the environment, therefore no carbon footprint from painting, plating, or other coatings.
  - Lower alloyed grades resist corrosion in atmospheric and pure water environments while high-alloyed grades can resist corrosion in most acids, alkaline solutions, and chlorine bearing environments

- The use of stainless steel minimizes the use of new natural resources

- The hygienic qualities of stainless steel mean that harsh chemicals are not required to get a clean surface and therefore requires less maintenance and is often used to replace corroded or failed products

Companies and consumers who want to make a difference in the environment and lower their carbon footprint can easily do so by simply choosing stainless steel products by DCI, Inc.

DCI, Inc. is committed to being the premiere supplier of innovative solutions for our customers through the design and fabrication of stainless steel and alloy equipment.

Various reference resources (not inclusive): [www.worldstainless.org](http://www.worldstainless.org)  [www.nickelinstitute.org](http://www.nickelinstitute.org)  [www.ssina.com](http://www.ssina.com)