



History

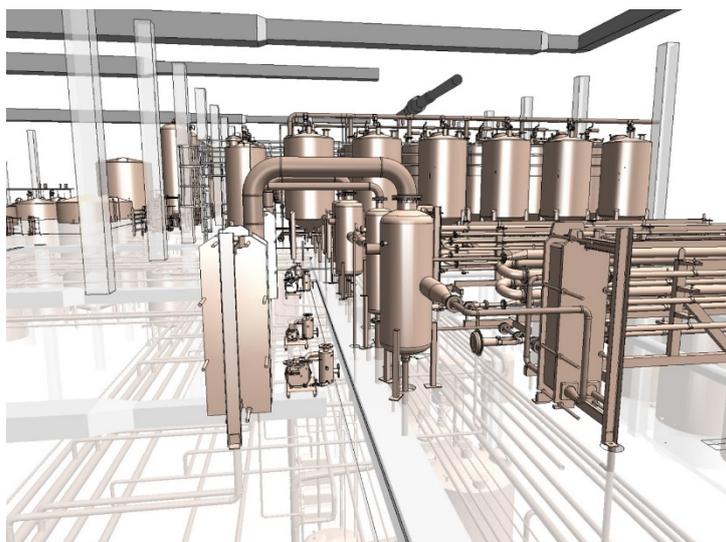
The story of glucose syrup began with Gottlieb Kirchoff, a German chemist. In 1811 he converted starch into glucose.

Our story begins with Karl Kroyer, a Danish inventor of the continuous conversion of starch to glucose syrup. We are still having his continuous convertor built.



First Kroyer converter

Today we do, however, replace the original acidic hydrolyzation with the more flexible and the more accurate enzymatic conversion. This enables the manufacture of any degree of conversion from low-DE malto-dextrins to high-DE dextrose syrups, and with isomerase even fructose syrups.



Front end of a Low DE conversion line.

Each enzyme works only well within a narrow temperature range and at an accurate pH. From start to end, multiple shifts may be necessary, and all impurities introduced with the feedstock and the additives must be removed. We use ion exchangers of our own design for the job, just in line with our process.



Ion-exchanger section

Starch sweetener factories may be built as stand alone, but are most often an add-on to a starch plant processing any starchy crops and thereby provides for better marketing opportunities.

Tank Yard

The intermediate storage of syrups has developed into a sophisticated tank yard to meet today's broad-spectrum demand.



Danish Tank Yard.

Applications

Beer adjunct

The worldwide beer productions have reached two billion hectoliters. Barley is being replaced by maltose syrups as adjuncts.

Soft drinks

Similar trend in the non-alcoholic beverage market amounting worldwide to one billion U.S. dollars. Sugar is being replaced by starch syrups – fructose, dextrose.

Sweets

Global candy market is up, and the US consumption alone is now six million pounds of candy every year.