

**#952 – Sugar: Booming Business!**  
**Ake Harmanny**, StuvEx nv, Kontich, Belgium

The presentation includes a real life demonstration of a sugar dust explosion. Based on the explosion characteristics of sugar dust the typical explosion hazards of sugar dust will be presented, which are very different from e.g. Grain dust. Some explosion accidents will be discussed and guidance is included how typical sugar process equipment can be protected.

**Posters**

**#953 – Cooling the Sugar: An Important Step to Ensure Optimal Storage and Packaging Conditions.**  
**J-M Riechling**, Bulkflow European Office, Philippeville, Belgium

This poster reviews the different parameters which must be controlled in order to have optimal sugar storage conditions: size, moisture and temperature of the sugar , as well as

the type of silo to be used.

The principle of this innovative sugar cooling technology is the combination of indirect heat exchange with the mass flow principle of bulk solids. Thermal designs for this indirect, plate type, bulk solids exchanger are performed using an advanced, proprietary thermal modelling software, known as SOLEX.

In order to minimize the energy consumption, various layouts and designs are offered to find and optimal fit for the application. Various examples will be presented.

**#954 – Color measurement – are all methods equal? Marianne McKee, Ronnie Triche, Mary An Godshall, and Charley Richard.** Sugar Processing Research Institute, Inc., New Orleans, LA., U.S.A.

At Sugar Processing Research Institute, Inc. (SPRI), we have noted that raw sugar color is being

measured using any of several different methods. Using these different methods to measure color can have a wide ranging effect on the determined value of the raw sugar. We studied the effect of two different methods on raw sugar color by measuring the color according to the International Commission for Uniform Methods of Sugar Analysis (ICUMSA) method and the raw sugar contract (No. 14) of the New York Board of Trade method (often called the Domino Contract method or sometimes the modified ICUMSA method). The color ratio for the Domino contract color to ICUMSA color ranged from 1.17 to 2.23 with an average of 1.95. The lower color raw sugars showed the greatest differences in determined color value using these two methods.

**SJ**

## U.S. Cane Sugar Refining Companies

Company	Refinery Location	Melting Capacity <sup>a/</sup>	Company	Refinery Location	Melting Capacity <sup>a/</sup>
<b>American Sugar Refining Co.</b> Baltimore, MD 1100 Key Hwy. East Baltimore, MD 21230 800-638-1590	Baltimore, MD	3,000	<b>Florida Crystals Refinery</b> P.O. Box 86 South Bay, FL 33493 561-996-9072 Fax: 561 992-7326	South Bay, FL	1,100
Chalmette, LA 7417 N. Peters St. Arabi, LA 70032 504-271-5331	Chalmette, LA	3,100	<b>Imperial Sugar Co.</b> P.O. Box 9 Sugar Land, TX 77487 281-491-9181 Fax: 281-490-9785	Port Wentworth, GA Gramercy, LA	3,150 2,200
Yonkers, NY One Federal St. Yonkers, NY 10702 914-963-2400 Fax: 914-963-1030	Yonkers, NY	2,000	<b>United States Sugar</b> 111 Ponce de Leon Avenue Clewiston, FL 33440 863-983-8121 Fax: 863-983-9827	Clewiston, FL	2,400
C & H Sugar Co. Inc. 510-787-2121 Fax: 510-787-3196	Crockett, CA	3,400			

a/ 24-hour melting capacity, short tons, raw value