

JM Canty International

Sugar Industry

Canty Sugar Industry Applications

Production Applications

Fuseview Sight Glass

SugarScope™ Crystal Growth Analyser

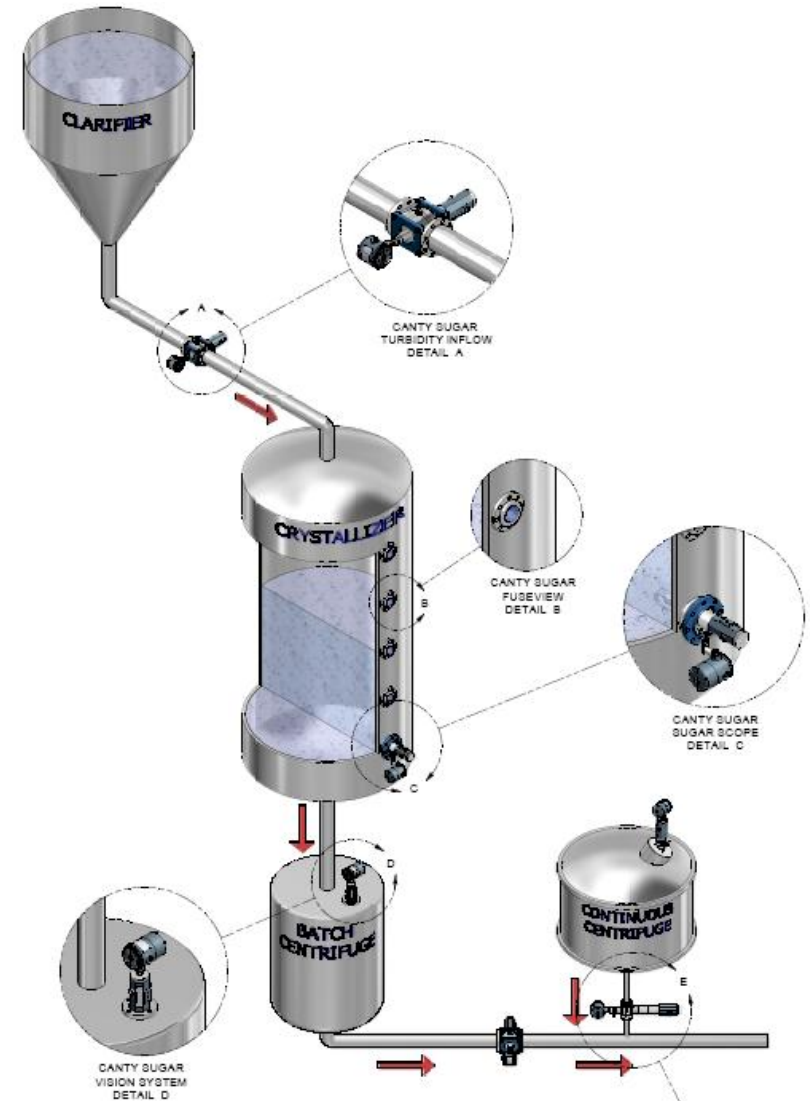
Turbidity Analyser

Centrifuge Camera Control

Quality Control Applications

Sugar Crystal Size Analysis

Sugar Crystal Colour Analysis



Canty Fuseview™ Sight Glass

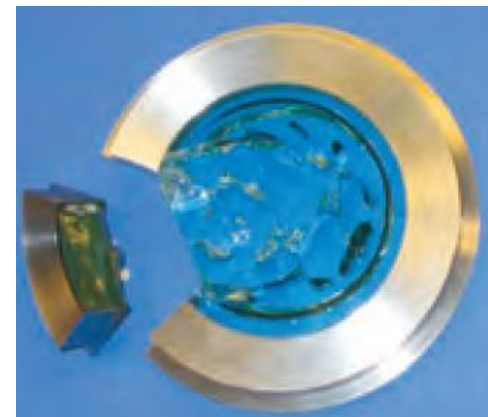
Unique Manufacturing Process

Our unique glass recipe (BoroPlus™) is heated to its molten point and poured into the centre of a metallic ring

The BoroPlus™ glass fuses / bonds to the metal and is slowly cooled

The metal compresses on the glass due to its higher coefficient of expansion, putting it under radial compression

By fusing glass to metal, a high pressure, high safety, hermetic seal is formed, resulting in a one piece construction Fuseview™ sight glass

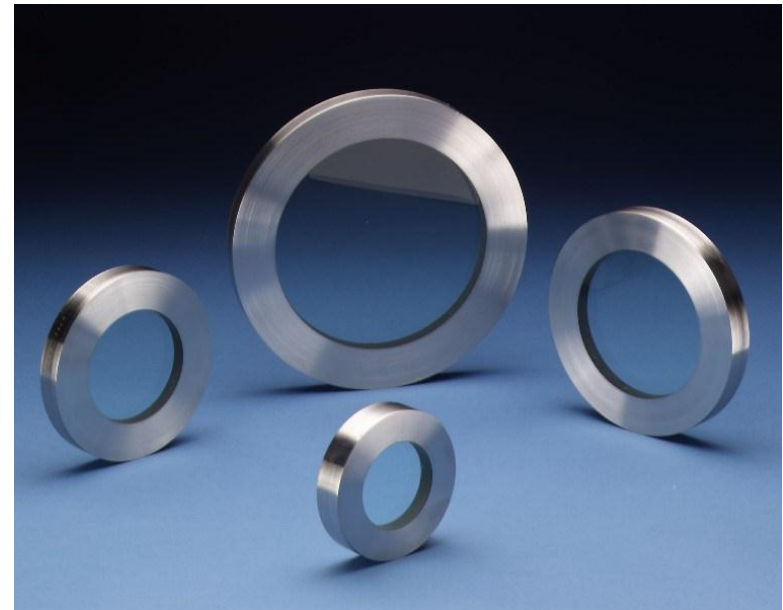


Canty Fuseview™ Sight Glass

Tempered sight glasses, cannot be fully tightened in place for fear of cracking the window and ruining the batch.

Therefore, there is not a full vacuum seal which causes leaks, and means more energy is required to boil the liquid.

By using a Fuseview™ the user is tightening on metal so cannot over torque and damage the window. A full seal is maintained, and so a full vacuum is achieved, meaning huge energy savings



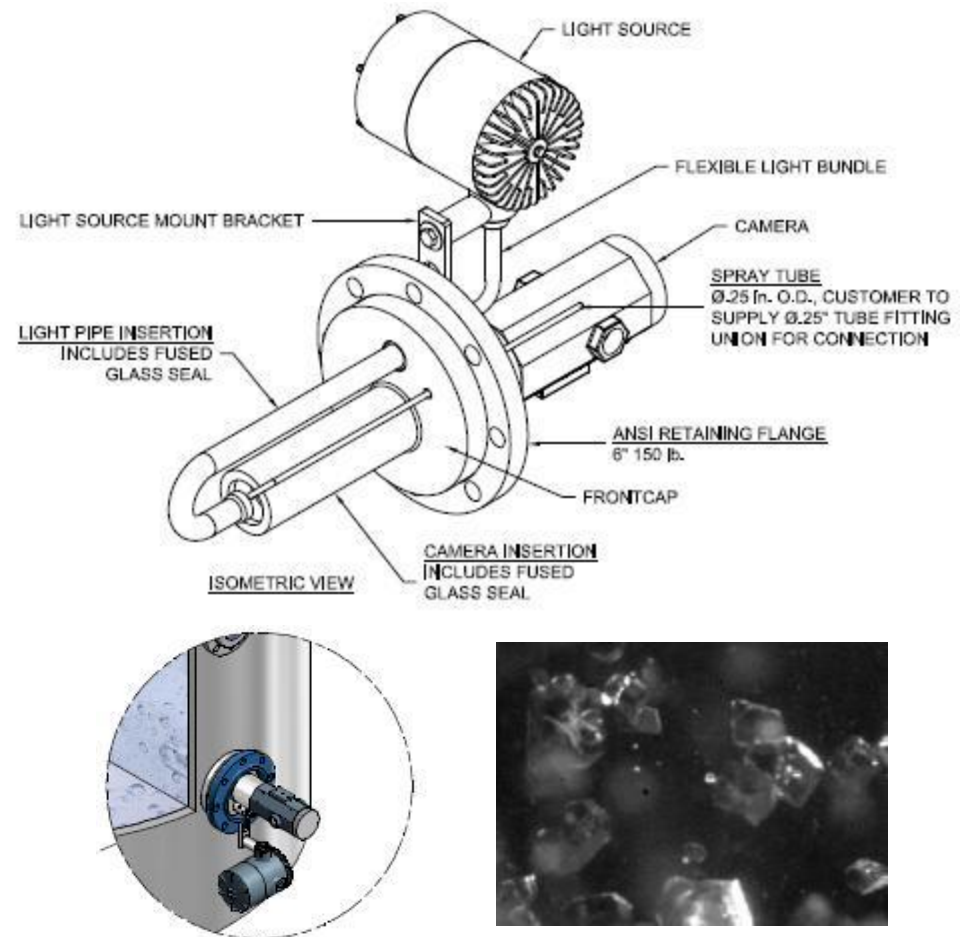
Canty SugarScope™

System features unique fused glass technology and fibre optic lighting

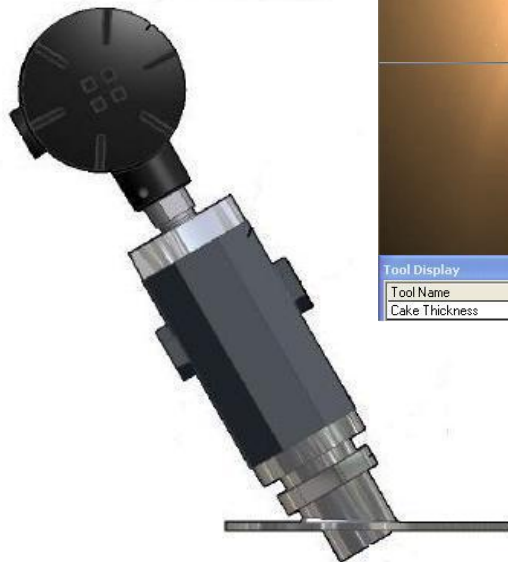
Side mounts onto the crystalliser vessel to provide live images of the sugar crystals as they grow – initial seeding through to full crystal growth

Provides early detection of seeding problems, allowing for recycling of the batch if necessary without wasting energy continuing with the process

Cantyvision Client software allows for crystal size / shape analysis up to 5% solids concentration



Canty Centrifuge Camera Control



Ethernet camera & light combination unit provides remote view into the centrifuge for continual process monitoring

Cantyvision Client software can be used to provide real time continuous measurement of product thickness on the wall of the centrifuge

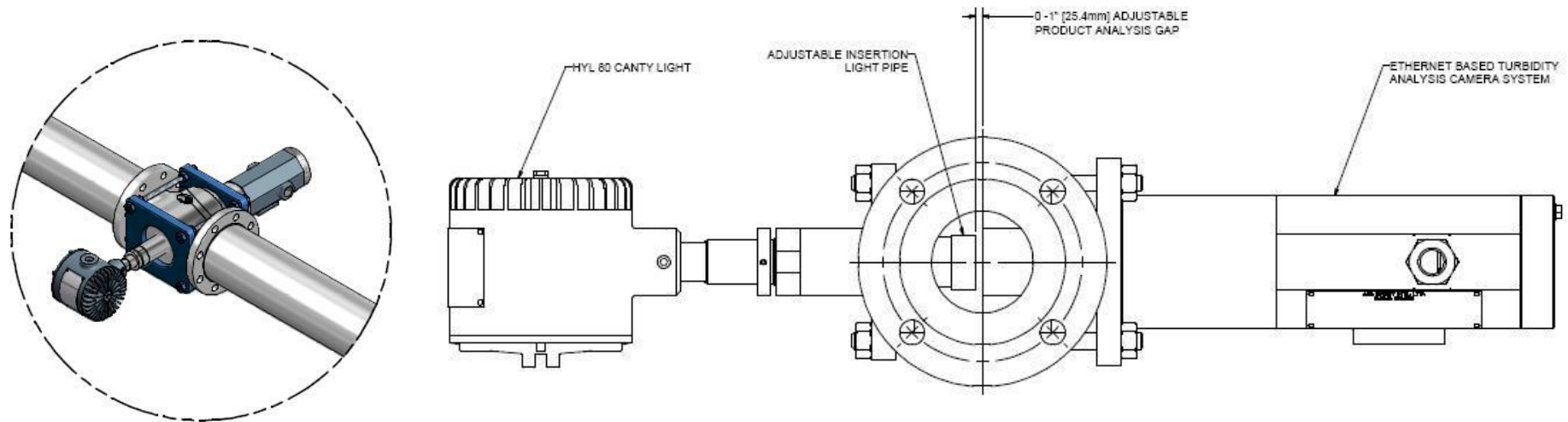
The intensity of light reflection from the surface of the product can be used as an indication of surface fluid / filter process performance

Canty Inline Turbidity Analyser

Vision based system based featuring fused glass technology and fibre optic lighting.

Mounts fully inline to give real time indication of colour / turbidity after various phases of sugar production process (clarifier)

Cantvision Client software measures the amount of light entering the camera CCD chip from the light source through the liquid stream



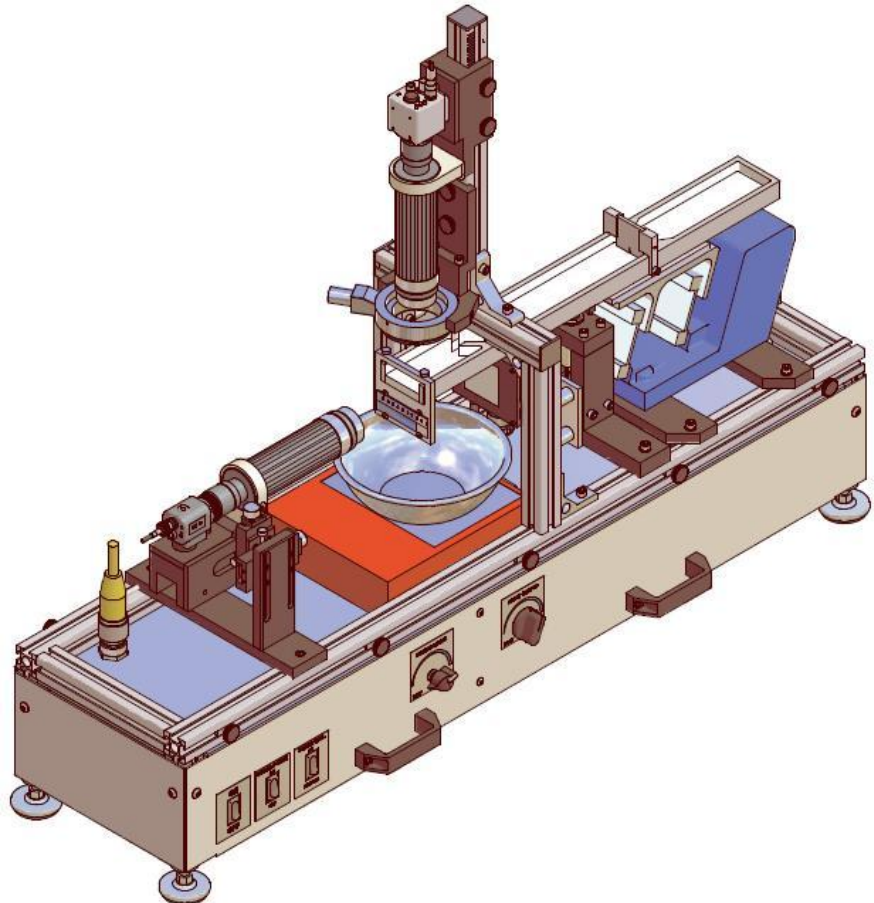
Canty Particle & Colour Analysis

Both particle analysis and colour analysis can be performed by the one system

Product fed in front of first camera for colour speck (front lighting)

Product fed in front of second camera for particle size (back lighting)

Images retrieved and sent to Cantyvision PC

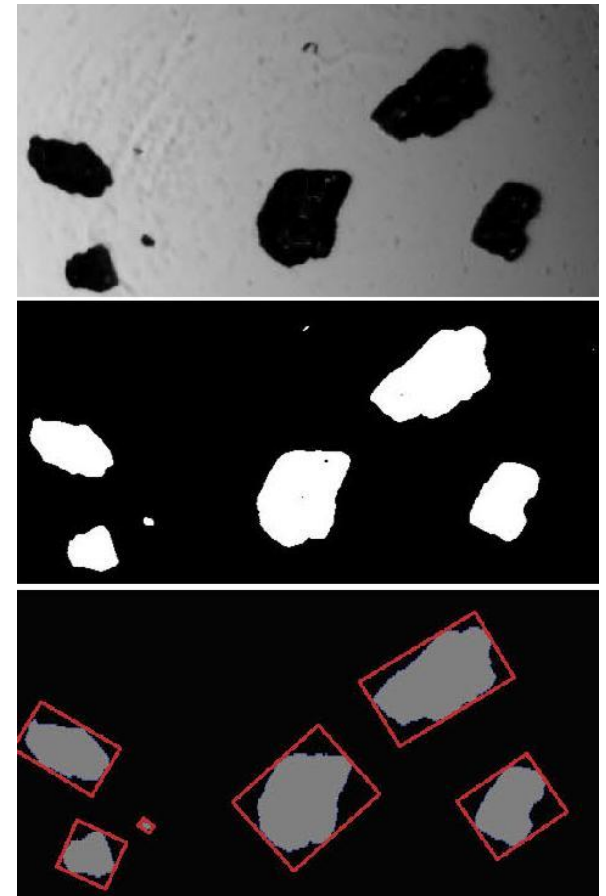


Canty Particle Size Analysis

Vision based particle analysis works by passing the sugar crystals between a camera and light source (back lighting) to capture images of the particles

These images are binarised by the Cantyvision software

These images are analysed in real time by Cantyvision Client to provide information on a number of different parameters (major axis, minor axis, perimeter, aspect ratio etc.)

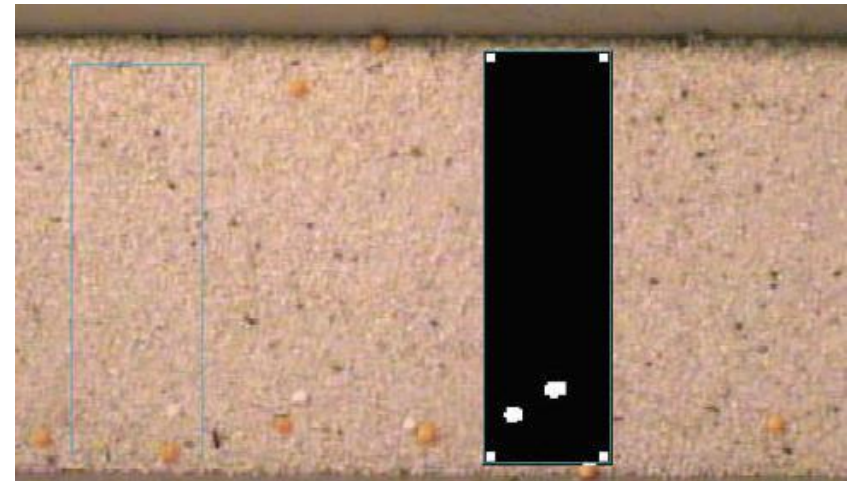


Canty Colour Analysis

Vision based colour analysis works by passing the sugar crystals in front of a camera an light source (front lighting) to capture images of the particles

These images are analysed in real time by Cantyvision Client to provide information on the colour of the particles on a number of different colour scales (YUV, RGB, CIELab)

Various colour zones can programmed to only monitor particles of a particular colour
ie. whiteness of sugar / black speck detection



JM Canty, Inc. · Buffalo, New York · Phone: (716) 625-4227 | JM Canty, Ltd. · Dublin, Ireland · Phone: +353 (1) 882-9621

This concludes the Presentation!

Thanks for choosing CANTY!

For Further Information on this
product please visit
www.jmcanty.com.