

CHAPTER 3

OPERATION

This chapter provides instructions for powering the Contour Pro on and off. It also describes the different windows and functions that are found on the home screen and how to access images on the system.

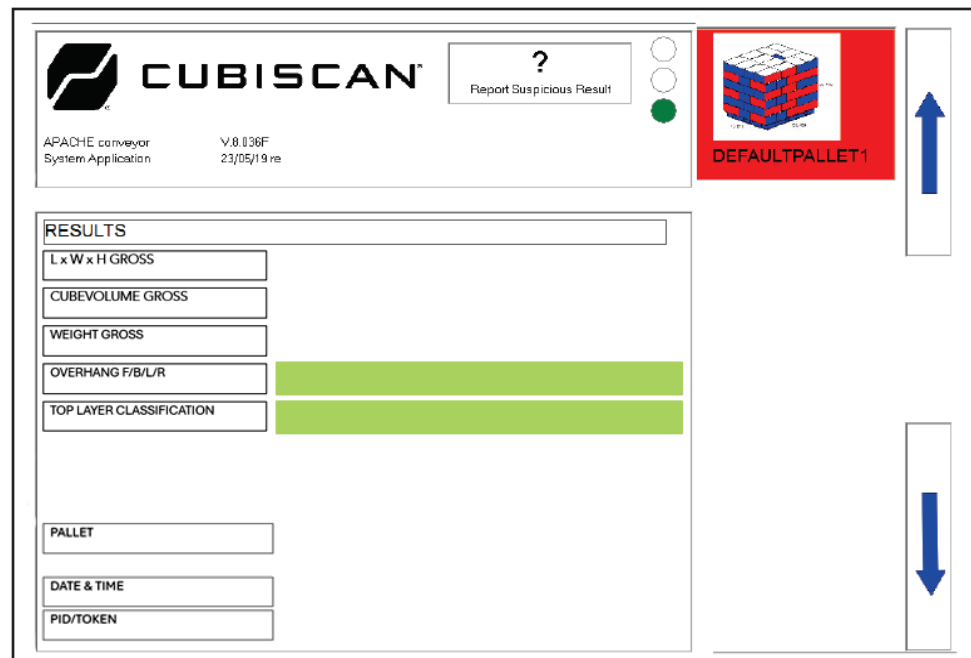


Figure 6
Home screen

NOTE > The following screenshots have been taken from a non-standard version of the Contour Pro and may appear slightly different from your own.

Powering the Contour Pro On/Off

The Contour Pro is equipped with a safety-rated AC mains power cord and may only be connected to an earthed power socket. Permanently installed devices must be permanently connected to the operator's power mains by terminals. The operator's mains

voltage range must be consistent with the local country's main voltage.

The power cable plug or the red-and-yellow turn switch must be easily accessible so as to allow complete disconnection from the power mains. For the device to be truly disconnected from the power, the power to the device must be severed by unplugging or by turning the switch.

When installing, the environmental conditions must be taken into consideration. Never connect or disconnect power and data transmission lines during an electrical storm as this may result in electrical discharge.

Powering on System

Before powering the system on or off, ensure that the conveyor is clear.

To turn the Contour Pro on, locate the red knob located on the control box, see Figure 7. Turn the red knob clockwise into the ON position.



Figure 7
On/Off Knob

Once the system has been powered on, it will display the home screen. The stacklight will indicate when the Contour Pro is ready to measure.

Powering off System

To turn the Contour Pro off, touch the **Cubiscan** logo located in the information bar. The following message will appear:

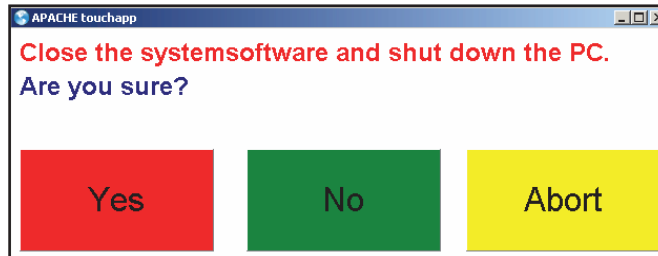


Figure 8
Shutdown popup

To confirm the shutdown, tap **[Yes]**. The system will shut down. After the system has shutdown, turn the red knob counterclockwise into the off position. Allow at least 20 seconds to pass to ensure that all power has been drained from the system before turning it back on.

Cubiscan Display

Each Contour Pro has a display which shows all measurement data and errors after each pallet scan. The following is the displayed data and a short description of the data.

Measurement Results	Description of Data
Total Height (INCL Pallet)	Equals Payload H + Pallet H
Payload L x W x H	Bounding box size
Payload X-axis & Payload Y-axis	Bounding box offset from pallet center
Payload CubeVolume	Equals bounding box volume
Overhang (front, rear, left, right)	Overhang of bounding box from pallet
Top L x W	Top layer length & width
Top X-axis & Top Y-axis	Top layer offset from pallet center

Top2 Payload X-axis	Top layer X offset from bounding box center
Top2 Payload Y-axis	Top layer Y offset from bounding box center
Top Layer Missing Case L x W x H	Size of missing top layer case if recipe specifies
Date & Time	Time stamp of measurement.

Contour Pro Touchscreen

While the Contour Pro is designed to work autonomously, a touchscreen is provided located on the control box to operate and configure the Contour Pro.

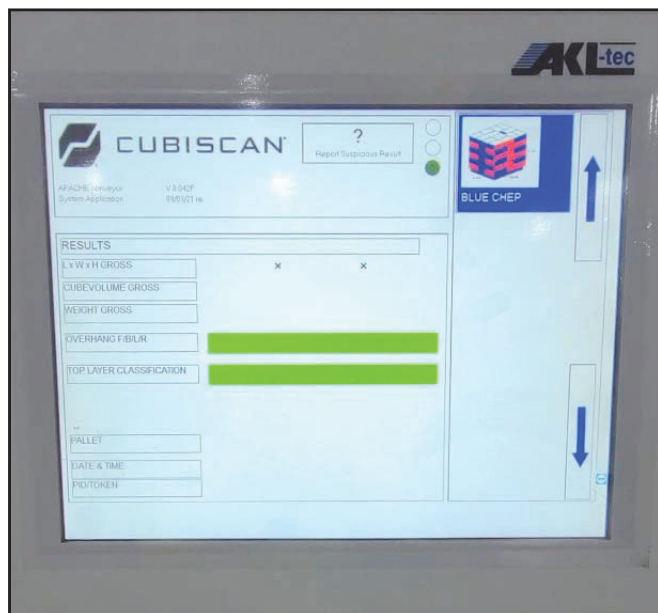


Figure 9
Touchscreen

Never use a sharp or hard-tipped object to tap on the touchscreen. It is fragile and can scratch or break. You can tap lightly on the screen with your fingertip, or you can use the eraser end of a pencil or a stylus with a soft point. Use a light touch just hard enough for the screen to respond.

Contour Pro Interface

Contour Pro is designed to be used in fully automated systems. An interface is provided to display results of measurements, adjust settings, and report anomalies in measurement.

This section describes the different areas and windows found on the home screen.

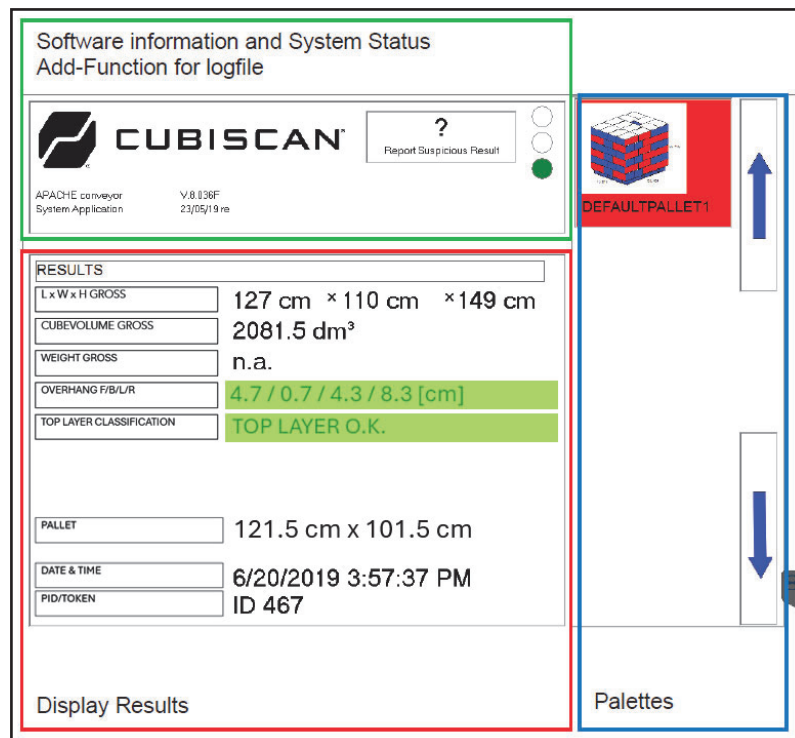


Figure 10
Home screen

System Information

The System Information reports the Contour Pro's current status. This section of the main screen also displays the status button.



Figure 11
System status

Software Information

The system information section of the home screen displays the version and revision date of the Contour software.

APACHE conveyor System Application	V.8.036F 23/05/19 re
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System status

The system status indicates the state of the Contour Pro. There are three states: **ready and waiting**, **calculating**, and **measuring**.



Green LED -> System ready, waiting.



Yellow LED -> System is calculating.



Red LED -> System in measuring process.

Measurement results

The measurement window displays the results from the previously measured pallet. The following information is displayed in the window:

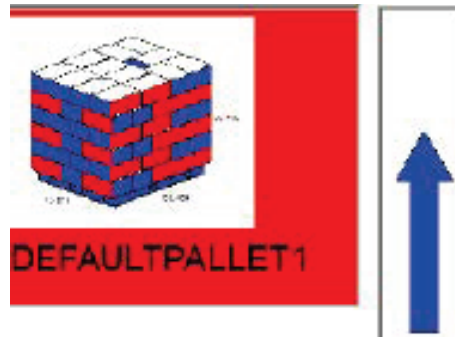
RESULTS	
L x W x H GROSS	127 cm × 110 cm × 149 cm
CUBE VOLUME GROSS	2081.5 dm ³
WEIGHT GROSS	n.a.
OVERHANG F/B/L/R	4.7 / 0.7 / 4.3 / 8.3 [cm]
TOP LAYER CLASSIFICATION	TOP LAYER O.K.
PALLET	121.5 cm x 101.5 cm
DATE & TIME	6/20/2019 3:57:37 PM
PID/TOKEN	ID 467

Figure 12
Measurement results

L x W x H GROSS	Displays the measured gross values for each dimension length, width, and height measured in centimeters.
CUBE VOLUME GROSS	Displays gross cube volume, which is the product of the length, width, and height measured in cubic decimeters.
WEIGHT GROSS	Gross Weight is not used on the Contour Pro.
OVERHANG F/B/L/R	Displays measured overhang of the pallet on all four sides: front, back, left, and right side.
TOP LAYER CLASSIFICATION	Indicates whether top lay of the pallet are within specifications or if pallet is flagged as being out of spec.
PALLET	Displays the dimensions of the pallet as determined by the pallet type.
DATE & TIME	Displays the timestamp for the measurement. This timestamp will be recorded in the log file.
PID/TOKEN	Displays the internal ID Number for the measured pallet.

Pallets field

The pallets field allows for the selection of pallet type from a list of pre-determined pallet types. Use the blue up and down arrows to scroll through the pallet types.



Add-function

The add-function allows the user to add a comment to the logfile on flagged pallets that are out of spec. Complete the following steps in order to add a comment to a flagged pallet:

1. Click of the button [Report Suspicious Result].



2. A new window will open with scripted comments. Select a comment for the flagged measurement.

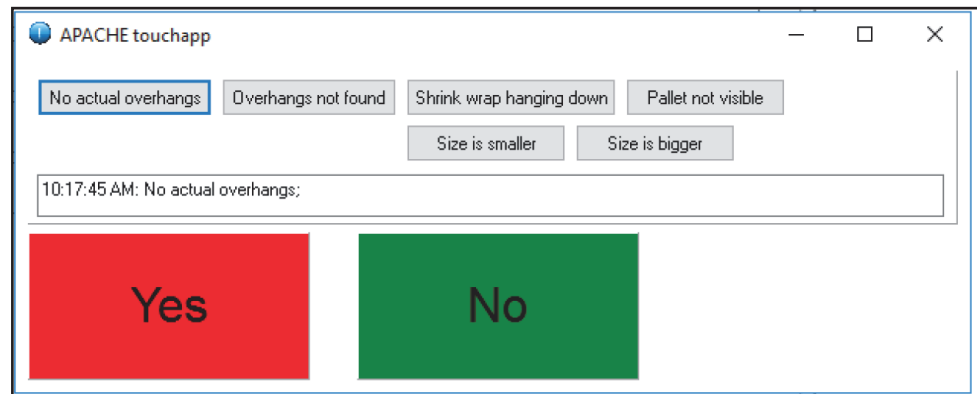


Figure 13
Flagged measurement

3. After selecting the appropriate comment, click **[Yes]** if an issue exists with the pallet or click **[No]** if there is no issue.

Accessing Photos



The Contour Pro is equipped with an Axis camera, which may be used to take pictures of product as part of the measurement process. These images may be set up to push to a network source or may be retrieved directly from the Contour Pro.

To retrieve the images from the Contour Pro, first, plug in a keyboard to the PC unit found in the control cabinet of the Contour Pro.



Figure 14
PC input

Plug the keyboard into one of the free USB slots on the back of the PC unit. You may also plug in a flash drive to store the images on.

Once the keyboard is plugged in, hit **Shift-Esc** on the keyboard to exit the main screen and access the home screen for the underlying operating system. From here you may access the file explorer by running it from the command prompt or the apps menu.

With the file explorer up, look for the APA folder on the local disk (typically designated as the C:\ drive).

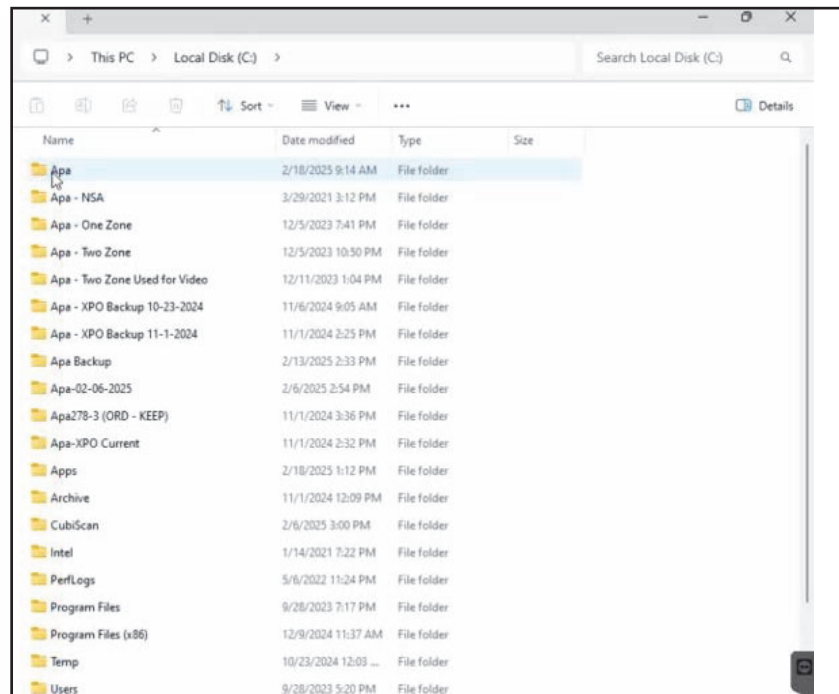


Figure 15
APA folder

Within the APA folder find the images folder. Once found, access the image folder to find the images acquired by the Axis camera.

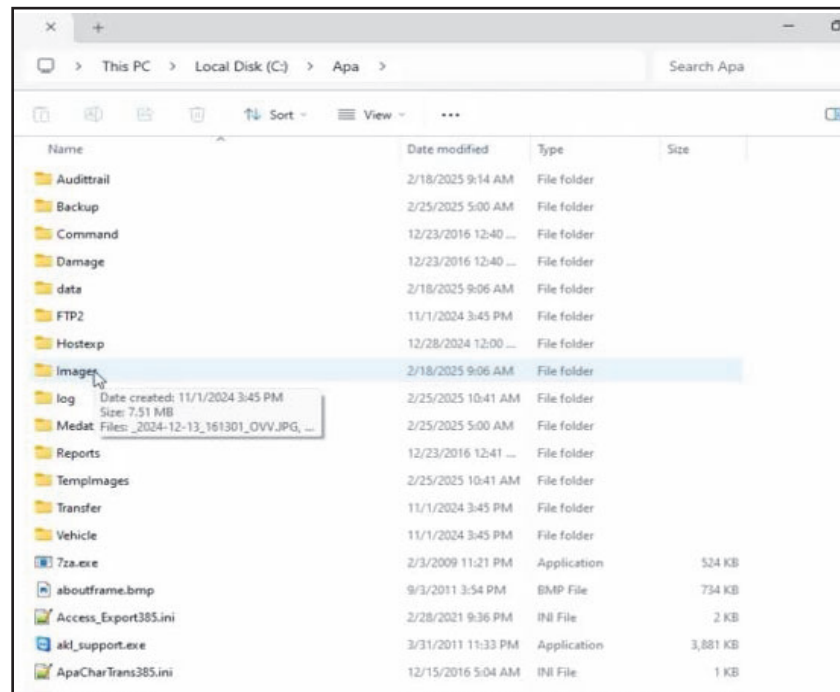


Figure 16
Images folder

Each image is labeled with a series of numbers that identify certain information for each of the images. The label is made up of the

barcode identifier + sequence number + date the image was required.

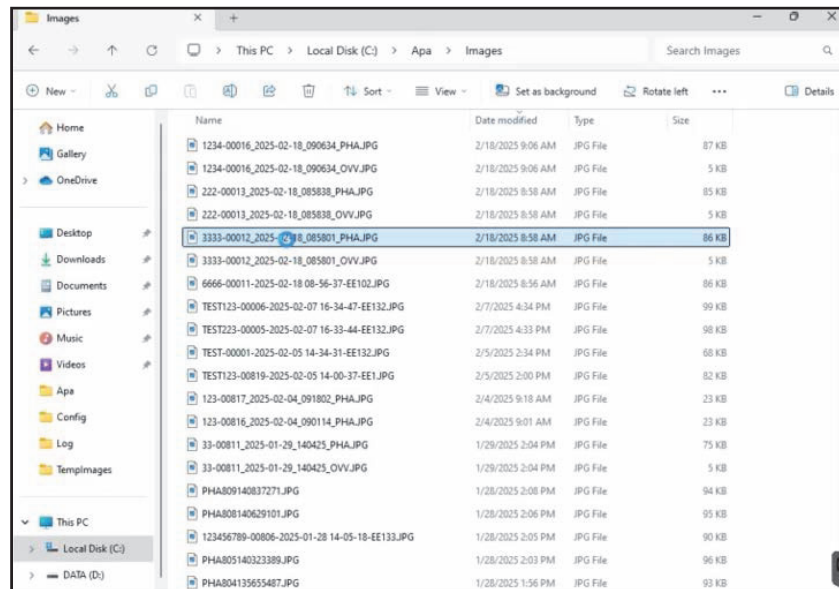


Figure 17
Image file

The images may be moved to a flash drive to transfer to another storage device.