

# Frucor Beverages powers production with Panasonic Toughpad

## CUSTOMER

Frucor Beverages  
[www.frucor.co.nz](http://www.frucor.co.nz)



## CHALLENGE

Improve on-floor access to the ERP production system in a demanding manufacturing environment.

## SOLUTION

Deployment of 26 fully rugged Windows 8 Toughpads, mounted in key locations and on forklifts, across the facility.

In the quest for more efficient handling of raw materials coming into its production environment, beverages manufacturer Frucor has developed a custom application and deployed Panasonic's Toughpad FZ-G1, fully-rugged Windows 8.1 Pro tablet computers to power it. The Toughpads are strategically deployed in the company's demanding production process, with units mounted on forklifts, and at several locations across Frucor's 16-hectare South Auckland campus, delivering reliable computing in a challenging setting.

Frucor manufactures, markets and distributes a range of fruit juices, fruit drinks, energy drinks, waters and soft drinks, many of which are household names throughout New Zealand and Australia. The company's brands include 'V' (also distributed throughout Europe and the UK), Just Juice, Fresh-up, McCoy, Citrus Tree, Simply Squeezed, H2Go, NZ Natural, G-Force, S, Mizone, Pepsi, Mountain Dew, 7Up and Frank.

## CHALLENGE

Faced with an overly complex ERP production module, Production Supply Manager at Frucor Pat O'Donnell took charge of a project to simplify the system which drives the process of goods receiving and handling. "The result of that is an app called Piki, which sits on top of the ERP system and provides hierarchical access to our operators on the basis of their job requirements. It is a component of an intelligent workflow, and helps the various tasks associated with goods handling by quickly narrowing down the available keying options as the operator logs in, then uses the application."

O'Donnell says with the application developed, suitable devices were required. "The factory is a demanding environment, with high humidity, while the industrial processes involved in production means knocks and drops are a constant threat, particularly for handheld devices or those mounted on forklifts or other machinery."

## SOLUTION

The availability of a compact, fully-ruggedised Windows 8.1 Pro computer in the Panasonic Toughpad FZ-G1 was the ideal solution for Frucor's needs, confirms Eddie Sella, Programme Manager, Group IT Solutions at Frucor. "What is important for



technology in the manufacturing plant is that it has to be easy to use by staff, fitting into their workflows. We also had to have something that was fully rugged; we don't want devices breaking and leaving shards of technology in our drinks," he quips.

"And just as important is that the devices have to be connectable back to our domain in real time with the ERP solution - so that meant a Windows device that was rugged and easy to use."

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Pat O'Donnell, Frucor Beverages

Sella says the Toughpads were the obvious choice when Frucor researched the market, and adds that the company also had a precedent: “When we went looking for devices, the Toughpad was the only one that stood out. What’s more, we had used them for a different project – for our Quality Assurance teams – so we had experience which proved them to be really rugged and reliable in the field.”

Headline features of the Panasonic Toughpad FZ-G1 include: fourth-generation Intel Core i5 vPro processors, capacitive 10 finger multi-touch direct sunlight viewable touchscreens; 10-hour battery; flexible configuration ports; Dual band Gigabit WiFi; MIL-STD-810G, 180cm drop/shock resistance and all-weather IP65 dust and water resistance.



O’Donnell says placing the 26 Toughpads in the factory was achieved with fully rugged Havis mounts for those in fixed locations; for those mounted on forklifts, some further ingenuity was required. “Together with a local engineering firm, we developed a special arm to hold the devices. A lot went into that, to make sure the Toughpad is ergonomically positioned, while still allowing the operator to ‘bail out’ should it be necessary,” he explains.

“ The arm on a forklift released unexpectedly, swinging out and sandwiching the Toughpad against a crate. That would have destroyed an ordinary machine, but the frame was undamaged and the machine was still working. ”

Pat O’Donnell, Frucor Beverages

## RESULTS

While the introduction of the Piki app has done wonders for improving key metrics at the Frucor plant – O’Donnell says that, in combination with other measures, it has seen improvement of Inventory Record Accuracy from 70% to 92% - it couldn’t be done without the right devices in place. “To be honest, in most places on the production line, the Toughpad is probably overkill. After all, it is a complete Intel i5 Windows machine and it’s running a fairly lightweight app with the processing on the server side; however, standardisation means we are able to rotate those which have a relatively easy life, with those that are in more demanding environments,” he notes.

Standardising on Windows devices throughout Frucor’s manufacturing environment also means considerably easier device management. But it was for their ability to cope with unusual computing environments for which the Toughpads were chosen – and O’Donnell makes no bones about this aspect of their performance. “We’ve had them in place for about a year so far without any problems at all. They handle high humidity, knocks and bumps, and those that go outdoors on the forklifts are exposed to regular rain without any trouble,” he relates.



To date, just one machine has suffered serious damage; “The arm on a forklift released unexpectedly, swinging out and sandwiching the Toughpad against a crate. That would have destroyed an ordinary machine, but it just required a new casing – the frame was undamaged and the machine was still working.” Sella says Panasonic’s Windows 8 Toughpad has another advantage over other devices: “There are other Windows devices that you can get rugged cases for, but the Panasonic is the simplest solution, with everything including ruggedness integrated. We’ve had these machines working in a really tough environment and the best thing that can be said for them is that they are doing just what they said they would,” he concludes.