

# Joe Sharkey and his magnificent trommel

It's only right that the J. Sharkey Memorial Trophy is awarded to the highest-scoring vintage cheddar in the DIAA Victorian Dairy Product Competition. Generations of cheddar cheesemakers owe a huge debt of gratitude to the man it is named after, discovered Margaret Langdon.

Once upon a time, the process known as cheddaring meant that cheesemakers had to manually dry curd to expel excess whey and give the curd a good, smooth texture. The process involved leaning over a vat for hours with extended arms. It was hard, slow work that took its toll on the workers and their continually strained backs.

Enter Joe Sharkey – cheesemaker, factory manager and a man with big ideas. He had worked in the dairy industry since 1920, when he joined the Glaxo Dried Milk Company, then in the 1930s he managed cheese factories and co-operatives in South Australia, winning honours for export cheese grading. When the Kraft Walker

Cheese Company leased a factory in Drouin, Victoria, to keep up with demand during World War II, Mr Sharkey became its manager.

Since 1935 Mr Sharkey had been investigating ways to decrease manual handling in cheesemaking, which would benefit the workers, improve product quality and save time. World War II brought added urgency to the need to mechanise cheese production. Demand for cheese was up, as it was needed to feed the troops – including the US personnel stationed in Australia – but manpower was down. Workers all over Australia had left their jobs to join the army.

Mr Sharkey got to work on his ideas in earnest, and the combination of his enthusiasm and drive with Kraft Walker's expertise and resources was a good one. Kraft engineer **Doug Lambert** began doing preliminary drawings of Mr Sharkey's cheddaring machine.

Although materials were scarce, the government realised the importance of the project and in 1941 released the resources to build it. Mr Sharkey's invention became a reality.

Resembling an odd-looking spaceship, it was a tapered stainless steel drum mounted on a frame. It had a motor to drive the tilting and turning of the drum, and perforations to drain the whey. Mr Sharkey called his invention a trommel (German for 'drum') but it was nicknamed 'The Drouin Rocket'.

In an article published in *The Australian Journal of Dairy Technology* in 1949, Mr Sharkey described the trommel and its performance in meticulous detail. "The complete operation of coupling up the pump, drying out, and returning the curd to the vat, is performed by a lad or a man in 17 minutes, or at the rate of 3,550 gallons per hour," he wrote.

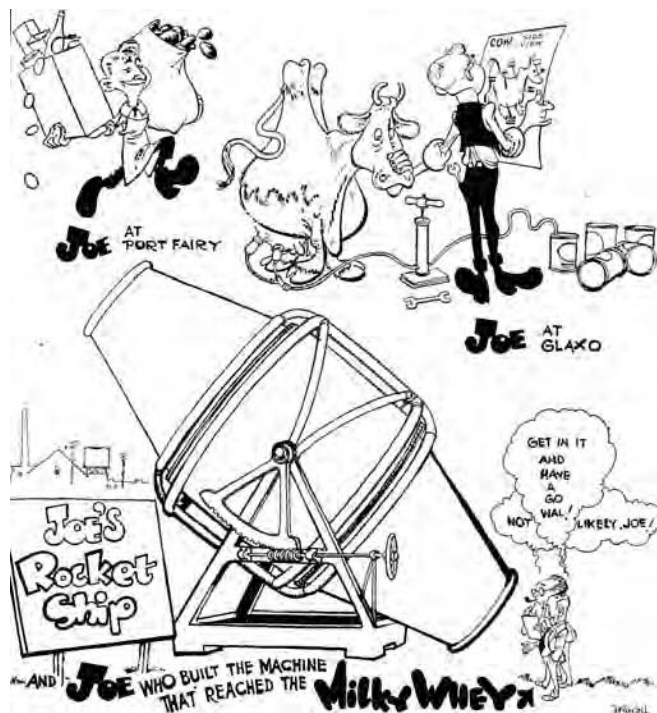
"The amount of labour saved by the trommel is considerable ... Having been relieved of the arduous task of drying out the curd, the men are in better condition to perform the operations connected with the remaining stages of the process."

Cheesemakers all over the country could only have agreed.

**Margaret Dick** was a renowned microbiologist who worked at Kraft Walker in the 1940s. When interviewed about her distinguished career by the Australian Academy of Science in 2000, she described the innovative atmosphere at Kraft.

"There was always a new plant going in to produce new products," she said. "The chief engineer, Doug Lambert, was very good. He worked with our cheesemaker, Joe Sharkey, to mechanise cheesemaking for the first time in the world."

Image from Victoria – Cream of the Country by Norman Godbold.



A light-hearted look at Joe Sharkey's career and invention.

*Joe Sharkey's article, published in the Australian Journal of Dairy Technology (1949, volume 4, issue 1), is now available to download free for DIAA members from www.diaa.asn.au.*

Kraft US, impressed by the Australian invention, took out a world patent on the design and built modified versions of the trommel for its overseas plants. Product improvement was marked and trommel-made cheese soon began to win awards in Australia and overseas.

Mr Sharkey was not one to sit on his laurels – he developed the trommel 'mark II' in 1958 and installed it in Kraft Walker's Allansford plant, and the 'mark III' at Strathmerton in 1968.

Today the thought of producing bulk cheddar without mechanisation seems absurd. It is not an exaggeration to say the trommel changed the dairy industry.

By the time Mr Sharkey passed away in 1968 he could look back on a lifetime of achievement, not just as an inventor who inspired others to design and innovate, but also as a master of his craft.

"Joe Sharkey was a very good cheesemaker," Ms Dick said. "He knew his curd backwards. He used to say, 'Now, just look at that. Can't you feel how silky it is?' Kraft owes much of its reputation to his knowledge."

*This article is based, in part, on information from Norman Godbold's Victoria – Cream of the Country.*

*Joe Sharkey's trommel in action.*



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