

newport news

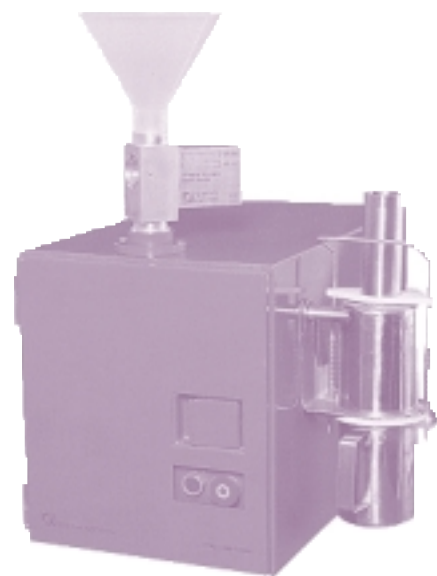
THE NEWSLETTER OF NEWPORT SCIENTIFIC

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NEW

Laboratory and Factory Mills

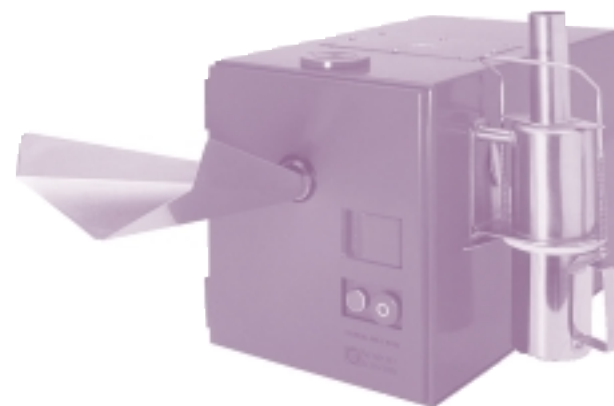
featuring fast throughput,
low contamination and
long life



Quality sample analysis starts with quality sample preparation, and Newport Scientific has designed models 6000 and 6200 to mill the toughest of samples in the toughest of environments.

Model 6000 is a hammer mill with a choice of hammer options to suit your samples, from dry vitreous materials including grains, snacks, spaghetti, peas and pulses to soft minerals, resins and rubber.

Model 6200 is a diamond abrasive mill with your choice of full diamond strap for extremely low contamination abrasive grind, or half cover diamond strap when an anti-clogging grind is essential. The mill handles a range of samples from grains through to the most difficult, large, tough and fibrous samples such as dried plant material, grass, hay, feed and forage.



Hammer Mill 6000 and Diamond Abrasive Mill 6200

The most recent additions to the Newport Scientific family — the Laboratory and Factory Mill series — incorporate the most recent technology, designed to make your life easier.

Their state-of-the-art features include:

- the 1.5 hp, 16,000 rpm motor which is more powerful and more robust than those in similar mills on the market, ensuring that you get fast sample throughput combined with years of trouble-free operation
- a fully enclosed motor to keep your operating environment as quiet and comfortable as possible
- the choice of a range of hammers to ensure a perfect grind
- a range of screen sizes to ensure you get the right particle size for your application
- two diamond abrasive options to give you a really abrasive grind for those difficult samples which are fibrous or hard; and an ultra-low contamination grind if you are concerned about trace element contamination
- options like the power feeder which delivers sample into the mill chamber at a precise and constant rate to make milling simple
- the air assist accessory to help you mill difficult high fat and high oil samples
- the air purge accessory which automatically cleans the screen, chamber and passageways so your mill is ready for the next sample
- the front tray option which allows you to feed large and bulky samples into the mill.



And we haven't forgotten the little things like:

- thermal cut out for safe operation
- convenient front-mounted controls
- ease of cleaning access to the mill chamber for maintenance.

ASK US...

Ask us about milling applications for Near Infra-red Analysis, Falling Number Test, Gluten Index Test and Rapid Visco Analysis for:

- | | | |
|----------------------------|---|-------------------------------------|
| • hard and soft wheat | • soybeans | • herbs and spices |
| • oats | • lupins | • hay, straw and other plant tissue |
| • corn | • peas | • wood chips |
| • rice | • pulses | • plastics |
| • tapioca | • spaghetti and pasta | • resins |
| • lentils | • extruded snacks and breakfast cereals | • rubber |
| • legumes with hard shells | | • soft minerals. |

From Small Seeds...

NEWPORT Newport Scientific Grows

Australia is the world's fourth largest exporter and sixth largest producer of wheat, and grain is one of Australia's most important rural exports. So when one quarter of the 1983 wheat crop was lost to pre-harvest sprouting, the consequences were catastrophic for Australia's economy and in particular for rural Australians.

The Australian Wheat Board urgently sought a new test method that would be accurate, objective, simple, rapid and reliable — even at grain receival elevators (silos) in hot and dusty Australian summers.

Two years later the first Rapid Visco Analyser — a stirring and cooking viscometer — was ready for field trial. The RVA measured weather damage in wheat in a three-minute test, by pasting the starch in the sample until the α -amylase activity was largely completed, and the viscosity stabilised. Today the RVA-3 looks a little different than it did in 1985, and the three-minute RVA Stirring Number Test has been accepted by the AACC as Standard Method 22-08.

In 1987, Newport Scientific Pty Ltd produced the first controlled heating and cooling RVA, and evaluation of the potential of the RVA for starch characterisation began. Starch pasting quality assessment quickly developed as the RVA's main application, with rapid starch pasting methods being adopted as standard methods of both the AACC and ICC in the mid-1990s.

Today, Newport Scientific Pty Ltd continues to respond to market needs for a wider diversity

of applications, incorporating variable shear, extended viscosity range, and more powerful control and analysis software into the latest models of the RVA. These days the RVA is distributed worldwide and used in a wide range of both research and commercial applications, and both the number of RVA users and the library of published applications continue to grow. The RVA has been used: in breeding programs; at grain receival and storage; in flour milling; for assessment of raw ingredient and final product quality for extrusion of snack foods, breakfast cereals and pet foods; for selection of wheats suitable for noodle manufacture; for characterisation of rice, potato, tapioca, wheat, corn and other starches; for control of the commercial starch modification process; and in the brewing industry.

Recent publications have established novel applications for protein testing, including wheat gluten, soy protein and milk proteins, and extruded products and aquaculture feeds.

Under the leadership of Managing Director, Rodney Booth, Newport Scientific Pty Ltd continues to complement its integrated research and development program — in collaboration with experts in both the government and private sectors — to provide novel solutions to many of the problems now faced in the grain and food-based industries.

—THIS ARTICLE FIRST APPEARED IN *CEREAL FOODS WORLD* JUNE 2000.

Meet the People

Stephen Neil

Since November 1999, Stephen has been working at Newport Scientific as Industrial Designer. With degrees in both Arts and Industrial Design from Sydney University and University of Technology, Sydney, he is also a part-time lecturer in Computer Aided Design.

Prior to joining Newport Stephen had 11 years experience, both in Australia and overseas, in designing a wide range of products from scientific instruments to automotive accessories. His work included the design of Newport Scientific's very own StarchMaster — a collaboration which was so successful he joined the company!

Earlier this year Stephen won a prestigious Australian Design Award for his work on the Quantum Stadium Seating System, recently installed in large numbers at a Sydney Olympic venue.

As resident Industrial Designer, Stephen is responsible for both the development of new products and the improvement of existing products.



What's New at Newport

- Our colourful new mill brochures are now available in Adobe Acrobat pdf format on our homepage. Simply download and print from our Website at www.newport.com.au
- Newport Scientific Pty Ltd's Managing Director, Rodney Booth, is Technical Program Chair at the American Association of Cereal Chemists Conference (AACC) to be held in Kansas City, 5-9 November, 2000. You can meet Rodney at AACC and find out about the latest developments in RVA design and applications.
- Bronwyn Elliott, Newport Scientific Pty Ltd International Marketing Manager, has been appointed to the executive committee of International Cereal Science and Technology (ICC) as corporate member representative and Asian region representative.
- Calibrations are now available for converting Stirring Number Units to Falling Number Equivalent for Australian and Argentinian wheats, and US wheat, rye and durum. Calibrations for southern African wheat will be available soon, and custom calibrations can be prepared for other samples.
- Keep an eye on our homepage and in coming issues of *RVA World* and *Newport News* for the new RVA Mini3, especially designed for weather damage testing.

At our Webpage

All Newport Scientific brochures as well as the latest issues of *RVA World* and *Newport News* are now available on our Website: www.newport.com.au as Adobe Acrobat pdf files which are easily downloaded and printed.



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