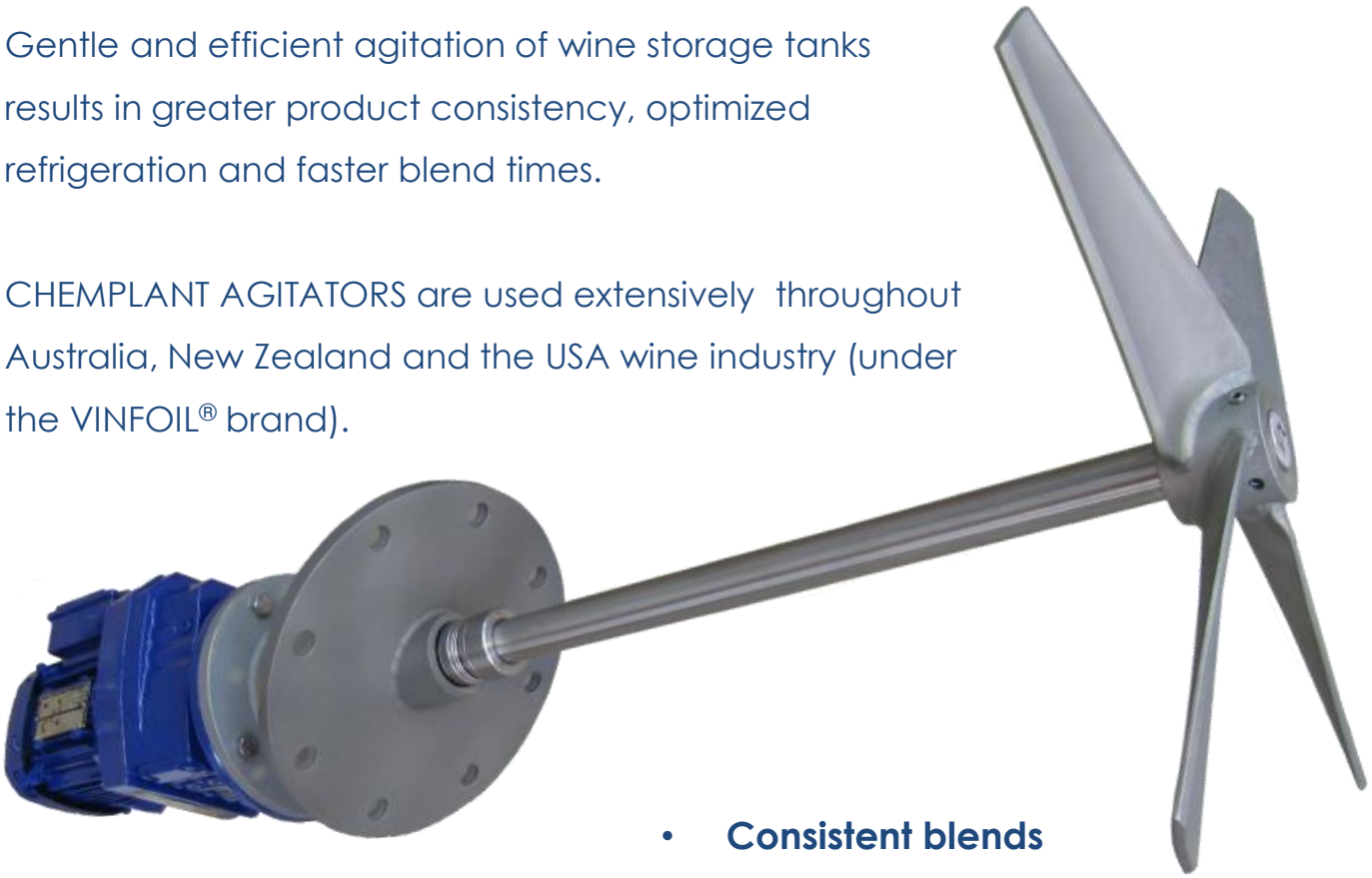
CHEMICAL PLANT & ENGINEERING

WINE AGITATION TECHNOLOGY

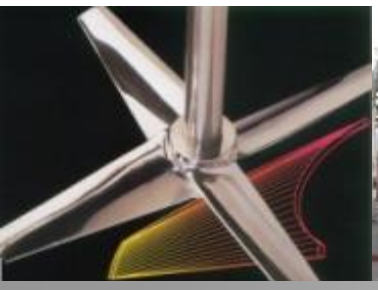
Gentle and efficient agitation of wine storage tanks results in greater product consistency, optimized refrigeration and faster blend times.

CHEMPLANT AGITATORS are used extensively throughout Australia, New Zealand and the USA wine industry (under the VINFOIL® brand).



IMPROVED WINE QUALITY
THROUGH GENTLE AGITATION

- **Consistent blends**
- **Improved flavor extraction**
- **Optimal refrigeration efficiency**
- **Power efficient technology**
- **Plant efficiency**



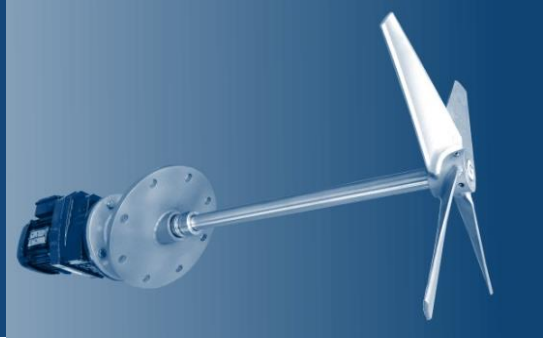

CHEMICAL PLANT & ENGINEERING

www.cem-int.com.au

CHEMICAL PLANT & ENGINEERING

RTF4 HYDROFOIL

Superior geometry resulting in optimum flow efficiency



The RTF4 hydrofoil delivers high volumetric flow rates whilst drawing up to half the power requirements when compared to competitor hydrofoils. The engineering technology behind the RTF4 provides an ***unparalleled flow for power*** solution for various agitation applications including blending, solids suspension or a complex reaction.

RTF4 TECHNOLOGY AND DESIGN FEATURES

When assessing the effectiveness of an agitator, often motor size is the key variable considered. However, for a more effective assessment of an agitators capability, the critical performance measurement is the agitator **flow rate**.
The flow rate is the volumetric displacement of fluid and can be characterized as the number of times the tank contents are turned over per unit of time.

The RTF4 Agitator delivers greater flow for a given power input. This is achieved by the following design features:

Variable Width The RTF4 blade is slim at the tip where speed is the greatest and wide at the base where speed is the lowest. This shape results in uniform flow across the impeller diameter producing the most efficient pumping action.

Decreasing Twist The RTF4 is designed with a pronounced twist at the base, gradually decreasing towards the tip. This creates an even velocity profile whilst minimizing turbulence behind the impeller blades.

Optimized Arch The key to high pumping is the arch of each blade. This is geometrically designed to travel through the liquid at a shallow angle with the leading edge while allowing the trailing edge to direct powerful currents downwards.

Profiled Edge The profiled edge of the RTF4 eliminates turbulence as the blade rotates through the fluid. This also has the added benefit of reducing erosion caused by particle to blade collision.

The RTF4 creates an axial flow pattern with a very even velocity profile across the impeller and the low shear design essentially eliminates any turbulence from the impeller blades.
As a result, the RTF4 has the lowest power consumption for a given discharge velocity, which can result in energy savings of up to 60%.

An additional benefit of the RTF4 is the low torque requirement for a given amount of flow, therefore reducing drive and shaft sizes.

The RTF4 Agitator therefore returns greater value for your investment.

MOTORS AND GEARBOXES

CPE offers a variety of gearbox and drive configurations to suit customer needs.

The mechanical service factors used to select shafts, motors and gearboxes are conservative to ensure long equipment life.

SEALS

A range of seals are available including lip seal, single and double mechanical seals and stuffing boxes.

AGITATOR RETROFITS

The technical superiority of the RTF4 hydrofoil allows retrofitting of impeller and shaft assemblies into existing applications, without the need to replace any of the drive components.

We offer an obligation free evaluation service to assess and identify opportunities for process

The critical performance measurement is the agitator flow rate.

The RTF4 Agitator delivers superior flow for a given power input, returning greater value for your investment.

CHEMICAL PLANT & ENGINEERING
A DIVISION OF CEM INTERNATIONAL PTY LTD
A.C.N. 004 933 135 A.B.N. 24 004 933 135
63 - 65 MAFFRA STREET, COOLAROO VIC 3048
TEL: +61 3 9309 4822 FAX: +61 3 9309 0069
www.cem-int.com.au