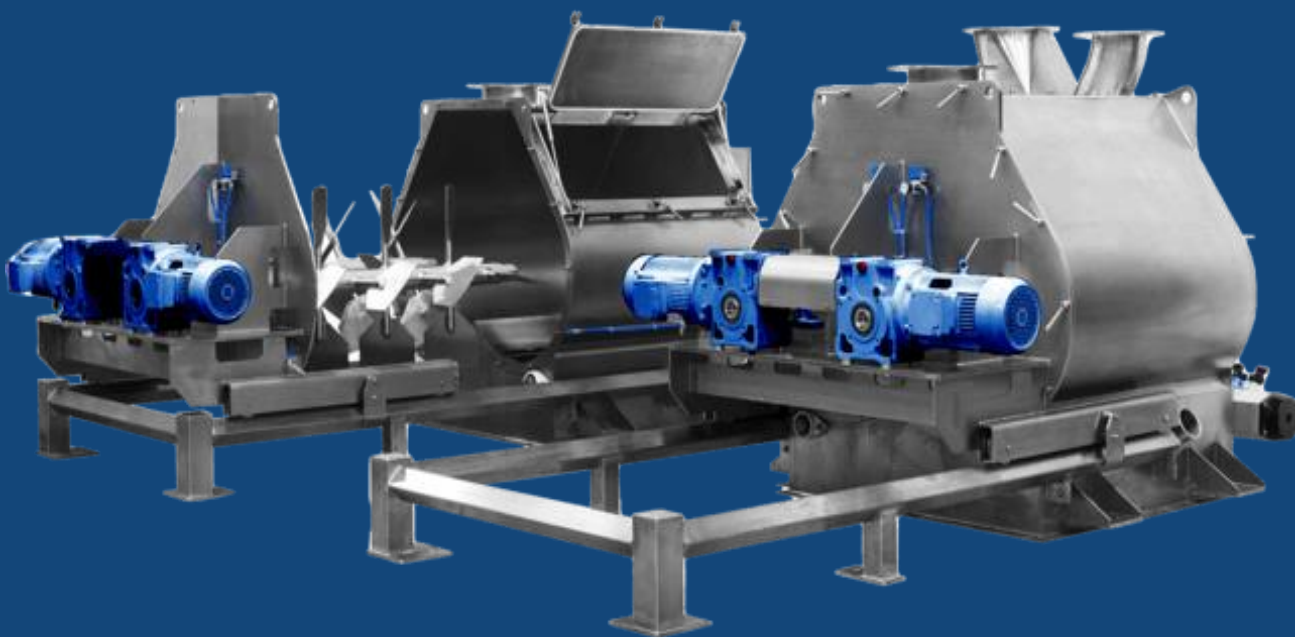


CHEMICAL PLANT & ENGINEERING



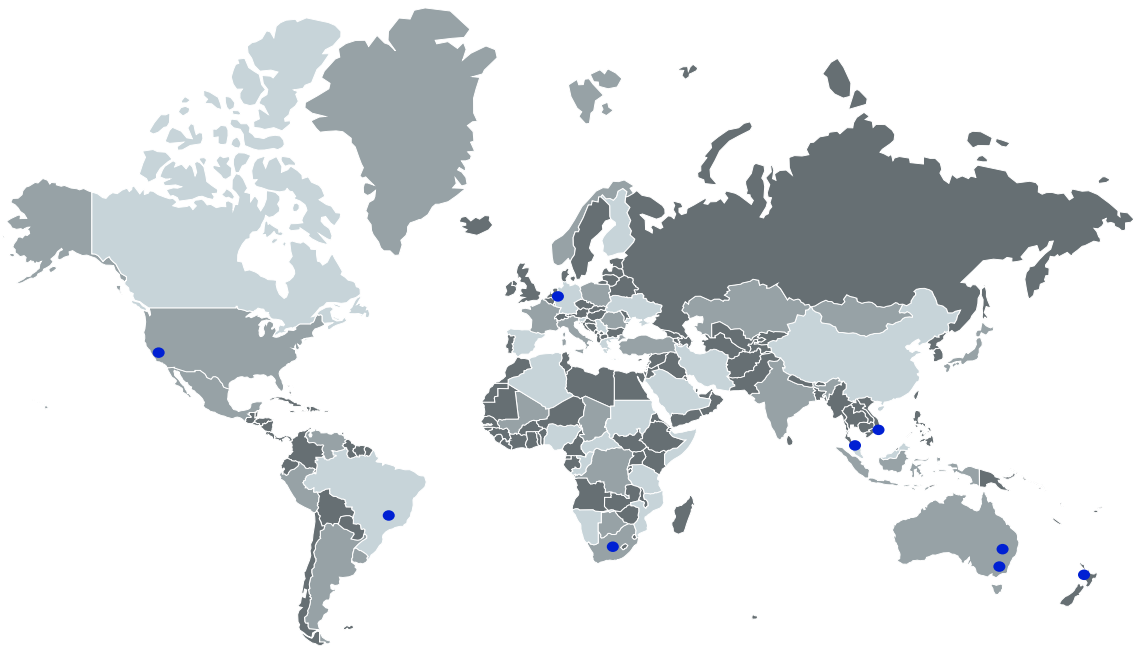
Bulk Handling Solutions



Company Introduction

Chemical Plant & Engineering (CPE), formed in 1953, is a division of CEM International Pty Ltd which is a wholly owned Australian Company. CPE is a global supplier and leading Australian manufacturer of field process technology and complete system solutions.

CPE has manufacturing facilities in Australia as well as strategic manufacturing partnerships and licensing agreements, and agents and distributors worldwide.



Headquarters

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- **World Leading Technology**
- **Custom Designed**
- **Fast & Accurate Mixing**
- **High Repeatability (CV≤5)**



Applications

- Chemical
- Mineral Processing
- Food & Beverage
- Pharmaceutical
- Animal Feed



Key Process Offerings

- Fast and accurate mixing
- Quick discharge (≤ 15 seconds)
- High mix Repeatability (CV $\leq 5\%$)
- Flexible plant designs
- Hygienic and CIP friendly design
- Easy product sampling

We custom design each mixer to suit the process and industry requirements. Our design and engineering philosophy is to provide fast, accurate, and repeatable mixing regardless of particle size and density variations.

Powder Blender Range



C Series

- Dual Rotor High Efficiency
- Batch (SD 0.5%) and continuous (SD 1%)
- Quick, accurate, repeatable mixing
- CV < 5
- 20–10,000 Liters



Standard Dual Rotor



Port Discharge



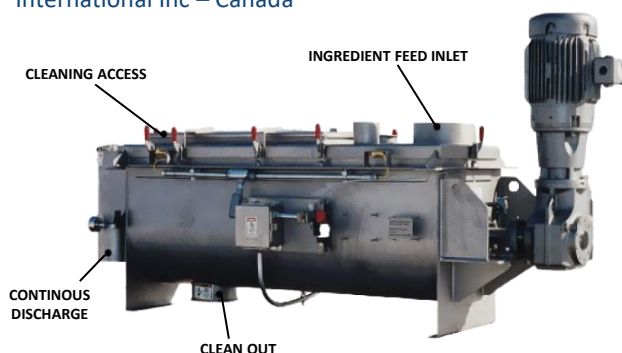
Retractable



https://www.youtube.com/watch?v=3A2_ArjW_MY&t=2s

A&J Series

CPE is the Australian and Southeast Asian agent and manufacturer under license for A & J Mixing International Inc – Canada



Premium Modular Continuous Mixer

Offering efficient and cost-effective mixing of powders, granules, fibres, flakes and pellets

- STDV 1%, CV<10
- 99.8% efficiency rating
- Liquid addition manifolds
- Optional Tech Shear-makers

CHDV

(Hygienic Design Vacuum Mixer)



- Designed to address hygiene and sanitation requirements.
- vacuum rated mixer allowing direct powder addition.
- The ability to discharge directly into hoppers below or to discharge directly into a conveying system.



<https://www.youtube.com/watch?v=kljGK3jpYkM>

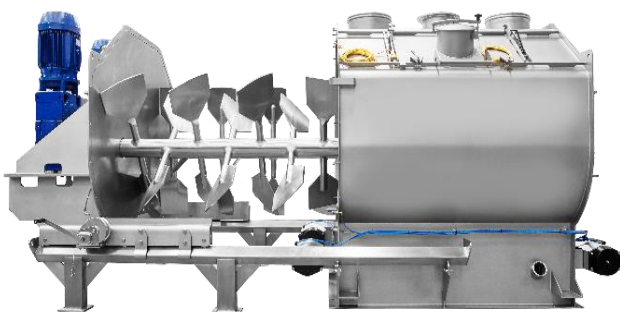
<https://www.youtube.com/watch?v=kAjUCOXQf3I>



Our equipment design has constantly evolved over the years to address process and customer requirements. Today we have the world's most efficient and accurate powder mixing technology.

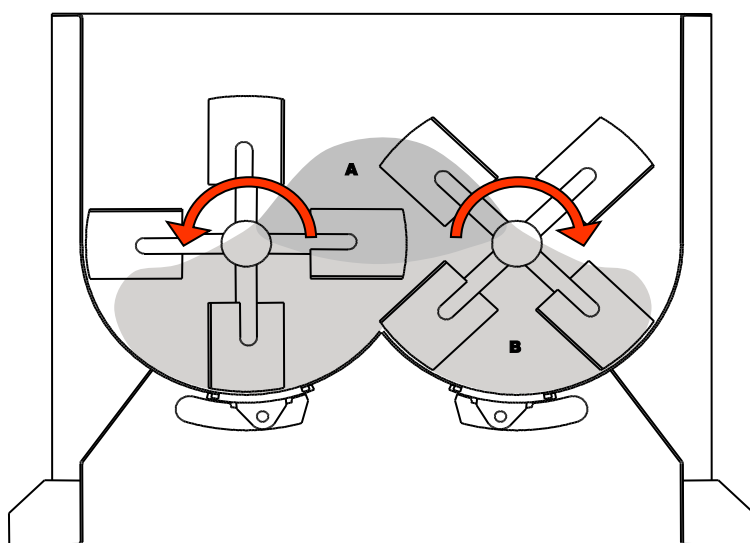


How It Works



- CPE Paddle Mixers generate a high volume of voids for particles to change place.
- Particle movement is organized at a pattern and speed that gravity is neutralized and segregation cannot occur.
- Particles are efficiently mixed without being exposed to shear or heat.

- ❑ Shafts counter rotate to lift the particles up from the transport zone to the fluidised zone.
- ❑ particles move freely in the fluidised zone to ensure a homogeneous mix is achieved efficiently.



Dual rotor mixer mechanism



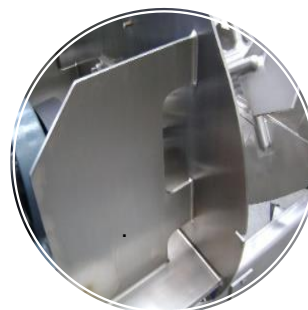
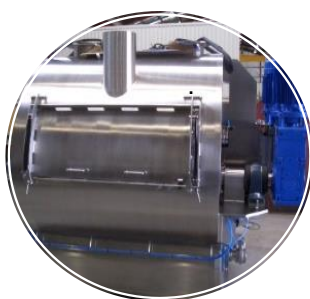
CPE mixers provide fast and accurate mixing of powders with varying particle sizes and shapes while meeting the industry and process needs.



Superior Product Features

World Leading Powder Blending Technology

- Fast acting bomb bay discharge system with FDA compliant seal
- Flat leading face paddle profile minimising product accumulation
- Large inspection doors with no corner pockets
- Designed compliance in with FDA, USDA
- Round body design offering greater strength
- Retractable rotor design
- Elimination of three corner pockets for ease of cleaning
- Minimal guards allowing greater access to all areas for cleaning



Design Attributes



Rotary actuators eliminate cylinders and potential safety hazards available on most models



Scalloping at strategic places eliminates corners and facilitates ease of cleaning without compromise in structural requirements



Discharge door seal, easy to install



Flat leading face paddle



Gland packed air purged shaft seals



Plug valve, easily removable for sanitisation



Food

- Infant Formula
- Powdered Milk
- Herbs & Spices
- Cereal & Oatmeal
- Beans
- Food Premix



Mineral Processing

- Powdered metals
- Minerals blending
- Metal Polishing Powders



Beverages

- 3 in 1 Coffee
- RTD Premix
- Iced Tea & Coffee
- Cocktail Premix



Chemical

- Fillers & Additives
- Fertilisers
- Cleaning Products
- Heat sensitive or friable ingredients
- Zinc Dust (Paint Enrichment)



Healthcare

- Food Supplements
- Pharmaceuticals
- Vitamins



Industrial

- Powder Coatings
- Cement Premix
- Concrete Topcoat
- Coating Powdered Metal
- Pigment blending
- Vacuum Coating



Food

Dairy Packers (New Zealand)

NESTLE (Middle East, AUNZ, Asia)

Yili (China)

Wyeth (AU)

Westland Dairy (NZ)

Caloris (USA)

Schenck Process (China)

Shanghai Gene (China)

Dairy Packers (NZ)

NESTLE (Middle East, AUNZ, Asia)

Synlait (NZ)

GEA (Worldwide)

Tertapak (Worldwide)

Blue River (NZ)

Gene Powpak (Canada)

Santos Jaya Abadi (Indonesia)

Weiss Tech (Indonesia)

Forisa (Indonesia)

Global Food Group

Powder Projects (NZ)



Infant Formula Plant

Powder Blender Installations



Chemical

Dulux

Plantic

Jalco

Aird

BOSTIK

HUNTSMAN CHEMICAL

VISMEC CO. LTD. (Thailand)

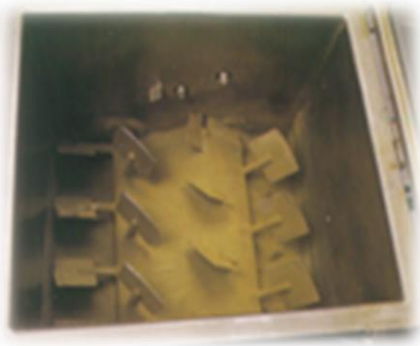
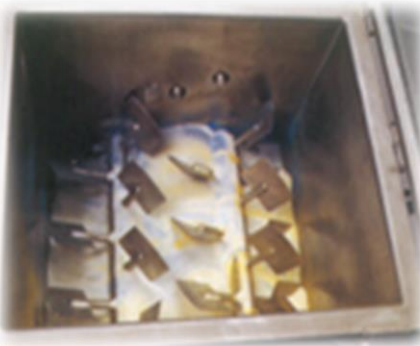
Winstone Wallboards (NZ)

Cemix Products Ltd (NZ)

JAMES HARDIE

ALLIED FRICTION AUSTRALIA P/L

Futuris Brakes International



Mixing Process Optimisation



In addition to OEM, we provide mixer retrofit and process optimisation services to enhance mixing accuracy and efficiency.

Single paddle mixers and ribbon blenders can be retrofitted using our superior mixing technology to take advantage of the following benefits:

- enhanced mixing accuracy
- quicker mixing (as quick as 90s)
- enhanced mixing repeatability (lower CV)
- higher production capacity
- lower energy consumption



Why Choose CPE ?



Decades of
Knowledge &
Experience



World Leading
Technology



Efficient
Solutions



Maximum Plant
Utilisation



Pilot Plant
Testing R&D



Custom design
and Retrofit



Numerous
Installations
Worldwide



Process Analysis
and
Optimisation



CHEMICAL PLANT & ENGINEERING

A.C.N. 006 967 988 (A member of the CEM International Group of Companies)

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