

# MIXERS AND COOLERS

**periplast**  
extrusion expertise



ECO FRIENDLY  
SUSTAINABLE  
CIRCULAR ECONOMY



## About Us

Periplast is a 4.0 industry player in extrusion, feeding and weighing, bulk material handling and service, bringing a wealth of know-how and experience to the market.

Customers benefit from Periplast being fully networked to offer them maximum support in the design, manufacture, and implementation of the best systems.

Backed by engineers, chemists, mechanics, electrotechnicians and a variety of industry experts whose skills make the solution process effective for their customers.

Beyond large-scale application, close collaboration with customers has driven the continuous development of systems and components. From silo store to complete extrusion lines, equipment for pipes / profiles / film and intelligent product developments for industries.

This impressive portfolio also includes extensive worldwide service and support encompassing maintenance, spare parts, consultancy, and training. As a result, customers have access to an even greater global network designed to take their processes to the next level.



## Some Facts

**1989**

Beginning of development of PVC Mixers and later Mixing Units for Masterbatches.

**1993**

Installation of the first PVC mixer / cooler line in France.

**2001**

Periplast acquires the SPEEDEX technology for large size downstream equipment such as multi-belt caterpillar haul-offs and planetary saws as well as the rights to use the trade name SPEEDEX

**2004**

Installation in Spain of a complete PE pipeline of 1600mm diameter.

**2007**

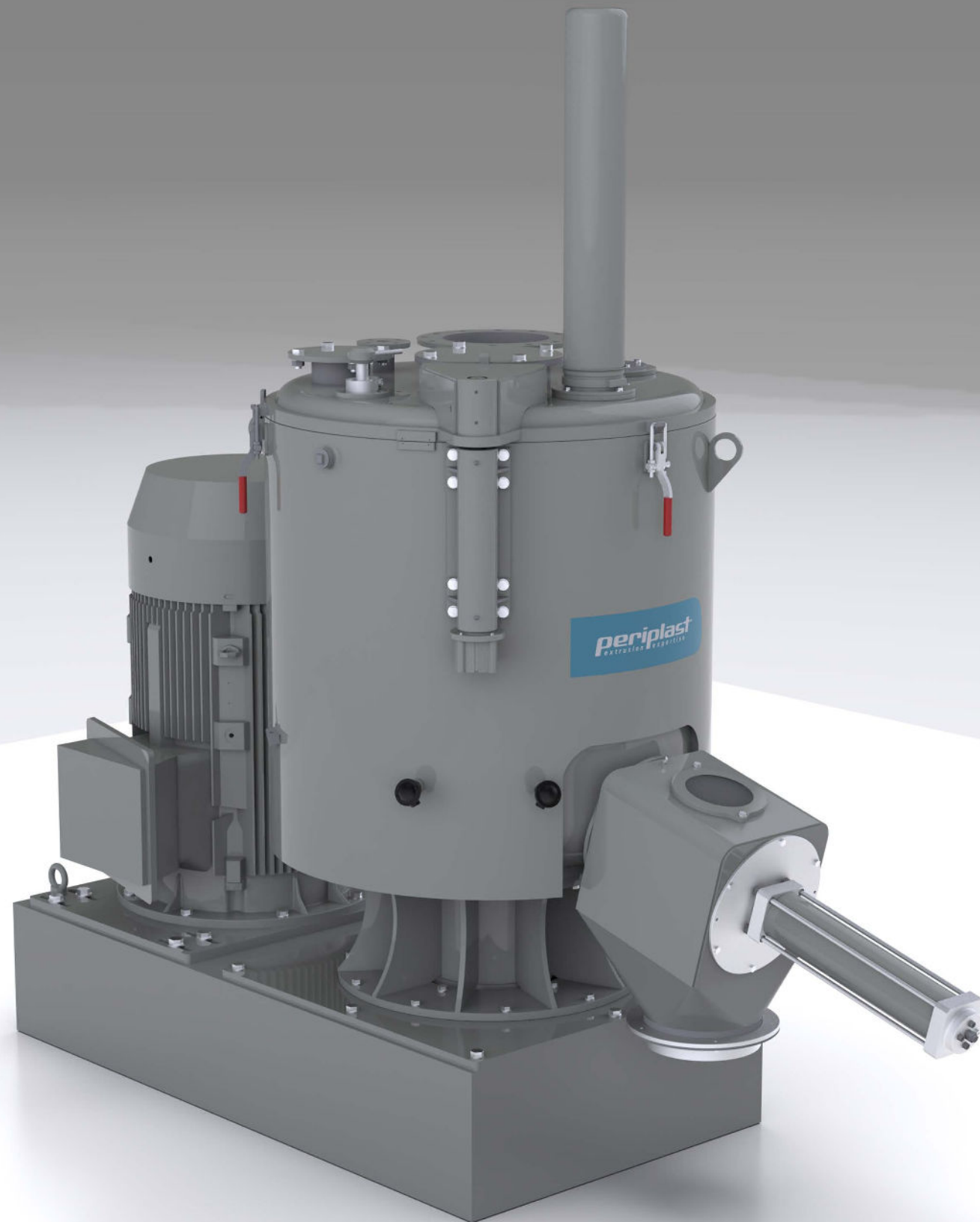
Manufacturing two full PE pipelines Ø2000mm with vacuum calibration for Australia. The first 2-meter line with vacuum calibration.

**2013**

Integration in the Poço Group, specialist in turnkey solutions for manufacturing plants. This partnership is the guarantee of reliability, efficiency, ease of operation and maintenance, without limitations anywhere in the world.

**2016**

Development of new software / hardware for the entire line of equipment supported by the "Industry 4.0" concept, with centralized automated line with remote control and real-time data acquisition and processing.



## Mixers

Excellent efficiency Mixers allowing excellent production rates and high-quality standards. Available with capacities from 20/100 lt. up to 1.500/4800 lt.

Up to 8 cycles per hour – (HC 1500/4800) – 12 ton/h

All inner surfaces in contact with the product are made of polished 316L stainless steel. The vessel lid is also made of 316L polished stainless steel and is opened vertically pneumatically operated, has silicone rubber seals and a safety limit switch to stop the motor when opening.

In the lid, we can also find an inspection window, the respirator connection with the filtering sleeve, and the connection for the product inlet.

Two Teflon coated insulated stainless-steel probes laterally positioned allow the temperature to be displayed in real-time on the control panel.

In addition to steel, the mixing tool has a tungsten carbide coating on the parts subject to greater friction all of them having a precise dynamic balance.

Extraction nut to quickly remove the tool with a special key supplied with the machine.

Single-speed A.C. driven by frequency inverter.

Grease lubricated Viton sealing rings dust and heat resistant. Bearings with self-aligning rollers periodically lubricated.

The mixer's base frame is composed of welded steel offering the required stability.

## Models

Model	Volume (l)	Weight per batch (kgs) <sup>1</sup>	Power (kW) <sup>2</sup>
H100	100	45	22
H200	200	90	45
H250	250	110	55
H400	400	180	75
H500	500	220	110
H600	600	260	132
H900	900	390	160
H1200	1200	540	250
H1500	1500	675	315

<sup>1</sup>Valid for 0,6kg/l apparent Density PVC formula

<sup>2</sup>Depending on the raw material formula



# Coolers

Vertical & Horizontal

Periplast coolers are designed to give the best performance in cooling the hot dry-blend.

Available with standard capacities of up to 4800 litres.

The water circuit design increases the cooling efficiency allowing a significant increase in the productivity of the cooler and therefore of the mixing plant.

The cooling interspace can work with high pressure values and can withstand a typical pressure of factory closed loop chillers. Due to the high heat exchange surface (vessel + sides + lid) and the action of the main agitator which ensures intense contact of the dry-blend with the exchange surface, Periplast coolers guarantee the lowest final cooling temperature so that dry mix can be stored in intermediate storage silos thus avoiding lump formation due to thermal inertia of the dry-blend.



## High Quality

All surfaces in contact with the product are made of finely polished stainless steel to provide easy cleaning and prevent the material build-up.

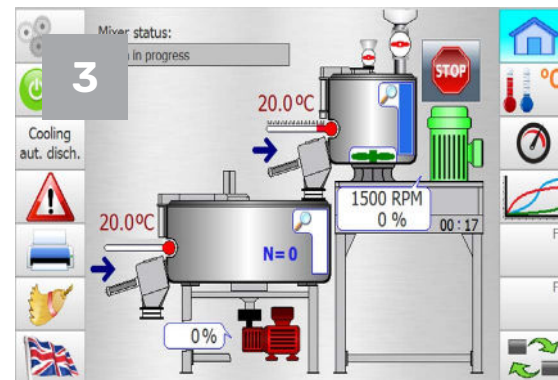
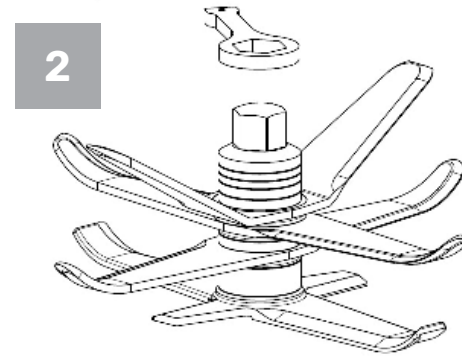
Applicable to any type of turbomixer and can be built in special versions and/or with larger capacities to meet specific customer requirements.



## Models

Model	Volume (l)	Power (kW) <sup>2</sup>
C300	300	5.5
C800	800	11
C1400	1400	22
C1600	1600	22
C1800	1800	22
C2500	2500	30
C3000	3000	37
C4800	4800	55

## Main Features



**1** 316L stainless steel vessel

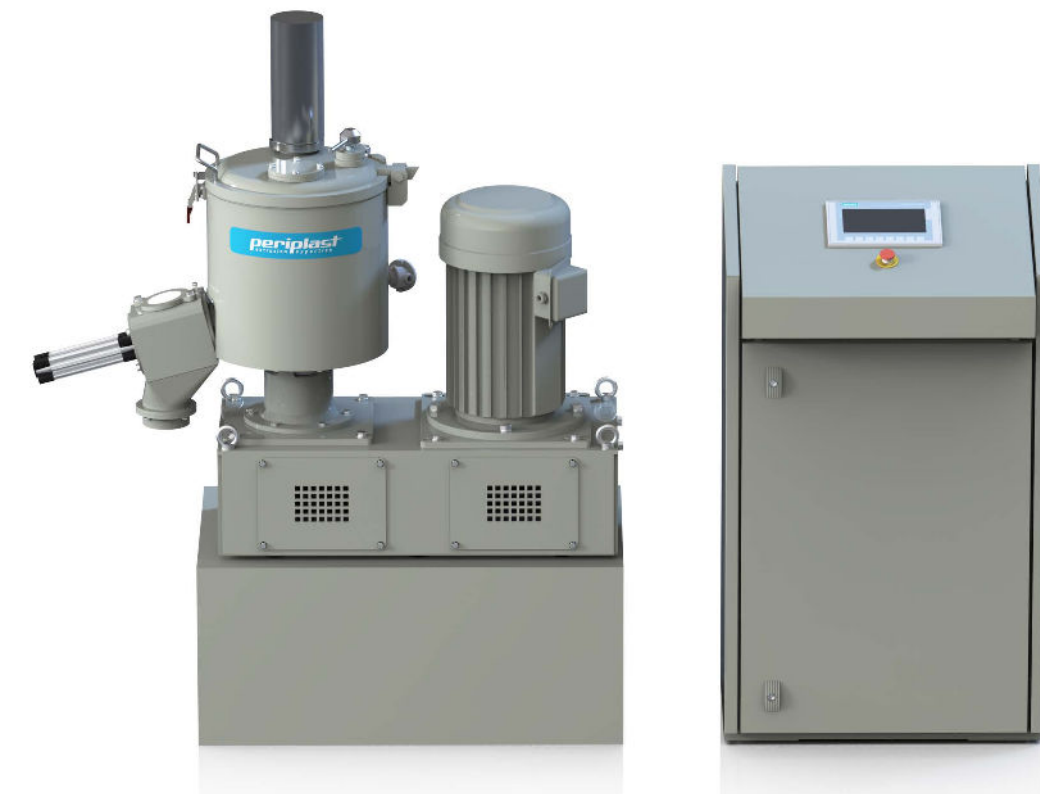
**2** Tungsten-coated mixing tool

**3** Real-time control

**4** Viton sealing rings

**5** Single speed control motor

**6** Horizontal cooler available for all models



## Lab Mixer

The Periplast **H20 Laboratory Mixer** (20-litre volume, 7.5kW power) is suitable for mixing PVC, powder coatings, masterbatch and pigments, thermoplastic rubbers, wood plastic composites (WPC) and offers high reproducibility of the process environment in the production facility to provide essential data to improve productivity and quality.

It allows mixing and cooling in the unit itself as the double wall allows water circulation. Alternatively, by adding a

cooler to the mixer, you can obtain a combination of heating and cooling like the industrial one.

The mixing paddles are made of tungsten carbide coated 316L stainless steel and individually calibrated ensuring excellent balance, dynamic and accuracy.

For their replacement, there is a quick-release nut with a special key allowing all mixing paddles to be changed easily.

Variable speed AC motor with the possibility of integration with PLC and HMI

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