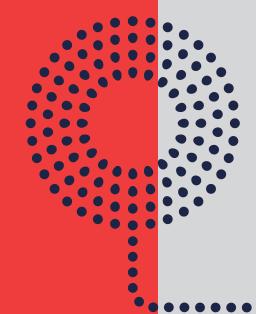


Our versatile pilot plant enables quality, production rates and other key parameters to be defined for cost effective in-house product development.

ipco.com

# -ROTOFORM——MI— LABORATORY—— SYSTEM S——FOR— PRODUCT—— DEVELOPMENT





## -----STREAMLINE YOUR DEVELOPMENT WITH A PILOT UNIT

Purpose-designed for laboratory use and/or small-scale production, our compact and versatile pilot plant opens the door to new levels of efficiency for your product development.



By trialing processes and products on a dedicated pilot plant, it's possible to define quality, production rates and other key parameters. The ability to manufacture small quantities makes product development easier. The production of samples enables the cost effective introduction of innovative new products for marketing.

### IPCO laboratory scale solidification unit: The solution of developing your product.

In order to support customers in the development of new products, we have taken some of our most widely used systems – including the steel belt cooler and the Rotoform pastillation unit – and created laboratory-scale solidification lines

### Rotoform performance for reliable, high quality granulation

The Rotoform MI is engineered to the same high standards as all other Rotoform systems and consists of a stator, metering bar, perforated rotating shell, refeed bar and the drive.

### Controlled solidification on a steel belt cooler

The steel belt cooler forms the heart of most of our chemical and food processing systems and we have developed a lab unit that can be used with a variety of feed devices. As with our full-scale systems, the liquid product is transported along a continuously moving steel belt and solidified as the heat is transferred via the belt to cooling water sprayed against the underside. This process is quick and efficient, and the indirect cooling means there is no risk of cross contamination between the products and cooling media.

Key advantages of the system:

- Premium quality Rotoform pastilles.
- · Maximum system versatility.
- · Solidification directly from the melt.
- Ideal for labs, R&D and small-scale production – easy scale up to industrial production.
- Simple operation and accurate system control.
- No risk of cross contamination between product and cooling media.
- · Suitable for food or chemical products.
- Easy cleanable steel belt.





### **System specifications**

Plant dimensions	Width	150 mm
	Length	1-4 m
Production capacity		up to 20 kg/h*
Pastille diameters		up to 12 mm*
Melt temperatures		up to 200 °C
Product viscosities		10-5 000 mPas

<sup>\*</sup>Depending on the products being processed.

### IPCO granulation compact unit for solidification of various products

The pilot granulation system is based on a small-scale steel belt cooler and matching Rotoform MI feeding device. The melt is brought via compressed air or inert gas to the Rotoform MI system where a needle valve guarantees exact dosing onto the belt. The perforated rotating shell turns concentrically around the stator to deposit drops of the product across the whole operating width of the continuously running stainless steel belt.

The circumferential speed of the Rotoform is synchronized with the speed of the belt: drops are therefore deposited without deformation. Heat released during solidification and cooling is transferred via the steel belt to cooling water sprayed underneath.

Ancillary equipment is available to meet the process requirements of different products:

- Skid mounted.
- · Product vessel.
- Product pump.
- Piping.
- · Working table.
- Control terminal.
- · Heating unit.
- · Cooling unit.

This compact pilot unit is also available for rent on request.

### Typical Rotoform MI plant

