

Laboratory and Small Batch Equipment



Baker Perkins supplies the MPX19 and MPX24 twin-screw extruders for small batch and low-output continuous production. The extruders are specifically designed for all types of powder coating formulations, including epoxy, hybrids, polyester, acrylics and fines recycling, and are specifically engineered with features that help to maintain consistent quality while keeping running costs low.

MPX19 Laboratory Extruder

The MPX19 is a benchtop twin-screw extruder ideal for academic, laboratory and development work. It delivers repeatable results, and enables full, reliable scale-up to production outputs on Baker Perkins' range of larger extruders.

Risk-free switching to continuous production

The MPX19 is an ideal tool for companies moving from batch to continuous processing who need to establish the processing parameters necessary to match their existing product.

Academic applications

The MPX19 features Baker Perkins' clamshell barrel; production can be stopped at any time for immediate access to demonstrate and review the state of material being processed.

Production applications

Companies can use the MPX19 in a laboratory environment to examine process problems, extend product lines, and develop new processes.

MPX24 Integra Small Batch Extruder

The MPX24 Integra is a small batch extruder designed specifically for use either in a laboratory for new product development, or in a production environment for tasks such as colour matching and small batch production.

Accurate scale up

The MPX24 Integra delivers repeatable results that can be consistently reproduced on production scale machines. Results are obtained first time, improving quality and reducing costs.

Rapid changeover

The top-opening barrel provides easy access for cleaning and the design means that a thorough clean can be achieved very quickly.

Compact design

A chill roll and flaking unit are fully integrated into the machine for a complete process in a portable machine.



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MPX19 Laboratory Extruder

Features

- Clamshell barrel for easy access and cleaning
- Splined agitator shafts for increased reliability
- Segmented screws allow ultimate flexibility for screw profile design
- Electrically heated/water cooled barrel for accurate temperature control
- Detachable chill roll
- Top and side feeders
- Additional top and side feed ports
- PLC control with recipe management and data logging
- Secure remote access for updates and troubleshooting

MPX24 Integra Small Batch Extruder

Features

- One piece horizontally split clamshell barrel (15:1 L/D)
- High free-volume barrel design to process a wide range of product types
- Electrically heated/water cooled barrel for responsive temperature control
- Splined agitator shafts to distribute torque evenly
- Insert type liners for reduced maintenance costs
- Manual barrel opening for access and easy cleaning
- Fully integrated chill roll and kibbling unit with discharge conveyor bypass
- Control system with simple touchscreen interface
- Secure remote access for updates and troubleshooting



Performance and Engineering Data

- Typical outputs: 5-25 Kg/hr (500 rpm)
- Maximum operating temperature: 200°C
- Speed range: 0 – 500 rpm
- Total connected power: 2Kw@ 500 rpm

Options

- Multiport feed
- Side feed
- Alternative discharge options

Performance and Engineering Data

- Typical output: 100 kg/hr
- Maximum operating temperature: 200°C
- Speed range: 0 – 1,000 rpm
- Total connected power: 9Kw@ 1,000 rpm

Major Dimensions

- Length: 1,200mm
- Width: 600mm
- Centreline height: 400mm
- Overall with feeder: 1,000mm
- Approximate weight: 130kg
- Barrel lengths from 15:1 L/D up to 40:1 L/D

Dimensions

- Length: 2,500mm
- Width: 1,000mm
- Centreline height: 1,300mm
- Overall with feeder: 2,200mm
- Approximate weight: 1,000kg