



innovation • performance • productivity

*The XTS range for Laboratory, R&D  
and small scale production.*



*XTS Twin Screw Extruders and Ancillary Equipment for  
Powder Coatings, Thermoplastics, Biopolymers, Medical  
Plastics, Fine Chemicals, Pharmaceuticals and Food...*

Find out more [www.xtrutech.com](http://www.xtrutech.com) [sales@xtrutech.com](mailto:sales@xtrutech.com) Call +44 (0)1782 621122

# XTS Twin Screw Extruders

The XTS laboratory range includes four extruder models designed specifically for small scale production, R&D, and specialist applications. All models can be seamlessly integrated with a variety of ancillaries also manufactured by Xtrutech.

## **XTS11 Twin Screw Extruder Line:**

Barrel length: 24 L/D  
Length: 1800mm  
(including table)  
Height: 1781mm  
(including hopper)  
Width: 800mm



The XTS11 is the smallest Twin Screw Extruder in the XTS range and is ideal for sampling and R&D purposes. This Extruder is particularly well suited to pharmaceutical applications and small batch testing. Additionally, for high value or sensitive materials the XTS11 can be run at a low throughput.

The XTS19 Twin Screw Extruder has been designed with a wide range of processing capabilities, from lab scale sampling to research and development work.

The XTS19 is one of the smaller Extruders in the XTS range and is ideal for small batch testing and the testing of new formulations. The XTS19 is well suited for the processing of Thermoplastics, Medical Plastics, Biopolymers, Fine Chemicals and Pharmaceuticals.

## **XTS19 Twin Screw Extruder Line:**

Dimensions:  
Barrel length: 24 L/D  
Length: 1760 mm  
Height: 1957mm  
Width: 1260mm





### **XTS24 Twin Screw Extruder Line:**

Barrel length: 24 L/D

Length: 3137mm

Height: 2366mm

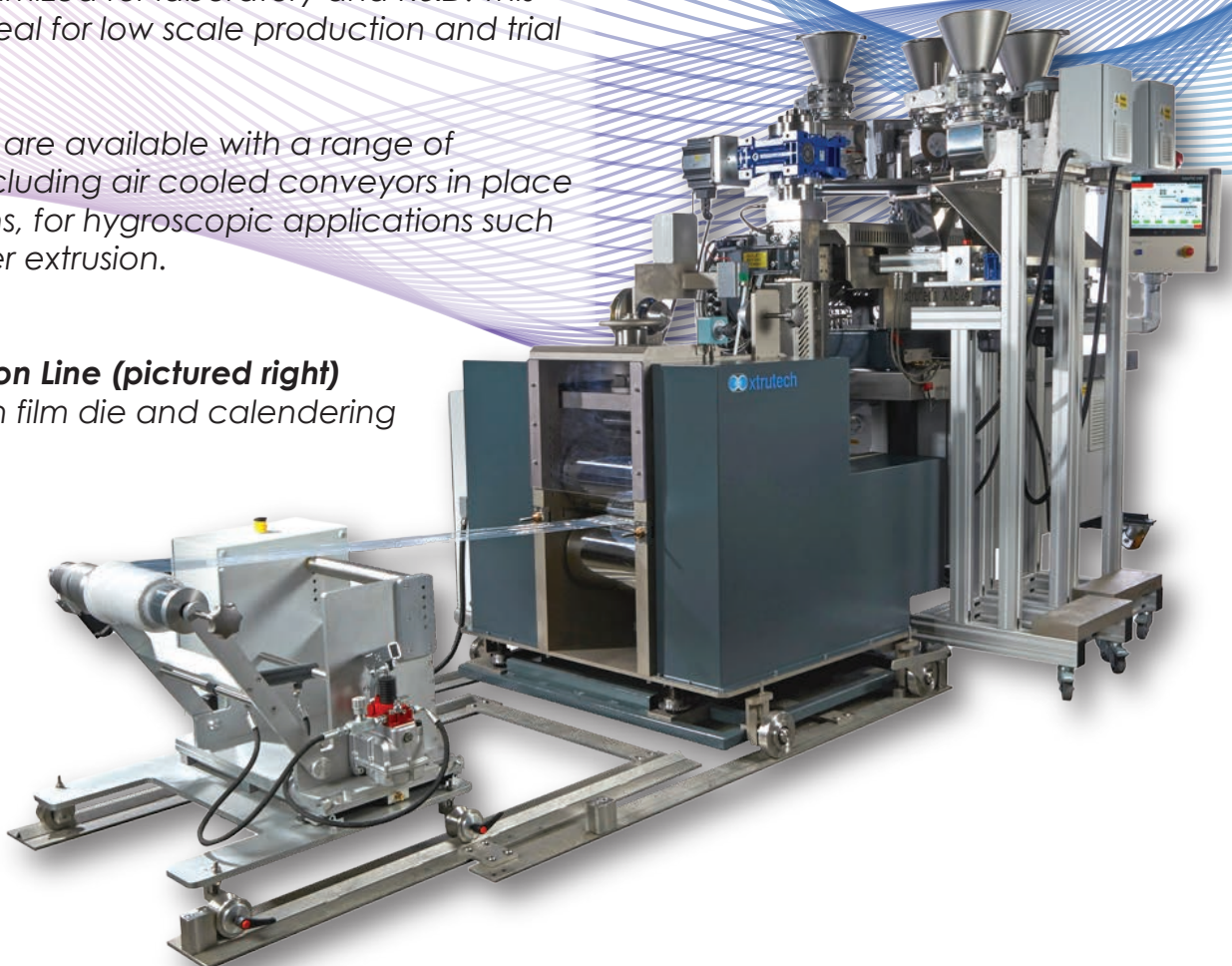
Width: 1640mm



The XTS24 Twin Screw Extruder is one of the larger Extruders optimized for laboratory and R&D. This extruder is ideal for low scale production and trial formulations.

XTS Extruders are available with a range of ancillaries including air cooled conveyors in place of waterbaths, for hygroscopic applications such as Biopolymer extrusion.

**XTS24 Extrusion Line (pictured right)** features both film die and calendering unit.



The XTS35 is a versatile extruder that can serve both laboratory and production functions. The 35mm is ideally used as a lab machine when higher free volume is necessary. It is also perfect for low-scale production and offers a high throughput particularly for specialty products.

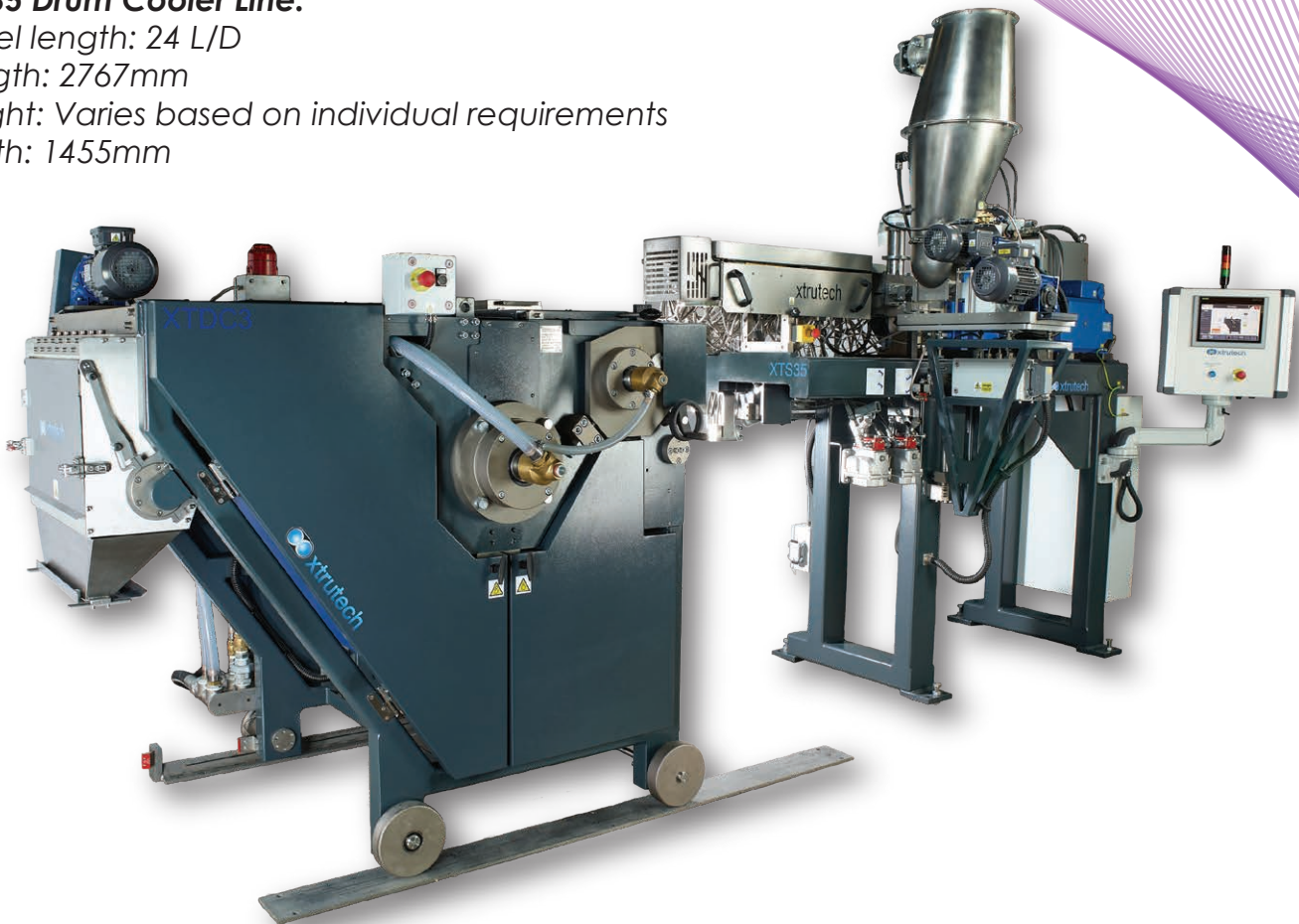
**XTS35 Drum Cooler Line:**

Barrel length: 24 L/D

Length: 2767mm

Height: Varies based on individual requirements

Width: 1455mm



The XTS35 Twin Screw Extruder has been designed to fit seamlessly with an XTDC3 Drum Cooler (pictured).

**XTDC 1:** Bench top for lab samples- to match the XTS19 Twin Screw Extruder

**XTDC 2:** R&D and / or small batch production up to 150 KGs/hr- to match the XTS24 Twin Screw Extruder.

**XTDC 3:** Small batch production up to 350 Kgs/hr- to match the XTS35 Twin Screw Extruder.

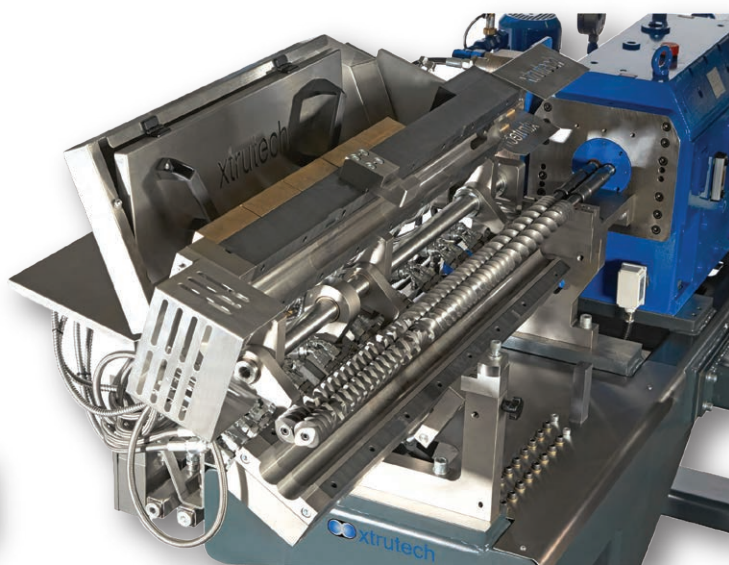
XTDC Drum Coolers deliver evenly applied temperature reduction, which doesn't compromise the integrity of the product. Our water-cooling technique is both cost and energy efficient, and in turn promotes the reduction of air moisture to prioritise sustainability and quality.

Our designs are compact and yet even our smaller production sizes are capable of intense yields of 350 kgs/per hour. The endless belt is easily accessible via a side access door, so it can be maintained and replaced accordingly.

To further reduce cleaning times, we offer the optional extra of a "removable kibbler shaft". This allows the shaft to be taken out of the machine, cleaned, and then efficiently replaced.



# Extruder features



## Features:

- Clamshell barrel for quick cleaning and maintenance.
- Insert liners which can be made from wear or corrosion resistant materials.
- Segmented screw elements.
- Independently controlled temperature zones with electric heating and water cooling.
- PLC controlled with operator friendly HMI screens.
- Multipoint Liquid Injection (for viscous and non-viscous fluids) can use various types of pumps peristaltic, gear, piston, syringe, HPLC.
- Atmospheric Venting
- Vacuum extraction to remove gases generated by process.
- Scale-up to production from the XTS19 to the XTS24 or XTS35.
- Customised laboratory ancillaries including waterbaths, pelletisers, haul off etc.

## Optional Extras:

- Side Feeders - for highly filled products and temperature/sheer sensitive products and materials.
- Liquid Feeders - low and high viscosity, with range of pump types (gear, peristaltic, syringe & piston).
- Vacuum Cabinets/ enclosures to contain Volatile Organic Compounds, toxic dust, and fumes.
- Nitrogen Purge for Feeders.
- Data Capture – (RPM, torque, set points vs actuals, throughput).
- Volumetric or Gravimetric (LIW/loss-in-weight) Feeders.

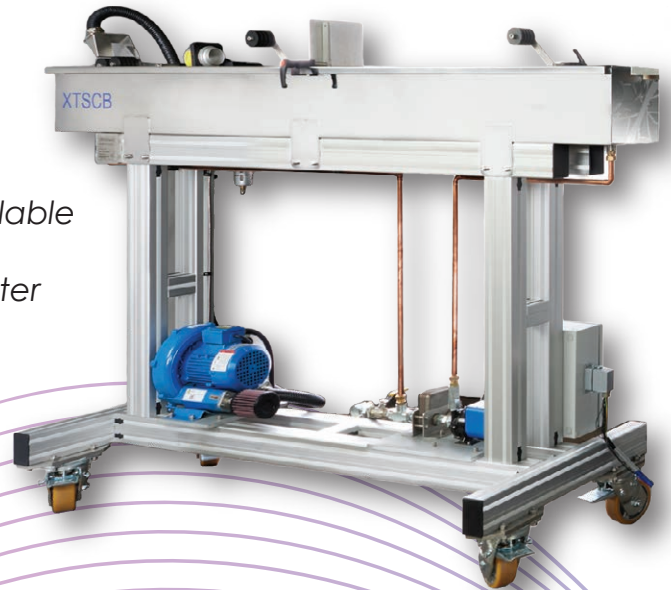
# Ancillaries

Xtrutech's ancillaries have been designed to complement and enhance the capabilities of an XTS Twin Screw Extruder. The XTS range of ancillary equipment is adaptable for a multitude of industries, ready to optimise your experimental and production processes.

Whether you're delving into polymer processing, pharmaceuticals, food technology, or any other field that demands precise material manipulation, our ancillary equipment stands as the perfect addition to a XTS Twin Screw Extruder.

## Water baths

- Stainless- steel tank with aluminium frame.
- Standard length of 1.5M with other lengths available on request to suit process.
- Cooling water connections for reprocessing water through heat exchanger.



## Strand Pelletisers

- Suitable for dry-cut applications
- Replaceable blade and bed knife constructed of through hardened tool steel.
- Variable speed controls.
- Easy maintenance design with access panel for cleaning.
- Safety interlocked and complete with electrical controls.



## Face-cut Pelletisers

- Suitable for water soluable applications such as biopolymers and food.
- Mounted on an anodized aluminium frame with a 0.75kW cutter motor (dependent on size) and variable speed cutter of 0-1000 rpm.
- Our control panel also provides speed control via potentiometer with digital display meters.



# Spares & Services

## Process Trials

Xtrutech's Innovation Centre is now open for process trials, this brand-new facility will house the XTS19 and XTS35 Twin Screw Extruder lines, along with various ancillaries from the XTS range.

Our customers can rest assured that they have chosen the right partner in Xtrutech, as we collaborate in this new space to create their optimal Twin Screw Extruder line.

## Spare parts

Xtrutech are a leading independent supplier of OEM spare parts for Twin Screw Extruders. As a result, we strive to only use quality materials that ensure compatibility with original parts.

We supply **screw elements, shafts, and barrels** for a variety of extruder manufacturers.

Looking for something else? Xtrutech supply a range of extrusion spares such as thermocouples, heaters, feeder spares, motors, and gearboxes, some of which are no longer in manufacture with the OEM.

Please speak to a member of our team who can advise you on the availability of these parts.

## Services

Xtrutech offer a range of engineering services for Twin Screw Extrusion equipment. Our team includes qualified engineers and technicians, many of which have experience working with a range of OEM manufacturers.

Whether it is discussing the future potential of your XTS machines, or preventative maintenance agreements, we want to give you a long-lasting service that is personalised to your requirements.

Our experienced team of engineers and technicians we will work towards a better understanding of what you need to realise the potential of your extruder.





innovation • performance • productivity

### So why Xtrutech?

The XTS range of Twin-Screw Extruders and Ancillary Equipment have been developed by Xtrutech, based on our knowledge and experience of designing, manufacturing & operating extruders for over 20 years.

Xtrutech's equipment is ideal for the development of new formulations and innovative processes, prioritising efficiency, maintenance & economy.



ISO  
14001 : 2015  
45001 : 2018

INTEGRATED  
MANAGEMENT  
SYSTEM

REGISTERED

Certificate  
No:375042021

#### **Xtrutech Ltd**

Unit 5  
Crown Road  
Festival Trade Park 2  
Stoke-on-Trent  
ST1 5NJ  
United Kingdom

T: +44 (0)1782 621122  
E: sales@xtrutech.com  
www.xtrutech.com

#### **Xtrutech Inc**

1635 Market Street  
Suite 1600  
Philadelphia  
PA 19103

T: +1 267-567-7592  
E: sales@xtrutech.com  
www.xtrutech.com



Certificate  
No:214562020



**XTS-F052 E V2**  
**5/9/23**

Find out more [www.xtrutech.com](http://www.xtrutech.com) [sales@xtrutech.com](mailto:sales@xtrutech.com) Call +44 (0)1782 621122