

## Technical Specifications

Opt. = Option

Range		Co-Extruders						Main Extruders								
Screw Diameter	mm	20	25	30	35	38	45	30	38	45	50	60	75	80	90	
L:D Ratio	- Standard	20:1	20:1	25:1	25:1	25:1	25:1	25:1	25:1	25:1	25:1	25:1	25:1	25:1	25:1	
	- Option	na	na	na	na	na	na	na	na	na	30:1	30:1	30:1	30:1	30:1	
Screw Torque	Nm	262	358	477	656	878	1313	439	1071	1718	1766	3552	4132	5250	8595	
Thrust Bearing Dynamic Load	Kn	39	39	102	102	345	345	102	345	345	345	575	1630	1860	1860	
Motor - AC Standard	kW	2.2	3.0	5.0	5.5	7.5	11.0	4	11	18	18.5	30	45	55	90	
Direct Drive Motor		Std	Std	Std	Std	Std	Std	Std	Std	Std	Std	Std	Std	Std	Std	
Barrel Heating Capacity	kW	1.6	1.6	3.6	3.6	9.8	9.8	3.6	9.8	9.8	10	16.4	20.8	22.4	45	
Barrel Heat Zones - Standard		3	3	3	3	3	3	4	4	4	4	4	4	4	5	
Die Head Heat Zones - Standard		1	1	1	1	1	1	2	3	3	3	3	3	3	2	
Clamp Heat Zone		1	1	1	1	1	1	1	1	1	1	1	1	1	1	
High Temp / Fluorocarbon Compatible		Opt.	Opt.	Opt.	Opt.	Opt.	Opt.	Opt.	Opt.	Opt.	Opt.	Opt.	Opt.	Opt.	Opt.	
Available Configuration	- Horizontal	Yes	Yes	Yes	Yes	Yes	Yes	na	na	na	na	na	na	na	na	
	- Vertical	Yes	Yes	Yes	Yes	Yes	Yes	na	na	na	na	na	na	na	na	
	- Universal	Yes	Yes	Yes	Yes	Yes	Yes	na	na	na	na	na	na	na	na	
SMART PLC Control System		Opt.	Opt.	Opt.	Opt.	Opt.	Opt.	Opt.	Opt.	Opt.	Opt.	Opt.	Opt.	Opt.	Opt.	
Hopper Capacity	Litres	20	20	20	20	59	59	20	20	59	59	59	59	59	150	
Total Installed Power - Standard	Kva	5	5	15	15	23	25	20	40	50	65	75	95	114	157	
Dimensions - standard	- Length	mm	1060	1160	1300	1425	1500	1730	1200	1605	1800	1900	2350	2711	2804	3675
	- Width	mm	700	700	800	920	920	920	800	800	800	800	800	1027	1027	1194
	- Overall Height	mm	1790	1790	1790	1790	1790	1790	1750	1750	1750	1750	1800	1787	1787	1925
Centreline Height	mm	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	
Net Weight - Standard	Kg	350	400	550	640	700	775	550	650	670	800	1050	1650	1700	2500	

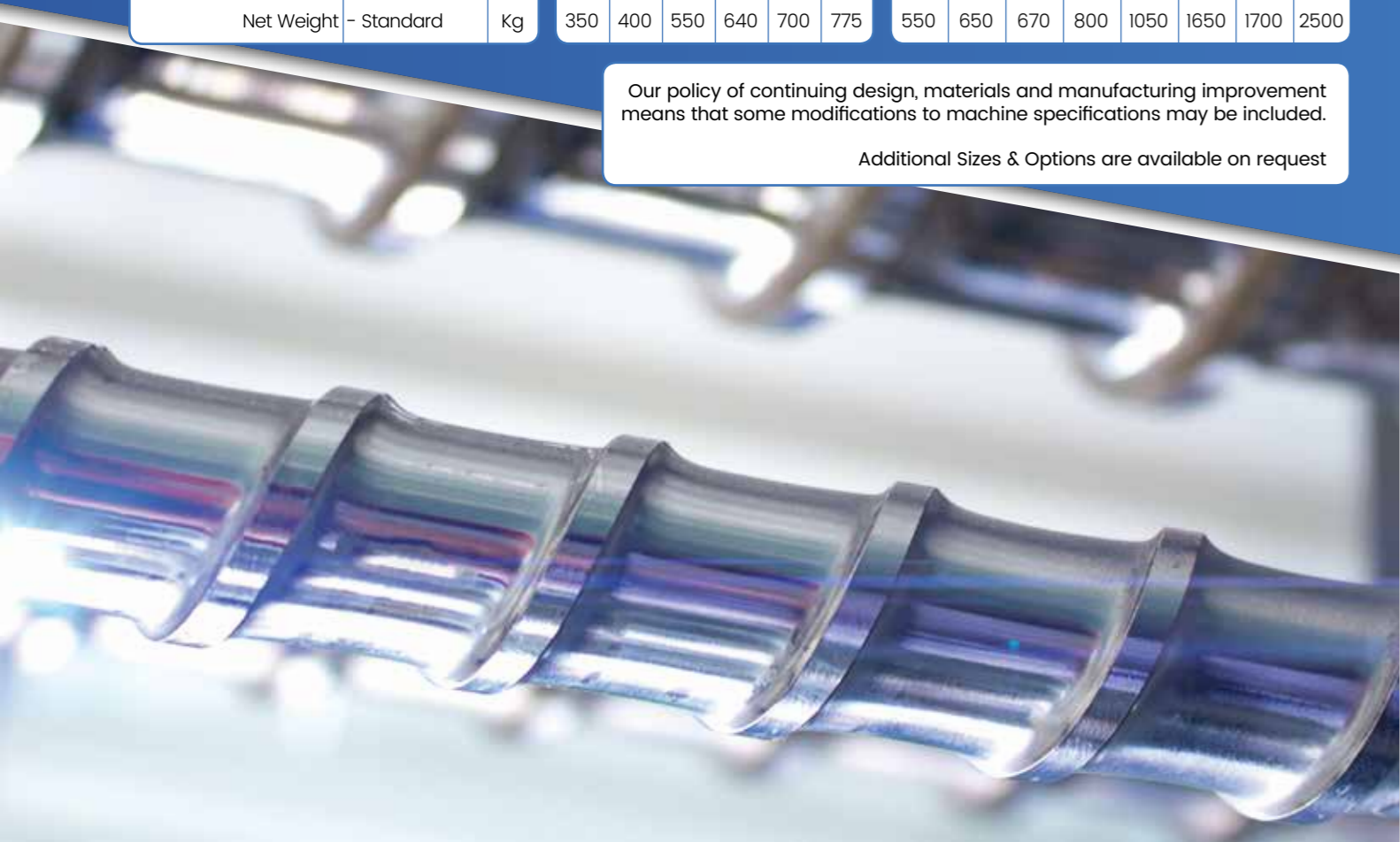
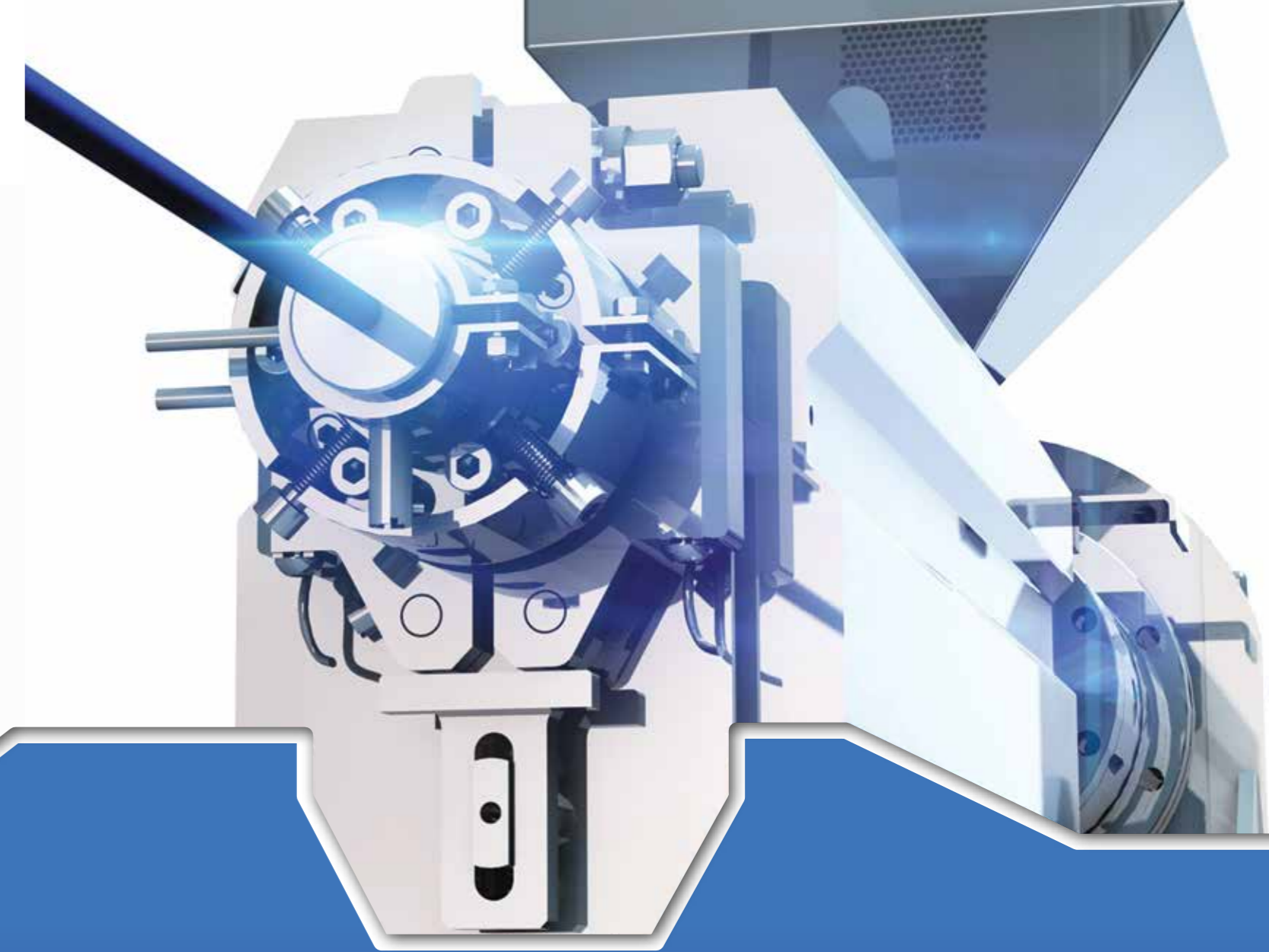
Our policy of continuing design, materials and manufacturing improvement means that some modifications to machine specifications may be included.

Additional Sizes & Options are available on request

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### Industries served

- Medical Devices & Life Sciences
- Automotive
- HVAC (PEX Pipe & PB Pipe)
- Zippers (re-sealable packaging)
- Cosmetic Squeeze Tube (Soft Tube)
- IC Carrier Profiles
- Rod & Plate (including PEEK)
- Flexible & Rigid Profiles
- Tube & Hose
- Seals & Gaskets
- Microducting
- Wire & Cable
- Heat Shrink Tube

# Single screw Extruders



# For more than 65 years

Boston Matthews has been at the forefront of extrusion machinery technology.

## A Worldwide Organisation

Boston Matthews is a global company that supports in excess of 30,000 machines in over 70 countries.

Head Offices and manufacturing facilities are based in Worcester, England which are further supported by facilities in Coral Springs, Florida, USA and Shanghai, China.

## Advanced Design & Innovation:

Continued investment in the latest technology enables Boston Matthews to drive extrusion innovation for the benefit of our customers. From 3D Design to Digital Measurement Analysis.

## Customer Support – Aftercare

Boston Matthews has dedicated Spare Parts and Customer Support Departments to ensure you are fully supported at all times.

Our team of Test Engineers, Processing Engineers and Commissioning Engineers ensure your machine or complete extrusion line operates at the optimum level before you take delivery.

We can also train your operators, install and commission in your facility and our Processing Engineers are always willing to assist, even after sign off.

## Boston Matthews Machine Range Includes...



Extruders



Cooling & Sizing



Pulling

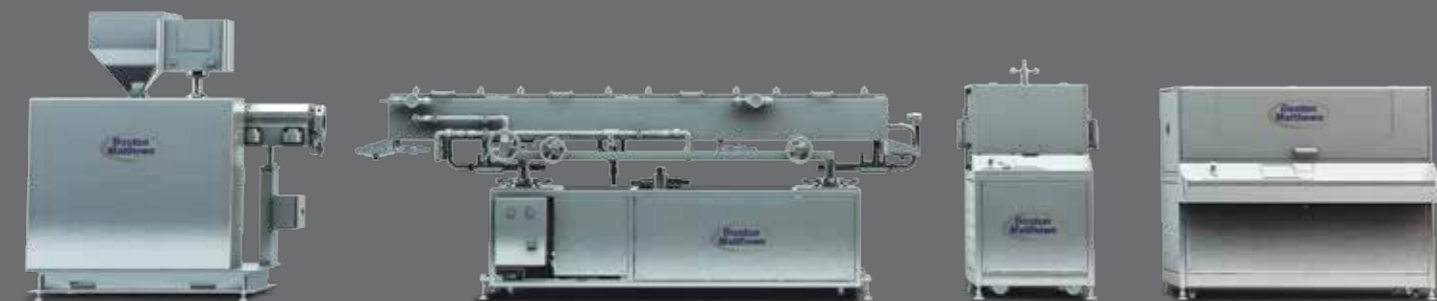


Coiling & Winding



Cutting & Sawing

## ...and Complete Lines



## Designed and developed

using over 50 years polymer processing experience Boston Matthews Single-Screw Extruders provide the optimum performance and the highest quality at all times.

Consistent precision speed holding combined with advanced screw design ensures the highest level of product quality output. Boston Matthews Single-Screw Extruders are capable of processing a wide range of polymers including:

- HDPE
- MDPE
- LDPE
- LLDPE
- PP
- ABS
- PET
- PS
- EVOH
- POM
- PA
- FPVC
- PVC
- PU
- CA
- CP
- PBT
- PEX
- EVA
- PPO
- PEEK

**smart**  
control system



## Quick & Easy Maintenance

Intelligent design incorporates many features that not only provide maximum performance and accuracy but reduces downtime and makes routine maintenance simple and easy including the elimination of belts and pulleys; Plug & Play replacement of heaters, cooling fans and thermocouples.

## Polymer Process Control

AC Motor technology with encoder feedback for precision screw speed holding combined with the intelligent "Accutrol" temperature control system ensures complete control over the extrusion operation.

## Screw Design Technology

50 years of polymer processing and screw design experience supported by Flow Simulation Software ensures polymers are processed with the maximum quality and efficiency.

## Energy Efficient Operation

All Boston Matthews extruders feature AC and Direct-Drive Technology (direct drive up to 120mm). This ensures maximum power transmission and eliminates the need for belts & pulleys (a wear item). This also reduces operational noise and dust levels as well as reducing energy consumption.

## Total Control

Extruders are available with traditional hard wired control or the optional SMART PLC control system. The colour touch-screen control offers many additional features including Recipe Storage; Password Protection and Security Levels; Product Traceability & Data Export; Ethernet Connectivity; Alarm History and much more.

## High Temperature & Fluorocarbon Processing

Boston Matthews has designed a range of extruders specifically for the processing of Fluorocarbons and other High Temperature polymers including PEEK. Specialised materials are incorporated to ensure safe processing of these polymers at even the highest processing temperatures.



Co-Extruder