



EXTRUSION SOLUTIONS



About

Milacron is a global industrial leader in manufacturing highly engineered and customized injection molding and extrusion solutions, and aftermarket parts and service for the plastics industry. Our extrusion solutions deliver reliable, high-performance plastics processing machines for pipe, profile, and sheet applications. Our product lines feature Twin Parallel, Twin Conical, and Single screw extruders, designed to perform with process versatility and high throughput for applications in irrigation, water, gas transportation, infrastructure, and industrial applications.

Milacron's extrusion solutions are distinguished by technological advantages, including high productivity, longevity, and low energy consumption, resulting in higher OEE and lower operating costs. With integrated M-Powered, a suite of IIoT solutions, users benefit from real-time monitoring, predictive analytics, and more innovative downtime management. We also offer customized solutions for various product mixes – an expertise often sought by the plastics processing industry.

Backed by decades of expertise, Milacron's extrusion solutions combine robust engineering with process versatility, ensuring consistent product quality and long-term reliability, positioning manufacturers to meet growing production demands with confidence.



TP-SERIES

TC-SERIES



Twin Parallel Screw Extruders

TP 68 | TP 75 | TP 75c | TP 95 | TP 95c | TP 117

Twin Conical Screw Extruders

TC 55 | TC 65 | TC 80

Single Screw Groove Feed Extruders

SG 45 | SG 60 | SG 75 | SG 90 | SG 120

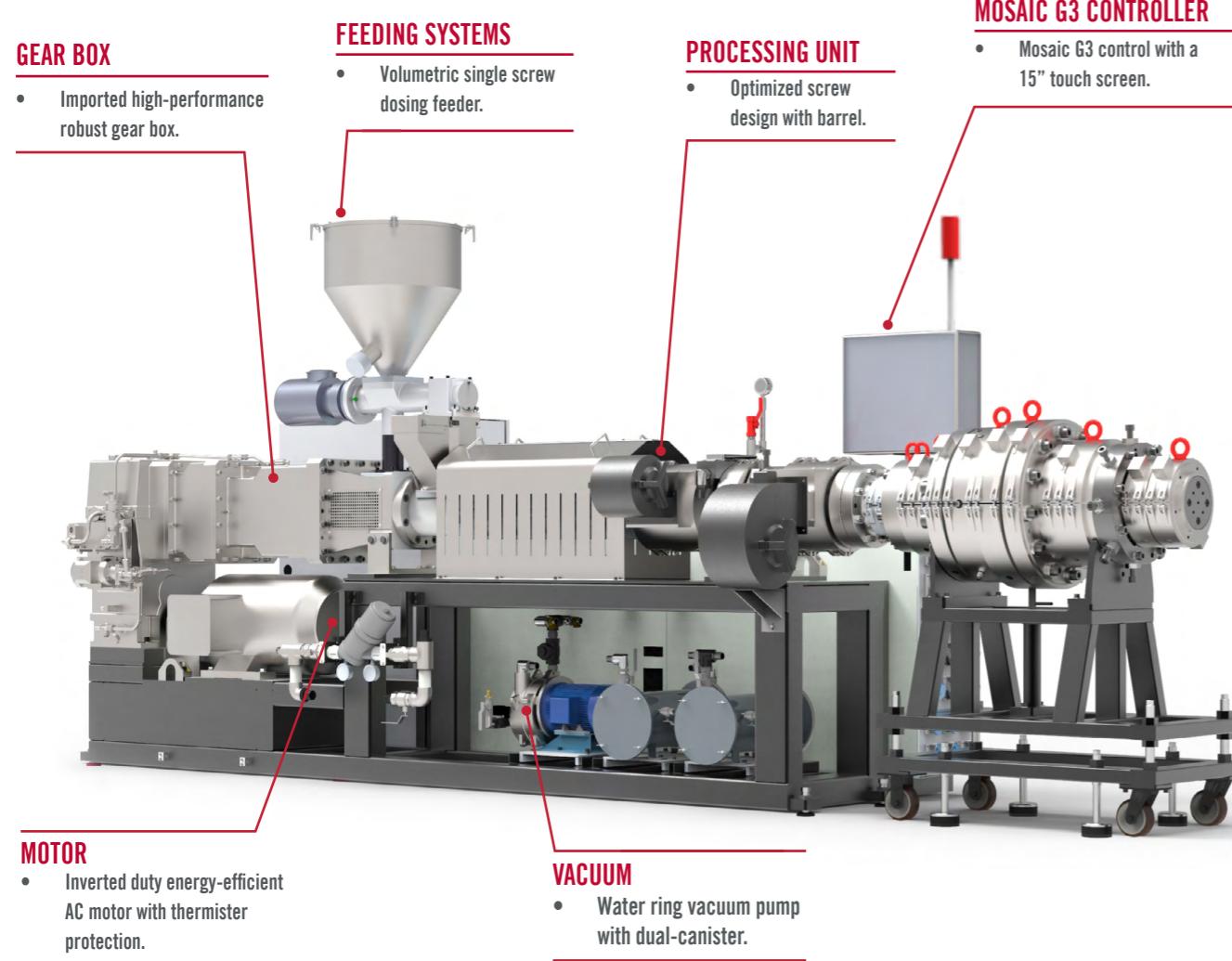


SG-SERIES

TWIN PARALLEL SCREW EXTRUDERS

The Milacron Twin Parallel Screw Extruder series is a robust solution that produces PVC and CPVC pipes, ensuring melt temperature, uniformity, and high output while addressing critical needs in the extrusion process. It caters to processors in water distribution and construction who demand both performance and energy efficiency. Its technical superiority is driven by a robust gearbox and Milacron's centralized advanced control interface, all working in sync to optimize output and simplify operation.

The TP Series facilitates the reliable processing of PVC and CPVC polymers through high-output extrusion lines. Additionally, with M-Powered IIoT integration, smart manufacturing becomes a reality. Customers benefit from increased uptime, improved ROI, and lower energy expenses. Engineered for high-output operations, the TP Series delivers durable performance, reducing the total cost of ownership and enabling flexibility for future production requirements.



Features & Benefits

- ⌚ Imported high-torque gearbox ensuring reliability.
- ⌚ Wear-resistant screw and barrel designed to enhance service life.
- ⌚ Optimized screw design for higher output.
- ⌚ Screw temperature control system for better process control.
- ⌚ Air-cooled barrel design for PVC pipes ensuring effective thermal control.
- ⌚ Oil/Water-cooled barrel design for CPVC pipes ensuring effective thermal control.
- ⌚ Directly coupled main motor with gearbox to minimize power losses.
- ⌚ 15-inch touch-screen HMI with process control, data storage, I/O diagnostics.
- ⌚ Efficient AC drive system ensuring low energy consumption.
- ⌚ Electrical control panel with air conditioning.

DESCRIPTION / MODEL	TP 68	TP 75	TP 75c	TP 95	TP 95c	TP 117
Screw Diameter (mm)	68	75	75	95	95	117
L/D Ratio	26D	26D	26D	26D	26D	26D
Motor Rating (kW)	30	45	45	75	75	110
APPLICATION						
Pipe Range (Single die)	20 - 200	75 - 315	1"- 4"	160 - 400	2"- 6"	160 - 400
Pipe Range (Dual die)	20 - 63	20 - 110	1/2"- 2"	63 - 110	1/2"- 2"	75 - 200
PVC Pipe (kg/hr)	280 - 300	400 - 425		700 - 750		1100 - 1200
cPVC Pipe (kg/hr)			200 - 250		350 - 400	

APPLICATIONS

- ⌚ Agriculture / Irrigation Pipe
- ⌚ Plumbing Pipe
- ⌚ Casing Pipe
- ⌚ Column Pipe
- ⌚ SWR Pipe
- ⌚ Underground Drainage Pipe

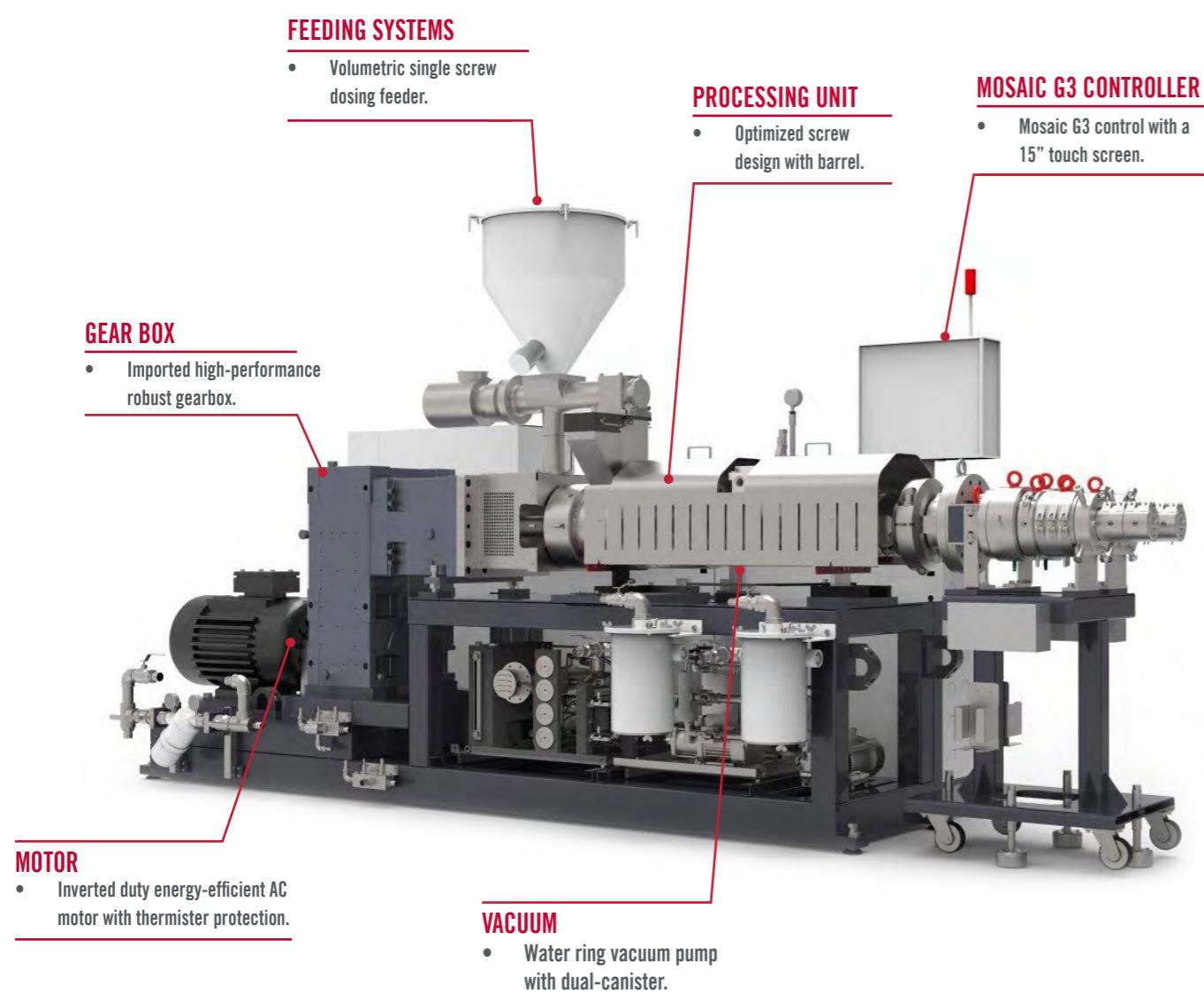


Note: Output is based on raw material grade, bulk density, and other processing parameters

TWIN CONICAL SCREW EXTRUDERS

Milacron's Twin Conical Screw Extruder series is specifically designed for PVC and CPVC-based applications, including pipe and profile extrusion. Designed to process materials for various applications, this series enables the processing of a wide range of formulations. It caters to industries focused on building materials and utilities, where dimensional accuracy and durability are essential, delivering consistent and reliable processing, and high-quality products.

Its distinctive features include a wider processing window that handles a variety of applications, from pipes to complex profiles. With proven stability and process reliability, the TC Series continues to set the benchmark for PVC & CPVC extrusion.



Features & Benefits

- Imported high-torque gearbox ensuring reliability.
- Wear-resistant screw and barrel designed to enhance service life.
- Optimized screw design for higher output.
- Screw temperature control system for better process control.
- Oil / water-cooled barrel design for effective thermal control.
- Directly coupled main motor with gearbox to minimize power losses.
- 15-inch touch-screen HMI with process control, data storage, I/O diagnostics.
- Efficient AC drive system ensuring low energy consumption.
- Electrical control panel with air conditioning.

DESCRIPTION / MODEL	TC 55	TC 65	TC 80
Screw Diameter (Front / Rear) (mm)	55 / 114	65 / 132	80 / 156
L/D Ratio	22D	22D	23D
Motor Rating (kW)	30	37	55
Barrel Cooling Medium	Water / Oil	Water / Oil	Water / Oil
Screw Heating Medium	Oil	Oil	Oil

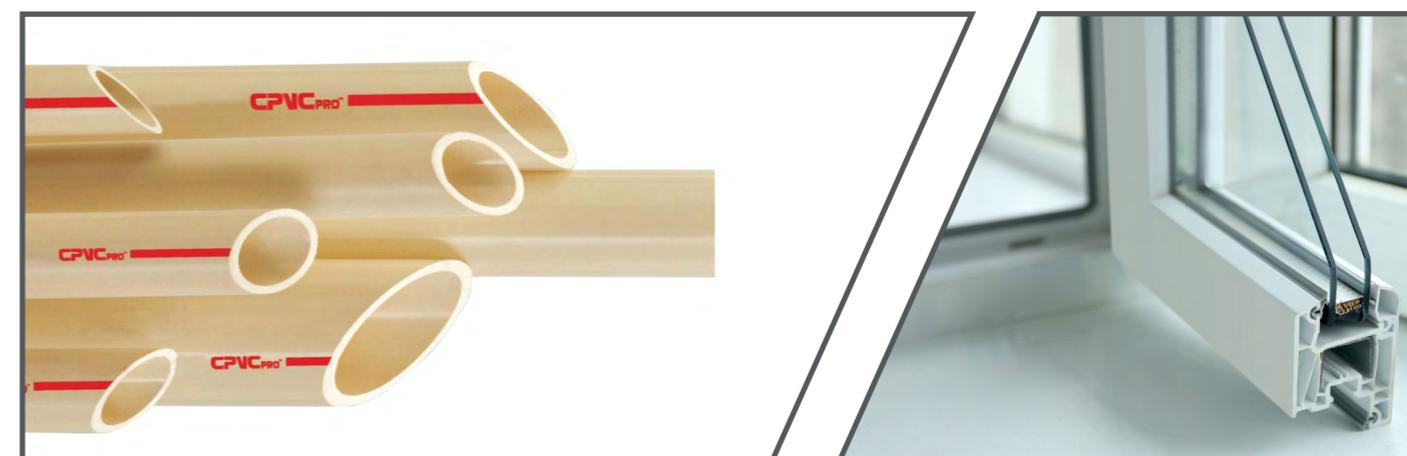
APPLICATION THROUGHPUT RATES

cPVC Pipe (kg/hr)	160 - 190	220 - 250	250 - 300
uPVC Pipe (kg/hr)	110 - 240	135 - 365	225 - 590
uPVC Profile (kg/hr)	35 - 200	90 - 295	135 - 410
Wood Plastic Composite (kg/hr)	90 - 160	135 - 230	385 - 455

APPLICATIONS

- CPVC Plumbing Pipe
- Window Profile & WPC

- High-performance Industrial Pipes
- PVC Lead Free Plumbing Pipe

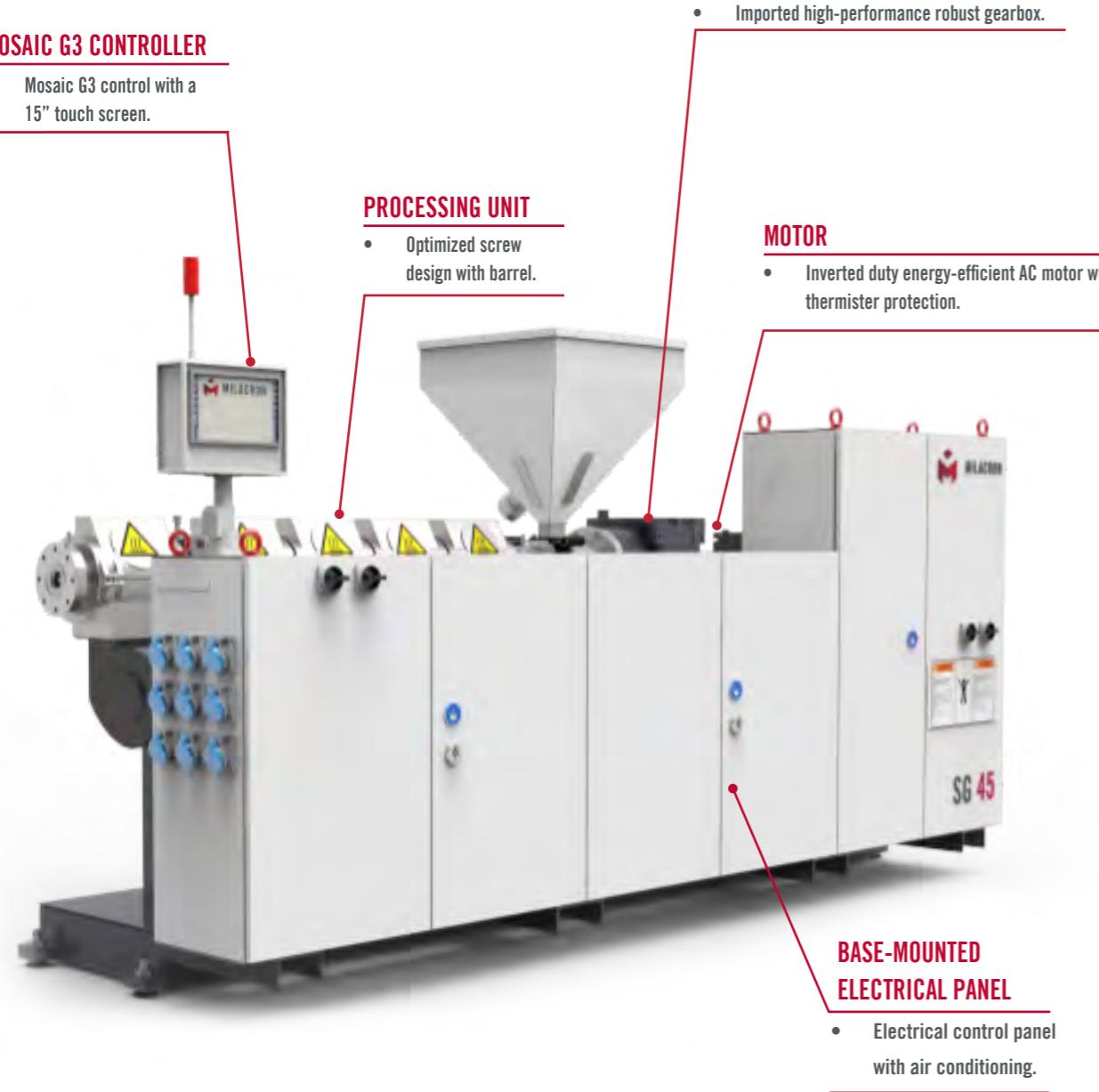


Note: Output is based on raw material grade, bulk density, and other processing parameters

SINGLE SCREW GROOVE FEED EXTRUDERS

The Milacron Single Screw Groove Feed Extruder series is an energy-efficient and high-output solution for processors requiring consistent performance in pipe and sheet extrusion. It is ideal for industries ranging from infrastructure to irrigation, where reliability and cost efficiency are vital.

It is designed to process High-Density Polyethylene and Polypropylene polymers at low temperatures. Its technical superiority is driven by a robust gearbox, specially designed barrier screw for homogenized mixing, and Milacron's centralized advanced control interface, all working in sync to optimize output and simplify operation. Engineered to perform and built to last, the SG Series is a trusted extrusion solution that evolves with your plant's growing demands.



Features & Benefits

- Longer L/D ratio ensures homogeneous mixing and efficient melting at high speeds.
- Wear-resistant screw and barrel designed to enhance life.
- Optimized screw design for higher output at low temperature.
- Directly coupled main motor with gearbox to minimize power losses.
- Spiral groove sleeve for energy efficient conveying (Optional).
- 15-inch touch-screen HMI with process control, data storage, I/O diagnostics.
- Efficient AC drive system ensuring low energy consumption.
- Suitable for processing of PE & PP polymers.
- Compact extruder layout for efficient space utilization.
- Electrical control panel with air conditioning.

DESCRIPTION / MODEL	SG 45	SG 45	SG 45	SG 45	SG 60	SG 75	SG 90	SG 120
Screw Diameter (mm)	45	45	45	45	60	75	90	120
L/D Ratio	36:1	36:1	42:1	42:1	42:1	42:1	42:1	42:1
Motor Rating (kW)	30	56	75	110	132	250	315	600
Output Capacity (kg/hr)	90 -100	180 - 200	240 - 260	350 - 380	450 - 500	800 - 850	1050 - 1100	2000 - 2200

APPLICATIONS

- Agriculture Pipe
- Special Purpose Industrial Use
- Sewage
- Infrastructure
- Telephone Ducting
- Effluent System

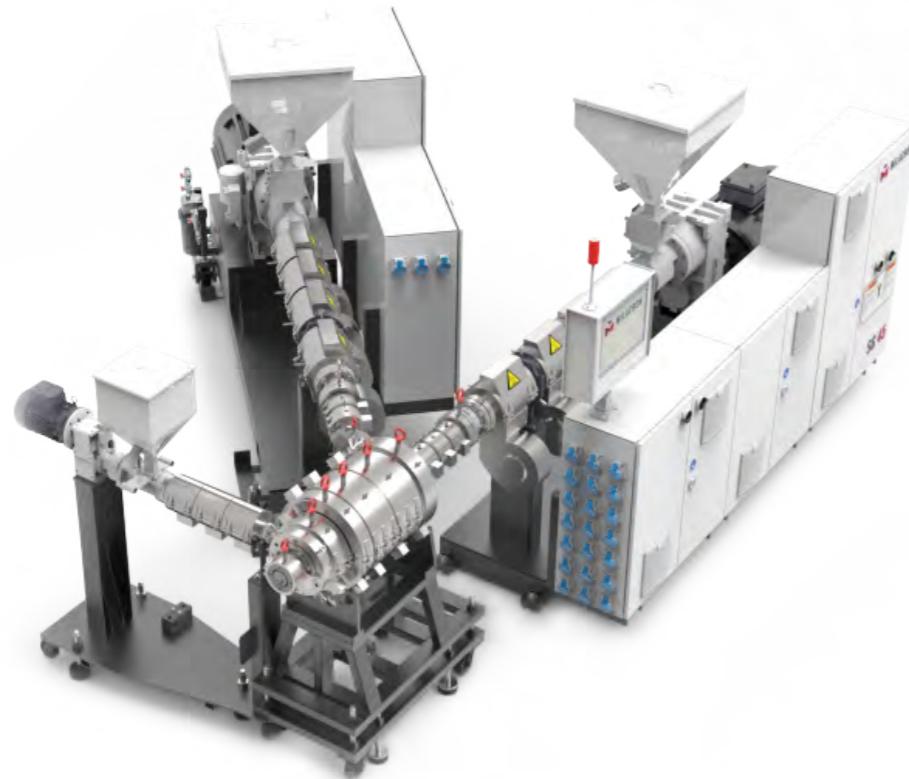
- Gas Pipe
- Water Distribution



Note: Output is based on raw material grade, bulk density, and other processing parameters.

MULTILAYER PIPE SOLUTIONS A-B-A & A-B-C CONFIGURATION

Milacron's multilayer pipe solutions include the PE/PP variant, which utilizes recyclate to achieve sustainable solutions, thereby maximizing material efficiency and flexibility across different layer ratios. These solutions are designed for energy-efficient and cost-effective processing, ensuring high productivity.



Features & Benefits

- ⌚ Longer L/D ratio ensures homogeneous mixing and efficient melting at high speeds.
- ⌚ Wear-resistant screw and barrel designed to enhance life.
- ⌚ Optimized screw design for higher output at low temperature.
- ⌚ Directly coupled main motor with gearbox to minimize power losses.
- ⌚ 15-inch ergonomic touch-screen HMI with process control, data storage, I/O diagnostics.
- ⌚ Efficient AC drive system ensuring low energy consumption.
- ⌚ Electrical control panel with air conditioning.
- ⌚ Two-extruder, 3-layer ABA configuration utilizing recycled material, providing a sustainable and cost-efficient production solution.
- ⌚ Flexibility with a wide variety of layer ratios & suitable material combinations.
- ⌚ Mineral-based PP masterbatches with BaSO_4 can also be processed efficiently.
- ⌚ Two Layer A/B & B/A Layer Ratios Possible.
- ⌚ Uniform distribution of each layer ensures optimal material utilization.

A-B-A CONFIGURATION, PE PIPE OUTPUT UP TO 400 KG/HR

EXTRUDER	EXTRUDER A	EXTRUDER B
Material	Virgin	Recycled
Layer Ratio	10 - 20%	60 - 80%
Extruder Size	SG-45, 30 kW	SG-45, 110 kW
Individual Output(kg/hr)*	70 - 90	340 - 360

* Indicative Pipe outputs for PE materials can be changed depending on the selection of material types, grades, and the selection of layer ratios.

A-B-C CONFIGURATION, PE PIPE OUTPUT UP TO 450 - 500 KG/HR

EXTRUDER	EXTRUDER A	EXTRUDER B	EXTRUDER C
Material	Virgin	Recycled	Virgin
Layer Ratio	10 - 20%	60 - 80%	10 - 20%
Extruder Size	SG-45, 30 kW	SG-45, 110 kW	SG-45, 30 kW
Individual Output(kg/hr)*	70 - 90	340 - 360	70 - 90

* Indicative Pipe outputs for PE materials can be changed depending on the selection of material types, grades, and the selection of layer ratios.

MULTILAYER POLYOLEFIN PIPE DIE HEADS

MODEL	16	20	25	32	40	50	63	75	90	110	125	140	160	180	200	225	250	280	315	355	400	450
MHPO 110-3L																						
MHPO 200-3L																						
MHPO 450-3L																						

APPLICATIONS

- ⌚ PCR Pipe
- ⌚ Telecom Ducting Pipe

- ⌚ 3-Layer PPR Pipe
- ⌚ 3-Layer HDPE Pipe



DIE HEADS

Milacron Die Heads are engineered to enhance the output performance of extruders while ensuring high product quality. Additionally, these die heads are designed with features that facilitate quick and efficient changes in pipe sizes, thus streamlining the production process and enhancing productivity.

PVC PIPE DIE HEAD

The MHP Series solid-wall PVC pipe die heads are designed to enhance the efficiency of the PVC pipe production system. Milacron used its extensive design knowledge in the processing of PVC to incorporate features that deliver performance and ease of operation. The robust design includes features that minimize downtime during product changeovers. The die head flow path has been optimized to provide consistent product quality.

Features & Benefits

- High-volume die design offers a distinct advantage in achieving consistent, high-quality output.
- Optimized melt flow channels ensure stable processing and uniform material distribution.
- Smooth pipe surface finish with low overweight even at high output rates.
- Quick size and wall-thickness changeover system for reduced downtime and higher productivity.



PIPE SIZE RANGE

\varnothing = mm

MODEL*	16	20	25	32	40	50	63	75	90	110	125	140	160	180	200	225	250	280	315	355	400
MHP 63*																					
MHP 110*																					
MHP 200*																					
MHP 250																					
MHP 315																					
MHP 400																					

*Double-strand die available for effective utilization of extruder capacity.

CPVC PIPE DIE HEADS

Milacron CPH Series solid-wall CPVC pipe die heads are designed for smooth melt at higher output. Milacron used its extensive design knowledge in the processing of CPVC die heads by optimizing the flow line for consistent product quality at longer runs.

Features & Benefits

- Efficient, smooth flow line ensures high-quality pipe production for longer runtimes.
- Compact layout for optimized space utilization



PIPE SIZE RANGE

\varnothing = Inch

MODEL*	1/2"	3/4"	1"	1 1/4"	1 1/2"	2"	2 1/2"	3"	4"	6"
CPH 1*										
CPH 2*										
CPH 4										
CPH 6										

*Double-strand die available for effective utilization of extruder capacity.

POLYOLEFIN PIPE DIE HEADS

The Milacron MHPO Series die heads are designed to deliver exceptional performance and reliability. Milacron's years of extensive global experience has resulted in development of these high-performance die heads based on both theoretical approach and practical experience.

Features & Benefits

- Robust & Reliable – Built for demanding production conditions, ensuring long-lasting performance.
- Optimized Spiral Mandrel Design – Ensures uniform melt flow for high output.
- High Productivity – Delivers higher output at lower working pressures and melt temperature.
- IPC System (Optional) – Available on select models for advanced process control and optimized output



PIPE SIZE RANGE

\varnothing = mm

MODEL	16	20	25	32	40	50	63	75	90	110	125	140	160	180	200	225	250	280	315	355	400	450	500	560	630
MHPO 63																									
MHPO 160																									
MHPO 250																									
MHPO 450																									
MHPO 650																									

DOWNSTREAM EQUIPMENT

Milacron offers a wide range of high-quality downstream equipment to achieve optimized performance with accuracy. It features units with a robust build, engineered for precise performance, making them ideal for high output. These units are designed to enhance operational efficiency and reliability.

CALIBRATING SYSTEM - S.S. VACUUM COOLING TANK

Milacron's vacuum cooling tanks are available for pipe diameters from 16 mm to 630 mm, delivering reliable performance across a wide range of applications. These vacuum tanks provide accurate control of vacuum and water temperature and are designed for user-friendly operations and ease of maintenance.

DESCRIPTION / MODEL	VT 63*	VT 110*	VT 200*	VT 250	VT 450	VT 630
Pipe Size Range (mm)	16 - 63	20 - 110	20 - 200	50 - 250	90 - 450	160 - 630
Cooling Length (mm)	6000 / 9000	6000 / 9000	6000 / 9000	6000 / 9000	6000 / 9000	6000 / 9000
No. of Chambers	1	1 / 2	1 / 2	1 / 2	2	2

*Available in both Single strand & Dual strand



Features & Benefits

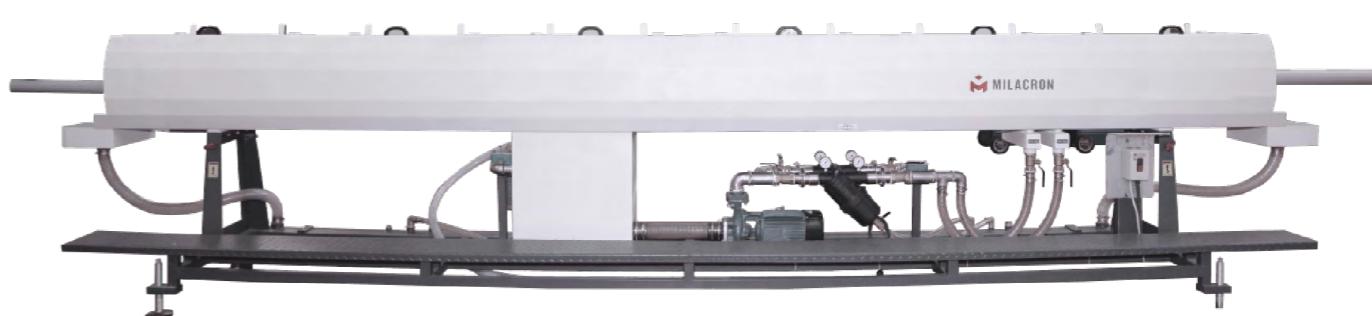
- Tank Shell Construction – Stainless steel tank shell for long life and durability.
- Motorized Axial Movement – Enables smooth and efficient handling with minimal effort.
- High Intensive Spray Cooling – Ensures efficient and uniform cooling for consistent pipe quality.
- Easy-to-Clean & Adjustable Spray Nozzles – Simplifies maintenance and ensures hygienic operation.
- Accurate Vacuum, Water Level & Temperature Control – Enhances dimensional stability of the pipe.
- Bypass Line with Filter – Maintains system cleanliness and efficiency, supporting online cleaning.
- Enhanced Product Quality – Improves dimensional stability at uniform output.

CALIBRATING SYSTEM - S.S. SPRAY COOLING TANK

Milacron's Spray Cooling tanks are available for pipe diameters from 16 mm to 630 mm, delivering reliable performance across a wide range of applications. These Spray Cooling tanks provide accurate water temperature and are designed for user-friendly operations and ease of maintenance.

DESCRIPTION / MODEL	CT 63*	CT 110*	CT 200*	CT 250	CT 450	CT 630
Pipe Size Range (mm)	16 - 63	20 - 110	20 - 200	50 - 250	90 - 450	160 - 630
Cooling Length (mm)	6000 / 9000	6000 / 9000	6000 / 9000	6000 / 9000	6000 / 9000	6000 / 9000

*Available in both Single strand & Dual strand



Features & Benefits

- Tank Shell Construction – Stainless steel tank shell for long life and durability.
- High Intensive Spray Cooling – Ensures efficient and uniform cooling for consistent pipe quality.
- Easy-to-Clean & Adjustable Spray Nozzles – Simplifies maintenance and ensures hygienic operation.
- Accurate Water Temperature Control – Enhances dimensional stability of the pipe.
- Enhanced Product Quality – Improves dimensional stability at uniform output.
- Motorized Axial Movement (Optional) – Enables smooth and efficient handling with minimal effort.



HAUL-OFF UNIT

Milacron offers state-of-the-art Haul-off units suitable for pipe diameters from 16 mm to 630 mm O.D. Haul-off units are engineered for high performance and accuracy at high speed as well as at low speed. The wide range of Milacron Haul-offs are designed for maximum flexibility and available up to 6 Tracks.

DESCRIPTION / MODEL	HU 63*	HU 110*	HU 200*	HU 250	HU 315	HU 450	HU 630
Pipe Size Range (mm)	16 - 63	20 - 110	20 - 200	50 - 250	75 - 315	90 - 450	160 - 630
No. of Tracks	2	2	2	3 / 4	3 / 4	4	6

*Available in both Single strand & Dual strand



Features & Benefits

- Ⓜ Robust design & adequate pulling force
- Ⓜ Track movement by pneumatic control
- Ⓜ Counterbalance of air pressure provided to balance track pressure while pulling thin pipes.
- Ⓜ Geared motor with Servo-controlled system for uniform, accurate and constant speed.
- Ⓜ High-speed accuracy for minimized pipe overweight
- Ⓜ Low-maintenance design with no mechanical couplings
- Ⓜ Individual track control minimizes chain wear
- Ⓜ Encoder-equipped for precise length measurement

CUTTING UNIT

Milacron's offers a wide range of Cutting Units for a range of diameters from 16 to 630mm O.D. Cutting units can also be provided with servo control for high-output high-speed lines. Cutting units for PO pipes (PE/PP) are swarfless.

DESCRIPTION / MODEL	CU 63*	CU 110*	CU 110 S*	CU 160 S*	CU 200 S*	CU 250	CU 315	CU 450	CU 630
Pipe Size Range (mm)	16 - 63	20 - 110	20 - 110	32 - 160	20 - 200	50 - 250	63 - 315	90 - 450	160 - 630
No. of Tracks	20	15	20	20	15	12	12	10	8

*Available in both Single strand & Dual strand



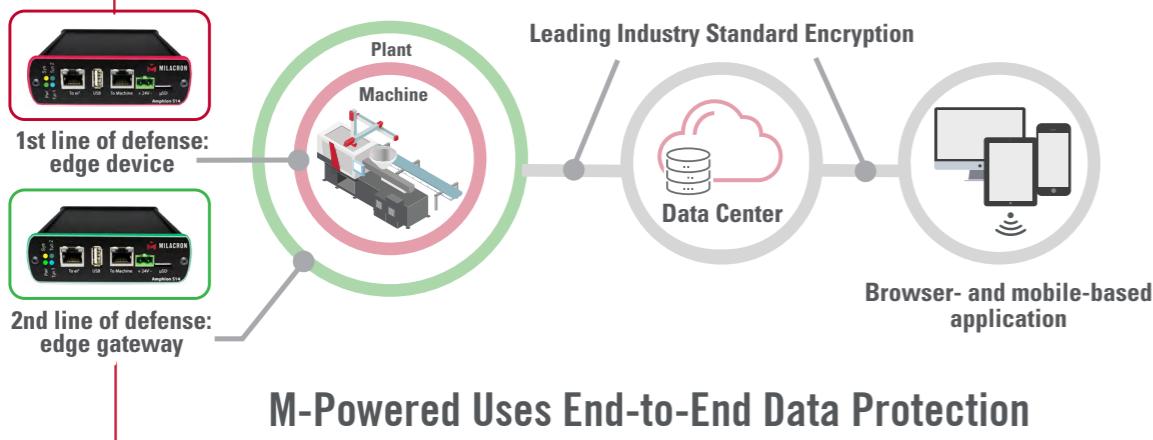
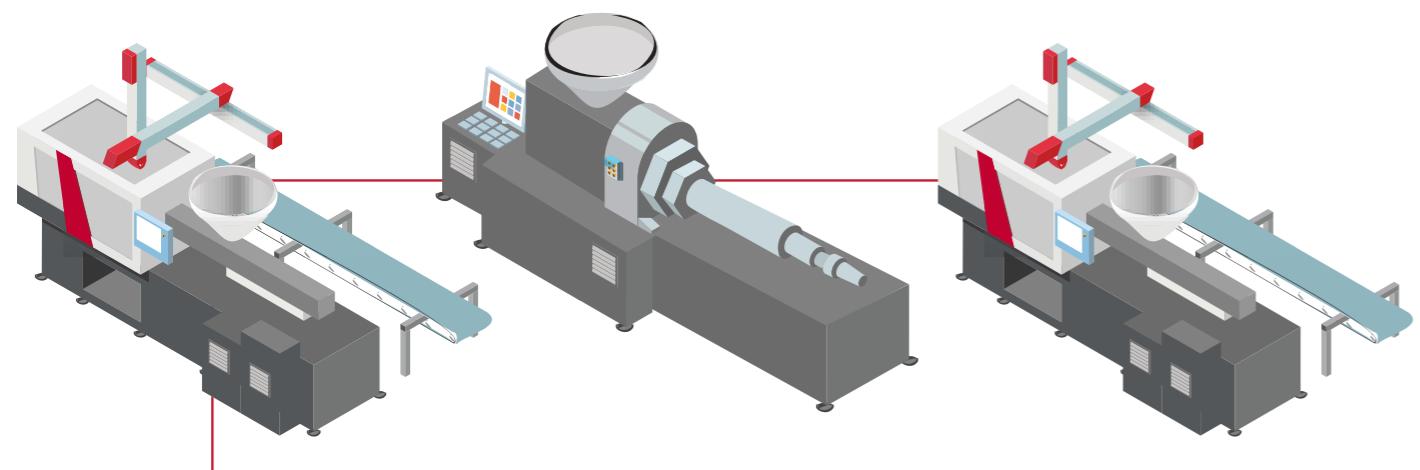
Features & Benefits

- Ⓜ Carbide-Tipped Circular Saw – Ensures longer service life and consistent cutting performance.
- Ⓜ Pneumatically Operated Cutter Trolley Movement – Provides smooth and reliable operation.
- Ⓜ Servo-Controlled Cutting Unit (Optional) – Available on select models.
- Ⓜ Hard Chrome-Plated Tie Bars with Bellows – Enhance durability and protect against dust and wear.
- Ⓜ Swarfless Cutting – Ideal for clean and precise cutting of PO pipes.
- Ⓜ Digital Length counter for precise measurement of cutting length.
- Ⓜ Door Safety Switch – provided for Human safety
- Ⓜ PLC Control (Optional) – Enables easy operation and precise process control.

M-POWERED

Leading The Plastics Industry In Digital Transformation

M-Powered is a portfolio of easy-to-use observational, analytical and support services that provides customers a competitive advantage. Leveraging the Industrial Internet of Things (IIoT) technology, M-Powered runs sophisticated algorithms that utilize real-time machine learning to monitor machine operations, and provide alert in advance of potential issues.



M-Powered Yields Unique Intelligence On:

- ⌚ Current and future operations
- ⌚ Manufacturing quality - reduce scrap
- ⌚ Uptime and OEE
- ⌚ Reduce power usage

The addition to your company's bottom line from implementing IIoT solutions are:

- ⌚ Alert for scheduled maintenance
- ⌚ Reduce unplanned outages
- ⌚ Increase productivity

To learn more, contact enquiry@milacron.com.

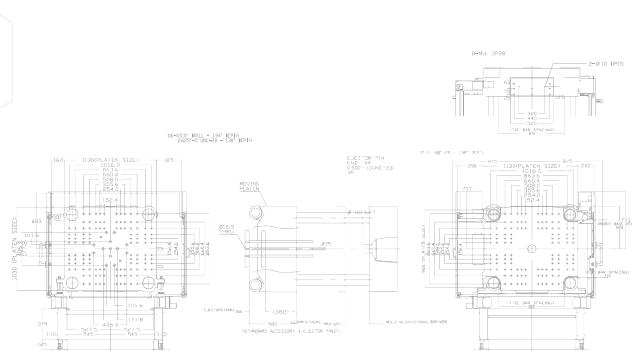
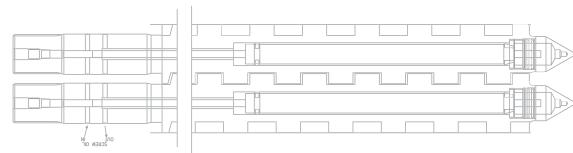
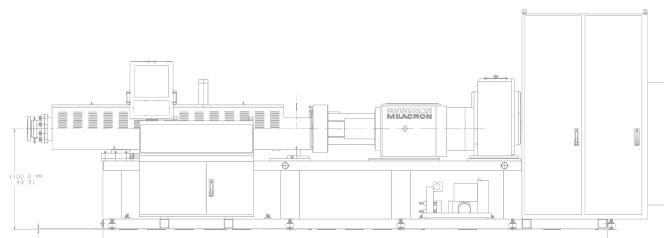
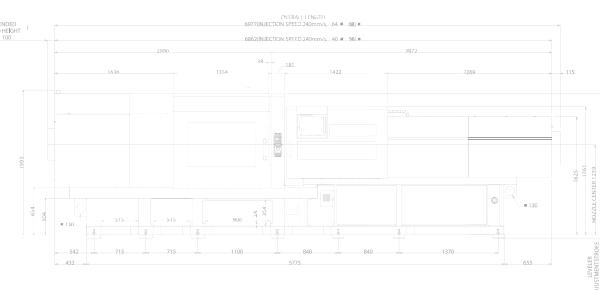
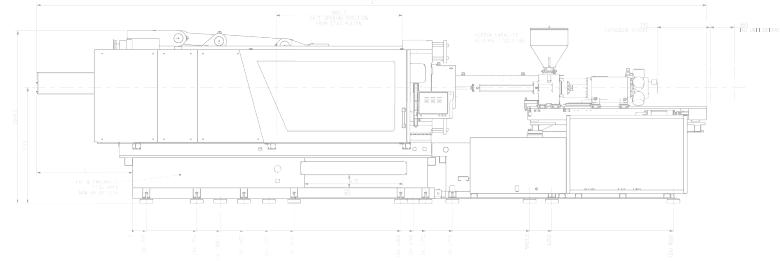
APPLICATIONS





All specifications reflect average values based on typical machine layouts. Actual figures will vary depending on final machine configuration. Performance specifications are based on theoretical data. Photograph may show attachments or accessories, which may not be part of the standard scope of supply. Due to continual improvements, specifications & some components are subject to change without notice.

OFFICE	PHONE NUMBER
BENGALURU	+91 99169 51333
PANCHKULA	+91-172-415 5955
CHENNAI	+91-44-2378 3648/0456/3318
HYDERABAD	+91-40-4539 2595
KOLKATA	+91-33-4601 7768
MUMBAI	+91-22-4005 5459/65
NEW DELHI	+91-11-4630 1114/5/6
PUNE	+91-20-4861 5001/02
VAPI	+91-75674 11133



Milacron India Pvt. Ltd.
93/2 & 94/1, Phase-I, G.I.D.C. Vatva,
Ahmedabad - 382445, Gujarat, India.

+91-79-61341700
enquiry@milacron.com
www.milacron.com