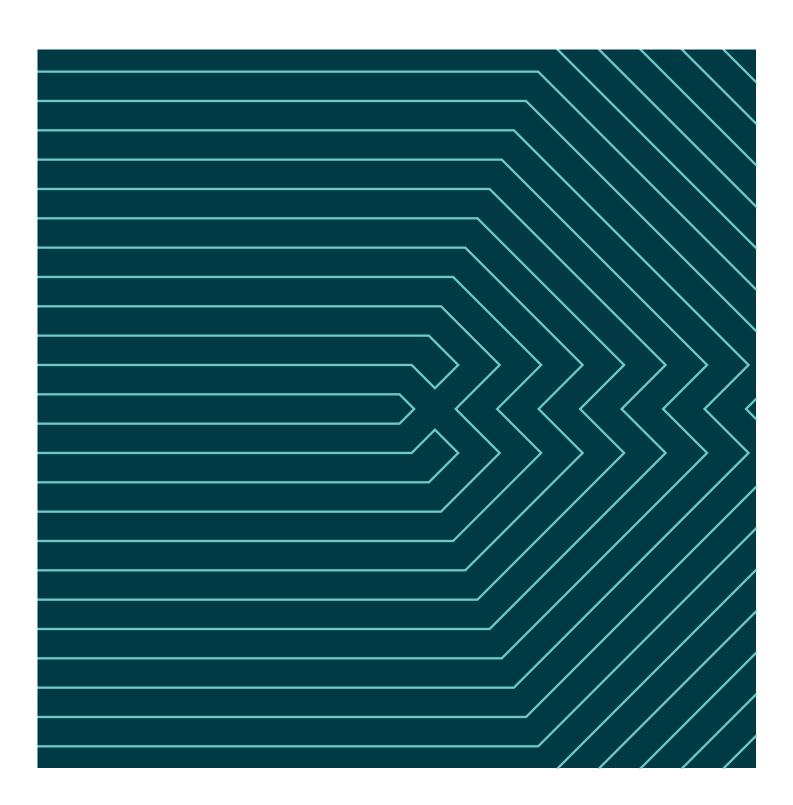


# Plastic extrusion technologies

Bausano's single and twin-screw extruders ensure efficient, precise, and versatile processing of a wide range of thermoplastics, delivering consistent performance and high-quality output for diverse industrial applications.







# Extrusion lines designed for your factory

Extrusion lines designed and built entirely at the Rivarolo Canavese (Italy) facility, where each detail is engineered to ensure performance, durability and flexibility for advanced plastic processing.





### High technology plastic extrusion lines

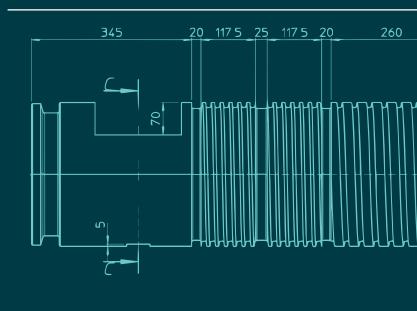
For 80 years, Bausano has represented excellence in the production of plastic extrusion systems. A result achieved through dedication, expertise and a passion passed down over three generations. Its extrusion lines are recognised for quality, strength and reliability, with the added value of full customisation — including aesthetic details. From the outset, Bausano has chosen to take a different path, welcoming change with a forward-looking mindset and constant drive for improvement. This approach has enabled the development of advanced technologies that raise both machine efficiency and operator working conditions.

## Made in Italy quality

Choosing Bausano means selecting a strategic partner for plastic processing. Bausano designs and builds tailor-made extrusion lines, fully Made in Italy, for the production of pipes, granules, profiles, medical tubes and medical bags in thermoplastic materials. Its extruders and finished products stand out for their reliable technology, aimed at enhancing performance and reducing energy use.

# Quality made at Bausano





### In-house production

Producing efficient extrusion systems involves multiple factors, often unexpected.

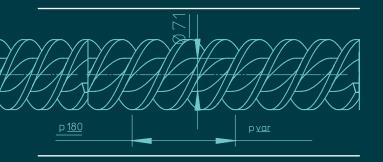
Bausano manages each stage internally, from initial design to final assembly, to maintain full control. This approach ensures shorter lead times and high technical-functional quality, along with attention to product aesthetics. Its commitment extends beyond delivery, continuing through long-term partnerships focused on enhancing extrusion performance and creating shared value over time.

#### **Screws**

The design of customised screws is the first step towards efficient extrusion. Bausano's technical team uses advanced calculation tools to analyse polymer behaviour and assess the impact of thermal and mechanical stress. The resulting screw geometry maximises motor and heating efficiency, reduces material waste and increases system productivity.

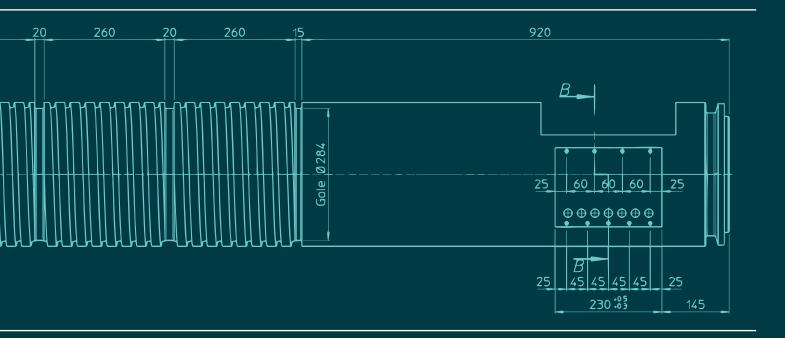
#### **Barrels**

To ensure optimal performance, Bausano uses special nitrided steel for its barrels. When required, bimetallic versions with internal sleeves in selected alloys are also available to meet specific processing needs.



Screw designed and manufactured entirely at the Rivarolo Canavese plant. Its geometry is defined according to the specific characteristics of the material to be processed, ensuring optimal plasticisation and high mechanical efficiency. Every project is carefully analysed by Bausano's engineering department and fully manufactured in-house at the Rivarolo Canavese facilities.

This internal management of design and production phases ensures complete control over each process and enables fast, precise responses to any changes or specific customer needs during the development phase, guaranteeing the highest level of adaptability and efficiency.





Barrel engineered and produced entirely in-house. Available with bimetallic internal coating, specifically developed to increase resistance to wear and extend the service life of the extrusion system in demanding production contexts

## <u>Design</u>

Bausano carefully evaluates every production need. Each part is designed from scratch, based on the type of polymer and production goal, including screws, barrels and gearboxes — to ensure tailormade extrusion results.

#### **Production**

Every component — from extruders to calibration systems, cooling tanks, cutting units and other downstream accessories — is custom-built in Bausano's machining department, with precision down to the finest detail.

## **Assembly**

Once machined, components are sent to the automated warehouse, which manages distribution to the assembly area. Here, Bausano's extrusion lines are constructed with method and technical care.

## **Testing**

Before shipment, each system undergoes rigorous controls and performance tests using the actual materials. This allows Bausano to verify full conformity to the initial project and ensure optimal functionality.

# Fields of application

1

## PO and PVC pipes

Thanks to the power and versatility of the E-GO and MD extruder families, Bausano designs and manufactures complete lines for the production of PVC, HDPE, LDPE, PE100, and PP pipes for any application: single-layer and multi-layer, smooth and corrugated, rigid and flexible, with diameters up to 1,600 mm.

2

## **Pellets and compounds**

Fully customisable and efficient at any production speed, Bausano's lines — equipped with MD technology and dedicated accessories — produce granules from virgin or recycled materials for moulding, extrusion or calendering.

3

## **Technical and window profiles**

The Multidrive system of Bausano's MD extruders ensures great reliability and high performance in the production of rigid and flexible profiles with variable weight and size – from a few to several metres per minute. Single-screw E-GO extruders are also available for standard profile production with compact footprint and ease of use.

4

## **Recycling and regranulation**

In order to make plastic recycling a standard practice, many factors need to add up: from product design to collection to sorting and processing. Bausano E-GO single-screw extruders and MD twin screw extruders are designed to reprocess a variety of plastic scraps – PVC, HDPE, TPR, PA, PS, ABS and many others – ensuring utmost production efficiency and excellent performance over time.

5

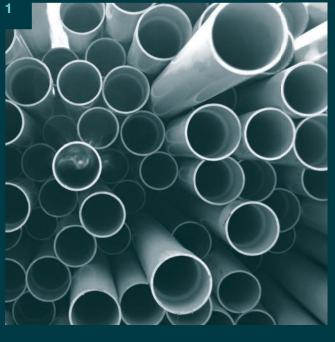
### WPC deck and floor

Polywood technology enables the production of profiles composed of up to 80% natural fibres – more sustainable, cost-effective, stronger, and more versatile than wood, while offering the same aesthetic appeal and being fully recyclable. A new frontier in the field of building materials.

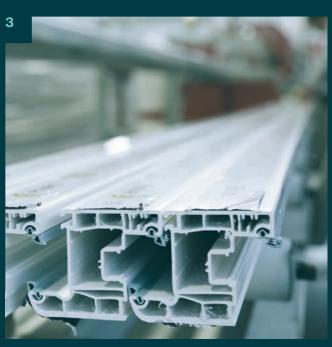
6

#### **Medical products**

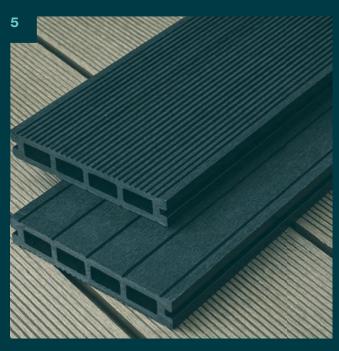
With Bausano's single- and twin-screw extruders, combined with a wide range of accessories, it is possible to create highly efficient and customised production systems for processing PVC and other materials approved by pharmacopoeia regulations, designed to meet the industry's highest quality standards.













# Smart technology, real savings



#### Lower consumption, higher efficiency

Extrusion plays a dual role in plastics processing: it is both a final shaping method and a preparatory stage for technologies such as injection moulding, blow moulding and film blowing. Its efficiency has a direct impact on a wide range of applications. As an energy-intensive process, it requires careful optimisation – most energy usage is directly tied to machine operation. Bausano designs each extrusion line based on clear technical parameters and production targets, which differ case by case. This results in machines that are always tailored, even within the same product series. What remains constant is the company's ability to improve process efficiency, reduce energy consumption and maintain consistent performance standards.

# Complete extrusion range engineered for performance and flexibility

#### **MD** series

#### Parallel twin-screw extruders

Up to 35% less power consumption thanks to the induction heating system and full line digitalization via industrial IoT with real-time monitoring, dynamic KPIs and predictive algorithms for process optimization.

### **E-ON** series

### **Conical twin-screw extruders**

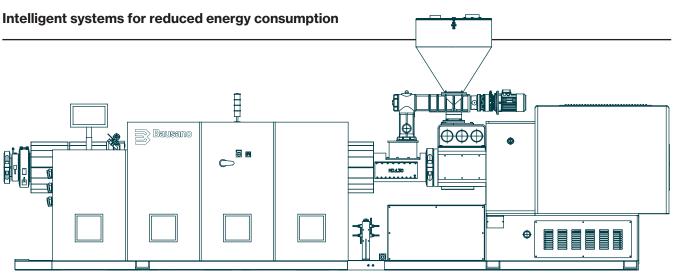
Feature nitrided screws for high durability, optimized flow geometry and precise thermal control – ideal for high efficiency PVC pipe and profile production.

#### **E-GO** series

### Single-screw extruders series

A series of extruders in various sizes and outputs, suitable for producing technical profiles or LDPE and HDPE pipes with diameters up to 1600 mm. All models in the E-GO R single-screw range are also engineered for recycling and pelletizing plastic waste, with optimized L/D ratio and pre-degassing filtration for efficient processing of post-consumer and industrial materials.





Example layout of an MD series extruder, equipped with Bausano's patented Multidrive system, designed to ensure mechanical efficiency, extended durability and uniform torque distribution across the entire drive unit.

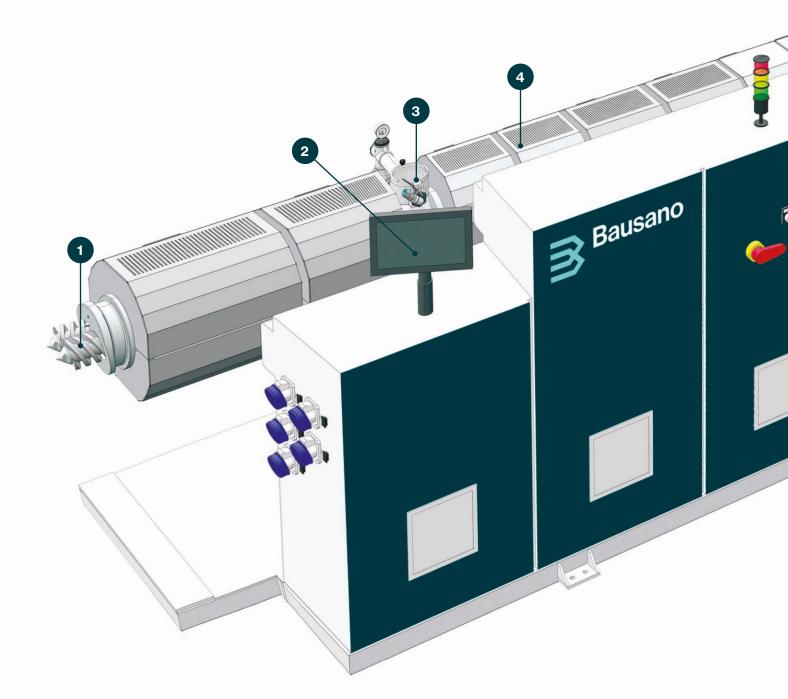
# Parallel twin-screw extruders

# **MD Series**

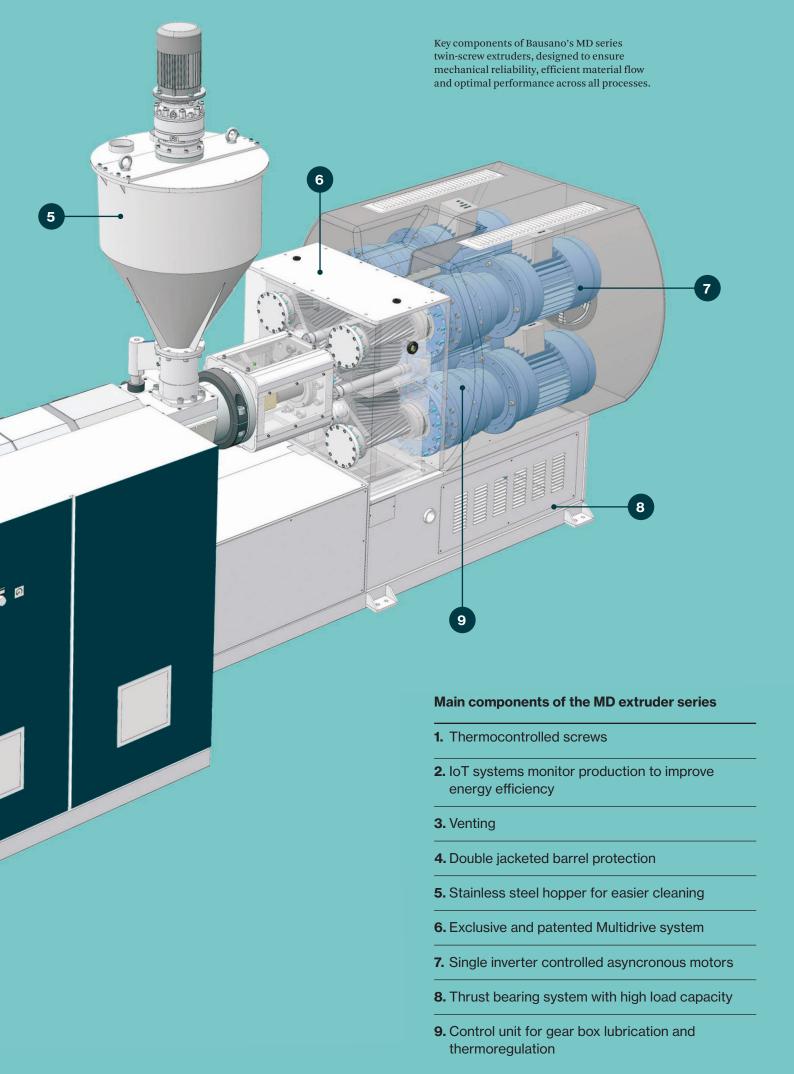
## New generation extruder

The quality of a compound, a profile, a pipe or any thermoplastic product depends on the extrusion line that produces it. This is why Bausano designs every detail with precision, from mechanical systems to electronics. Screw geometry is engineered to reduce friction and enhance efficiency.

The patented transmission system cuts torque stress, improving performance and extending system life. Latest-generation motors are combined with user-friendly tools for monitoring energy consumption. A combination that results in higher productivity and energy savings – a dual benefit that makes Bausano's lines a reliable and forward-looking choice in extrusion.



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# Cooling system

Temperature is the secret for a professional extrusion process. The correct thermoregulation of the barrels and screws is the key to obtaining high-quality extruded products.

For this reason, Bausano has developed an advanced and efficient cooling system, reliable at every production speed.

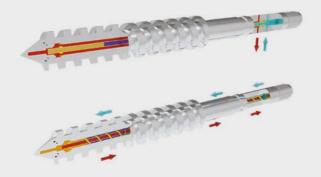
#### Internal screw thermocontrol

Automatic adjustment of the internal temperature of the screws through a closed circuit or a temperature control unit.



## **High-efficiency air cooling**

Automatic adjustment of the barrel temperature through air fans.



## **High-performance oil cooling**

The specific solution for lines with high production volumes, is the cooling of the barrel by a circuit containing temperature-controlled fluid.



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# Dosing system

Thanks to the versatility of Bausano extruders, it is possible to equip each machine with customized feeding systems.

This ensures adjusting the layout of the line and its technical characteristics to the material to be processed and to any specific production requirement.

### Forced feeder

The speed control system can adjust the amount of material, avoiding uneven feeding distribution.



## **Combined feeder**

A forced and volumetric hopper combination ensures high accuracy and efficient material feeding.



#### Volumetric feeder

The system delivers a defined volume of material per unit of time with consistent precision.



#### **Gravimetric feeder**

The system supplies an exact quantity of material per unit of time.



# **Patented Multidrive system**

# 4×2

## The technological evolution of Bausano

The Multidrive transmission system has been a benchmark technology in the world of extruders for thirty years, reducing the stress on the drive shaft, gears and screws by distributing the torque through one or two pairs of counter-rotating motors. A revolutionary solution, which offers better performance, reduces the risk of failure due to excessive stress on the mechanical parts and guarantees greater durability than traditional singlemotor systems.

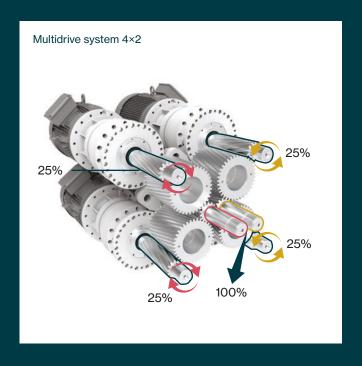
## **Thrust bearing system**

Bausano counter-rotating twin-screw extruders are equipped with special multi-stage thrust bearings, designed to triple the dynamic load, improving the overall efficiency of the machine and making MD series extruders ideal for managing high production volumes.

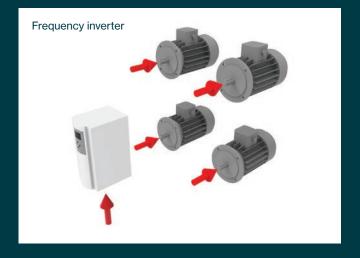
## Frequency inverter

In all Bausano Multidrive extruders, the motors are controlled by a single static frequency inverter – a reliable, versatile and precise system that ensures constant rotation and improves machine efficiency:

- Perfect motor synchronisation without fragile or costly devices.
- · Always optimal power distribution.
- · Notable reduction in energy consumption.
- · Lower installation and maintenance costs.
- Greater structural solidity and extended service life.







# **Patented Multidrive system**

# 2×2

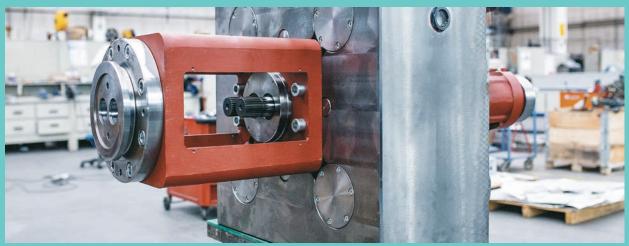
### Small size, high performance

For smaller extruders, Bausano has developed the Multidrive 2×2 system, available on models MD 30, MD 52, MD 66, and MD 75. With two motors instead of four, the system reduces overall dimensions, optimises gearbox operation, and ensures top-class performance and reliability.



### THE POWER OF MULTIDRIVE TRANSMISSION

More torque, less wear: a smarter way to boost performance, extend machine life and reduce downtime in every production cycle.



## **Longer life**



More power



**Lower consumption** 



Longer life of shafts and gear, thanks to the distribution of motion on four or two different points. Available on the screws with the same power output from the motors, for significant energy savings. With the same performance, thanks to the torque distribution on the two control shafts.

# Patented induction heating system



Bausano's induction heating system uses electromagnetic induction to heat barrels without contact. It reduces energy consumption by up to 35% compared to traditional resistive systems. The result is faster start-up, precise temperature control, and lower component wear.

## Main components of the induction heating system

- 1. Barrel
- 2. Induction coil
- 3. Barrel protection
- 4. Cooling fan

### An energy saving technology

Unlike traditional ceramic resistors, which rely on thermal conduction and dispersion, induction delivers energy precisely where it is needed, reducing heat loss. This translates into faster heating, stable temperatures, and up to 35% lower energy consumption during production. In addition, the absence of external heating elements minimises component wear and improves safety. The result is a more efficient, durable and cost-

The result is a more efficient, durable and cost effective solution for extrusion.

#### The benefits

- · Max energy efficiency with savings up to 35%.
- Faster barrel heating and cooling.
- · Increased machine durability.
- · Even heat distribution.
- · Easy installation and maintenance.

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ENERGY SAVING FORECASTS: CALCULATION OF DEPRECIATION				
Hours of system operation	h/year	В	6,000	
Energy cost	€/kWh	С	0.14	
Energy saving	€/year	$D = A \times B \times C$	7,409	

Estimate calculated for active production cycle, based on estimated consumption of every single area, considering areas 4 to 9 active for 20% of the time.

	RESISTANCE SYSTEM MD 130				IND	OUCTION SY	STEM MI	) 130			
Areas	Rated power			Interval control (sec)	Time on (sec)	% time on (sec)	Absorbed power (kWh)	Power reduction (%)	Absorbed power (kWh)	Energy saving kWh	Energy saving %
	No. of heating intervals	Power intervals in Watts	Total area power in Watts								
1	1	10,000	15,000	60	36	60	6	30	4.2	1.8	30
2	3	5,000	15,000	60	30	50	7.5	30	5.25	2.25	30
3	3	5,000	7,500	60	30	20	7.5	30	5.25	2.25	30
4	1	7,500	7,500	60	12	20	1.5	30	1.05	0.45	30
5	1	7,500	7,500	60	12	20	1.5	30	1.05	0.45	30
6	1	6,000	6,000	60	12	20	1.2	30	0.84	0.36	30
7	1	6,000	6,000	60	12	20	1.2	30	0.84	0.36	30
8	1	7,500	7,500	60	12	20	1.5	30	1.05	0.45	30
9	1	7,500	7,500	60	12	20	1.5	30	1.05	0.45	30
TOTAL A	REAS		82,000				29.4		20.58	8.82	

### Traditional vs. induction: system comparison

For Bausano, innovation has always been a key strategic asset. It was the first to introduce electromagnetic induction heating in extrusion on an industrial scale. Unlike traditional resistance-based systems, this technology heats the barrel without contact through an alternating electromagnetic field. The result is a faster, more efficient process that improves performance, reduces component wear and lowers energy consumption by up to 35%. An advanced solution developed to optimise production while promoting sustainability and respect for both people and the environment.



# Induction heating in numbers: less waste, more output

## Efficient performance, tailored precision

Every Bausano project is based on clear technical needs and specific production goals, which can vary from case to case. That's why each extruder is unique – even within the same series. What remains constant is the capacity to optimise output, reduce costs and ensure excellent performance under any condition.

Installing the induction heating system on Bausano extruders significantly reduces energy consumption. Unlike traditional resistive systems, induction focuses heat directly on the barrel, minimising dispersion. This leads to faster start-up, lower thermal losses and stable temperature control, improving overall efficiency. It's a concrete solution to reduce production costs while promoting sustainable operations.

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A copper coil is tightly wrapped around the barrel, transferring heat by direct contact. This method ensures efficient and uniform heating, improving thermal stability and reducing energy consumption across the extrusion process.

## INDUCTION VS RESISTANCE: THE ENERGY GAP

COMPARISON #1					
Models	Installed powers				
MD 66/19	Ceramic resistors 20 kW				
MD 66/19 induction	Induction heating system 14 kW				
Difference	–6 kW				

COMPARISON #3					
Models	Installed powers				
MD 158/21	Ceramic resistors 88 kW				
MD 158/21 induction	Induction heating system 61 kW				
Difference	–27 kW				

GUMPARISUN #2					
Models	Installed powers				
MD 130/30	Ceramic resistors 20 kW				
MD 130/30 induction	Induction heating system 14 kW				
Difference	–26 kW				

COMPARISON #4					
Models	Installed powers				
MD 170/28	Ceramic resistors 192 kW				
MD 170/28 induction	Induction heating system 124 kW				
Difference	-68 kW				

# MD Bausano series Parallel twin-screw extruders

MD 30









Compact, versatile and perfect for testing and sampling operations, the special extruder Bausano MD 30 is designed for those who need to analyse products and manage pilot tests in the laboratory on small quantities of material, with the aim of identifying solutions to be extended to the entire production. Consisting of one or two inlets on a single barrel with side pressure probes, MD 30 allows you to process multiple materials with a single doser.

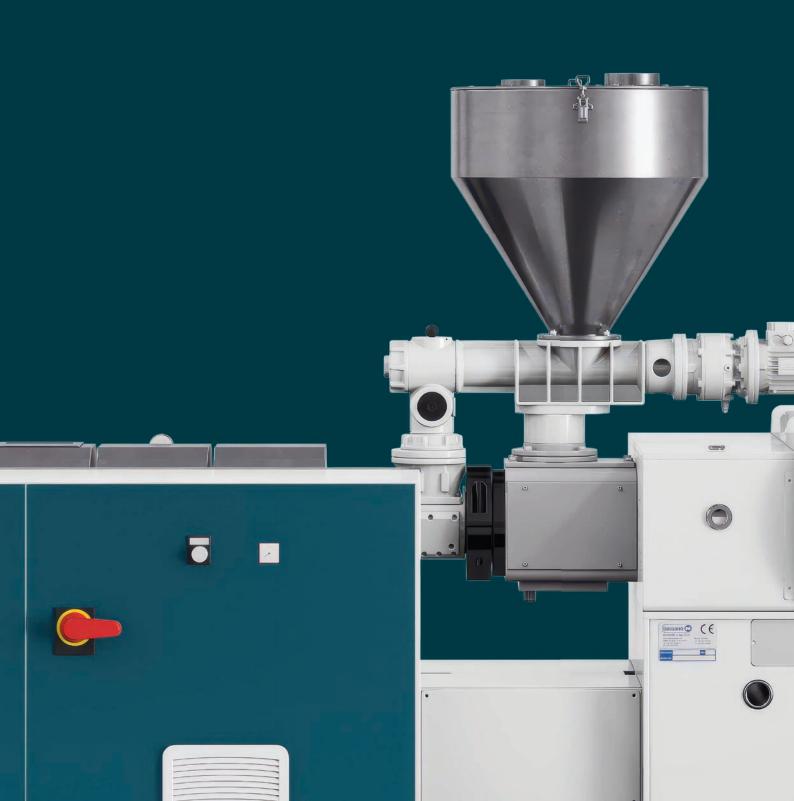
Equipped with wheels, the extruder can be easily moved and any inspection and cleaning operation is simple and fast, thanks to the wider degassing. This compact line is ideal for formulation studies, compatibility testing, and developing scalable recipes before transferring the process to full-scale production.

TECHNICAL DATA					
Models	MD 30/19	MD 30/30			
Motors (kW)	2 x 1.5	2 x 1.5			
Total power (kW)	11	12			

Data may vary according to design specifications.

# MD Bausano series Parallel twin-screw extruders

MD 52 MD 66 MD 75





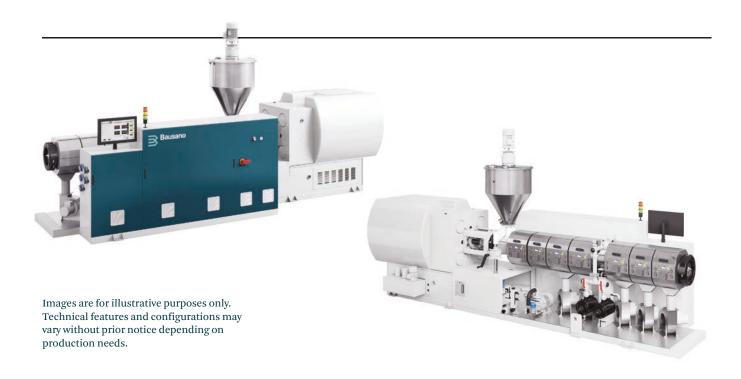
SCREWS: TECHNICAL DATA					
Models	MD 52	MD 66	MD 75		
Diameter (mm)	52	66	75		
Direction of rotation	Counter-rotating	Counter-rotating	Counter-rotating		
Rotation speed (rpm)	14-79	10-60	8-80		
Thrust system dynamic load (kN)	410	694	694		
Torque on each screw (Nm)	1780	2200 / 2750	3380 / 4100		
Thermostating	Fluid-type	Fluid-type	Fluid-type		
BARREL: TECHNICAL DATA					
Models	MD 52	MD 66	MD 75		
L/D ratio	23	19 / 30	24 / 30		
Degassing	With vacuum pump	With vacuum pump	With vacuum pump		
Cooling	Air	Air	Air		
	INSTALLED POWERS:	TECHNICAL DATA			
Models	MD 52	MD 66	MD 75		
AC extruder motors (kW)	2 x 7.5	2 x 7.5 / 2 x 9	2 x 15 / 2 x 22		
Degassing pump motor (kW)	2.2	2.2	4		
Total power (kW)	40	45 / 55	85 / 108		
Average consumed power (kW/h) 18 20 - 25 34 - 40					

Data may vary according to design specifications.

# MD Bausano series Parallel twin-screw extruders

MD 92 MD 118 MD 130





SCREWS: TECHNICAL DATA							
Models MD 92 MD 118 MD 130							
Diameter (mm)	92	118	130				
Direction of rotation	Counter-rotating	Counter-rotating	Counter-rotating				
Rotation speed (rpm)	8-65	8-45	8-45				
Thrust system dynamic load (kN)	1680	2250	2830				
Torque on each screw (Nm)	8105	18190	27000				
Thermostating	Fluid-type	Fluid-type	Fluid-type				
BARREL: TECHNICAL DATA							
Models	MD 92	MD 118	MD 130				
L/D ratio	25 / 30	26 / 30	25 / 30				
Degassing	Vacuum pump	Vacuum pump	Vacuum pump				
Cooling	Air	Air	Air				
	INSTALLED POWERS:	TECHNICAL DATA					
Models	MD 92	MD 118	MD 130				
AC extruder motor (kW)	4 x 15 / 4 x 18.5	4 x 30	4 x 30				
Degassing pump motor (kW)	4	4	4				
Total power (kW)	127 / 165	205 / 210	240 / 260				
Average consumed power (kW/h) 60-70 95-105 120-130							

Data may vary according to design specifications.

# MD Bausano series Parallel twin-screw extruders

MD 158 MD 170





Models         MD 158         MD 170           Diameter (mm)         158         170           Direction of rotation         Counter-rotating         Counter-rotating           Rotation speed (rpm)         8-38         8-45           Thrust system dynamic load (kN)         5085         5900           Torque on each screw (Nm)         36600         46960           Thermostating         Fluid-type         Fluid-type           BARREL: TECHNICAL DATA           Models         MD 158         MD 170           L/D ratio         21/26/30         24/28           Degassing         Vacuum pump         Vacuum pump           Cooling         Liquid         Liquid           INSTALLED POWERS: TECHNICAL DATA           Models         MD 158         MD 170           AC extruder motor (kW)         4 x 37/4 x 45/4 x 45         4 x 55           Degassing pump motor (kW)         4         4           Total power (kW)         260/286/338         411/435	SCREWS: TECHNICAL DATA						
Direction of rotation         Counter-rotating         Counter-rotating           Rotation speed (rpm)         8-38         8-45           Thrust system dynamic load (kN)         5085         5900           Torque on each screw (Nm)         36600         46960           BARREL: TECHNICAL DATA           Models         MD 158         MD 170           L/D ratio         21 / 26 / 30         24 / 28           Degassing         Vacuum pump         Vacuum pump           Cooling         Liquid         Liquid           INSTALLED POWERS: TECHNICAL DATA           Models         MD 158         MD 170           AC extruder motor (kW)         4 x 37 / 4 x 45 / 4 x 45         4 x 55           Degassing pump motor (kW)         4         4	Models	MD 158	MD 170				
Rotation speed (rpm)   8-38   8-45	Diameter (mm)	158	170				
Thrust system dynamic load (kN)         5085         5900           Torque on each screw (Nm)         36600         46960           Thermostating         Fluid-type         Fluid-type           BARREL: TECHNICAL DATA           Models         MD 158         MD 170           L/D ratio         21 / 26 / 30         24 / 28           Degassing         Vacuum pump         Vacuum pump           Cooling         Liquid         Liquid           INSTALLED POWERS: TECHNICAL DATA           Models         MD 158         MD 170           AC extruder motor (kW)         4 x 37 / 4 x 45 / 4 x 45         4 x 55           Degassing pump motor (kW)         4         4	Direction of rotation	Counter-rotating	Counter-rotating				
Torque on each screw (Nm)         36600         46960           Fluid-type           BARREL: TECHNICAL DATA           Models         MD 158         MD 170           L/D ratio         21 / 26 / 30         24 / 28           Degassing         Vacuum pump         Vacuum pump           Cooling         Liquid         Liquid           INSTALLED POWERS: TECHNICAL DATA           Models         MD 158         MD 170           AC extruder motor (kW)         4 x 37 / 4 x 45 / 4 x 45         4 x 55           Degassing pump motor (kW)         4         4	Rotation speed (rpm)	8-38	8-45				
Thermostating   Fluid-type   Fluid-type   Fluid-type	Thrust system dynamic load (kN)	5085	5900				
BARREL: TECHNICAL DATA           Models         MD 158         MD 170           L/D ratio         21 / 26 / 30         24 / 28           Degassing         Vacuum pump         Vacuum pump           Cooling         Liquid         Liquid           INSTALLED POWERS: TECHNICAL DATA           Models         MD 158         MD 170           AC extruder motor (kW)         4 x 37 / 4 x 45 / 4 x 45         4 x 55           Degassing pump motor (kW)         4         4	Torque on each screw (Nm)	36600	46960				
Models         MD 158         MD 170           L/D ratio         21 / 26 / 30         24 / 28           Degassing         Vacuum pump         Vacuum pump           Cooling         Liquid         Liquid           INSTALLED POWERS: TECHNICAL DATA           Models         MD 158         MD 170           AC extruder motor (kW)         4 x 37 / 4 x 45 / 4 x 45         4 x 55           Degassing pump motor (kW)         4         4	Thermostating	Fluid-type	Fluid-type				
L/D ratio       21 / 26 / 30       24 / 28         Degassing       Vacuum pump       Vacuum pump         Cooling       Liquid       Liquid         INSTALLED POWERS: TECHNICAL DATA         Models       MD 158       MD 170         AC extruder motor (kW)       4 x 37 / 4 x 45 / 4 x 45       4 x 55         Degassing pump motor (kW)       4       4	BARREL: TECHNICAL DATA						
Degassing Vacuum pump Vacuum pump  Cooling Liquid Liquid  INSTALLED POWERS: TECHNICAL DATA  Models MD 158 MD 170  AC extruder motor (kW) 4 x 37 / 4 x 45 / 4 x 45 4 x 45 4 x 45  Degassing pump motor (kW) 4	Models	MD 158	MD 170				
Cooling Liquid Liquid  INSTALLED POWERS: TECHNICAL DATA  Models MD 158 MD 170  AC extruder motor (kW) 4 x 37 / 4 x 45 / 4 x 45 4 x 55  Degassing pump motor (kW) 4	L/D ratio	21 / 26 / 30	24 / 28				
INSTALLED POWERS: TECHNICAL DATA           Models         MD 158         MD 170           AC extruder motor (kW)         4 x 37 / 4 x 45 / 4 x 45         4 x 55           Degassing pump motor (kW)         4         4	Degassing	Vacuum pump	Vacuum pump				
Models         MD 158         MD 170           AC extruder motor (kW)         4 x 37 / 4 x 45 / 4 x 45         4 x 55           Degassing pump motor (kW)         4         4	Cooling	Liquid	Liquid				
AC extruder motor (kW)		INSTALLED POWERS: TECHNICAL DATA					
Degassing pump motor (kW) 4 4	Models	MD 158	MD 170				
	AC extruder motor (kW)	4 x 37 / 4 x 45 / 4 x 45	4 x 55				
Total power (kW) 260 / 286 / 338 411 / 435	Degassing pump motor (kW)	4	4				
255, 250, 550	Total power (kW)	260 / 286 / 338	411 / 435				
Average consumed power (kW/h) 125-140 200-215	Average consumed power (kW/h)	125-140	200-215				

Data may vary according to design specifications.

# Conical twin-screw extruders

# **E-ON** series

The E-ON range of conical twin-screw extruders by Bausano is specifically engineered to meet the distinct technical requirements of two key PVC-U extrusion sectors: corrugated pipes and rigid profiles. Designed for precision, stability, and energy efficiency, these machines combine performance and adaptability across different production environments.

For the extrusion of rigid PVC-U corrugated pipes, E-ON extruders ensure stable thrust, even with mineral-filled formulations, and guarantee throughput rates from 50 to 400 kg/h. Their screw and barrel configuration allows for optimal melt quality, eliminating section change defects and enabling seamless integration with corrugation heads.

In profile production, the focus shifts to continuous extrusion and excellent surface quality.

E-ON models deliver 50 to 300 kg/h and are built with screw geometries optimised for constant, long-run operation. They provide superior adaptability to rigid, soft-touch, and recycled compounds, making them ideal for both decorative and technical profiles.

What sets E-ON apart is not only its applicationspecific performance, but also its modularity and efficiency. Each unit is engineered to offer:

- High energy savings.
- Flexibility for integration into new or existing extrusion lines.
- Complete technical support from configuration through to commissioning.

With E-ON, Bausano delivers a reliable, tailored extrusion solution designed to maximise process control and long-term production efficiency.

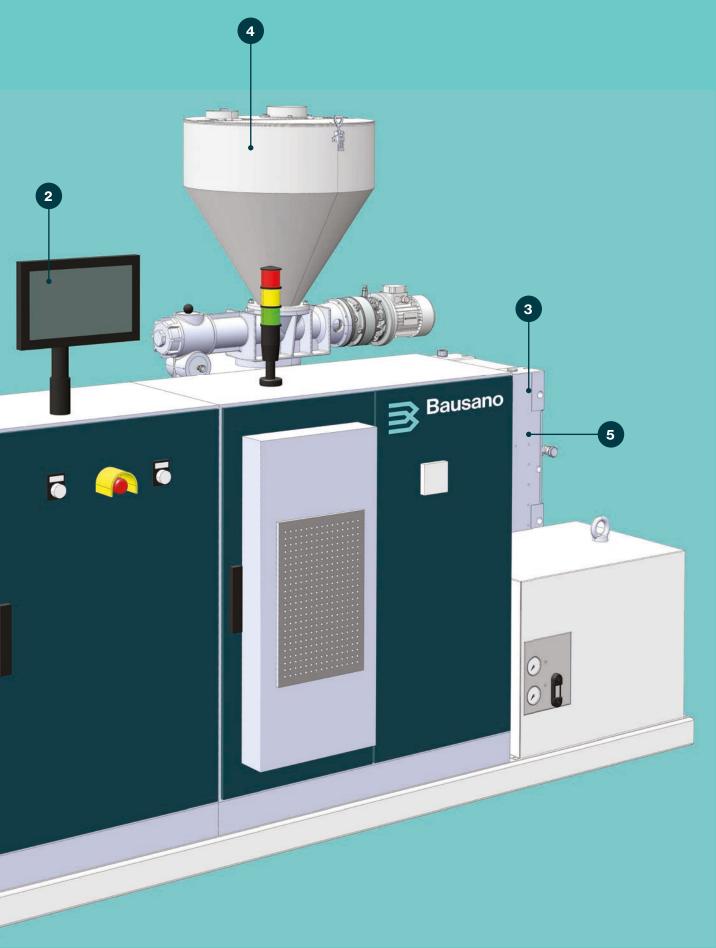
## Main components of the E-ON extruder series

- **1.** Ceraminc heating bands (induction system as optional)
- **2.** IoT systems monitor production to improve energy efficiency
- 3. AC motors
- 4. Volumetric feeder
- 5. Made in Italy certified reducers



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This is the E-ON extruder model by Bausano, specifically developed to meet the needs of corrugated pipe and profile production, where the use of a conical screw system is essential to ensure stable processing, optimized fusion and precise control over material behaviour.



# E-ON Bausano series Conical twin-screw extruders

E-ON 53 E-ON 63 E-ON 80





Images are for illustrative purposes only. Technical features and configurations may vary without prior notice depending on production needs.

TECHNICAL DATA						
Models	E-0N 53	E-ON 63	E-ON 80			
Screw diameter (mm)	53	63	80			
Barrel diameter (mm)	108	130	156			
L/D ratio	23	23	23			
Extruder motor power (kW)	23	36	69			
Degassing zone	1	1	2			
Single degassing pump power (kW)	1.5	1.5	1.5			
Thermal heating power (kW)	22	26	34			
Total power (kW)	37	51	83			
Extruder speed (rpm)	35	35	35			
Guaranteed output for PVC-U pipes (kg/h)	50-150	50-270	150-400			
Guaranteed output for PVC-U profiles (kg/h)	50-120	50-220	120-300			
Dry vacuum pump (no liquid ring)	Standard	Standard	Standard			
IP23 motors	Standard	Standard	Standard			
Parallel shaft gearbox with oil cooler	Standard	Standard	Standard			
Nitrided barrel	Standard	Standard	Standard			
Nitrided screws	Standard	Standard	Standard			
Bimetallic barrel + screws	Optional	Optional	Optional			

Data may vary according to design specifications.

# Single-screw extruders

# **E-GO** series

## Powerful, compact and cutting-edge

Bausano E-GO single-screw extruders are developed to process a wide range of polymers – PVC, PP, PE, ABS, PMMA and others.

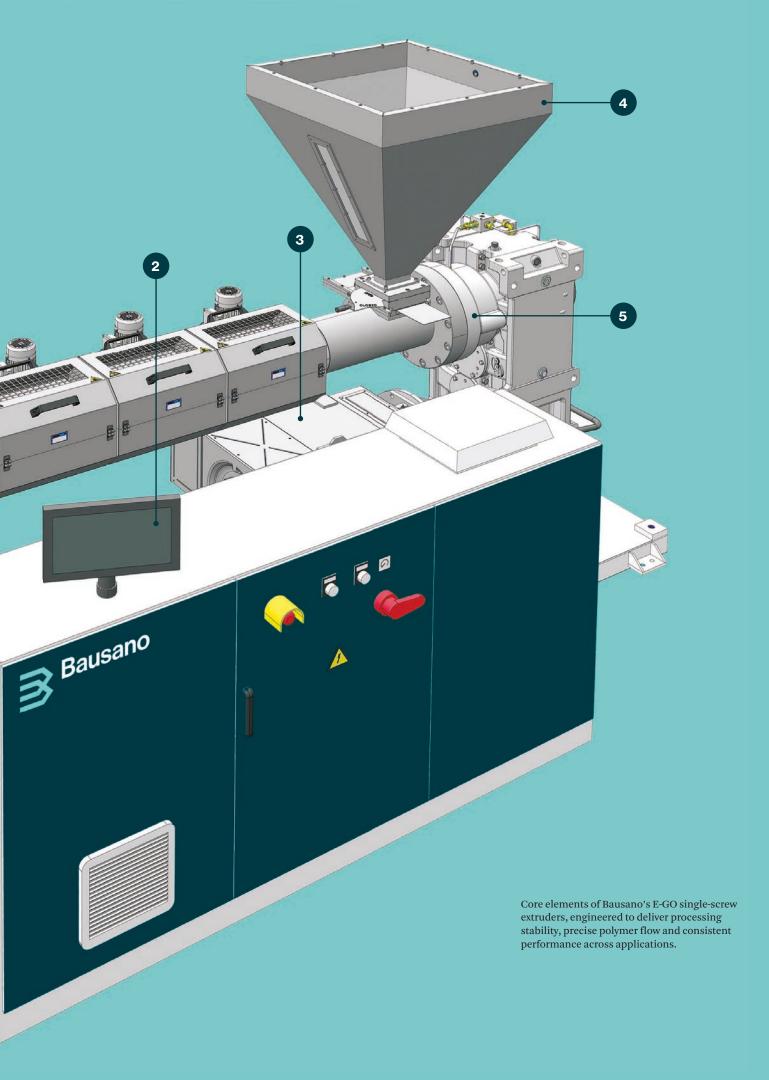
Their core strength lies in the screw geometry, featuring a customised design with variable pitch, optimising torque transmission and enabling higher output even at lower processing temperatures, including for polyolefins.

Energy efficiency is guaranteed by low-input asynchronous motors, while reduced component wear minimises the risk of failure and lowers operating costs, limiting the need for maintenance. Moreover, digitalisation via Industrial IoT enables real-time monitoring, dynamic KPIs and predictive algorithms for continuous process optimisation.

## Main components of the E-GO extruder series

- **1.** Ceraminc heating bands (induction system as optional)
- **2.** IoT systems monitor production to improve energy efficiency
- 3. AC motors
- **4.** Sliding hopper (or gravimetric doser)
- 5. Made in Italy certified reducers

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# E-GO for profiles

# Bausano single-screw extruders

The precision and versatility of Bausano's E-GO single-screw extruders make them suitable for processing materials such as PVC, PE, HDPE, LDPE, PP-R, WPC, ABS, PC/ABS and others. They are ideal for producing technical profiles that combine mechanical strength, durability and refined aesthetics.

Applications include roller shutters, window sills, cable ducts, edge protections, skirting boards and gutters – meeting the needs of sectors from construction to interior design. To maximise the potential of each extrusion line, Bausano provides a complete range of accessories for building high-performance, fully customised solutions.

### **Features**

AC motor

Parallel shaft gear box with helical and ground gears and thrust bearings

Force-feed lubrication with oil pump and exchanger

Feeding area with water-cooled external sleeve

Nitriding steel extruder barrel and screw

Barrel heating by ceramic heating bands

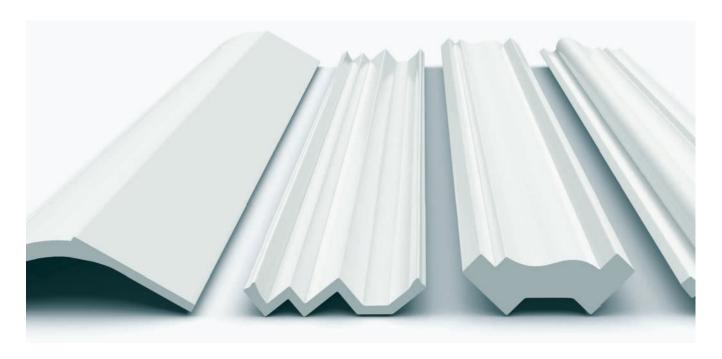
Barrel cooling by air fans

Stainless steel openable barrel cover

Grooved feeding zone according to the application

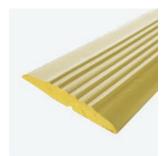


This images are for illustrative purposes only. The machines may be subject to change.











		TECHNICAL DATA			
Models	E-G0 45	E-G0 60	E-G0 70	E-G0 75	E-GO 90
Screw diameter (mm)	45	60	70	75	90
L/D ratio	25 / 30	25 / 30	25 / 30	25 / 28	30
Total power (kW)	25 / 35	41 / 80	45 / 65	85 / 108	135

Data may vary according to design specifications.

# E-GO for pipes

# Bausano single-screw extruders

Thanks to Bausano's E-GO single-screw technology, it is possible to produce pipes for a wide range of industrial applications, from construction – such as water, gas and electrical conduits – to the medical and automotive sectors.

The system enables the extrusion of single-layer or multilayer pipes, rigid or flexible, with diameters ranging from small to large cross-sections, using materials including PP, PP-R, PE, HDPE, LDPE, PE-X, PE-RT, PMMA, PC, PA and PU. With its extensive selection of customisable accessories, Bausano offers complete extrusion lines tailored to specific production needs.

#### **Features**

AC motor

Three-stage gear box with ground helical gears

Bimetallic barrel and screws as optional

Barrel heating by ceramic heating bands

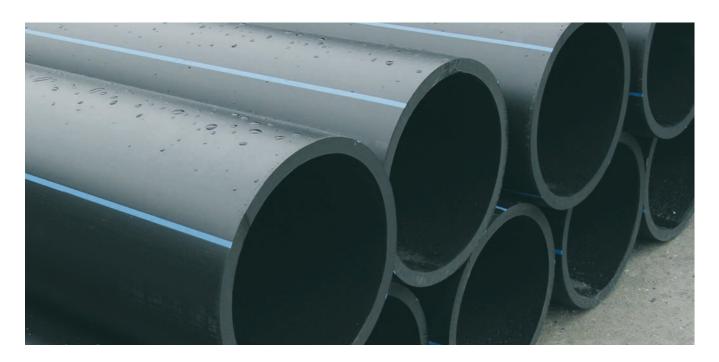
Barrel cooling by air fans

Stainless still openable barrel cover

Grooved feeding zone

Feeding zone thermoconditioning unit as optional













TECHNICAL DATA													
Models	E-G0 45 LS / HS	E-GO 45	E-G0 60	E-G0 75	E-GO 90	E-GO 120	E-GO 125	E-GO 150					
Screw diameter (mm)	45	45	60	75	90	120	125	150					
L/D ratio	30	37 / 40	30 / 37 / 40	30 / 37 / 40	30 / 37 / 40	30	37	37					
PE100 output (kg/h)	100 / 200	350 / 520	350 / 600 / 830	550 / 850 / 1250	800 / 1200 / 1900	1100	1500	1700					
PP-HM output (kg/h)	80 / 170	300 / 370	300 / 500 / 600	400 / 700 / 875	550 / 900 / 1200	800	1000	1200					
Motor power (kW)	25 / 44	83 / 100	100 / 157 / 190	150 / 217 / 300	215 / 335 / 450	310	400	620					
Total power (kW)	38 / 55	95 / 140	120 / 175 / 230	180 / 245 / 340	290 / 365 / 500	360	480	730					

Data may vary according to design specifications.

# E-GOR for recycling Bausano single-screw extruders

The E-GO R single-screw extruder series is Bausano's solution for recycling and pelletizing plastic materials. It is equipped with an optimised L/D ratio, an efficient vacuum degassing system and advanced filtration – ideal for processing highly contaminated waste, including heavily printed scraps. The resulting pellets are transformed into granules suitable for reuse in film blowing, pipe extrusion and injection moulding applications. The precision and speed of the system, together with the screw's dedicated design, ensure excellent quality of the final output.

With its single or dual-zone vacuum system, it efficiently removes volatiles and moisture, making it particularly suitable for film with ink and high humidity content. Bausano's single-screw technology supports a wide range of polymers, such as PE, HDPE, LDPE and PP.

### Screw design technology

80 years of expertise in polymer processing and screw design, enhanced by flow simulation software, guarantee high-quality and efficient material transformation.

### **Example of processing materials**

PE/PP mixed packaging films

PE/PP printed film

PP thermoforming flakes

PE washed film flakes

LDPE film waste from agriculture

LDPE stretch films

PE/PP/ABS/PS crushed regrinds













TECHNICAL DATA											
Models	E-GO R 45	E-GO R 60 / DD	E-GO R 90 / DD	E-GO R 105 / DD	E-GO R 125 / DD	E-GO R 160 / DD	E-GO R 180 / DD	E-GO R 210			
Screw diameter (mm)	45	60	90	105	125	160	180	210			
L/D ratio	37	37 / 44	37 / 44	37 / 44	37 / 44	37 / 47	37	37			
Output heavy material kg/h	50-80	140-160	250-280	400-470	500-700	1000-1200	1200-1500	1700-2000			
Output light material kg/h	30-50	120-150	180-250	350-450	450-650	900-1100	1100-1400	1500-1800			
Motor power (kW)	30	37 / 45	70 / 80	110 / 132	200 / 210	315 / 355	425 / 525	640			
Degassing zone	1	1/2	1/2	1/2	1/2	1/2	1/2	1			
Total power (kW)	50	75 / 95	100 / 140	180 / 220	300 / 330	470 / 540	605 / 750	860			

Data may vary according to design specifications.

Bausano Plastic extrusion technologies

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## **Extrusion instinct**

Bausano, international company founded in Italy in 1946, is a leader in developing high-tech industrial solutions for plastic processing.



Bausano S.p.A.

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