



Company profile



**IT IS IMPORTANT
TO BE DIFFERENT,
IT IS MANDATORY
TO DO BETTER.**

Experience The House of Extrusion®



Bandera THOE

is the home of research, innovation and groundbreaking technologies where you can test your material, prove the result and lead the market.

BANDERA
EXTRUSION INTELLIGENCE®

Our history

Becoming the **future** of the...



1947

Luigi Bandera officially established the company and started the history of extrusion in Italy.

1950

Costruzioni Meccaniche Luigi Bandera became a joint stock company, scaling up its activities to become an industrial concern.

1960-1970

Costruzioni Meccaniche Luigi Bandera experienced a remarkable industrial growth developing a wide and diversified range of extrusion products.

Our history

...extrusion of plastic materials

1980-1990

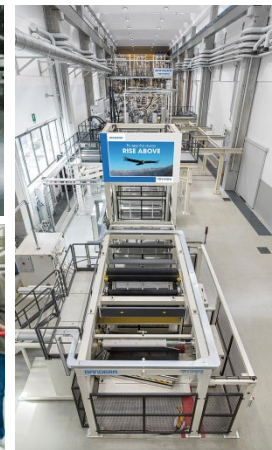
Costruzioni Meccaniche Luigi Bandera was acknowledged as one of the leading companies in the extrusion sector of both Blown Film and Sheet, in Italy and worldwide.

2015-2020

Opening of the House of Extrusion®, 6000 m² housing R&D and test-running activities on complete production lines with customized engineering services and an after-sales global network. THOE was recently upscaled with a dedicated facility for a new wet trials area including a 2-hall brand new building with 35 mt height.

Today

Bandera focuses on advanced technologies intended for the plastic industry for the fulfilment of the Circular Economy criteria.





Extruding future
plastics now®

Establishing Bandera as the most important design and manufacturing centre for extrusion in Europe providing **Blown Film** and **Flat Die** lines featuring newly conceived recyclable and compostable techniques.

Bandera business is focused on four main goals.

A strong focus



Designing safe and reliable production lines to offer **top quality performance**, in compliance with EC safety rules.



Manufacturing extrusion lines for finished goods made **from 100% recycle to 100% recyclable**.



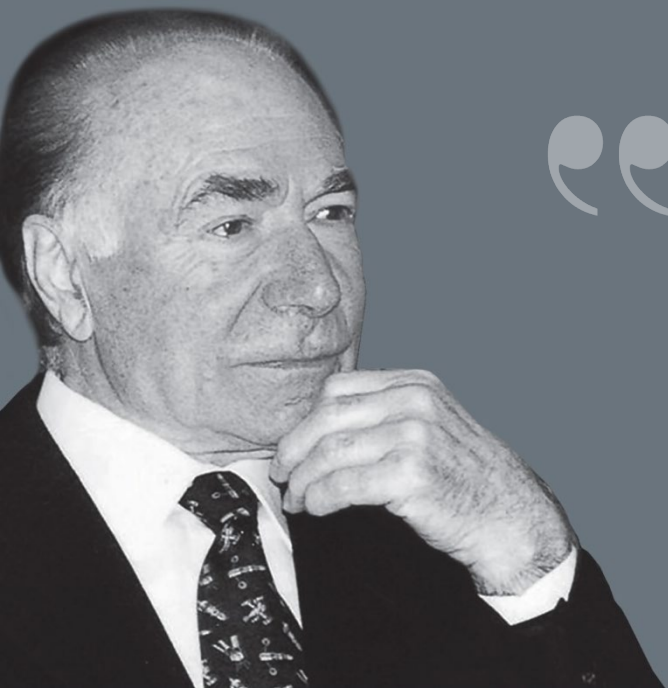
Placing **customer satisfaction** at the centre of our work to guarantee the best possible care as a reliable partner through customer focus and personal contact.



Promoting technologies allowing **a sustainable decrease in the weight of packaging materials** and ensuring minimum energy consumption levels.

Our crucial asset

Our founder Luigi Bandera used to say



“The essential asset held by my company is the people working here and their expertise.”

This innovative spirit drives us towards achieving the most challenging customer goals.

In house engineering and manufacturing

100% in house designed and manufactured machinery,
based on an individual customizing philosophy, to meet
our customers' needs.



Quality at Bandera means
ATTENTION TO DETAILS and
STRICT CONTROLS.



Bandera has a unique know how and capability to manage complex projects



Bandera implements turnkey projects thanks to its long-term expertise and know-how in providing complete plants.

The **Bandera Technical Department** not only designs and manufactures complete extrusion lines, but it also has the expertise for supplying a **top level consultancy** for the design of the factory that is to house the extrusion line itself.



Recycling

Revolutionary extrusion techniques for Neverending Stories.



Blown Film

Flexible packaging & converting plus agriculture application.



Flat Die

Rigid packaging and FFS industry, special films for more different industries.



Pelletizing

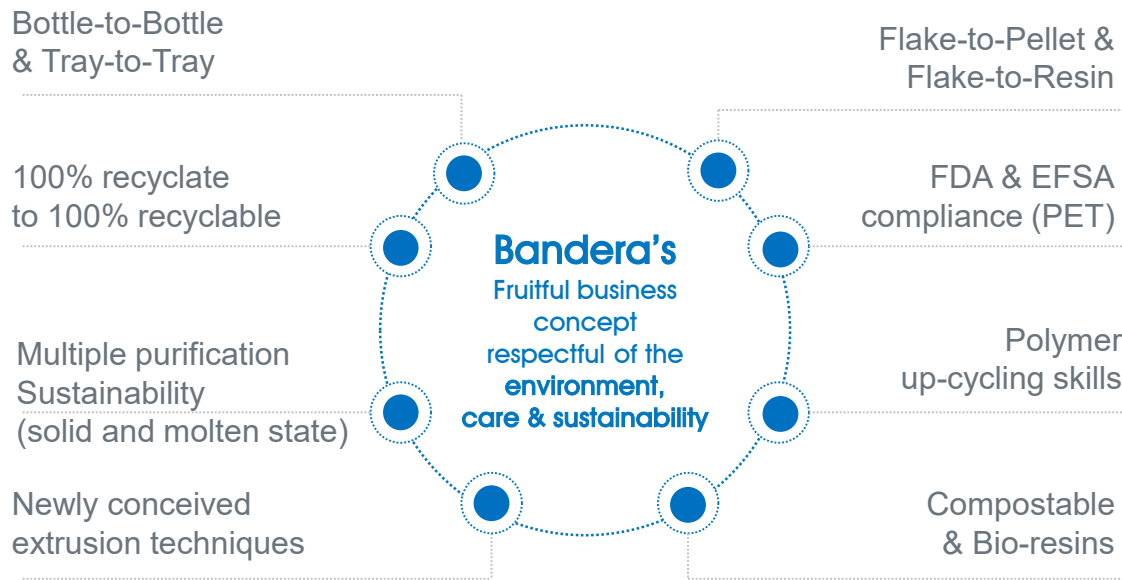
Various rigid and plasticized PVC formulations.



Extrusion Equipment

Various industries including recycling and highly filled compounds.

Recycling

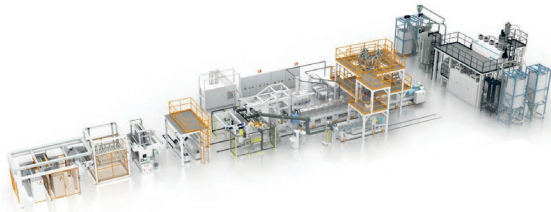


Bandera solutions for packaging and converting are focused more than ever on **recyclable and compostable materials** in compliance with the European strategy on plastics and recycling.

Bandera's recycling technology

Depending on the raw material features and the final product performances, Bandera proposes **customized solutions based on its hi-tech twin screw extrusion.**

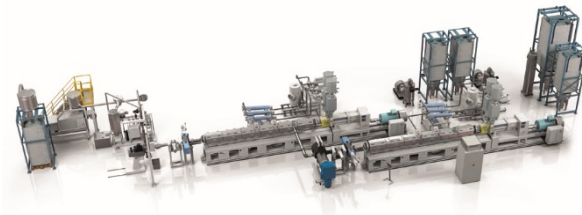
HVTSE® PUR^a



Bottle-to-Bottle



Polyolefin up-cycling process



Tray-to-Tray



BLOWN FILM technologies

- ✓ **Agri FutureFilm®** complete Blown Film lines for the production of **agricultural film**.
- ✓ **Geo FutureFilm®** complete Blown Film lines for the production of **waterproof geomembranes**.



BLOWN FILM technologies

Complete extrusion lines for Blown Film (packaging & converting)

- ✓ **SmartFlex®** lines (1 and 3 layers) competitive investment, maximized flexibility, power consumption reduction, functional and compact layout
- ✓ **Techno Flex® Plus** lines for multi-layer film (3 and 5 layers) with top performances
- ✓ **Barrier Flex®** lines for high barrier film (7, 9 and 11 layers)
- ✓ **HDB Flex®** lines for the production of FFS industrial bags





16

FLAT DIE technologies

Complete extrusion lines for Rigid Film and Sheet

Bandera designs and manufactures **complete extrusion lines** dedicated to the production of rigid wound films and high thickness sheets, respectively for the **thermoformed packaging** and **converting sectors** and for a large number of industrial applications.



FLAT DIE technologies

Complete extrusion lines for PET Rigid Film

Bandera is a global player in the technology of **dryerless direct extrusion of PET Rigid Film**, with a patented system based on a **co-rotating twin-screw extruder** coupled to a **high vacuum venting system**.

Bandera has supplied over **250 complete lines** to the main converters worldwide, who continue operating them with success since the year 2000.



FLAT DIE technologies

Complete Sheet Extrusion lines

High quality technical PET and PP sheets for the furniture industry

Technical sheets in HDPE, PP, HMWPE, PC, material mixtures with ABS and other materials (thermoplastic resins and industrial waste products) for the automotive industry components and thermoformed product markets.

Flexible sheets for waterproofing systems (multilayer PP/PE geomembranes) with possible internal fiber or fabric reinforced layer.

Thin sheets in PP and PET (usually embossed) addressed to the paper industry and medium thickness sheets in PS and ABS/ ABS-PMMA for the electrical appliance sector.



Complete PET/PO Pelletizing plants

Recycling and **compounding** technology is part of Bandera know how mainly covering the **PET industry** and the **highly filled PP** applications.

Highly vented twin screw extruders are widely used to complete systems from 500 to 2000 kg/h output.



High Performance PVC Pelletizing System

Bandera PVC Pelletizing lines are the result of more than 70 years of activity in manufacturing counter rotating twin-screw extruders within a range of 45 to 175 mm.



EXTRUDERS for special applications

The manufacturing of **extruders** for **special applications** represents a very important part of Bandera's business activity: **single screw extruders, counter rotating and co-rotating twin-screw extruders, large extruders with cascade configuration** and **special design extruders** for both compact and **innovative foam materials**.



Cooperation with Brueckner Maschinenbau

The manufacturing of **extruders** and **filters** for **Brueckner** officially started in 1979 and continues to represent a substantial part of Bandera's business activity.





«Condor Line®» programme

23

The most advanced technology hub for sharing innovations in the packaging and converting industry.

A brand new way to support converters in challenging innovative production targets.

A unique way to share knowledge and innovation.

This project to be developed in 3 years: 2019/ 2020/ 2021, represents a large “incubator of ideas” and acts as a valuable instrument for applied research on a complete extrusion line with a productivity responding to industrial standards.

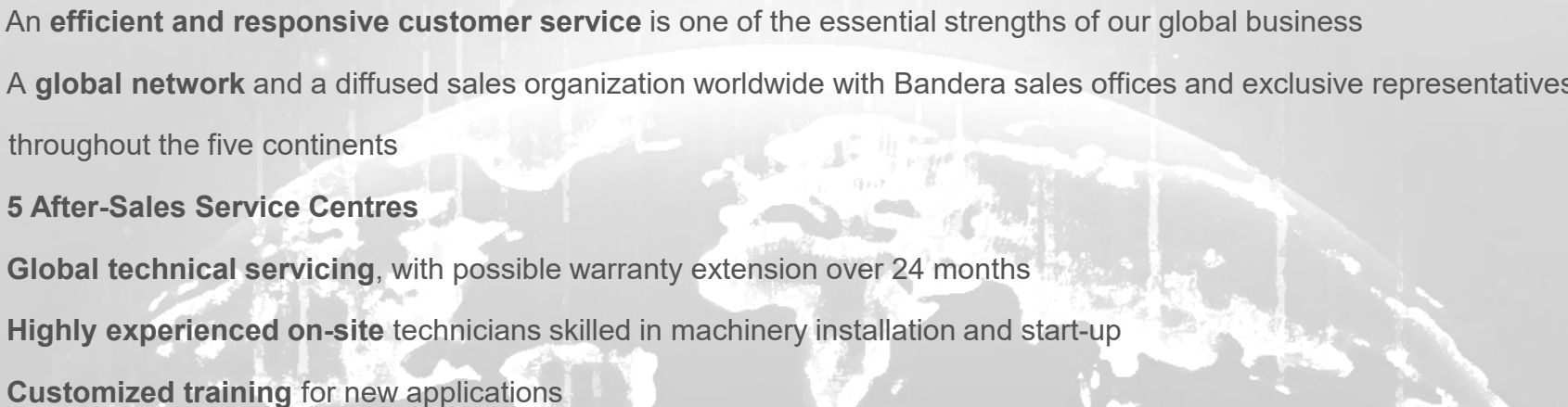
«Condor Line®» programme

One among the many benefits of the programme is cooperating to test innovative technologies:

- ✓ **new combined** flexible and rigid film applications
- ✓ **new barrier materials**
- ✓ **to lower the weight** of packaging materials
- ✓ **biocompostable** and **biodegradable** materials
- ✓ processes for **recycled raw materials** (even highly filled)

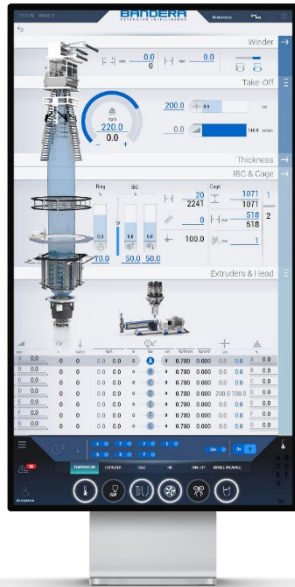


After Sales Service Centers

- ✓ An **efficient and responsive customer service** is one of the essential strengths of our global business
 - ✓ A **global network** and a diffused sales organization worldwide with Bandera sales offices and exclusive representatives throughout the five continents
 - ✓ **5 After-Sales Service Centres**
 - ✓ **Global technical servicing**, with possible warranty extension over 24 months
 - ✓ **Highly experienced on-site** technicians skilled in machinery installation and start-up
 - ✓ **Customized training** for new applications
- 

Bandera Customer Care, a new approach to after-sales

At Bandera, **customer fidelity** represents **the core** of any activity in the supply of industrial plants, to fulfill customer requirements by **offering “Customer Care”** to achieve **“Customer Satisfaction”**.




CUSTOMER CARE



The House of EXTRUSION® THOE

As a first step, a 3000 m² facility was completed in 2015. A 3000 m² additional facility soon followed and completed in 2019. These facilities represent a brand new **area housing R&D activities and wet tests on complete extrusion lines** for the development **of innovative ideas for the packaging and converting sectors.**



Being a **Bandera partner in experimentation and research means** being able to **benefit from our long expertise** in the technology of extrusion of thermoplastic materials with proven references in the extrusion.

Extrusion Academy®

E I extrusion intelligence®



In the recently renewed and upgraded laboratory, it is possible to **co-develop advanced extrusion solutions** with us or via the acquisition of one of the **Bandera laboratory extruders**.

Cognitive EXTRUSION®



**Extrusion
Knowledge®**

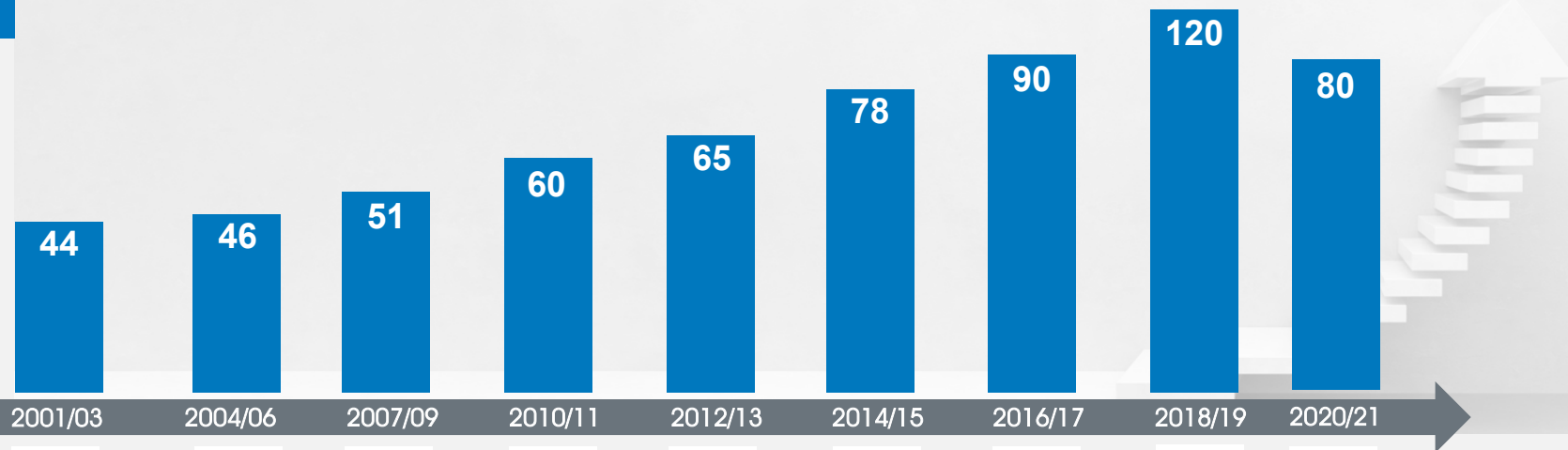
IoE Internet of Extrusion®, now embedding in every line, is the first step to integrate the Industry 4.0 applications. This means a significant opportunity for the customers to know and manage the production process in depth, while taking advantage of faster and more precise programmed technical assistance up to predictive maintenance. Last, but not least, this also brings them into the new world of **IIoT Industrial Internet of Things**.

Recent facts and figures

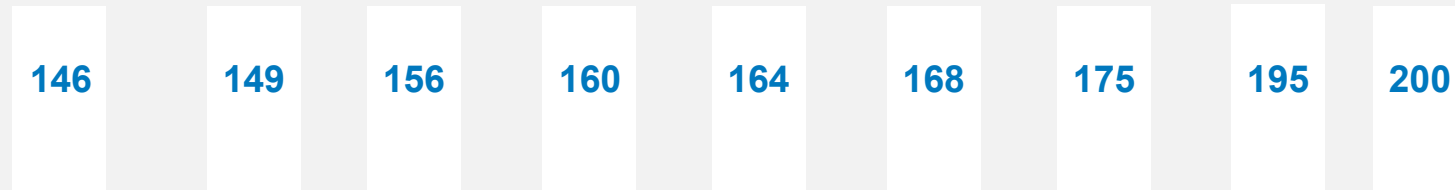
Bandera is one of the major extrusion systems manufacturers in Europe in terms of number of employees, as well as sales revenue figures.

In the last few years the business has also grown substantially on a global scale and the company has significantly **increased** the number of **specialized engineers**.

€ Million



employees



■ **1947**

74 years of experience

■ **15 500**

active clients all over the world

■ **35 000**

extruders installed running worldwide

■ **55 000**

m² production sites

■ **54 000**

t of extruded polymers per day

Proud to be a key player

Bandera numbers summarise what our long term expertise, know-how and innovative approach really mean.

31





Top packaging and converting solutions



Follow us



@banderaontheweb
@House_Extrusion
@extrusion_EA



ExtrusionbyBandera



Costruzioni Meccaniche Luigi Bandera



Extrusion Intelligence

BANDERA
EXTRUSION INTELLIGENCE®

Costruzioni Meccaniche Luigi Bandera S.p.A.

Corso Sempione, 120 - I-21052 Busto Arsizio (VA) Italy

+39 0331 398111 lbandera@lbandera.com

luigibandera.com