



Extrusion Coating Lines for Flexible Packaging

TECNO COATING ENGINEERING
EXTRUSION TECHNIQUES





OUR HISTORY

TCE was founded by PRANDI and GINI Families in 1989 however, the company real background dates back to the early 60ies under the name of “**PRANDI Officine Meccaniche**”, when the first extrusion lines were designed.

Today, TCE top management can count on more than 50 years of experience in the extrusion field with a background of hundreds of extrusion lines manufactured with the full customers satisfaction. In particular we are proud of our technical resources and our high experience in engineering of extrusion lines and in the important knowledge of polymers extrusion process. Thanks to the previously formed worldwide experience since first extrusion line took shape in 1989, TCE is leading the industry both in the flat-die (cast & extrusion coating) and in round die (blown, bi-axial orientation) technology, offering their customers a wide range of high quality extrusion equipment together with a high level of service and process know how.

OUR PRESENT

Today TCE has become a prominent force in the flexible packaging industry by continuously introducing innovations and thus contributing to the effectiveness of the industrial process. TCE has established an important international reputation caring about product quality and Customer service. Knowledgeable and efficient staff is providing to our Customers a service which is both effective and thoughtfully personal; practically a well qualified team to partner the industries we serve.

Building a company on quality means seeing the job through, and TCE is able to handle complete “Turn-key” projects from site survey and feasibility study to complete installation and commissioning while our responsive after sales service ensures that Your machine always achieves the highest performance levels; in order to show You its technological potential TCE will be glad to receive You at its premises whenever You desire.

OUR VISIONS

Through continuous innovation in extrusion technology and process engineering, we aim at developing cost effective solutions for improved productivity and optimized resource management, this to provide our Customers with the tools to fulfil today’s market ever increasing demand for high standard & environment friendly packaging products.

OUR PHILOSOPHY

EXTRUSION TECHNIQUES is our Company aphorism and does not only expresses the wide production program of extrusion equipment available at TCE but is also a synonymous of following fundamentals distinguishing TCE:

Process & Technology: Wide knowledge of resins and formulations in combination with the latest extrusion methods.

Design: “Italian styled” equipment offering high productivity and Operators friendly machines.

State of the Art: Use of the latest available technical solutions supported by first class components available all around the globe.

Customer care: An efficient Customer Service at your Service supported by sophisticated diagnostic tools in synergy with qualified teams of process engineers.



EXTRUSION COATING LINES

for Flexible Packaging



Extruders & Screws

The extruder's size & performance in Kg/h:

Model	LDPE	PP
TCE 65	260	210
TCE 80	350	280
TCE 100	480	380
TCE 130	700	560
TCE 160	950	760

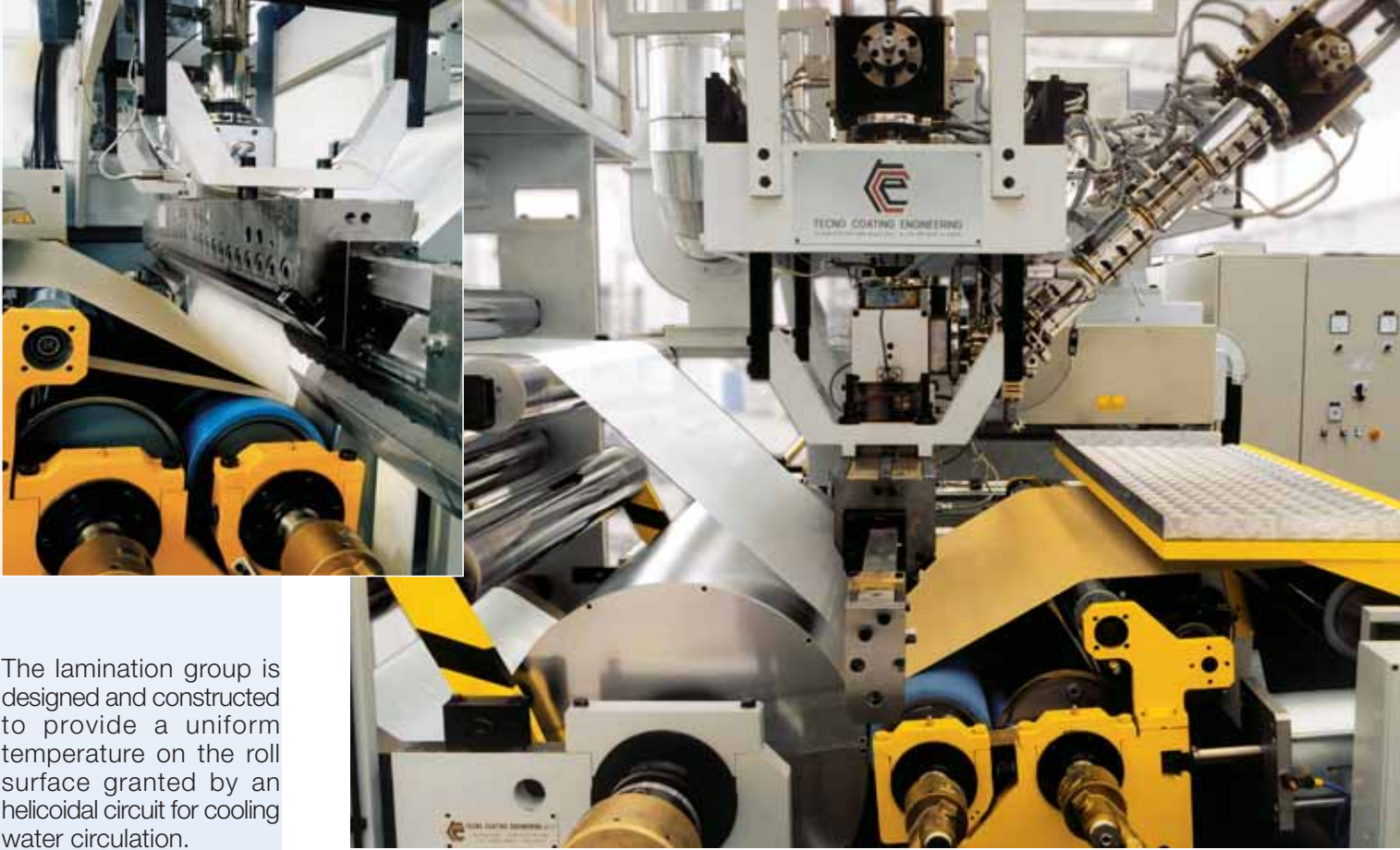


The extruder carriage position is adjustable in three axis to ensure the optimum melt position.



The screws are designed in order to perform at best with all worldwide available polymers LDPE, LLDPE, PP, EVOH, EVA, EAA, iomomers.

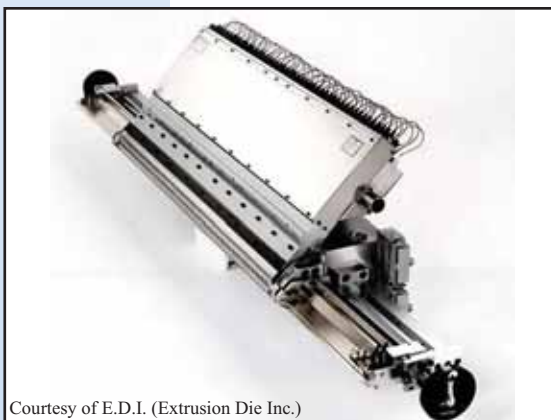
Coating/Lamination Group



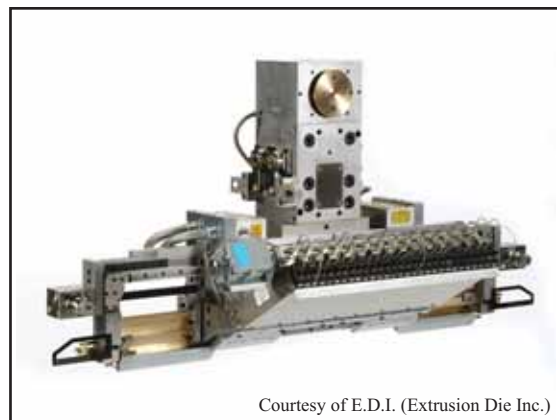
The lamination group is designed and constructed to provide a uniform temperature on the roll surface granted by an helicoidal circuit for cooling water circulation.

The unit is equipped with:

- Large diameter chill roll with high cooling capacity, the cooling drum is matt-chromium plated, the post cooling drum has mirror polished chromed surface (special surfaces on request)
- Quickly removable for rolls replacement
- Hydraulically actuated rubberised or PTFE coated pressing roll
- Adjustable PTFE tapes for overcoating
- Adjustable in height and machine direction by motor



Courtesy of E.D.I. (Extrusion Die Inc.)



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The T-Die can be supplied with manual or automatic adjustment of lips bolts. It can also be equipped with co-extrusion Feed Block and with Internal Deckling for the reduction of the extrusion width.

Unwinders & Winders

TCE Unwinders, Auxiliary Unwinders and Winders range can unwind and wind rolls from 400 mm up to 1800 mm diameter. Are specially studied for handle base material such as paper (craft, enamel, offset pulp) cardboard, aluminium foil, different film (PE, PP, PET, Nylon). Winders can be supplied with pneumatic shafts or shaftless, with semiautomatic or fully automatic splice system.

The loading of the rolls can be done by lifting platform or by crane.

Due to the high experience in design and construction, in fully automatic mode the operation speed can be 500m/min.



Primer Group

Water or solvent based, with “easy sleeve” replacing. Flat roll or gravure roll systems.



Auxiliary Equipment

TCE coating line are equipped with the most updated auxiliary equipment.

Different substrates need different treatments; corona treaters, flame treaters, plasma treaters are available and chosen properly.



Corona treatment



Flame treatment

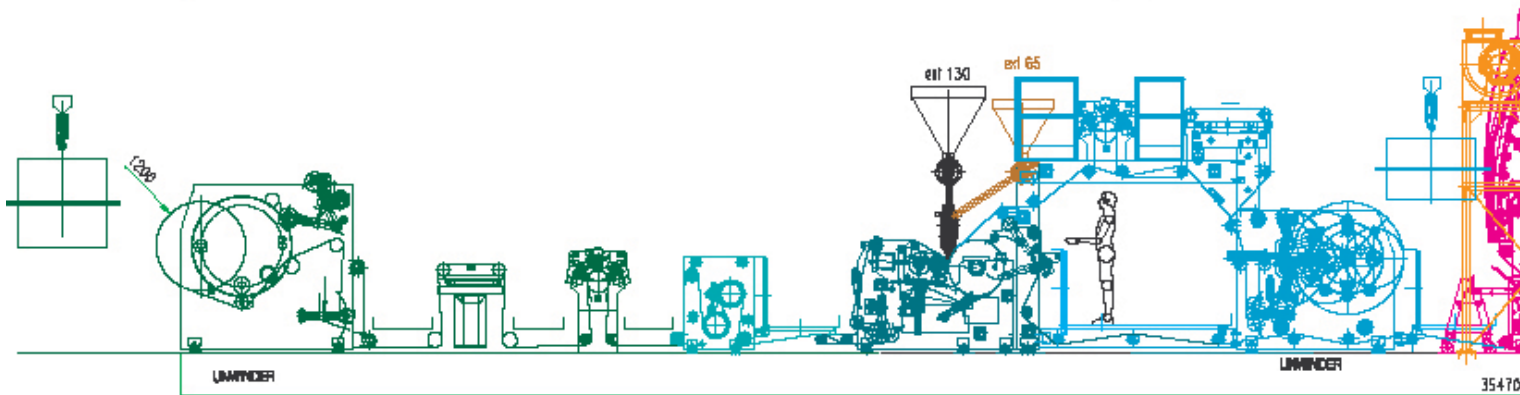
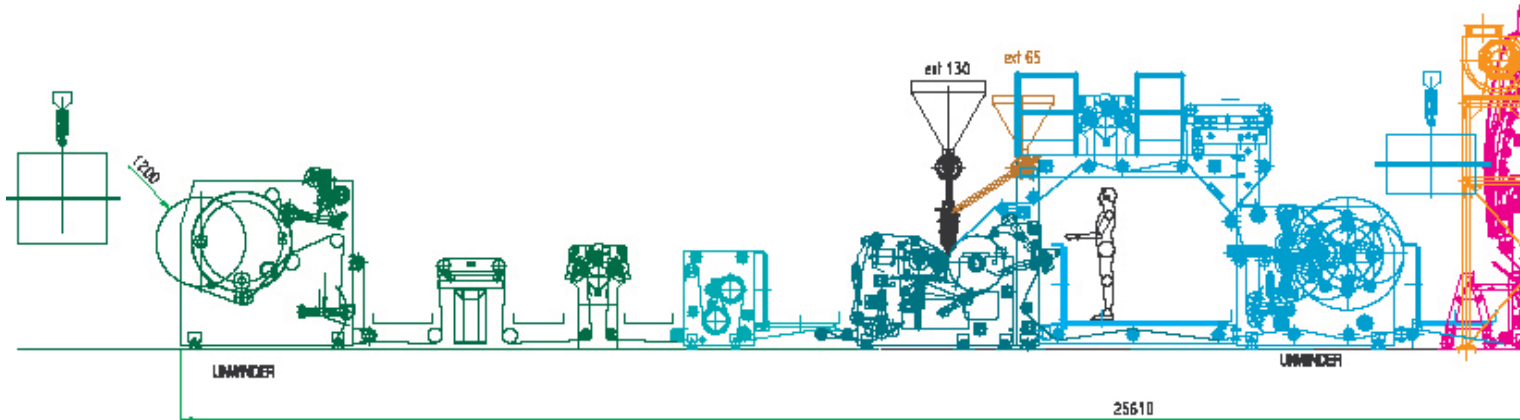
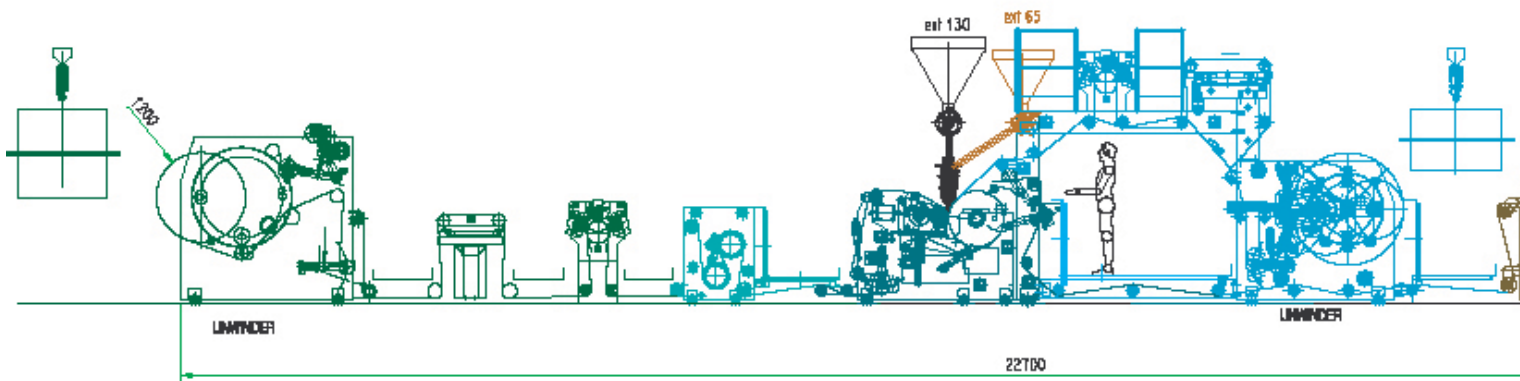
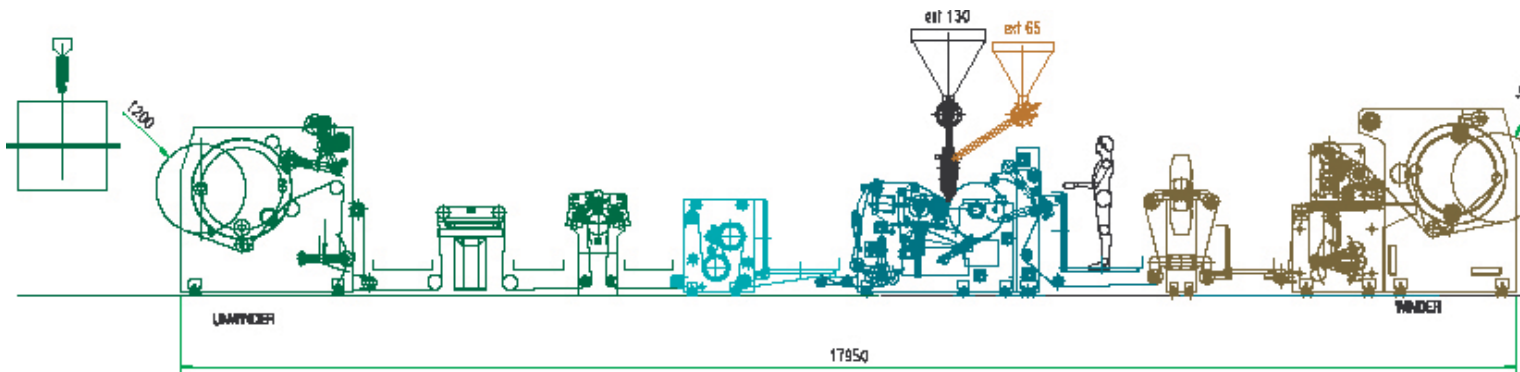
Thickness measuring gauges can be utilized together with the automatic T-die for having a perfect control of the single or total thickness of the final packaging.

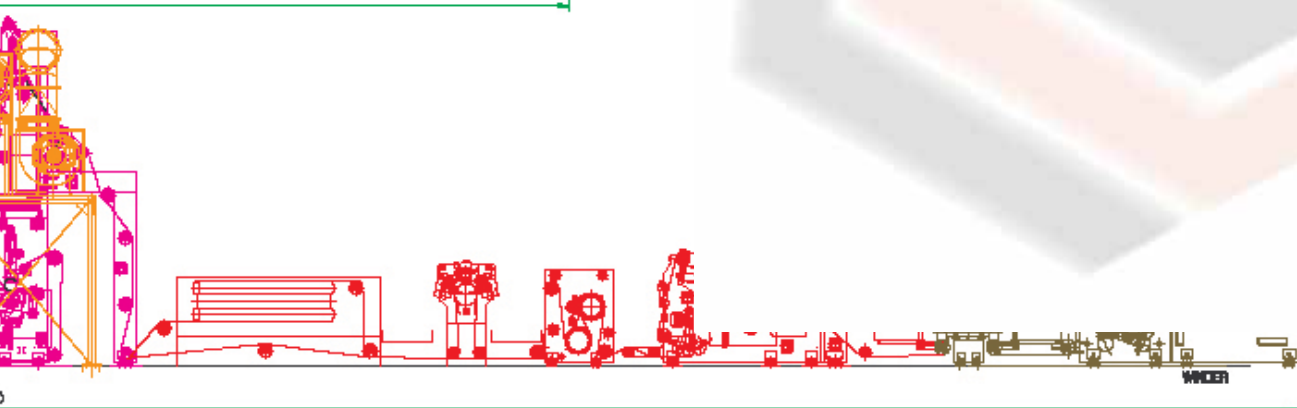
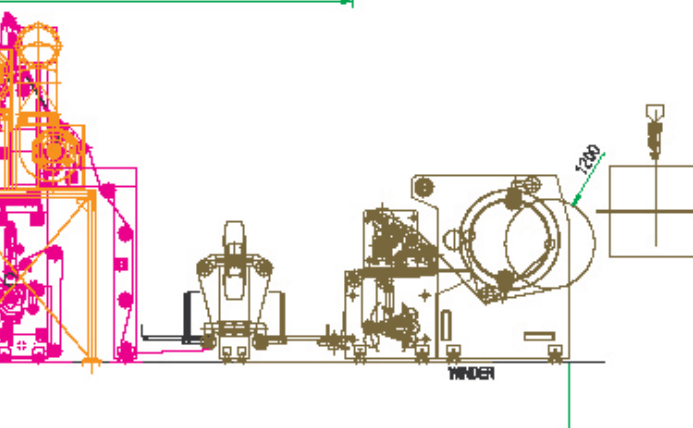
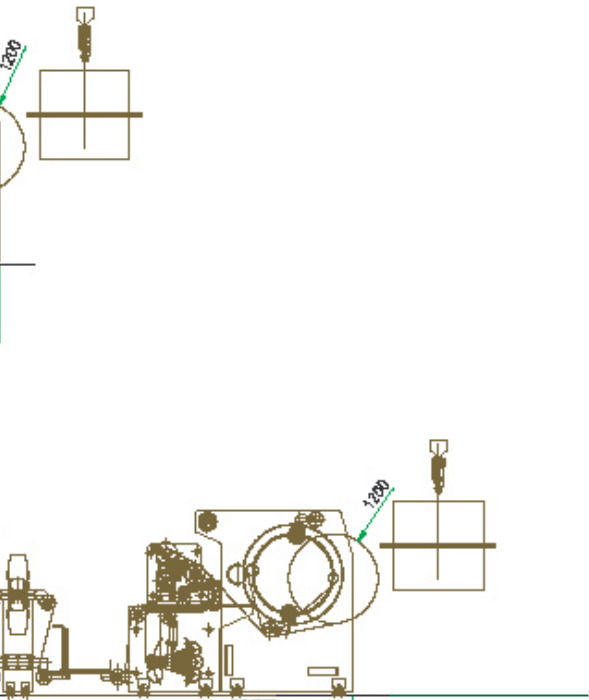


Thickness measurement gauge

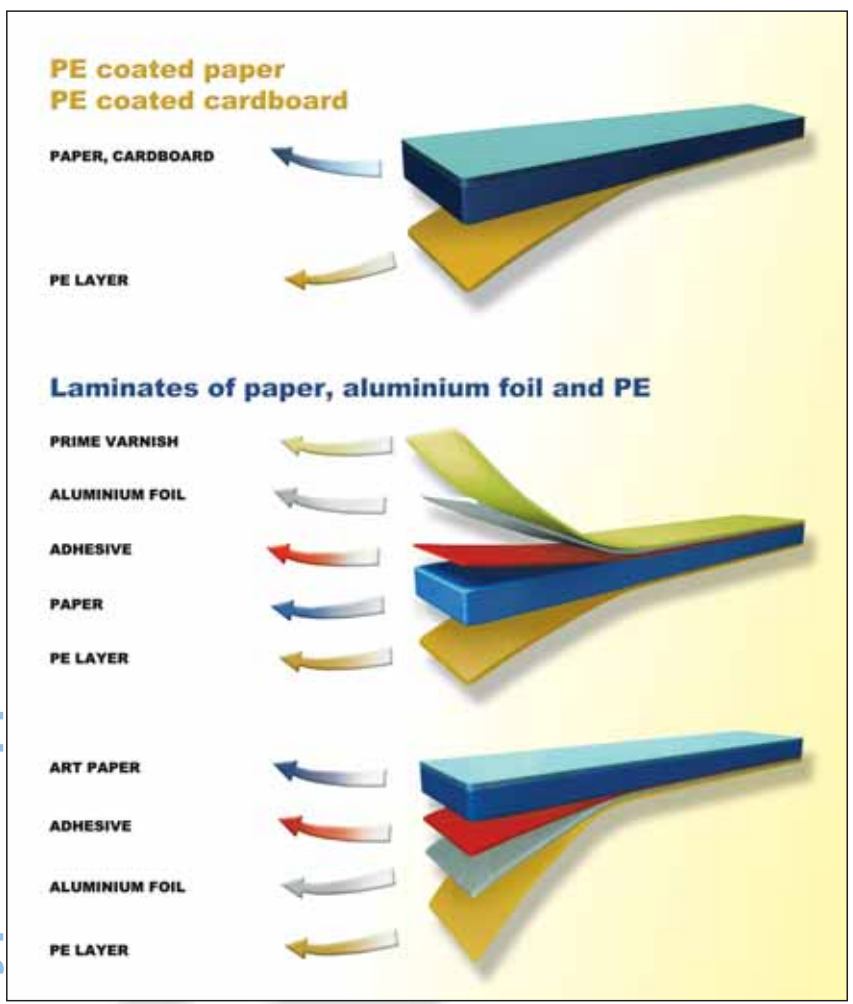
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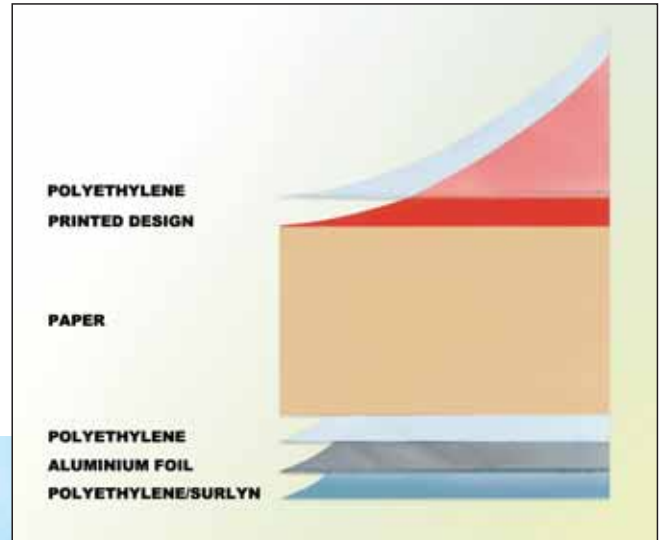
Typical Applications



Aseptic Packaging

Liquid packaging is the largest market segment for extrusion coating.

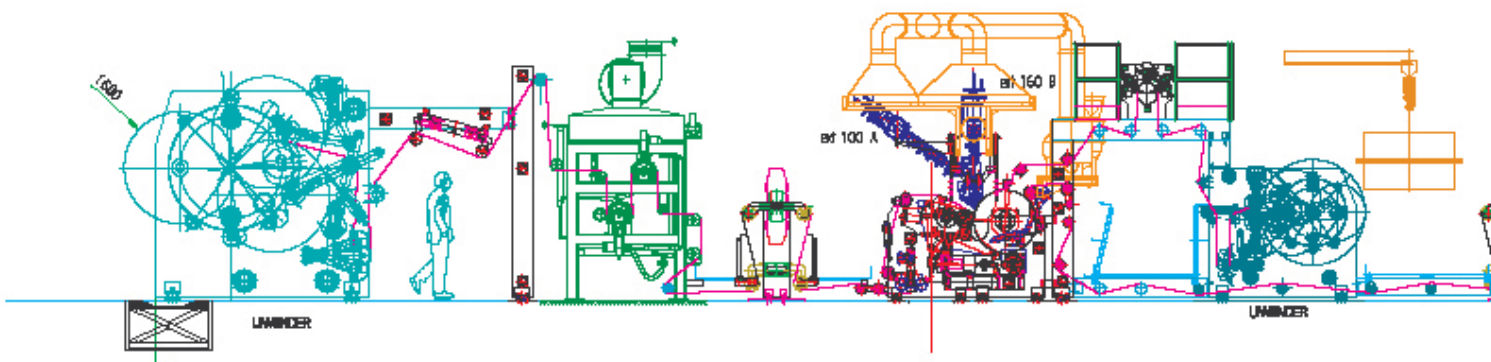
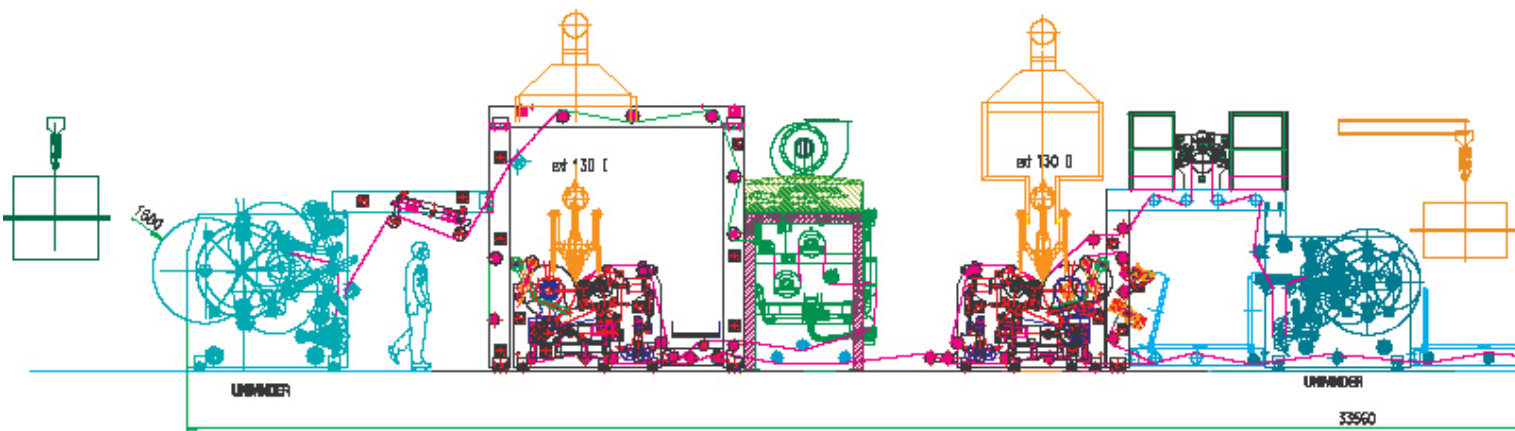
Made with cardboard, LDPE and Aluminium foil is the most suitable packaging for milk and other liquid foods. The number of aseptically packed products is constantly growing due to different benefits (longer storage, product freshness, flavour, nutrient retention, cost-effective transport, storage, light weight).



Typical Structure



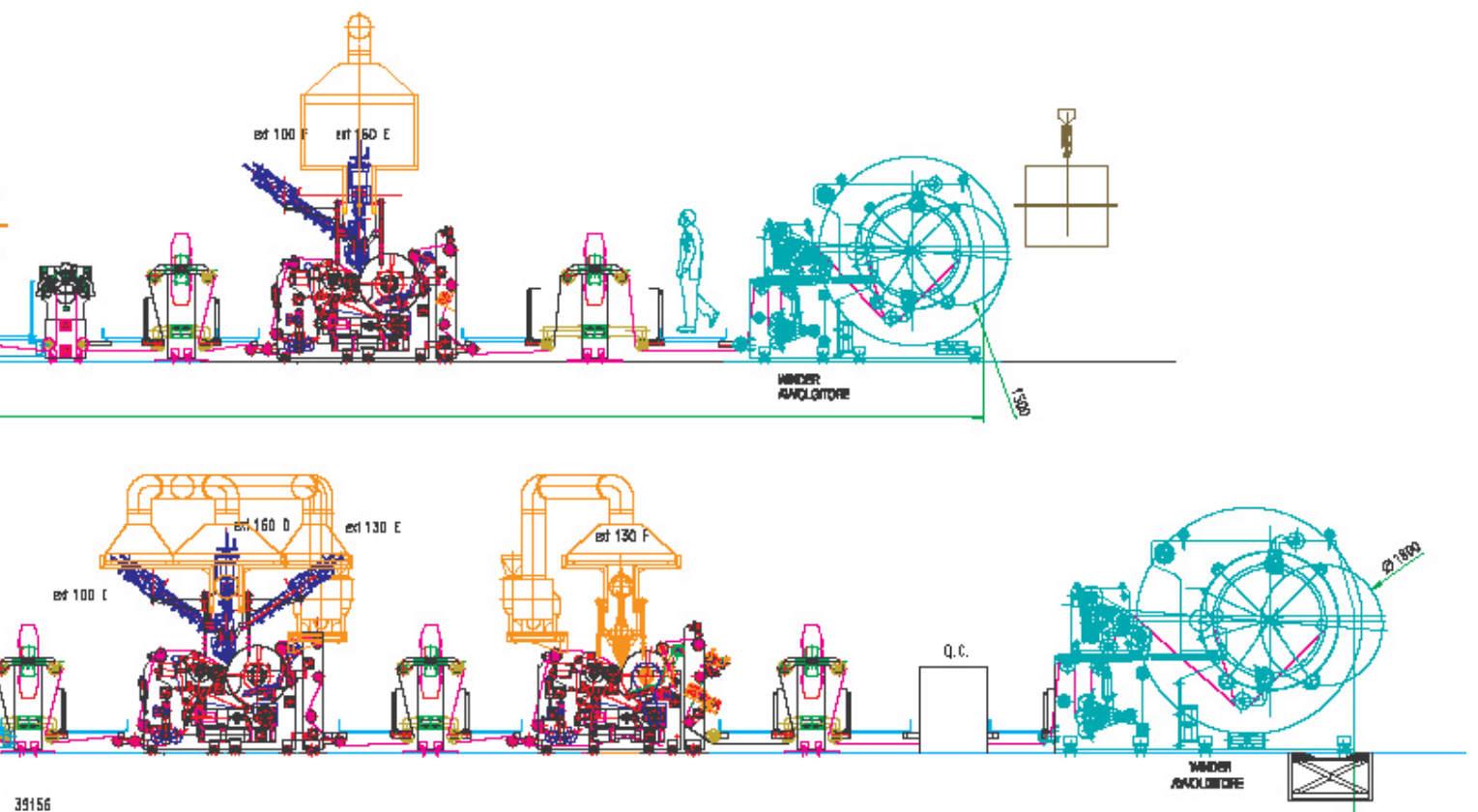
On the basis of his experience, TCE can suggest and supply different configurations of the extrusion-lamination line, from the simplest to the most up-dated configuration that foreseen the utilization of other polymers EVOH as oxygen barrier instead of aluminium foil.





Due to the long experience TCE can suggest various technical/economical solutions.

This particular lines dedicated to this particular product are constructed for giving the best possible performance and grant to the client the respect of the quality of the products. A defect detector can be installed in line to control the quality of the final packaging.





Headquarters in Momo



Work-shop in Boca

TECNO COATING ENGINEERING

Your Partner for:



- Stretch-Film Cast lines, 3 or 5 layers - CPP-Film Cast lines, 3 or 5 layers
- Cast-Coating lines for Barrier-Film up to 11 layers
- Extrusion lines for Bi-Axial Oriented Film (Double-Bubble) up to 7 layers
- Extrusion lines for Bi-Axial Oriented Barrier Film (Triple-Bubble) up to 7 layers
- Blown film lines, Mono-or Co-extruded up to 7 layers
- Multiple stations Extrusion-Coating & Lamination lines for the production of Aseptic Packaging Laminates, etc.

TECNO COATING ENGINEERING S.r.l.

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