Extrusion Lines

For Foils and Sheets

AMUT's Sheet Extrusion Lines are designed to provide comprehensive and technologically advanced solutions for producing foils and sheets from a wide range of thermoplastic materials. These extrusion lines cater to diverse applications, offering customisable configurations and capabilities such as co-extrusion for up to 9 layers and production rates exceeding 4000 kg/h. With a focus on high precision and efficiency, they serve industries including food packaging, automotive, and building construction.

Key Features

- Wide range of extrusion lines from 400mm to 3300mm in nominal width.
- Capable of producing sheets with thicknesses from 150 microns to several centimeters.
- Advanced co-extrusion technology supporting up to 9 layers.
- High production capacity of over 4000 kg/h.
- Use of specialised materials like PET, PS, PE, and PVC.
- Customisable extruders with different L/D ratios and drives.
- Single and multi-manifold flat dies with thermal stress resistance.
- Integrated stabilisation and cooling systems for consistent quality.

Key Benefits

- **Versatility:** Suitable for various industries such as food packaging, automotive, and construction.
- **High Efficiency:** High production capacity ensures maximum output.
- **Customisability:** Tailored to meet specific customer needs and product requirements.
- **Material Flexibility:** Supports a broad range of thermoplastics, enhancing application diversity.
- **Quality Control:** Advanced cooling and stabilisation systems maintain product consistency.
- **Precision Manufacturing:** Automated thickness adjustment for high accuracy.
- **Ease of Maintenance:** Designs allow for easy maintenance and operational start-up.
- **Environmental Compliance:** Utilises eco-friendly materials and processes, supporting sustainable production.

Accessories

- **Embossed Rolls:** For surface texturing and customisation.
- **Additional Cooling Rolls:** To enhance product cooling at high speeds.
- **Hydraulic Clamping Units:** For high precision in material processing.
- **Co-extrusion Flow Boxes:** For multi-layer sheet production.
- **Automatic Thickness Adjustment Systems:** For precise control over sheet thickness.

GET IN TOUCH TODAY

We solve the most technically advanced plastics automation problems across all industries.

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Applications – Extrusion Lines for Foils and Sheets

Food Packaging

Sheets for thermoformed food packaging can include or exclude barrier layers, with the flexibility for co-extrusion or lamination to create an airtight seal. These sheets can be treated for printing or metallising, and are specially designed for use in form-fill-seal automatic lines.

Materials: PET, PS, PE, PP, EVA, EVOH.

Multipurpose and Pharmaceutical Blister Packaging

Sheets designed for thermoformed packaging are ideal for displaying consumer goods and for creating blister packs for medicines, such as tablets or capsules. They can be treated for hermetic seal welding or bonding to ensure product integrity.

Materials: PET, PVC.

Paper & Cardboard Industry

Sheets and foils are suitable for producing stationery items such as binders, folders, catalogues, and files, as well as for packaging gift, cosmetic, and perfume boxes. These can be single or multilayer foils with surface embossing and treatments for printing, and can be cut and stacked in reams for further processing.

Materials: PET, PP, PVC.

Furniture Industry

Sheets, both single and co-extruded, are used for covering panels in domestic furniture, particularly kitchens, and for producing edge bands with wood grain surface embossing. They can be treated with primer coatings and printed using UV drying systems.

Materials: ABS, PMMA, PVC, PP.

Refrigerator and Bathroom Furnishings

Sheets are suitable for thermoforming into refrigerator doors and bathroom furnishings such as shower pans, basins, bathtubs, and corner shower fittings. They can be treated for foam application and provide a bright, glossy finish, with automated cutting and stacking processes.

Materials: PS (HiPS and GPPS), ABS, PMMA.

Medical Bags

Non-toxic foils are designed for medical bags used in transfusions, dialysis, or intravenous therapy. They feature a glazing or embossing surface finish to prevent adherence during sterilisation in autoclaves.

Materials: PVC, PP.

Multicellular Panels

Polypropylene Cartonplast is utilised for stationery items, while single or multi-chamber polycarbonate panels are used in the building industry.

Materials: PP, PC.

Technical Data	Specification
Nominal Width	400mm to 3300mm
Thickness Range	150 microns to several centimeters
Production Capacity	Up to 4000kg/h
Extrusion Layers	Up to 9 layers
Materials Supported	PET, PS, PE , PP, PVC, EVA, TPO, HDPE
Extruder Types	Single Screw, Twin Screw (parallet and conical)
Flat Dies	Single and multi-manifold, with automatic adjustment
Calendar Types	Vertical, horizontal, sloped; 3 or 5 rolls
Cooling System	Independent roll thermo-control, additional cooling rolls
Material Applications	Food packaging, automative, building construction
Control Systems	Inverter-controlled for perfect synchronisation

Automotive

Sheets are used for sound deadening in engine compartments, bi-laminated with nonwoven layers for interiors such as passenger and trunk compartments. Co-extruded sheets can be thermoformed for car door coverings.

Materials: PP, TPO, PVC.

Specialty Execution

Corrugated Sheets: Co-extruded from LDPE foam for industrial packaging of bulky items like coils, plates, and stainless steel pipes.

Transparent Sheets: Extruded from PS crystal (GPPS) for hobby crafts and DIY projects.

Flexible Sheets: Used for gaskets or sealing units, extruded from fluoropolymers (PFA, PVDF, Teflon).

Foil for Artificial Leather and Other Uses: Suitable for making artificial leather, tablecloths, industrial curtains, and room partitions, extruded from flexible PVC.

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