Extrusion Machine
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Introduction

Since founded in 1973, we, Daekwang Machinery have grown up with the support from the valued customers. We have strived to develop technology to provide the customers with maximum satisfaction. This led us to be one of the trusted converting and extrusion system manufacturers. Beginning in 1986 with the first exportation to Pakistan, we have been proactively focusing on the global market and we have exported over 200 systems to 24 countries so far. We are constantly investing in research and development in order to become one of the leading companies in this industry. You may be experienced our system indirectly when you brush your teeth. Because No. 1 manufacturer of Lamination Tube in the world is operating Daekwang’s Extrusion Lamination System to produce their world class products, the tooth paste container you may have touched this morning presumably has passed through our systems on its long way to a final product.

Never contented with current technical level, we are trying to maximize efficiency, stability, marketability and user convenience of our systems. We are confident that our products guarantee successful business of our customers. We promise to not only develop most reliable systems, but also provide the greatest service we can offer. Through our impressive system and dedicated staffs, we will strive to become the best business partner of you.

Fundamentals of Extrusion Machine

The most important unit of an Extrusion Line is the Extruder(s). Through an interaction between the screw and barrel, polymer pellets are melted. Molten polymer is delivered for crystallization (solidification) process. Most of cases, this is a cooling process for forming the molten polymer into a desired shape. As occasion arises, there may be additional processes; heating, stretching, cooling and coating. These processes complete the products which are appropriate for use. There is no doubt that each process, extrusion and forming, should be composed in harmony and be under strict control in order to produce high quality plastic products.
Sheet

The products having 0.2 mm or above thickness are called sheets. Sheets must have uniform gauge and flatness for good appearance and to facilitate smooth downstream processes. To produce good quality sheet products, screw(s), melt pump, precision calender roll unit, and a pressure control system must be in place constituting an organic system. All of our customers are satisfied with our customized screw combinations and stable and accurate control systems.
**Tube**

Shown below is an extrusion line for producing 5-layer seamless tubes. Most of seamless tubes have one or more barrier layers to protect the content which is sensitive to air. EVOH is the most commonly used barrier material. Due to poor bonding performance between EVOH and PE, a tie layer is interposed between the EVOH and PE layers. One inner barrier layer of EVOH, two tie layers and two outer PE layers are a typical structure of seamless tubes. The outer diameter of tube is automatically controlled by the pressure of the calibrator which is getting signals from diameter gauge.

**Monofilament**

Plastic filaments are used in various areas, medical, sports, clothing and so on. The most important and fundamental property that filaments should have is the uniformity of cross-section. In this respect, our machines’ perfect combination between software (pressure control) and hardware (melt pump, gear-driven rollers and winder) make this possible on your production. Our system will enable you to achieve uniformity of cross-section by controlling the resin pressure at the nozzle. Filaments produced with this system meet every specification you desire and guarantee smooth operation of downstream processes, achieving highest-level of productivity.