

AMUT SOLAR LINES PRODUCING EVA FOILS

EVA, Ethylene-Vinyl-Acetate, is the type of material produced with AMUT's extrusion foil line and it is especially reserved for the production of solar-photovoltaic panels.

EVA foil protects the photovoltaic cell, encapsulating and wrapping the silicon cells, and enables a **perfect sealing and a high adherence** with the outer glass sheet and with the back-sheet (lower layer).

The EVA foil delivered with AMUT lines assures:

- the maximum light transmission;
- the absence of deformations or shrinkages;
- a great capacity to achieve a good cross-linking level (necessary to end the panel lamination very quickly);
- the satisfaction of TÜV or CEI EN 50086 certificates requirements.

The foil produced has a width from 1050 mm up to 2100 mm, with a thickness range from 0,3 to 0,8 mm.

All units of the line are purposely designed for this application and to not compromise the foil dimensional stability.

The gravimetric dosing and extrusion/die units can process **both liquid and solid additives** thus assuring an optimal melting of the Polymers in order to give the foil **the necessary resistance to UV rays and avoid the yellowing effect** (it causes a lack of efficiency in the energy production). **There is not cross-linking during extrusion process.**

The calender has 3 rolls with special surface treatment to handle EVA material and to avoid the stickiness of the foil on the rolls. The calender, equipped with independent drives, has a **further special stabilization unit system**. The cooling phase must be progressive to reduce the tension at minimum level.

A **sophisticated thermoregulation system** is essential, for both extrusion and cooling processes.

The innovative **winding system can wind-up, directly in-line**, the foil in reels or permit to laminate in-line a separating film sheet (mask film) or a silicone paper foil to protect EVA foil completely.

There is also the possibility to emboss on one sheet side allowing the adherence with the glass sheet during the solar cells manufacturing.