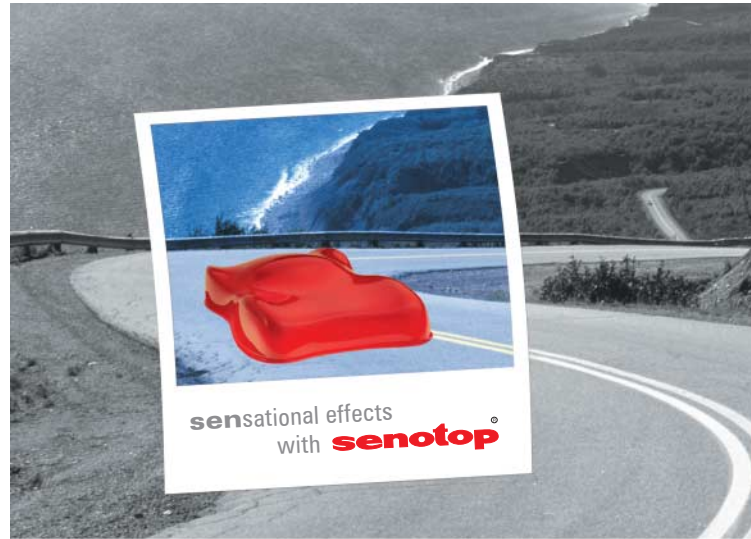


About Senco Europe

Senco Europe is a member of the Senoplast group that specialises in the production and marketing of co-extruded **senotop** films for automotive thermoforming applications.

While Senoplast continues to focus on its core markets for co-extruded products, Senco Europe produces and markets co-extruded films geared towards the high quality requirements of the automotive industry.

Declared goal of Senco Europe CEO Wilhelm Klepsch is the complete orientation of all company activities towards the needs and requirements of the automotive industry. This goal will be achieved with a dedicated team and an ambitious investment effort.



In 2005 Senco Europe started the construction of a new production site. A new extrusion line designed according to automotive requirements will produce **senotop** films for exterior and interior applications.

Senco Europe will continue its close co-operation with Senco R&D, the research and development company within the Senoplast group. This ensures a continuous product development with a focus on automotive requirements as well as a know-how transfer regarding processing technologies from thermoforming to reinforcing and trimming.

Design: www.nill.at | Photos: Bauer, Sechor

Version 2/2005 (E)



sensational effects with **senotop**®

Films for automotive applications

- Exterior
- Interior

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EXTERIOR

senotop Coex-Films for exterior applications

senotop Coex-Films are thermoformed and then reinforced by back-injection or back-foaming processes to produce finished parts with a class A surface and high stiffness. Compared to painting senotop offers a class A surface quality at significantly reduced production costs. All colours and metallic effects are possible.

The carrier layer of the film contains PC to provide high heat and impact resistance. A PMMA colour and a PMMA clear layer account for UV-stability, a deep high-gloss colour appearance as well as good scratch and chemical resistance.

The good thermoforming behaviour of the film is further improved by a bottom layer without in-line regrind.

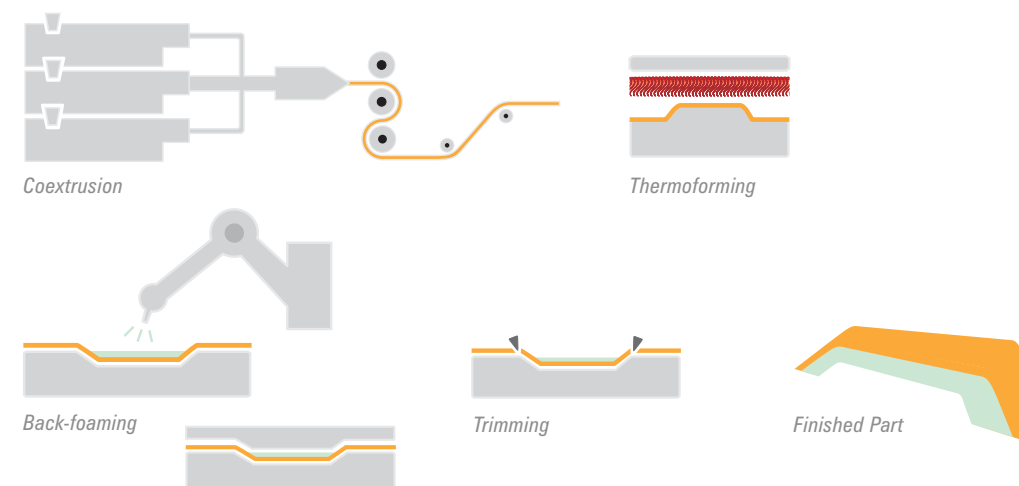
Series application:

- Smart roof module Spoiler Plus, start of production 2002

Picture with kind permission of Smart and Arvin Meritor.



Production process Back-foaming – schematic drawing



senotop Paintbase-Films for exterior applications

senotop Paintbase-Films are paintable either prior to thermoforming with specific paint systems or after thermoforming on the finished part with conventional paint systems. A multi-layer construction guarantees high heat resistance and top surface quality.

INTERIOR

senotop Coex-Films for interior applications

senotop Coex-Films for interior applications are thermoformed, trimmed and back-injected. Silk-screen printing before thermoforming is an additional production step that allows special decors of the film. Interior surfaces with senotop show deep high-gloss colour effects. The film technology offers cost reductions compared to painting processes since scrap rates are significantly reduced and different colour effects and decors can be manufactured with the same tooling.

Films with different colour effects

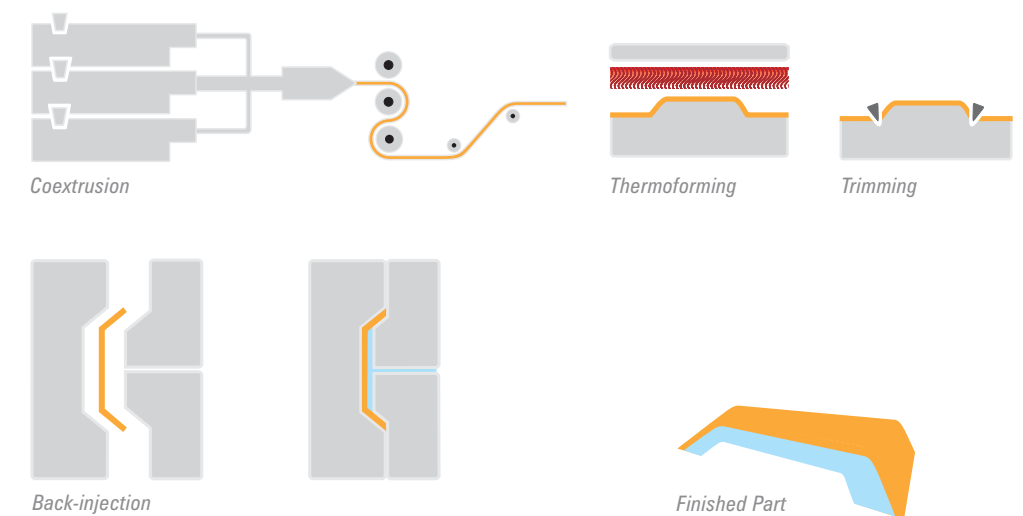


Series applications:

- BMW MINI - Interior trim and door parts in White-Silver, Anthracite and Edition colours: Piano Black, Royal Grey, Space Blue. Start of production 2004
- BMW 1 series - Interior trim and door parts in Gomera Black with silk-screen printing. Start of production 2004



Production process Back-injection – schematic drawing



senotop Printbase - films for interior application

Printbase - films can either be silk-screen printed or used as carrier for thin decorative films. A multi-layer construction guarantees top thermoforming and surface quality.