



- 1 SEM of nanostructures AR-plas[®] on Ultrason[®] and PMMA.
- 2 Transmission of PMMA with and without antireflective nanostructure AR-plas[®].
- 3 Ultrason[®] sample, right half side with antireflective nanostructure AR-plas[®].

AR-plas[®] ANTIREFLECTION OF PLASTICS BY PLASMA ETCHING

Motivation

Modern optical applications need solutions for providing polymer surfaces with antireflective properties. But, optical interference layers deposited by vacuum deposition are not effective for antireflection of curved lenses or micro structured surfaces.

Our solution

- generation of antireflective nanostructures by low-pressure plasma treatment
- excellent antireflective properties for oblique incidence of light
- surfaces are resistant for cleaning
- rapid and cost-effective technique

Our offer

- preparation of samples including small batches
- granting of licenses to apply the patented technology AR-plas[®]

Scope

- suitable materials (amongst others): PMMA, Zeonex, Zeonor, Ultrason, PET, TAC, Trogamid
- injection molded plastic parts
- complex shaped optics produced by hot-embossing (fresnel lenses)
- plastic films
- lacquers

The technology is suitable for plastic parts with only moderate requirements concerning the mechanical properties or encapsulated optical components.

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