



**Introduction of
Asahi Glass Co., Ltd. &
AGC Chemicals Europe, Ltd.**

**THE
AGC
GROUP**

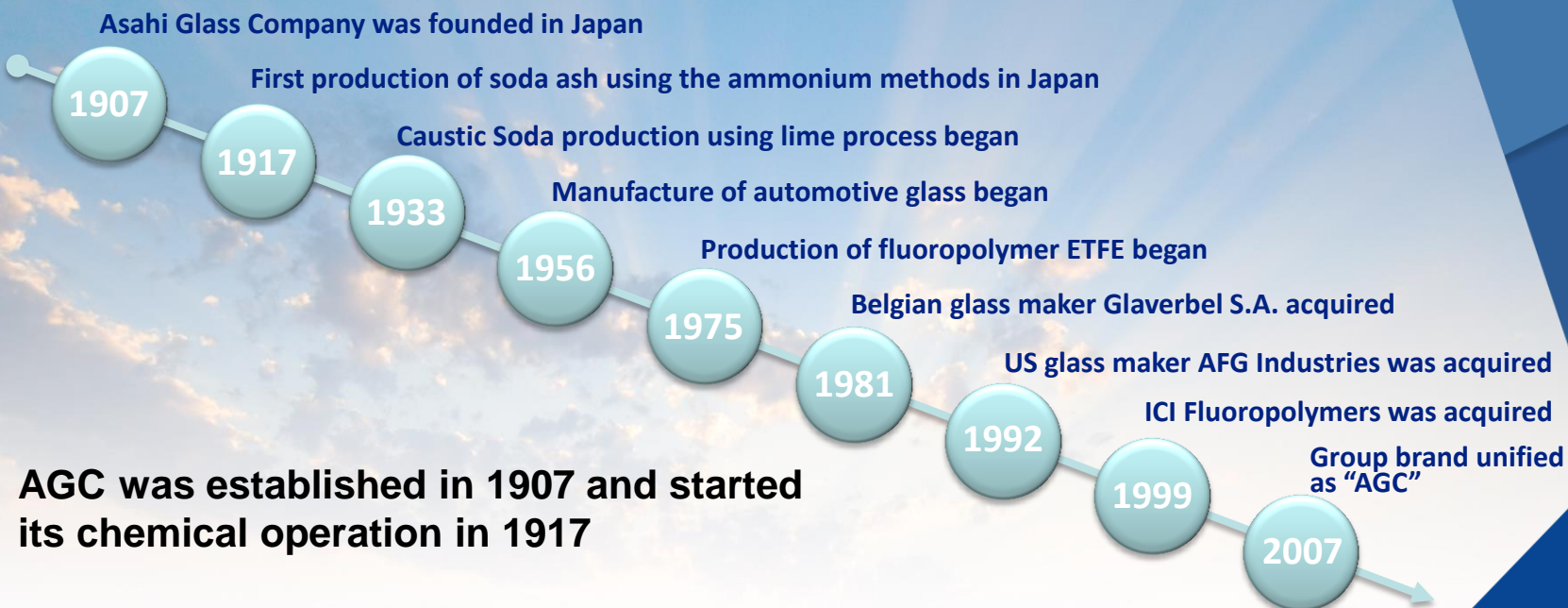


Key Facts About AGC Group

- President & Chief Executive Officer: Takuya Shimamura
- President Chemical Operations: Masao Nemoto
- Business Units: Glass, Chemicals, Electronics & Ceramics
- Net sales 2015: € 9.8 billion (1,326 billion yen)
- Companies in the AGC Group: 204 (166 outside Japan)
- Global No. 1 producer of float glass
- Global No. 1 producer of automotive glass
- Global No. 1 in fluorinated resins (Fluon[®] ETFE)
- Global No. 2 for TFT (thin film transistor) LCDs (liquid crystal displays)

All information as
per AGC's
financial year 2015

History of AGC Group



Business Domains of AGC Group

SALES BY GROUP

Automotive Glass

27%



Flat Glass

25%



Electronics & Ceramics

24%



Chemicals

24%



All information as per AGC's financial year 2015

Product Range from AGC Chemicals Europe

Fine Chemicals

Main Applications:
Pharmaceuticals
Agrochemicals

Fine Silica

Main Applications:
Chromotography
Cosmetics



AsahiGuard®

Main Applications:
Waterproof and
stain-repellent
coating of paper,
food packaging,
textiles, apparel,
automotive parts,
synthetic & natural leather



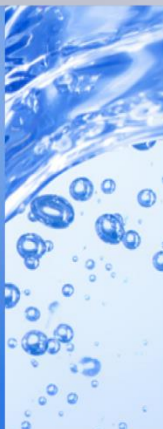
Lumiflon®

Main Applications:
UV/corrosion-resistant
coatings for bridges,
buildings, ships,
aeroplanes, windmills



Solvents

Main Applications:
Precision cleaning
(metals, plastics)
Drying agent
(after cleansing with
alcohol or hydrocarbons)
De-watering
(after aqueous cleaning)



Low GWP Refrigerant Gases

Main Applications:
Air conditioning
Refrigeration



Flemion® Ion Exchange Membranes

Main Applications:
Desalination
Chemical separation
Electrodialysis



Product Range from AGC Chemicals Europe

PTFE
Resins
Compounds
Micropowders
Dispersions

Main Applications:
Seals, Washers, Tape
Semi-finished parts
Thermoplastic Blends
Dry Lubricants
Cookware Coating
Glasscloth Fabric Coating




ETFE
Resins
Compounds
Powders

Main Applications:
Wire & Cable Insulation
Moulded parts
Packings
Corrosion-resistant Linings
Fuel hose & Coolant hose
Film




PFA
Resins
Compounds
Powders

Main Applications:
Wire & Cable Insulation
Moulded parts
Packings
Corrosion-proof Coatings
Film



AFLAS®

Main Applications:
O-Rings
Cables
Packings
Seals
Pump Covers



Fluon® ETFE FILM

Main Applications:
Architectural Film
Release Film

F-CLEAN®
Main Applications:
Greenhouse film



Polyols for Polyurethanes

Main Applications:
Heat & noise insulation
Coatings
Adhesives
Sealants
Elastomers





ETFE Film for prestigious constructions

AGC 化学品カンパニー
旭硝子株式会社

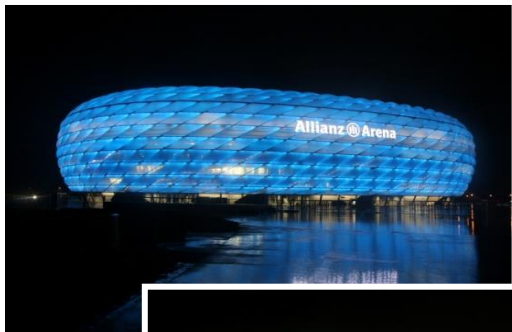
Mark Robles
Senior Product & Marketing Manager
ETFE Film
AGC Chemicals Europe



AGC Chemicals

Chemistry for a Blue Planet

Examples of ETFE Film Applications



- **Stadium Requirements**

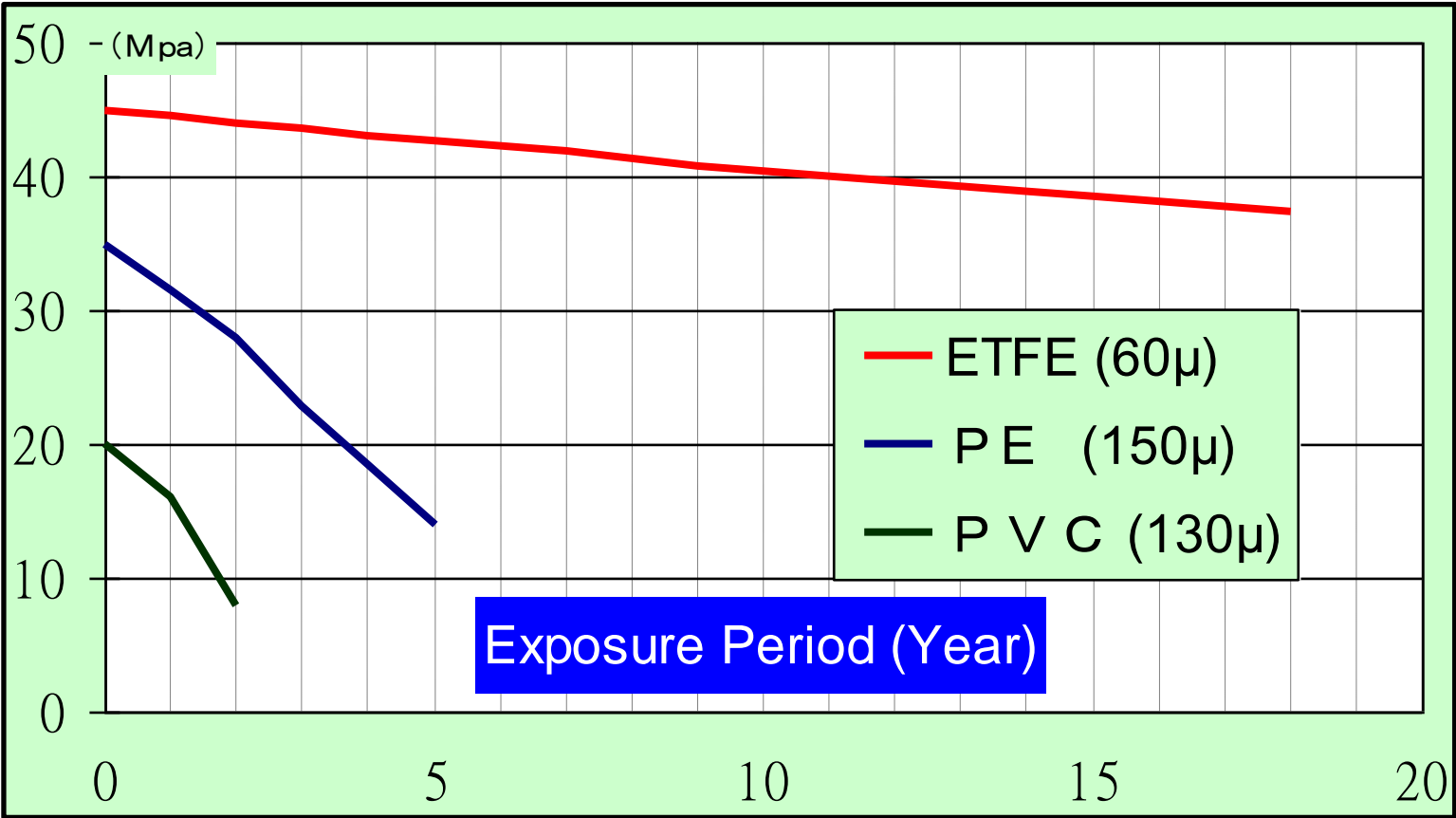
- UV (Ultra Violet) light transparency (over life of the structure)
- Transparency – Grass growth, evening illumination

- **Construction Requirements**

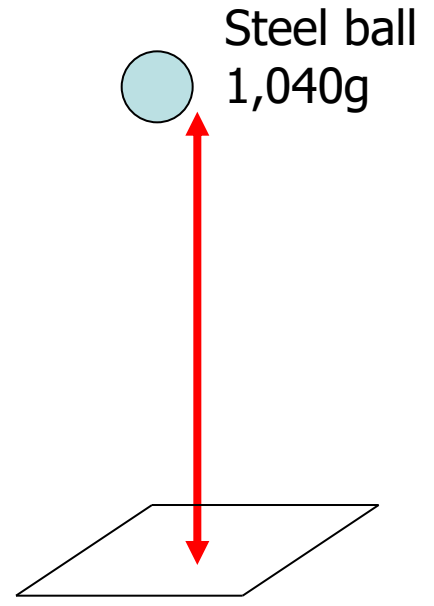
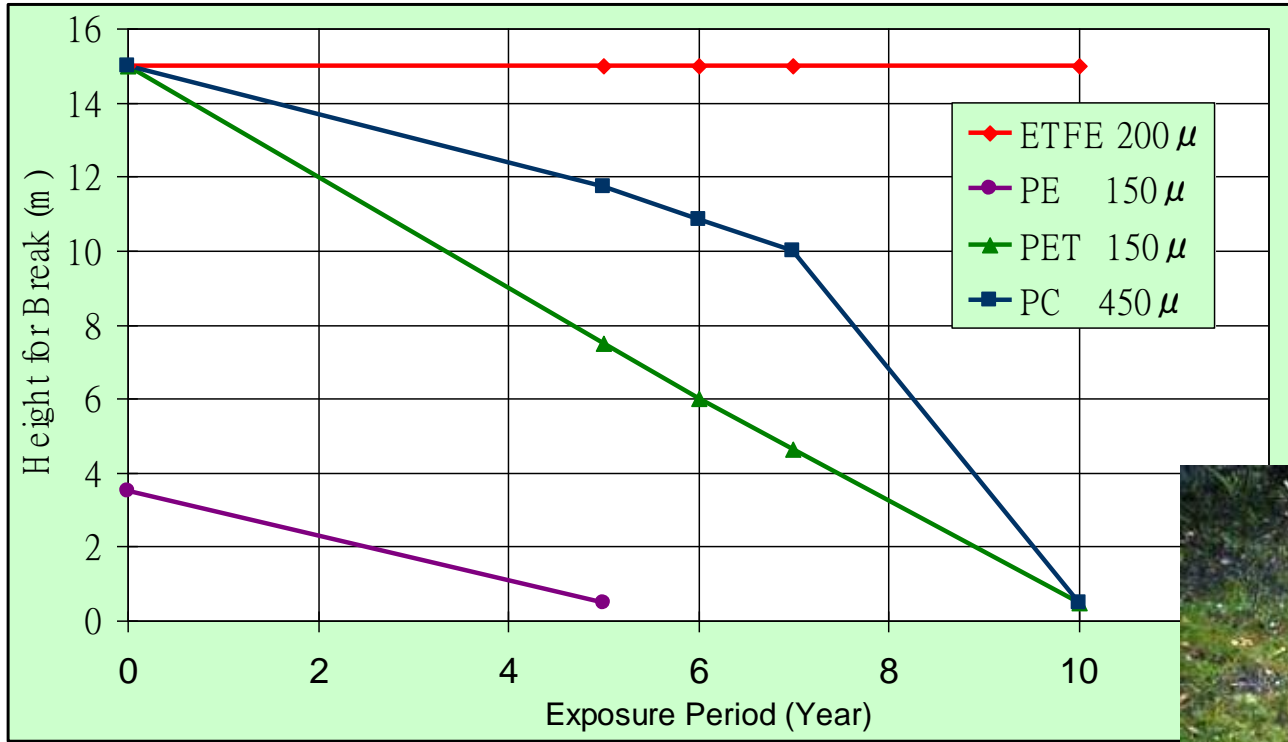
- Mechanical Performance (over life of the structure)
- Resistance to environmental agents
- Light weight (eg. glass) – lighter support structure

- **Design Requirements**

- Flexibility – shape effects
- Thermal Insulation – Water Cube Swimming Complex
 - Inflated ETFE film will reduce heating energy costs
 - Lighting costs reduced
 - No artificial lighting during the day



Mechanical strength -drop ball test-



How strong is ETFE Film?



