

Last update: October 2022

TECHNOVATION CENTRE | Safety Rules





During your visit, please stay within view of your group



Safety shoes are mandatory in labs



Smoking is not allowed Zones for smokers have been fitted out outside the building.



No pictures, please



Alarms

- 1. Discontinuous alarm : emergency situation, be ready to evacuate.
- 2. Continuous alarm : Evacuation of the building and gathering in the car park south

AGC Glass Europe CONFIDENTIAL



AGC Group : Worldwide

Main Segments | Glass Segment

AGC Glass Europe
History | Main Segments | Figures

Technology & Innovation
AGC T&I Worldwide | AGC Technovation Centre

AGC WORLDWIDE Main Business Segments



Our motto

Your dreams, our challenge.



AGC GROUP | Ambidextrous Management



Core Business



Establishing long-term, stable sources of earnings by increasing competitiveness of each business



Architectural Glass



Automotive Glass



Display



Ceramics



Chlor-Alkali / Urethane



Fluorochemicals & Specialty

Strategic Businesses

Create and expand highly profitable businesses that will become future pillars by using AGC's strengths in high-growth fields



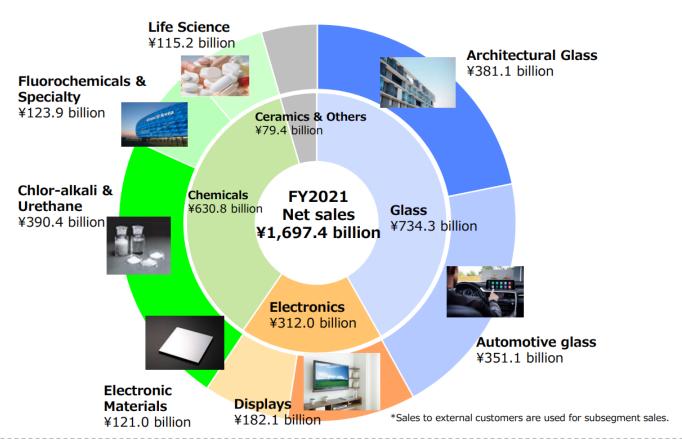




AGC GROUP | Business Overview



8



AGC GROUP | General information





Sales: 13.068 million € *

Operating profit: 1.587 million € *



56.000

employees*



206 companies in over 30 countries



Headquarters and stock exchange listing: Tokyo

AGC WORLDWIDE Glass Segment

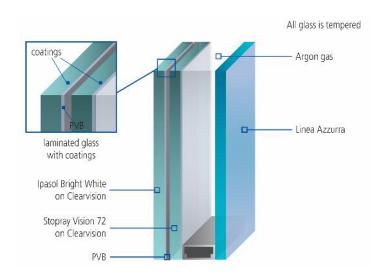


AGC GLASS WORLDWIDE | Building « look beyond together »





Lakhta Tower, St. Petersburg, Russia



The Lakta Tower, its façade is formed of double-glazing units incorporating three different glass components, with a total estimation of **450,000 sqm**

AGC GLASS WORLDWIDE | Automotive « look beyond together »











On-glass Antenna design, seamless integration of antennas in glazing to preserve the vehicule design.

ATC anechoic chamber, Gosselies, Belgium

The anechoic chamber is an advanced facility for measuring the quality of reception and transmission of antennas.



The Americas

- 3 float plants
- 2 primary transformation& patterned glass plants

- 4 automotive plants
- 9 AVO plants
- ARG network
- 1 R&D Centre
- 3.200 employees

Europe (incl. North Africa)

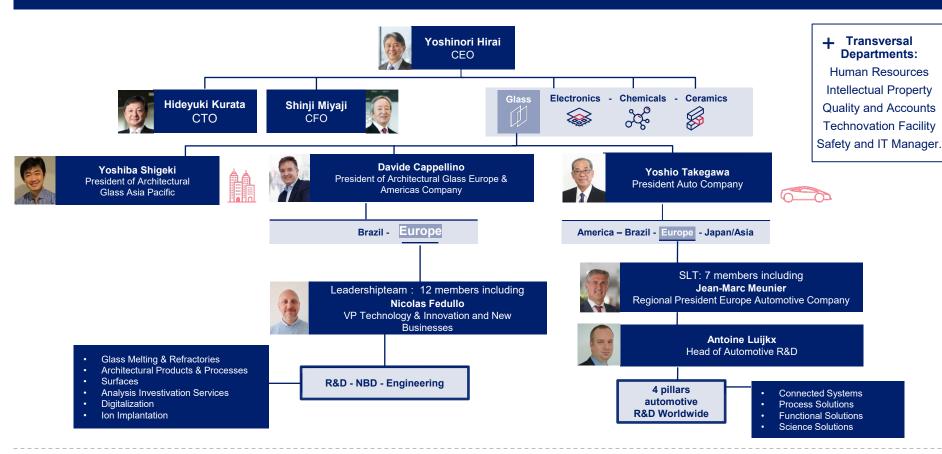
- 16 float plants
- 28 primary transformation& patterned glass plants
- 40 processed glass network
- 7 automotive plants
- 11 AVO plants
- ARG network
- 1 R&D Centre
- **15.200** employees

Asia / Japan

- 10 float plants
- 11 primary transformation& patterned glass plants
- 17 processed glass network
- 7 automotive plants
- 17 AVO plants
- ARG network
- 3 R&D Centre
- **12.900** employees

AGC GLASS WORLDWIDE Global organization

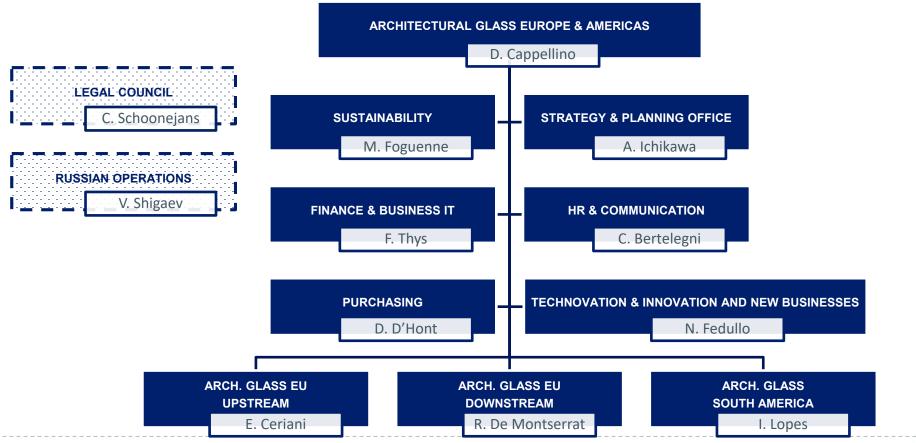




AGC Glass Europe CONFIDENTIAL

AGEA - Architectural Glass Europe & Americas Company





WE LEAD THE WAY FOR A BETTER WORLD



Glass will play a central role in the world of tomorrow And we want to play a leading role in the future of glass

Our ambition is to be the most profitable player in each of our business segments

BE THE BEST PLAYER IN OUR CORE BUSINESSES

We will focus resources, innovate, and build the best supply chain to become the most reliable and the most profitable player in each of our markets.

INTEGRATED VALUE CHAIN APPROACH

We will continue optimizing our upstream/downstream approach (balance between primary, processing, distribution, new businesses) in every market to maximize profitability and resilience.

QUICK INNOVATION, WITH A PURPOSE

We will improve speed and efficiency of innovation on products, business models and processes. We will focus innovation efforts where we can be winners.

LEADER IN SUSTAINABILITY

We will be the leader in our industry in the transformation of markets and technologies driven by sustainability.

BUSINESS EXCELLENCE AND WINNING CULTURE

We will establish a culture of challenge, courage and obsession with continuous improvement.

AGC EUROPE AGC Glass Europe



Our motto



We lead the way for a better world





AGC Glass Europe | A pioneering History



1961	Glaverbel, born from the union of Glaver and Univerbel	2002	Glaverbel joins the AGC worlwide organisation
1981	Asahi Glass Company takes over Glaverbel	2007	One global brand, AGC. Glaverbel becomes AGC Flat Glass Europe and AGC Automotive Glass Europe
1988	Launch of expansion strategy in Western Europe	2009	One company, AGC Glass Europe
1990	First West European industrial company to invest in Czech Republic	2012	Alliance with Interpane (Germany, Austria, and France)
1997	First West European glassmaker to invest in Russia	2015	Acquisition of NordGlass (Poland)
1998	Acquisition of PPG's European Glass business (France and Italy)	2019	Opening of AGC Automotive Induver Morocco's plant

AGC Glass Europe | 2 Main Segments



Building & Industry



- External glass
- Decorative glass
- Glass for high tech applications

2 Automotive



- Original Equipment Manufacturer (OEM)
- Automotive Replacement Glass (ARG)



N°1

In RU, Central Europe, Benelux

>100

Over 100 sites from Portugal to Russia

~1/4

Car & buildings are coated with AGC's glass



15.200 people*



R&D Center and Headquarters in Belgium



Worldwide sales network

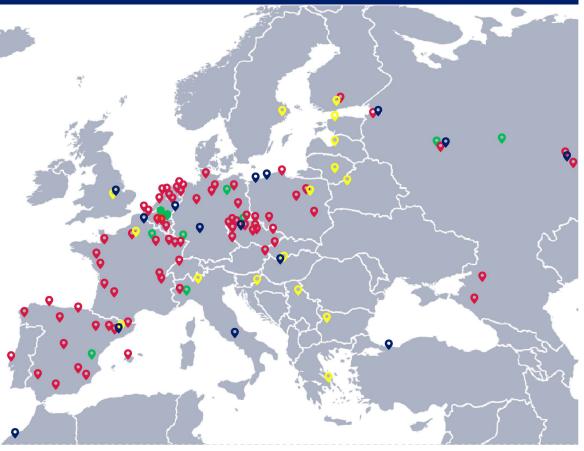
(*) End 2021

AGC Glass Europe | Industrial, distribution & sales network





- Float Plants
- Å
- Processing/ Distribution (Building and Industrial)
- Sales agencies (Building)
- <u>~~</u>
- Production OEM and ARG (Automotive)



TECHNOLOGY & INNOVATION AGC T&I Worldwide







TECHNOLOGY & INNOVATION | T&I vision





https://www.agc-glass.eu/en/innovation

The **world** around us is **changing fast**: smarter greener cities, advanced connectivity, and new models of mobility.

By reinventing glass and continuously improving what we can do, AGC makes sure that glazing is a central part of enabling these technological revolutions.

Some of these glass advances are already shaping our future way of living, moving and communicating. Your dreams are our challenge.

TECHNOLOGY & INNOVATION | Worldwide R&D



Ypsilanti, MI

Aniche, FR Development Process Auto

Gosselies, BE

Mol, BE Development Process

Lauenförde, GE

Yokohama Technical Centre (YTC)

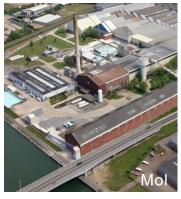


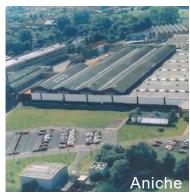
TECHNOLOGY & INNOVATION | Europe R&D











TECHNOLOGY & INNOVATION | Technovation center





TECHNOLOGY & INNOVATION AGC Technovation Centre



Our motto

Towards a sustainable future, with people as our best assets.



TECHNOVATION CENTRE Some T&I projects



Products development

- Clearsight
- Fineo

Service

Coating on Demand

New Technology

Thin glass processing

Engineering

Cold repair Klin

Environment

Zero CO2 Furnace

NBD

- Kezo
- Digitalisation



Markets

35

TECHNOVATION CENTRE Automotive portfolio



To support a customer portfolio getting larger

- OEMs, through classical sales channels: Daimler, Toyota, BMW, Volvo, Stellantis...
- Aftermarket, including end-customers, through our Automotive Replacement Glazing (ARG)
 Division
- Tier 1s, insurance, mobility providers, through our internal startups:







Wide Eye



Jack



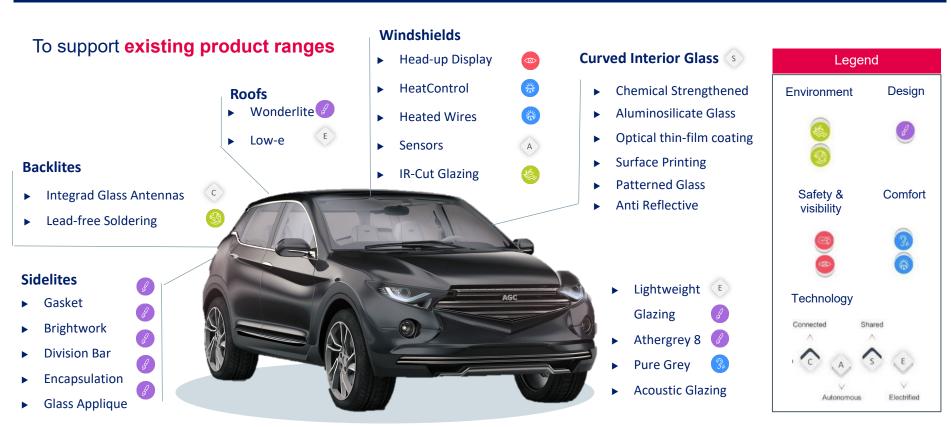
Antenna services



Pulsaart

TECHNOVATION CENTRE Automotive portfolio





TECHNOVATION CENTRE | Automotive portfolio



And create products & services of tomorrow

- Connected services
- Next generation p-polarized HUD (Head Up Display)
- Interactive Applique solutions
- New switchable glass generation







Interactive Applique

Head Up Display





Intellectual Property

- 43 patents (Patent Stats) per year
 22 Automotive 21 Architectural Glass
- 271 collaboration & confidentiality agreements



Visits of the Technovation Centre

- 217 visits for 636 visitors
- 70 visits of the discovery room for 408 visitors



Human Resources

- 285 people: 194 researchers & 91 technicians
- Increasing set of skills & competences
- 25 Internships 7 VIE
- 22 nationalities working at ATC
- Diversity: 81% men 19% women
- Entrepreneurship bootcamp

AGC GROUP'S BRAND STATEMENT



Never take the easy way out, but confront difficulties
Trust is the best way to inspire people
Strive to develop technologies that will change the world
A sense of mission leads us to advance

For more than a century, AGC has been guided by these founding spirits. Our unique materials, solutions and reliable partnerships have facilitated leading innovations across diverse industries and markets.

Today, by working with others to combine knowledge and advanced technology, we help make ever greater achievements possible, and bring bolder ideas to life

Your Dreams, Our Challenge

AGC Glass Europe CONFIDENTIAL

