

AGP  
EGLASS

The sky is the limit.

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## Introduction

Timelessness, elegance, strength.  
Brightness, coolness, lightness.  
It is glass in motion.  
It is AGP eGlass.

When glass becomes smart, it improves all of its qualities and it opens up possibilities in terms of form and function. With AGP eGlass we enhance passenger experience and ultimately the smart customers' buying decision: safety, entertainment, extra comfort and superior design.

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## About AGP Group

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We are paving the way for the automotive trends of the future. Part of it is our state-of-the-art automated manufacturing base in South America, with 1,800 employees and 500 engineers from 15 different nationalities. We as AGP provide innovative and customer-centric methods to bend intelligent high-tech

glass into complex shapes. Our seven core technologies are the key for rising demands in comfort, connectivity, emission, legislation and safety requirements, while addressing the complex technical and design needs of future mobility.

## AGP Group key facts

### HEADCOUNT

Employees - 1800  
Engineers and technicians - 500  
Nationalities - 15

### MARKETS

Automotive  
OEM - worldwide  
ARG - worldwide

### CERTIFICATIONS

ISO 9001 : 2008  
ISO 14000  
ISO/TS 16949

### R&D

50 patent applications per year

### TECH CENTER

Security glazing - Colombia / Brazil  
eGlass - Perú  
eGlass 2018: USA and Germany

### MANUFACTURING

Lima, Peru  
Curitiba, Brazil  
Bogotá, Colombia

### SIZE (UNDER ROOF)

27,000 m<sup>2</sup> eGlass  
50,000 m<sup>2</sup> BRG

### PRODUCTION CAPACITY

1,000,000 Ultralite Windshields / Panoramic Roofs per year  
18,000 BRG carsets per year  
Largest production capacity for automotive security glazing in the world

### SPECIAL FEATURES

Highly automated eGlass line  
Largest IOX tank in the auto industry  
Press and sag bending  
Technologies up to 4m<sup>2</sup> parts



## AGP eGlass our DNA

### INNOVATIVE

Constant pursuit of new and improved technologies to provide better service and promote the disruption of the industry.

### AGILE

Quick response times, quality and delivery, inspire trust and generate value to customers.

### FLEXIBLE

Expert capacity in small or large volumes and in simple or complex shapes. We co-develop with customers in order to overcome the most adverse obstacles.

### CLIENT FOCUSED

Service and customer experience-focused processes and products: All our efforts push towards giving the best results for our clients.

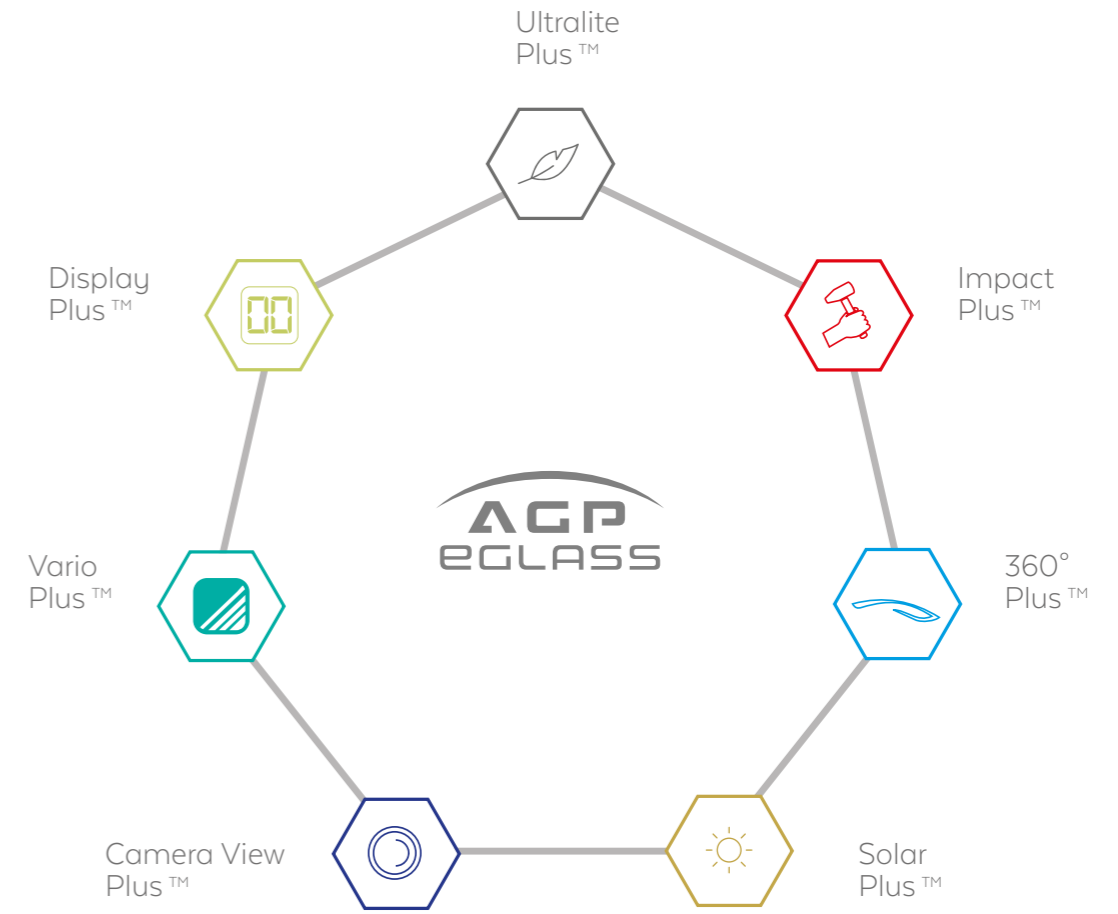
### ENTREPRENEURIAL SPIRIT

Creating opportunities for growth by pushing the limits of what is standard in the industry.

## Core Tech Solutions

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Tailored for  
the future of mobility





## Ultralite Plus™

It isn't just light



**35% lighter glazing | larger HUD | faster acceleration |  
lighter window components | better handling |  
faster defrosting | advanced optic | reduced CO2 emissions**

We support the fulfillment of ambitious design and performance mobility challenges:

- enables more efficient and lightweight car constructions
- improves the car's general performance (acceleration and energy efficiency)
- Soda Lime Glass | Alumino Silicate Glass hybrid composition – an advanced chemical strengthening process
- maintains good acoustic and stiffness performance

Up to 35% lighter glazing





## Impact Plus™

Enhanced passenger safety



up to three times more resistant  
than standard laminated glass |  
reduces probability of breakage

We enable car manufacturers to build cars with high safety standards, while providing all constructional comfort.

- meets ANSI Z26, ECR43 and EN356 requirements
- top performance in high and low temperatures
- outperforms thicker standard laminated glass without compromising stiffness



Lighter and stronger

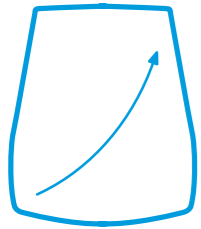






## 360° PLUS™

Maximum freedom when designing the car of the future



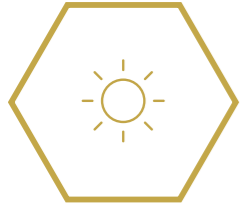
**largest windshields ever installed in a passenger vehicle | advanced bending capabilities for up to 4 m<sup>2</sup> glass surface through press bending technologies**

We make incomparable designs possible. Due to our technology, we are able to produce the most complex glass on the market in large sizes.

- advanced bending technologies for complex shapes
- bending depth of up to 400 mm
- minimum bending radius of around 100 mm
- tight surface tolerance to achieve perfectly fitted shapes
- gives the driver and passengers a feeling of openness and a panoramic view

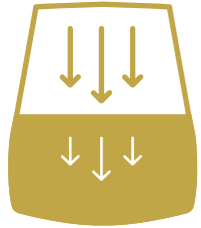
Design freedom





## Solar Plus™

Thermal comfort and full connectivity



**TTS (Total Transmitted Solar-Energy) of 45% with non-metallic configuration for windshields | TTS of 22% with non-metallic configuration for dark tinted rear sidelites, backlites or glass roofs**

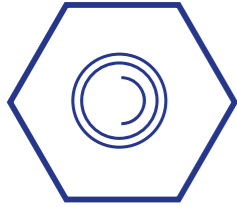
We enable superior solar performance without compromising car connectivity by using non-metallic coatings for cabin comfort.

- no EMI (ElectroMagnetic Interference)
- less AC power consumption
- low E coatings can be applied to the surface 4 for thermal comfort all year round



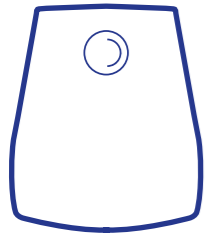
Comfortably connected





## Camera View Plus™

Clearest view – facing the future



**ready to meet the requirements of  
the most advanced autonomous driving systems**

We develop best-in-class windshields based on the specifications of our clients. We individually test them to provide demonstrable results:

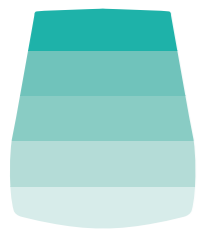
- optical power under 100 millidiopters
- tailored for every system and customer
- available in the industry's largest and most complex shapes

Advanced optics enable highly automated driving systems



## Vario Plus™ INVISIBLINDS

Privacy through individually controllable zones



multiple transparency  
adjustment zones

We guarantee the ultimate comfort for every passenger,  
in all situations.

- invisible blinds
- gray color for stunning elegance
- controlled by touch

The passenger sets  
the tone



## Display Plus™

Your field of view is the focus



information suiting your needs |  
modern, clean & beautiful

We turn glass into your personal control center:

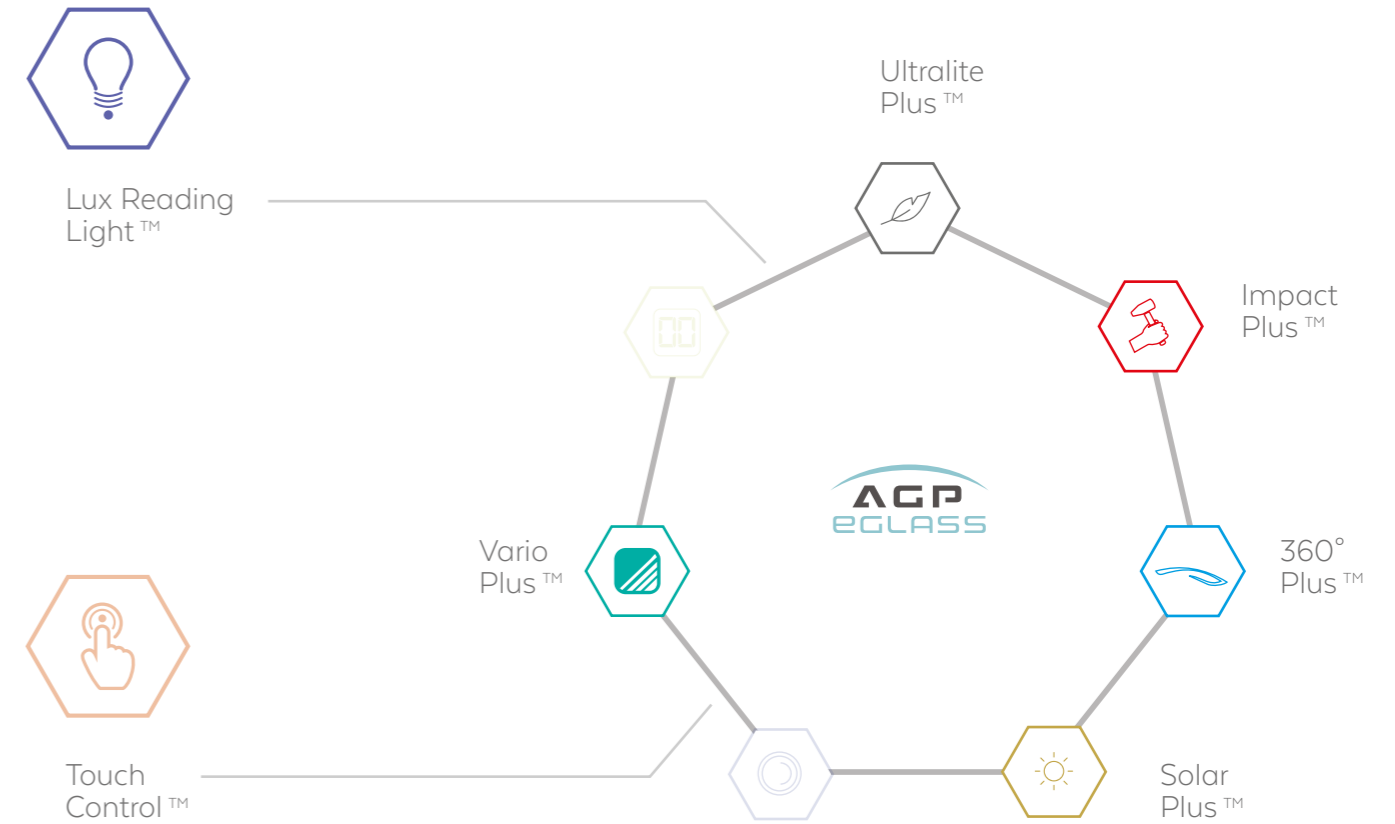
- transparent display
- presents data without requiring the user to refocus
- centers the field of view
- easier, more intuitive functionality increases the driver's safety

Modern solutions  
for car design



# AGP Vario Plus Sky

## Advanced roof technology





## Vario Plus Sky

The Vario Plus Sky is the new pinnacle of automotive glazing. The next dimension of panoramic roofs. A grand experience giving you the feeling of openness and empowerment – as if you could actually touch the sky.

Decide at any time, if you want to feel the sunlight or enjoy privacy under the elegant roof. By touch and through individually controlled integrated blinds you choose ambiance and reading light. Ultralight as it is, Vario Plus Sky reduces CO2 emissions and improves car handling.

It can go up to 4 m<sup>2</sup> in surface and allows complex shapes. It provides remarkable headspace to let you feel absolutely free. In Vario Plus Sky you will find the engaging power of glass redesigned for the needs of future mobility. Beyond that, it is outstandingly beautiful – in its appearance and its usability.

Let's create the future of mobility, together. Get in touch with the benefits of Vario Plus Sky.

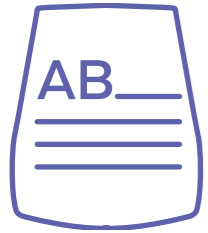
The sky is the limit.





## Lux Reading Light™

Light without a switch



panoramic star panel | independent reading  
lights for cabin comfort and passenger empowerment

We let you touch the stars.

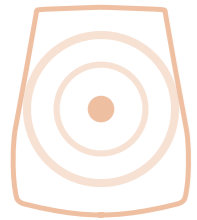
- invisibly embedded in the glass panel
- switched on by a simple touch

As if you could  
touch the sky



## Touch Control™

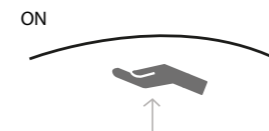
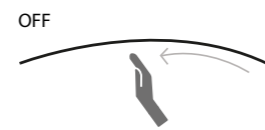
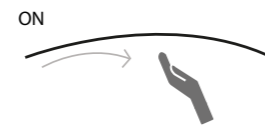
Feel the difference



HUE control | light switch | personal zone conduction

We put total control into your hands.

- no mechanical components needed
- embedded touch sensors
- handled by a simple touch
- empowering experience, modern and individualized



Power at your fingertips



We are ready for you.





The sky is the limit.

We are believers.

We are enablers.

We are AGP eGlass.



Notes







[www.agpglass.com](http://www.agpglass.com)