



Glaston Corporation Capital Markets Day 2021

CMD 2021

26 August 2021

glaston
seeing it through®

Heat Treatment Technologies highlights



Meet
Miika
Äppelqvist

SVP, Heat Treatment
Technologies



Heat Treatment Technologies

Heat Treatment Technologies includes a wide range of machinery, services and upgrades for glass **flat tempering, bending, bending-tempering and laminating lines**.

Glaston is the most known tempering line manufacturer in the market and the fastest growing manufacturer of laminating lines.

We differentiate ourselves in the market through **industry-leading know-how** to provide our customers with **the most innovative technology** and **the lowest operating costs**.



The world's leading safety glass machine manufacturer

Key trends in Heat Treatment market 1/2

The Edge at Hudson Yard, NYC

Increasing amount
of glass surface for
increased daylight
and well-being

Structural
interlayers

Laminated +
tempered coated
glass insulating
glass units

Coated glass with
large glass surface

Triple-layer
laminates



Key trends in Heat Treatment market 2/2

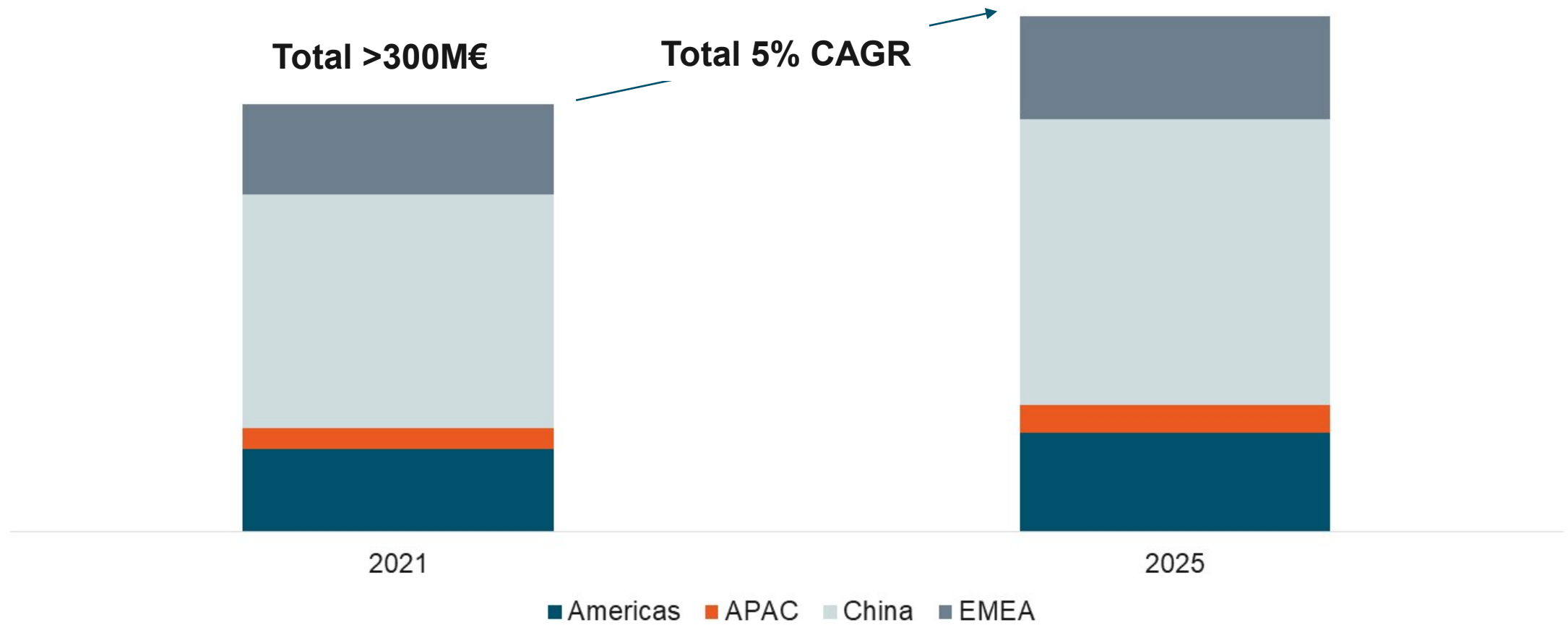
Growth impact slowing down

- ➡ **Safety glass regulations for tempered glass** exist already in a majority of the countries where glass is widely used.
- ➡ **Energy-efficient coatings** have become mainstream and development reaching boundaries of physics; Limited number of new coatings to drive tempering capability investments.

Strengthening trends

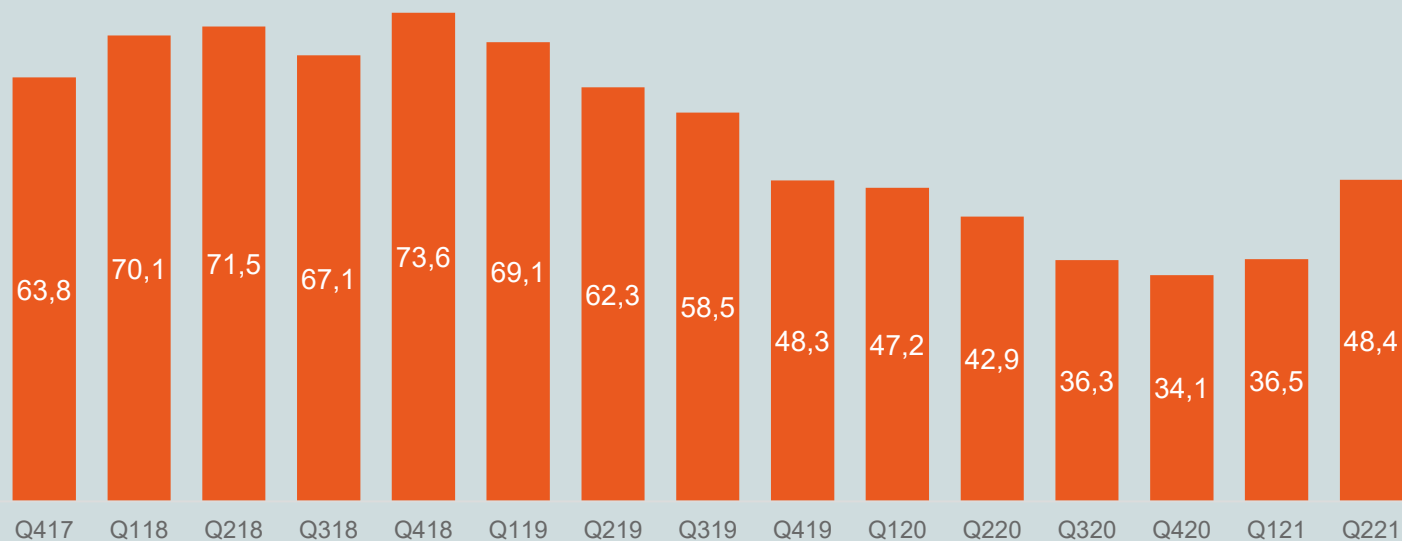
- ↗ **Higher degree of automation** to support growing profitability pressure. (currently large scale automation is used only in standardised production)
- ↗ **Laminated glass** is the **fastest growing** glazing type both in residential and commercial buildings. The growth is supported by **regulation** changes.
- ↗ **Fire rated glass** in buildings increases but is currently a small niche. Growth is supported by **regulation** changes.
- ✕ **Larger glazing** drives new size capability investments.
- ↗ China five-year-plan for **Solar-energy**

Addressable Heat Treatment equipment market: size and growth *



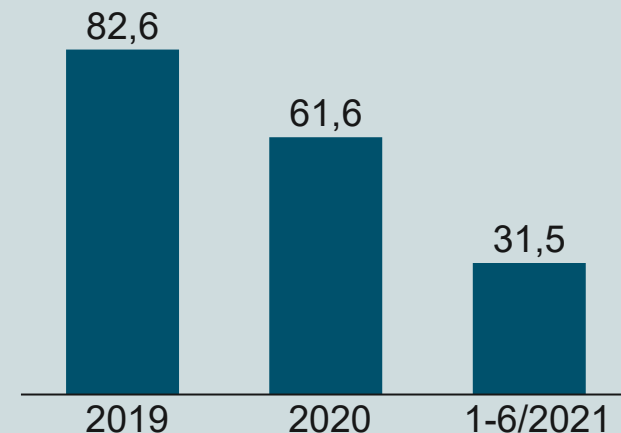
Technology order intake & HT segment net sales and EBITA

Machine order intake HT Technologies, rolling 12 months [M€]

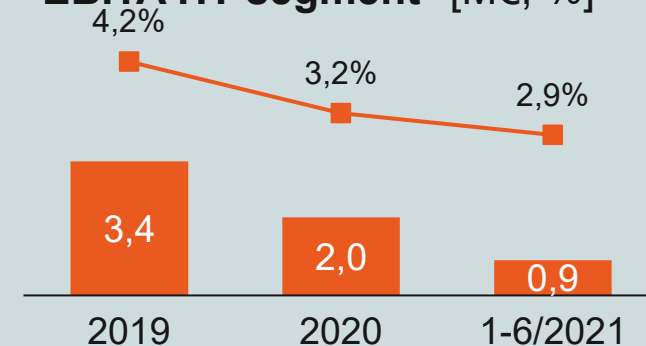


*HT segment: 2020 & 01-06/2021 including Emerging Technologies organization change

Net sales HT segment* [M€]



EBITA HT segment* [M€, %]



Heat Treatment

Growth plan actions into 2025

1. **Autopilot** development and commercialisation for tempering and lamination

- We reduce our customers' operating costs, increase quality and mitigate risks through automation.

2. **Grow** core and addressable segment

- We widen our offering to new segments through new products and solutions – in tempering and in lamination
- We also widen our offering to adjacent processes, e.g. loading and unloading solutions and measurement devices.

3. **China: Solar and Architecture**

- We capture our share of fast-growing Solar and Architectural markets in China through development of lowest operating cost solutions.

4. **Optimise** for cost-efficiency and quality

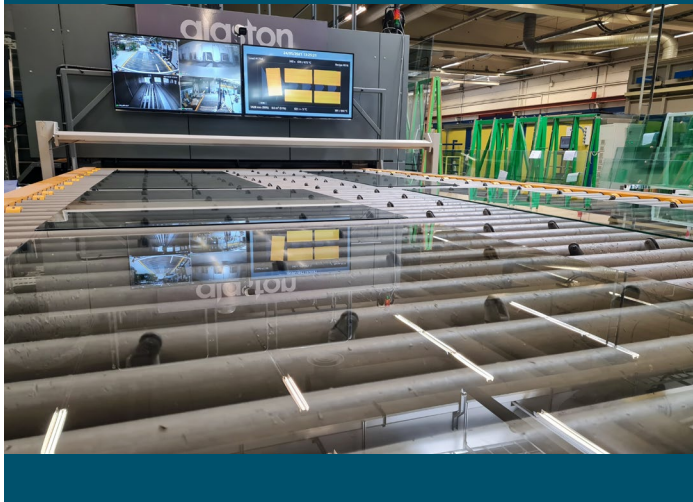
- Develop new installation concepts optimised for cost efficiency and quality
- Optimise our solution's cost-performance ratio



Heat Treatment technologies & innovations

Flat tempering

- Revolutionise tempering through Autopilot



Flat laminating

- The most advanced laminating technology in the market – widest capability and highest automation



HT Automotive

- New HTBS tempering & bending technology for the most complex glasses
- New Matrix Evo windshield/sunroof bending technology to meet market needs





Why to buy Glaston Heat Treatment equipment?

- For the past 50 years Glaston is known as the **reliable partner** with **reliable, high-performance, quality** machinery – Seeing it through
- Our **worldwide service network** offering **lifecycle service solutions** is the basis for a sustainable and long-term customer relationships
- **Autopilot & automation strategy** – one of the leading reasons (already today) for opting for Glaston tempering line
- New Glaston **comprehensive product portfolio**





> www.glaston.net

Thank you!

glaston
seeing it through®