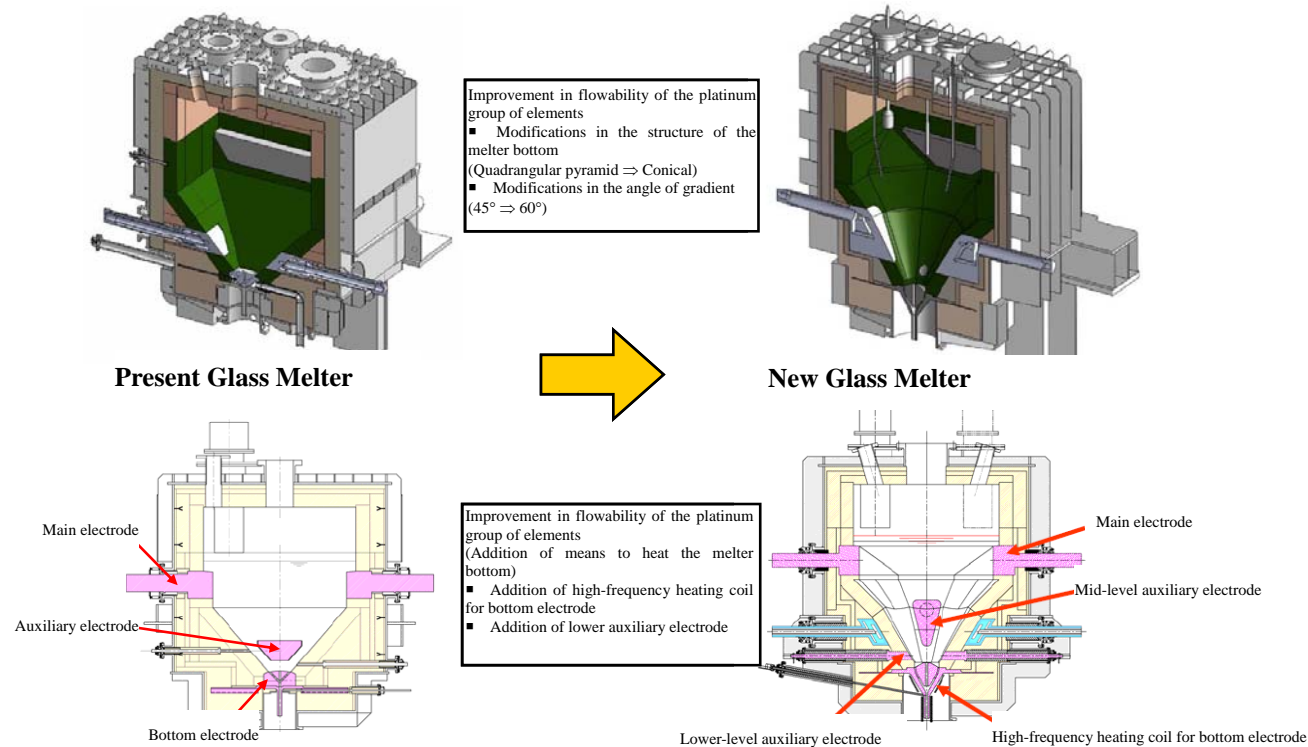


Regarding the development status of the new glass melter

1. Purpose of Development

- Development of vitrification technology with a higher performance
 - ① Improvement of the challenge areas of the current glass melter (Flowability of the platinum group of element, etc.)
 - ⇒ Development of the new glass melter
 - Development of the structure of a glass melter such that it can control the settling or sedimentation of the platinum group of elements, and methods for heating the bottom of the melter, etc.
 - Development of a new glass melter on a real scale based on what is mentioned above
 - Acquisition of basic data for complementing development
 - ② Further improvement in performance (Decrease in the amount of vitrified waste and improvement in the operating ability of the melter)
 - ⇒ Development of a new glass material
 - Development of a glass material which can fill (high filling) much more high-level liquid waste
 - Development of a new glass material which can suppress the generation of the yellow phase (low viscous fluid)
 - Development in cooperation with Japanese universities and research institutions under the All Japan Framework

2. Development of the new glass melter (Design concept for the structure of the melter bottom)

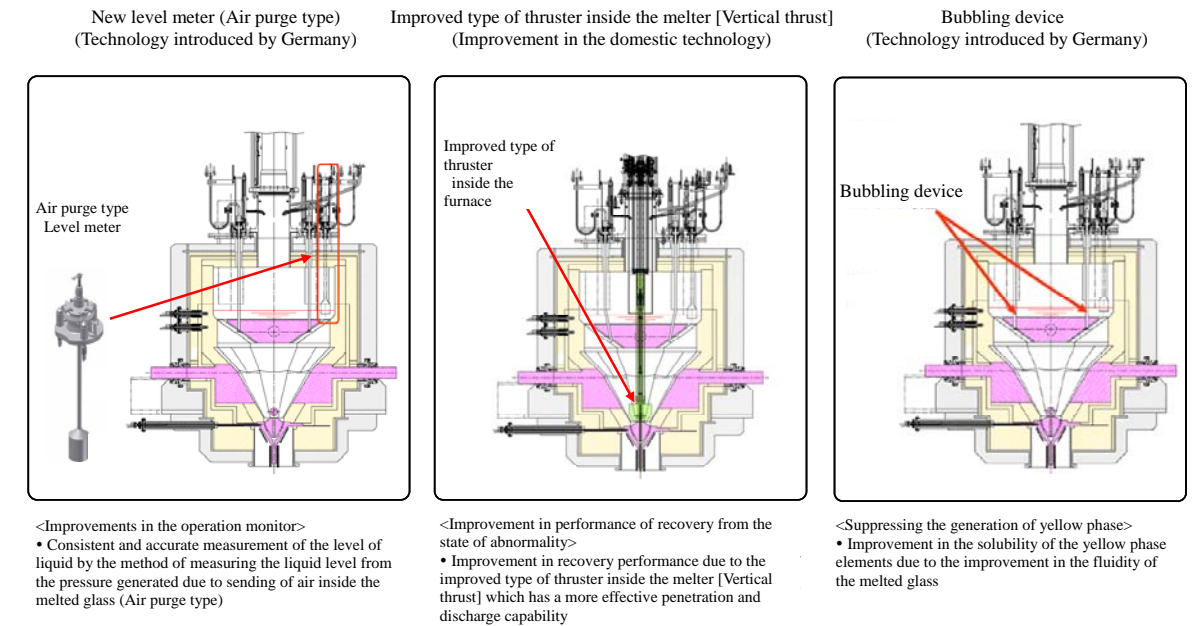


3. Development of the new glass material

- Development of a new glass material (glass matrix) along with the development of the glass melter
 - ① Development of a glass material which can take in much more high-level liquid waste
 - ② Development of a glass material which improves the solubility of the waste elements contained in the high-level liquid waste into glass (Controlling the yellow phase)

4. Development of Element Technology

- Development of a technology that improves operation monitoring or improves the recovery from the state of decreased flowability
- Technology is planned to be gradually introduced in the order of completing the development.



5. Overview of the glass vitrification technology development facility

- Research & development base to develop the glass melting technology
- Remotely operability confirmatory tests & education and training of the operators, etc.
- Constructed inside the reprocessing plant site so that the information or findings obtained at this facility are promptly fed back in a real machine

<Building overview>

- Construction site: Inside the reprocessing plant site
- Construction area: Approx.5,200m²
- Total floor area: Approx.9,500m²
- Scale of the building: Approx.91m x Approx.55m (5 stories above the ground)

- Start of construction: May, 2011
- Completion: October, 2013

<Main facilities>

- Testing area where the solidification cell is simulated
- Remote maintenance facilities
- Simulation area for disassembling the melting furnace



First floor plan of the glass vitrification technology development building

