**ABSTRACT**

Diploma project of the “Specialist” degree: «**Plant for the production of flat glass for the thin range**» / Igor Sikorsky Kyiv Polytechnic Institute; Supervisor: *Golembiovskyi A.O.*; Student: *Ivasyuk O.I.*, ХМ–61с group.

Explanatory note: 116 pages, 9 figures, 33 tables, 67 sources, 7 appendixes.

Graphic part: 8 A1 sheets.

Object of the research: plant for the production of flat glass for the thin range of float method.

Purpose of the work - to develop a plant for the production of flat glass for the thin range of float method in accordance with the individual tasks and latest global trends.

A project for the production of glass by float range extended total capacity of 4,5 million m2 per year was created.

Method of the project: production batch as a mixture of raw materials. Selected in accordance with designed machinery and appropriate technology nodes.

For making designed glass a glass bath furnace of continuous action of horseshoe direction flare and two pairs of burners was designed. The furnace is heated with natural gas.

 To increase the campaign to 15 years in kiln, design involves the use of electrofusion refractories from leading European manufacturers for masonry walls and furnace bottom of the pool.

To form float glass ribbons a bathroom with tin and toothed rollers was designed. Tape annealing is conducted in the leer with a set the heating elements.

**Keywords:**

Float method, shop, glass furnace, float bath, annealing, calculation of the furnace charge change technology, material balance, heat balance, the calculation of fuel combustion, glass.