

The Development of Ceramics Artistic Firing Techniques And The Capability of Using It in Decorating Industrial Ceramics Products

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Abstract:

The huge movement happened with the existence of Contemporary Art was one of the most important points that helped in developing the career of Ceramics, and was a reason in the division of ceramics section to find Industrial Ceramics and Artistic Ceramics. In this career, the material is the most important factor which helps the artist to express his personal ideas and show his own skills to deal with this special material concluding with amazing results which sometimes appears through the techniques he used or forming skills or both together.

On the other hand, Industrial Ceramics has reserved a special place in Egypt since long time ago, either the manufacturing of ceramic tiles or sanitary ware or tableware, etc.. Moreover, there has been a noticed development in the techniques and methods used in all the steps of manufacturing like forming, decorating or firing techniques, which all have been depending on industrial machines.

At the same time, Artistic Ceramics has been improving itself through discovering and exploring new artistic techniques used in different steps starting by forming passing by glazing and decorating and ending by firing techniques like (Raku, Naked Raku, Saggar Firing, Pit-firing, etc.) which give different results and make each piece has its own identity, and helped in making the very known reputation of Artistic Ceramics.

This essay shows the difference between the manufacturing of Industrial Ceramics and the making of Artistic Ceramics and tries to combine between the two specializations through practical experiments to conclude with functional masterpieces.

Key Words:

Industrial Ceramic Tiles, Sanitary ware, Artistic Ceramics, Ceramic artistic firing techniques.

an introduction:

The methods and methods of producing ceramics in its various fields varied, and there were different classifications for each field, which created multiple types within the same field, which gave an infinite number of results, whether at the level of form, function or color result, so there has become what is called artistic ceramics and ceramics. And each of them has its own methodology, goals and problems, and this article is an attempt to combine the two fields through a practical experience based on studied steps.

Research problem:

The research problem lies in the following questions:

- 1- Is it possible to use industrial products and the possibility of transferring them or applying artistic ceramic techniques to them?
- 2- What are the conditions and guidelines to be followed to obtain an industrial product treated with technical chromatic fire techniques?

research importance:

- 1- Exploring new means derived from the production of industrial ceramics and obtaining artistic color results on them.
- 2- Reaching a study that helps in developing and developing industrial and artistic ceramics at the same time.

research aims:

- 1- Access to used products of innovative aesthetic value in which art, technology and modern means in industry are linked.
- 2- Raising the level of studio ceramics and developing the factors used in it, including raw materials, techniques and production methods.
- 3- Developing the traditional methods used in industrial ceramics to obtain a distinctive and unique color treatment for the outer surface

Research Methodology:

- 1- The research tends to analytical and empirical study through modern technical techniques.
- 2- An analytical study of the techniques and technology of modern production methods for industrial ceramics.
- 3- Analytical study to determine the industrial ceramic products that can be transferred to technical ceramics.

The most important search results:

- 1- The research was based on the application of different technical fire techniques on industrial ceramic products, which varied between industrial tiles and sanitary ware products.
- 2- The possibility of applying technical fire methods to artificial porcelain tiles in a way that does not have any problems or restrictions.
- 3- The application on sanitary ware products such as basins gave a very large percentage of success. You need to repeat the experiment and take into account some of the mentioned points in order to make it 100% successful.
- 4- The chromatic results applied to industrial ceramic products gave value and uniqueness to the product due to its chromatic distinction

Recommendations:

- 1- Interest in doing various experiments using other technical techniques on industrial ceramic products.
- 2- Attempting to apply it to other industrial ceramic products such as porcelain products, refractories and others.

3- Attention to the marketing of this type of product because of its unique value and status, and displaying it in an appropriate manner for its value.

References:

Shawky Maarouf, "Moqadema Fi Tareekh Al Khazaf Al Hadeeth", Mozakera Taelemeya-1999
Khaled Serag El Din Fahmy, "Taatheer Al Khamat Al Modafa Wa Daraget Nometha Ala Mazhar Al Aksam Al Khazafeya Al Moawah Hata 1250°C", Resalet Majester, Koleyet Al Fenoon Al Tatbeqeya-Gameet Helwan, 2000.

Tahany Al Adly "Fesool Fel Khazaf, Al Goze Al Awal- Koleyet Al Fenoon Al Tatbeqeya-Gameat Helwan", 2001

Ayman Aly Goda, "Taqneyat Wa Gamaleyat Al Bareeq Al Madany Fi Al Khazaf Al Masry Al Hadeeth Wa Osolaho Fi Al Asr Al Fatemy (Derasa Moqarena)", Koleyet Al Fenoon Al Tatbeqeya, Gamaet Helwan, 1996.

Badr Ben Mohamad Al Meamary, "Telaat Al Khazaf", Daeret Al Nashr Al Elmy Wal Tawasol, 2005.

Mohamad Salama Abdel Hameed Al Hamshary, "Deraset Al Elaqa Bayn Al Taqneya Wal hakl Al Khazafy Ma Al Tatbeeq Ala Khazaf Al Estudio", Resalet Majester, Koleyet Al Fenoon Al Tatbeqeya, Gamaet Helwan, 2005.

1- Savage, George "Pottery through the ages", Cassell, London, 1959

2- Hamer, Frank and Janet "The Potter's Dictionary of Materials and Techniques, Fifth Edition", A&C Black, London, University of Pennsylvania Press. Philadelphia, 2004.

3- <http://geology.ahlamontada.net/t295-topic>

4- http://mawdoo3.com/الأدوات_الصحية

5- <http://platform.almanhal.com/Files/2/101097>

Ibrahim Al Khateeb, Rasha Zenhom, Ola Sobah "Estehdath Qawaleb Le entag Al Mofaraghat Al Zogageya Lel Omara", Al Mogalad Al Khames, Megalet Al Omara Wal Fenoon Wal Oloom Al Ensaneya – 2020.