

SYSTEM OF INDICATORS OF ECONOMIC EVALUATION OF PRODUCTION EFFICIENCY IN GAS PROCESSING INDUSTRY ENTERPRISES

Hasanov Ravshan Choriyevich

Chief Specialist of Shurtan Gas Chemical Complex LLC.

Annotation: in this article, the indicators of economic evaluation of production efficiency in gas processing industrial enterprises are widely covered and the products produced and their efficiency production resusers are also mentioned.

Key word: Shurtan GKM, ethylene, polyethylene, copolymern, SCLAIRTECH, gas, industrial enterprise

The system of indicators of economic evaluation of production efficiency in gas processing industry enterprises consists of several refining processes in the index: gas processing and production of ethylene, production of polyethylene and processing it into finished products, as well as auxiliary production.

Ethylene processing and production.

Today in the structure of the LLC " Shurtan GKM " two technological devices are successfully operating, one of which is the purification of natural gas and after its separation into the main components (methane, ethane, propan, butane, C5+ and gas condensate), high-quality ethylene, liquefied gas, gas condensate and granular sulfur are produced.

Ethylene gas separation and production technology is a licensed company ABB Lummus Global Inc.

The production of ethylene consists of the following main plants:

- Amine cleaning
- installation with gas separation system
- Department of preparation of pirogase
- oven pirogazh
- propan and ethylene cooling system
- ethylene installation

Production of polyethylene.

The second part of the technological devices with the use of " SCLAIRTECH " technology - NOVA Chemicals (Canada) is licensed in the North American market by one of the leading manufacturers of polyethylene – specializes in the production of various linear polyethylene (LLDPE, MDPE, HDPE).

To obtain copolymer, Butene-1 is used as a joint monomer, it is produced here at the plant "ALFABUTOL", according to the license of the French Petroleum Institute Axens (IFP).

The density of using butene as a Co-monomer can vary from 0,918 to 0,962 g/cm³.

Another advantage is the change of solutions (MFI) from 0.2 to 35.0 g/10 minutes and the production of an average molecular mass (<5mkm, F-0220), which allows the use of Shurtan polyethylene in various processing industries, ranging from 30000 to 350 000, is completed by obtaining a polymer with an average molecular weight and pouring products of large volumes (large tonnage)

In August 2002, the first batch of linear polyethylene was produced at Shurtan GKK LLC.

The process of manufacturing the main product, according to the technology of polyethylene-liquid phase Sclairtech, occurs in the solution. The raw material for the reaction-ethylene(monomer), Butene-1 (Co-monomer) is produced here, which makes the price of our polyethylene lower than other analogues.

The advantages of using Sclairtech technology include the following:

➤ Adaptability and versatility - excellent control of small cross-circuit and plastic properties means that more than 70 reactor varieties can be produced in the same direction (reactor system - autoclave, pipe and trimmer reactor - with different options and possibility of using separately);

➤ Based on the reactor system, the transition from one brand to another stops and from a few minutes to three to four hours when the spark is launched;

- depending on the reaction speed with small dimensions of the reactor system, controlling the propulsion safely in emergency situations, stop and start up.
- Quality-product with low gel content and high plastic with diffused additives, good resistance, a homogeneous product with low gel content;
- Reactor activate - safe operation with controlled shutdown and stable idle within short time;
- Large production in size - the reaction occurs at a high temperature (more than +2000C degrees Celsius) and very quickly. About 95% ethylene and Co-monomer in less than two (2) minutes turn into a polymer and leave the reactor system.

Processing polyethylene.

Today, "Shurtan GKM" LLC produces 27 types of polyethylene trade marks, which cover all types of processing of polyethylene. Kompleks specialists, together with large consumers of film, have created film stamps (F-0120, F-0220S) for mulching the goose, taking into account the peculiarities of the solar region. Many competitors in this part have already moved to hexen or Octene Co-polymer (HDPE-high density) packaging (shivirlash film) has been established in the commercial margin f-Y1 with mechanical propertiesilandi better in production, in which the brand properties of the film for the production have changed significantly, and Co-monomer buten-346 is used.

In order to achieve the level of polyethylene quality of European manufacturers, together with specialists from the Institute of polymers and The Tashkent chemical and technological institute, work is carried out on the basis of SHL to in-depth study of the physical and mechanical indicators of PE and to make changes due to the rheological properties of products.

All products of Shurtan GKM LLC have environmental and hygienic certificates confirming the guarantee of safety of the use of polyethylene Shurtan GKM LLC for the production of household products and products in contact with food products.

Every year, the main types of products of the enterprise are distributed in accordance with the production and balance of resources approved by the Ministry of economic development and poverty reduction of the Republic of Uzbekistan. The distribution of polyethylene produced during the 2021 year is projected in the following order:

- for export (the main consumers of the product are enterprises of the CIS countries) - 20 thousand tons (206 795 million tons). sum);

- The Republic of Uzbekistan through the Commodity Exchange - 99.1 thousand tons (1 127 758 million tons) to the domestic market. sum), as well as for the production of polyethylene products to " Karshi - Terimplast " - 6,1 thousand tons (71 387 million tons). sum)

The distribution of liquefied gas produced in 2021 is projected in the following order:

- for the needs of the population, through the LLC "territory"-102,1 thousand tons (50 540 million tons). sum);

- for other consumers, the Republic of Uzbekistan through one commodity-raw materials-7,72 thousand tons (24,382 million tons). sum)

The volume of stable gas condensate is 94,7 thousand tons (415 140 million tons). sum) is sold in full at "Buxoro oil processing plant" LLC.

It can be seen that the study of the system of indicators of economic evaluation of production efficiency in gas processing industry enterprises is finding its solution. Achieving this efficiency contributes to the development of the gas processing industry.

Used literature:

1. sgcc.uz
2. https://uz.wikipedia.org/wiki/Sho%CA%BBrtan_gaz-kimyo_majmuasi
3. <https://qasharxiv.uz/yangiliklar/101-shurtan-neft-va-gaz-qazib-chiqarish-boshqarmasi-40-yoshda>