

WATER-BORNE COATING MATERIALS ALREADY DOMINATE

An overview of the Ukrainian paint and coating materials market. Taras Karavayev, Victor Osyka and Tetiana Kolomiets, Kyiv National University of Trade and Economics.

The previous article on the analysis of the market of paint and coating materials (PCMs) in the Ukraine was published in the European Coatings Journal more than seven years ago (see ECJ issue November 2012, pages 18 and 19). Since then substantial changes have taken place in the volume of production, consumption, structure and trends of PCMs market development in the Ukraine, which are presented in this publication.

Data on other PCMs (such as fillers, decorative plasters, stoppers, solvents and diluents, etc.) have been added to this category. This led to an increase of the total production volumes and sales value of PCMs in the Ukraine.

The most changes are related to a significant increase of production and consumption of water-borne PCMs. In 2015 for the first time these ecologically friendly PCMs exceeded similar volumes of solvent-borne PCMs and began to dominate on the Ukrainian consumer market. Their share reached almost 60 % in the structure of the production of paint and varnishes in 2017-2018.

PRODUCTION VOLUME IN 2017 AT 240,000 TONNES WORTH MORE THAN EUR 500 MILLION

The given data show the Ukrainian PCMs manufacturers keep up with world and European current trends. Environmental aspects of production and use of these products remain the priority for the Ukraine.

According to the Ukrainian Paint and Coatings Association (UPCA), the total volume of PCMs production in the Ukraine in 2017 reached 240 thousand tonnes, which is 7.0 % more than in 2016. In terms of money, it was more than EUR 500 million. During 9 months 2018 production of PCMs in the Ukraine reached more than 188 thousand tonnes, which in terms of annual volumes may achieve 246 thousand tonnes, which is approximately 2.5 % more than previous year. However, PCMs production and consumption in the Ukraine (5.7 kg and 6.5 kg per capita) is one of a lower among European countries. This suggests great prospects for development of the Ukrainian PCMs market. The positive tendency is the constant increase in volumes and the share

Figure 1: Dynamics and structure of PCMs production in the Ukraine according to the main types in 2013-2018, thousand tonnes.

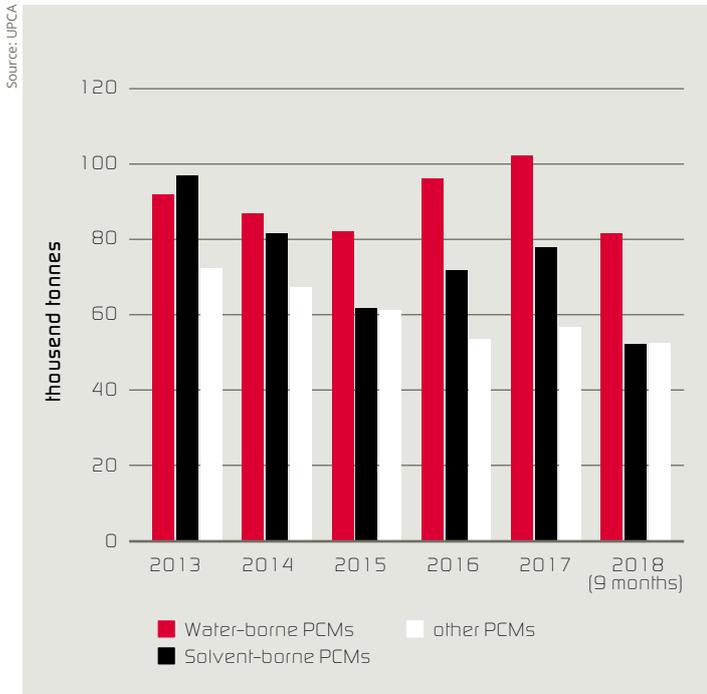
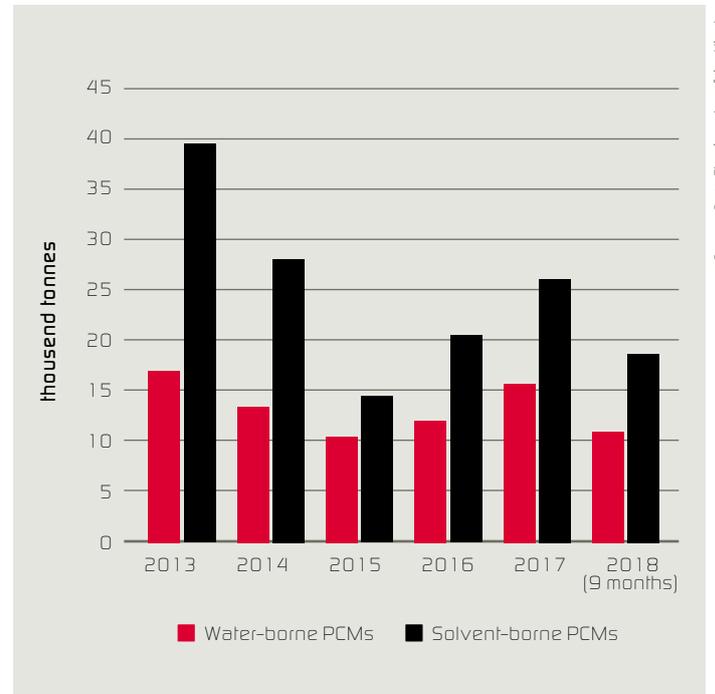


Figure 2: Dynamics and structure of PCMs import to the Ukraine according to main types in 2013-2018, thousand tonnes.



of production and consumption of ecologically friendly PCMs. In order to further increase of production and consumption of these PCMs it is necessary to fully implement the Technical Regulation “On limitation of emissions of volatile organic compounds due to the use of organic solvents in certain paints and varnishes and vehicle refinishing products”, which will come into force on May 30, 2019. European directive 2004/42/EC has been used as the base for developing of this Ukrainian legislation document. The first stage will start from 1 January, 2021.

GRADUAL RECOVERY OF THE MARKET HAS STARTED

According to official data of the State Statistics Service of Ukraine (SSSU), the largest volume of PCMs production in the Ukraine for the last 6 years was in 2013 at the level of 253.4 thousand tonnes, which is 1.7 % more than in 2012. In 2014-2015 the PCMs production dropped about 22 %. This is due to the drop in most sectors of the Ukrainian economy as a result of the military conflict with Russia, the annexation of the Crimea, the occupation of part of Donetsk and Lugansk regions. The gradual recovery of PCMs production occurs in 2016-2017. The volume of PCMs production reached 216.4 thousand tonnes in 2017, which was 9.2 % more than in 2015, but about 14.6 % less than in 2013. Starting from 2014 for the first time in the history of the Ukraine the volume of water-borne PCMs production exceeded the volume of solvent-borne PCMs and other PCMs. The volume of water-borne PCMs production decrease about 10.7 % in 2015 compared with 2013, which is more than three times less than solvent-borne PCMs (Figure 1). According to UPCA volume of PCMs production is about 4.4-11.0 % higher than the official data of SSSU.

SHARE OF WATER-BORNE COATINGS INCREASED TO 43 %

The share of water-borne PCMs in the total volume of PCMs production in the Ukraine has increased from 35 % in 2013 till more than 43 % in 2017, and in the volume of paints and varnishes production has increased up to 60 % and remains at this level during last 3 years. The Ukrainian domestic market formation is also affected by import of PCMs, the total volume of which over the past 6 years amounted more than 225 thousand tonnes. Import varied in quite broad ranges: from 56.1 thousand tonnes in 2013 till 26.0 thousand tonnes in 2015 (Figure 2).

The volume of PCMs consumption in the Ukraine (taking into account the UPCA’s data of the production volume) ranges from 301.3 to 226.7 thousand tonnes. The consumption decline almost 25 % in 2013-2015 and mostly due to the solvent-borne PCMs (Figure 3). The volume of PCMs consumption in the Ukraine increased of almost 50 thousand tonnes (22 %) in 2016-2017 and reached the level of 276.4 thousand tonnes in 2017.

Significant changes occurred in the structure of PCMs consumption in the Ukraine for the analyzed period. The share of environmentally friendly PCMs in the total consumption structure increased about 7 % and reached 42 % in 2018 compared with 2013. Meanwhile the share of solvent-borne PCMs in total consumption decreased at 9 %.

We want to pay attention to the fact that in 2015 for the first time in the history of the Ukraine the volume of consumption of environmentally friendly water-borne PCMs exceeded the solvent-borne PCMs and reached 57 % in the structure of paints and varnishes consumption. But we shouldn’t forget that the decrease of solvent-borne PCMs

consumption is also associated with a large drop in the production of machine building, metal structures, repairs of machinery and equipment other industrial sectors.

The share of the Ukrainian origin PCMs in the total consumption in 2013-2017 was range between 81 % and 89 %. The given data allows confidently state a fact that the Ukrainian PCMs industry is one of the few, which more than 80 % provides the needs of the domestic market PCMs of their own production.

CHALLENGES IN ANALYSING THE MARKET

The PCMs assortment at the Ukrainian market is quite wide and represented by both the Ukrainian and foreign brands. Factories of the leading European companies which produce mainly water-borne PCMs have been built and successfully operate in the Ukraine.

The main problems of PCMs market analysis in the Ukraine are the following:

- 1) state statistics has not actual data of volumes and structure of production and consumption of PCMs in the Ukraine. As a consequence UPCA collects their own data in order to track trends and generate objective data for foreign investors;
- 2) the statistic data don't indicate the structure of production and consumption of PCMs by the spheres of application as in all other European countries. In this case UPCA can also take the initiative and collects data from scientific researches and marketing agencies;
- 3) the Ukrainian producers should pay attention to the following important segments of PCMs according to the spheres of application: general machinery; chemical and food industry; automotive, mechanical engineering, shipbuilding; anticorrosive protection of metal structures, power lines etc.;
- 4) small market segments that need a separate investigation and attention, given the constant demand: powder PCMs, printing inks etc.

FORECAST

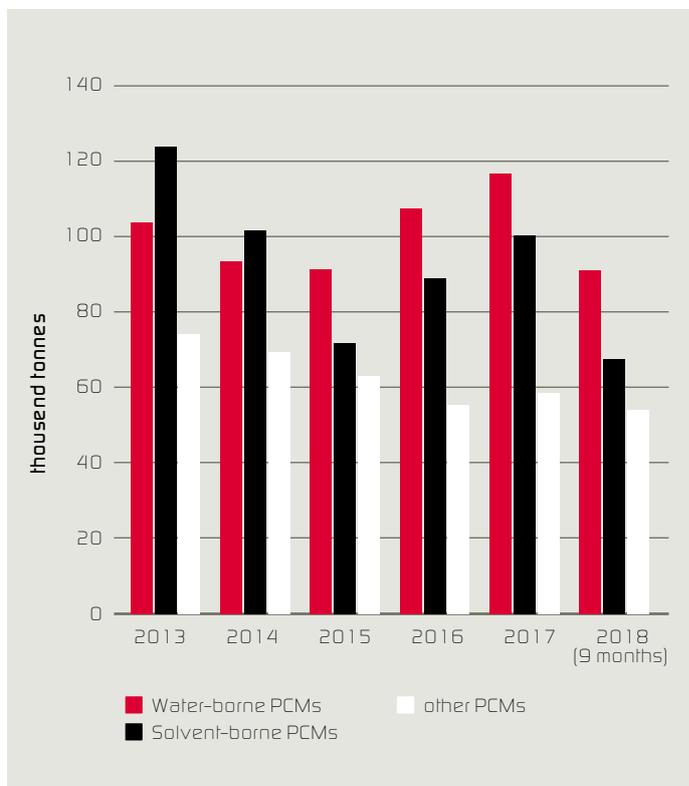
According to our calculations, which are based on data of UPCA, by the end of 2018, we forecast the growth of production and consumption of PCMs in Ukraine at the level of 3-5 %. The calculations correlate with the World Bank's forecast for Ukraine's economic growth in 2018 (3.5 %). Thus, according to our pessimistic forecasts, the volume of PCMs production in Ukraine in 2018 will be 247 thousand tonnes, consumption - 284 thousand tonnes. According to optimistic forecast this will be 252 and 290 thousand tonnes respectively.

CONCLUSIONS

Continuous reconstruction and modernization of PCMs production factories has been taking place in the Ukraine for the last 5 years in the direction of more automation of technological processes.

It is possible to reduce of Solvent-borne PCMs production volumes

Figure 3: Volume and structure of PCMs consumption in the Ukraine according to main types in 2013-2018, thousand tonnes.



and increase the production of Water-borne PCMs by the Ukrainian producers taking into account the Ukraine's dependence on imports of raw materials from oil and the constant rise of their prices. The cost of imported raw materials which has increased almost 3 times during the last 3-4 years due to the devaluation of the national currency, will continue to negatively affect to the PCMs production and sale. The cost of imported raw materials also contributed to a significant increase of PCMs price of the Ukrainian origin.

Under these circumstances it is especially important for the Ukrainian producers to use domestic mineral raw materials in PCMs composition. This is especially true for natural chalk and kaolin as extenders. This requires additional investment in the Ukrainian factories to improve the quality of mineral extenders which have been producing from natural chalk and kaolin. The Ukraine has practically unlimited reserves of these raw materials. This issue study is devoted many scientific works of the author in particular.



Taras Karavayev
Kyiv National
University of Trade
and Economics
[t.karavayev@
gmail.com](mailto:t.karavayev@gmail.com)



Victor Osyka
Kyiv National
University of Trade
and Economics



Tetiana Kolomiets
Kyiv National
University of Trade
and Economics

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