



Imagine a warm, starry July night over Ancient Rome. The owner of a rich villa prepared an exquisite table in the garden on the occasion of Neptunalia – a holiday in honor of Neptune. Guests lie on couches, arranged around the table in the shape of the letter “П”, pleasant music sounds, slaves with torches are arranged in the garden, beautifully illuminating the crowns of exotic trees... This is the world’s first garden and park lighting – spectacular, but it is still extremely imperfect technically. Since then, it has changed – slowly but steadily, in order to achieve amazing perfection in the twentieth and more in the twenty-first century. To see this, just look at the photos of night parks in Paris, London, Tokyo... But the parks of Moscow and St. Petersburg are no less beautiful. Representatives of AMIRA know a lot about the lighting of the latter. We talked about this with CEO Andrey Saramud and Technical Director Vladimir Kharkov.

– For the first time, the Egyptian pharaohs and Roman patricians tried to light their gardens after sunset, they loved to dine in the fresh air by the light of torches. And the European tradition of new times originates from candlesticks and oil lamps of the 16th century. However, only in recent decades landscape lighting has become a true art. What are the advanced trends in it?

Andrey Saramud: I do not agree that landscape lighting has become a true art only in recent decades. The very essence of such lighting is in the scenery. After all, landscape lighting is one of the most important attributes of urban infrastructure. Historically, park lighting gives both the park and the city a certain status, and it is it that vacationers and just walking people are attracted to.

Landscape lighting is inextricably linked with the fashion and style of the ensemble as a whole. The ubiquitous fashion for LED lighting should

not violate the unified urban design concept. Look at the old lanterns in the center of St. Petersburg. This is real art, which can be traced from the XVIII century. Of course, their internal contents have changed: oil, kerosene, gas lamps have been replaced by LED ones, but the shape of the hulls still remains. The company AMIRA has been engaged in lighting for 27 years, including historical one. We are making lamps for Nevsky Prospekt, Pestel Street, Dvortsoviy and Liteyny Bridges... the list goes on and on. By the way, the preservation of historical lighting is one of the modern trends.

– Most of our readers will be surprised to learn how complex the schemes that allow them to admire the night alleys and illuminated flowerbeds. The lighting system of parks and gardens includes common, local, decorative and marking light. Tell us a little about each of these components.

Vladimir Kharkov: Of course, landscape ensembles are not simply lighted; it is done according to a certain scheme, which is developed in accordance with specific tasks and landscape. Local light in gardens and parks is used for highlighting of individual elements installed in the park from a short distance (a figure bush, monument, some interesting tree, fence...), in general, everything that emphasizes the features of the park.

Decorative lighting is actually outdoor lighting, which we talked about above. Here, the lighting pole itself and the lamp are decorative elements that match the style of the park. Accordingly, in the reconstructed historical park or garden – authentic lighting poles and lamps (of course, with modern light sources) are used; in the park in a high-tech type there are some aluminum, chrome-plated lighting poles with unusual lamps.

Marking light indicates the boundaries of roads. As a rule, these are low (up to one meter) light columns or lighting poles with lamps.

– *What general laws must be observed when lighting gardens and parks? And how should the lighting of the main avenue of the park and the secluded corner of the city garden, a private garden at the summer cottage differ?*

Vladimir Kharkov: In addition to the immediate requirements for lighting standards, the designer should remember that the lamp with the lighting pole should be made in the same style and create a complete picture. Here it is very important to involve a designer or an architect in the project. Futuristic lighting complexes are quite suitable for pedestrian spaces inside modern residential neighborhoods, but classic lamps with decorative lighting poles will most often suit parks.

The difference in the lighting of the main avenue of a park and a summer cottage will primarily be in the power of the equipment and the dimensions of the lighting poles. What is appropriate for the alley can look obviously cumbersome in a private garden.

– *What types of lamps are used in landscape lighting? Probably a lot of innovations have been introduced in this area in recent years.*

Vladimir Kharkov: The main instrument for lighting parks and gardens is still floor lamps, mounted on poles with a height of 3 to 4 meters along pedestrian paths and recreation areas. Despite significant progress in LED light sources and the gradual abandonment of gas-discharge lamps, retro-style lamps remain very popular. As a result, consumers have the opportunity to get a lamp that has a classic design, but will have the most modern LED technology inside.

Of course, a lot of innovations have been introduced, but there is still space to grow. In luminaires with LED lighting, as a rule, a lens of the same type is used, giving a point light. We, in the company, are trying to use lenses that give diffused light (“butterfly”). That is, the light goes forward and sideways, thus providing a safe environment, and a little back. This scheme is well suited for landscape lighting, because it can illuminate the main alley and additionally give a small light to some side path at the same time.

– *One of the indispensable conditions for the organization of street lighting is safety, because we are talking about public places, and at the same time the equipment is under the constant influence of environment. How effectively do modern manufacturers solve this problem?*

Vladimir Kharkov: Answering previous questions, we have already touched on the topic of security. Summing up, it is important to note that the decorative lighting lamp is still an electrical device, so the issue of sealing the lamp and proper grounding of the lighting pole is in the

first place. Lamps should not overheat, for this, for example, manufacturers make the grid cases.

And do not forget about the main function of the lamp – after all, it should give the necessary illumination of the road, and not highlight the sky.

– *One of the urgent problems in big cities is called “light pollution”. What is it, how dangerous is it, and how to avoid it?*

Vladimir Kharkov: If you delve into history, you can trace the evolution of garden lamps. Since the company AMIRA is from St. Petersburg, it is more convenient to do it on the example of St. Petersburg, starting from the XVIII century. Since the 16th century, the lighting systems were designed as low structures with a height of 3 to 4 meters, with a small light source (stearin candles, kerosene, oil, gas, etc.). But such structures played the role of decorative lights for the boardwalk. These lamps became more efficient with the advent of new sources of light. Now they were able to illuminate not only themselves, but also the space 4-5 meters around, thus giving the desired security.

When an understanding that the lamp should provide light and create a safe environment emerged, the term “light

In 1988, an international association was created to preserve the dark night sky.

Of course, there is the economic side of the issue. The use of new technologies (LED lamps, motion sensors) significantly reduces operating costs.

– *Does the seasonal lighting of gardens and parks somehow differ? And what about everyday and festive, for example, New Year’s and Christmas lighting?*

Andrey Saramud: After all, it is more correct to talk about holiday decoration.

“Everyday lighting” is ordinary utilitarian. Its main task is to light the way. But this, by the way, does not prevent it from being originally designed. Everyday lighting is done in accordance with the general plan of the city; here the priority is the necessary norms of illumination and compliance with a unified urban lighting concept.

Festive design performs several functions: decorating the space, and, as a result, attracting residents and tourists. This design is usually more diverse. No wonder experts say that a light source can be anything: a bench, bush, tree, walkway, etc. Therefore, at various festivals you can see installations and luminous benches and trees, and the so-called map-



Gostiny Dvor, Nevsky Prospekt (St. Petersburg)

pollution” arose. After all, the old light sources in luminaires gave 70% of the light upwards and sideways, i.e. illuminated the sky. With the advent of miniature LED lighting devices, their installation became more rational, but did not save the city from “light pollution”.

As a member of the Lighting Urban Community International (LUCI), the company AMIRA annually participates in general events where the problem of “light pollution” is discussed during almost every meeting. In Europe, they conducted research on this topic. And it turned out that an excess of artificial light affects human health, flora and fauna. Nobody canceled biological processes, and the change of day and night is still important for human health. And we just lose the night.

ping (various images are projected onto buildings). But, usually, all this is removed after the holidays.

– *A modern citizen is not easy to surprise, but I think you will try! What it will be exactly?*

Andrey Saramud: The AMIRA Group of Companies has been developing urban lighting for many years: we are looking for new forms. I will not talk about all projects, I will only say that we are preparing openwork LED lighting complexes with dynamic lighting for gardens and parks. Such lighting poles themselves will be an art object, and give the desired light, even color. And naturally, we continue to work on the reconstruction of historical lighting.