

Trhový Štěpánov



A newly-built sports facility and children's playground by the Basic School in Trhový Štěpánov is a place for sports and social gatherings for all generations of local inhabitants. The multifunctional sports facility also includes a spot for mothers and infants, an arbour and a place for fires.

The town, as the investor and operator, contacted INDAL for technical support with a request for a well-balanced solution. The solution was balanced in terms of lighting fittings, energy and economics of operation. From the technical viewpoint, the modern lighting project was divided into three light circuits: footpaths, interior, pitch lighting.

Footpaths

Lighting for entrances and stairs from the school building—with regard to the latest lighting technology and the related operability guarantee INDAL proposed a solution using Stela LEDs. Stela Square 12 LEDs and Stela Round 12 LEDs with a power requirement of just 16W were used in the following configurations: 350 mA diodes (CREE XLamp XP-G), with a cold white light of approx. 5,700 K, with a high colour rendering index of $R(a) = 75$, a wide WRN beam, a narrow NRN beam and an Area beam for the correct distribution of lighting. The colour of the lights was chosen by the architect in a shade of green (RAL 6018).

Interior

The lighting of the running track, arbour and children's apparatus was designed by INDAL in cooperation with Ing. Arch. Viktor Drobny with the help of all-metal pole luminaires and an indirect lighting system. ALABAMA bollard luminaires are fitted with a 35W high-pressure metal-halogenide discharge lamp with a chromacity temperature of 4,200K and an excellent colour rendering index of $R(a) = 90$. The luminaires and poles were a shade of grey (RAL 9006).

Pitch lighting

The lighting for the multifunctional pitch was designed using IZX-A type floodlights with an asymmetrical beam. The luminaires use a 400W high pressure metal-halogenide discharge lamp, the chromacity temperature is 5,500K, and an excellent colour rendering index of $R(a) = 90$ again provides users with great and safe conditions for sports activities. The lights are a shade of grey, RAL 7035B.

Compared to the original proposal, the design based on INDAL's lighting proposal saves half the energy, and the total power requirement for the site is now 3.18kW. INDAL, as the manufacturer, provides a 15-year guarantee for the optical and physical properties of the lighting. The lighting levels are based on the requirements of the relevant standards, which ensure maximum security for users. The site is also very pleasantly and transparently lit and users can relax in peace around the arbour in a harmonic and soothing light that creates an oasis of calm here. For more information please contact Jaroslav Zeman - jaroslav.zeman@indal.cz.

