

Zaryadye Concert Hall opens in Moscow

By Marc Quiquerez

Built on the edge of the new Zaryadye Park in central Moscow, Zaryadye Concert Hall complex was inaugurated on September 8, 2018, one year after the park opened to the public.

Project Overview

The venue features a 1560-seat philharmonic hall (“Large Hall”) and a 400-seat chamber and recital hall (“Small Hall”) which can also be used for orchestra rehearsal. The building was designed by Moscow-based TPO Reserve and Nagata Acoustics served as acoustical consultant for the room acoustics of the two halls.

We first reported on the design of the building and the halls in a previous issue of this newsletter (August 2016 newsletter). At that time, construction was underway for the park and had also started on the building. Design phases were nearing completion and a 1:10 scale model of the Large Hall was under construction. Acoustic tests on the model were conducted between March and September 2017 to finalize the interior design of the hall.

Construction works in the hall were first rushed for an early completion in July 2018, when the complex was due to host Moscow Urban Forum 2018. Construction then resumed in late July and August, and the hall was finally completed in time for the scheduled inauguration in September.

Designed primarily as a hall for orchestra performances in natural acoustics, the Large Hall features a stage sized for large ensembles, complete with mechanical risers. The audience is divided between an extensive main parterre section and a seating terrace to the sides and back of the stage which transforms into a balcony as it steepens toward the rear of the hall. Additional shallow balconies on each side of the hall are primarily used for VIP guests. The first rows of the parterre are laid out



Figure 1: Building Exterior (Main Entrance)



Figure 2: Large Hall (Balcony View)

on flat lifts which can be lowered to reveal a large orchestra pit intended for staged or semi-staged opera or ballet performances, following the successful model of Mariinsky Concert Hall in St Petersburg. The pipe organ designed by Muhleisen G. Walther & Associés of Strasbourg (France) is showcased by a dynamic façade occupying the entire width of the upper back wall. Only the façade could be installed in time for the hall's inauguration, but the instrument will be completed and voiced over the course of the next year. With plans to extend the programming of the hall beyond classical music, the full extend of the main floor (included terrace walls) can also be transformed by mechanically lowering each individual row of floor and seating.

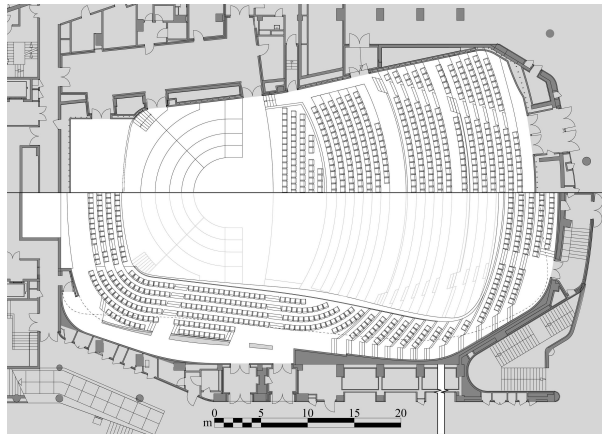


Figure 3: Large Hall Plan Drawing

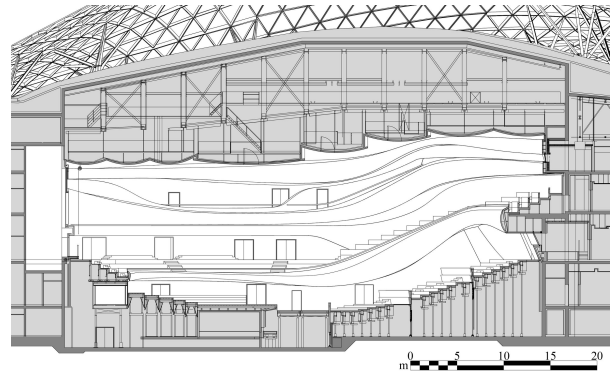


Figure 4: Large Hall Section Drawing

The Small Hall offers a 300m² fully flat floor and a shallow balcony ring. With its 14 m-high ceiling and ample volume, it is suited for rehearsal of large ensembles. Retractable acoustical draperies can be deployed around the upper walls and on the long sides of the lower walls to adjust the reverberance of the space to the needs of the various programs—which range from intimate recitals to amplified music or lectures—or occupancies.

First notes and inaugural concert

Maestro Valery Gergiev gathered a small group of musicians from Mariinsky Orchestra on August 29, 2018 as their first rehearsal in the finished hall ahead of the inaugural performance. The musicians immediately sounded at ease on the new stage, and Maestro Gergiev quickly stepped off the podium to walk around the hall, conducting the ensemble from a distance and instructing changes in the music and musicians' layout. Together, they playfully explored various musical registers and seating arrangements, putting the hall and its acoustics through a thorough test. They were later joined on stage by pianist Denis Matsuev. The sound in the hall was consistently clear, balancing great warmth and precision while exhibiting strength and richness throughout the audience.



Figure 5: Inaugural Concert

After the musicians had left the stage, we measured the reverberation time in the empty hall to be 2.9 s at 500 Hz, and estimated the reverberation time in a fully occupied hall at 2.4 s (500 Hz). Though rather high, these numbers confirmed our listening impressions of a rich acoustics and long reverberance, but never at the expense of high clarity of sound.

Mariinsky Orchestra took the stage for the inaugural concert of September 8, 2018 with their music director Gergiev, and joined by Mariinsky Chorus After an introductory address by Russian President Vladimir Putin, the concert opened with Modest Mussorgsky's Overture to Khovanshchina opera, aptly subtitled "Dawn over the Moskva River", as an homage to the new hall emerging on the river bank. It was followed by an all-Russian program with pieces by Shchedrin, Glinka, Rachmaninoff, Tchaikovsky, Shostakovich, Rimsky-Korsakov and more Mussorgsky. An all-star cast of soloists took the stage with the orchestra, with vocalists Albina Shagimuratova, Anna Netrebko, Mikhail Petrenko and Ildar Abdrazakov, pianists Daniil Trifonov and Denis Matsuev, violinist Pinchas Zukerman, and trumpeter Timur Martynov.

Coinciding with the celebration of Moscow Day honoring the founding of the City, the opening of the new hall served as a wonderful gift to a city passionate about music.