



AUDITORIUM G. ARVEDI

THE IDEA

The culture of excellence, which from its early steps has guided the realization of the Museo del Violino is perfectly synthesized in the **Giovanni Arvedi Auditorium**. The Auditorium, the only one of its kind and the outstanding result of a daring and modern project, was coordinated by **the architects Giorgio Palù and Michele Bianchi** with the support of the acoustical engineer **Yasuhisa Toyota** for the optimization of the acoustics, and reaffirms and exalts Cremona's role at an international level as the capital of violinmaking and music.

The guiding principle of the construction was the desire to offer each one of the 460 audience members an immersive and completely absorbing experience. From the structural elements to the design of the fittings and furnishings, from the acoustic solutions to logistical decisions, everything has been carefully studied in order to reach the highest possible finished standards. The excellence is not fuelled only by engineering skill and sophisticated calculations, but also by a profound sensitivity and an artisanal quest for perfection, tracing a direct and perceptible line of continuity back to the skill and capacity for innovation expressed by Cremona's great violin-making maestros.

The geometry of the spaces brings together soft volumes; sinuous lines chase each other and draw an organic sculpture which expresses the spreading of sound waves. The hall's particular architecture presents a final suggestion: the stage is at the centre of the scene, the audience "wrapped round" the musicians and the dialogue that is created between audience and players produces strong empathy and allows a new experience, of an intensity and quality of feeling noticeably higher than that of the classical concert concept.

THE STRUCTURE

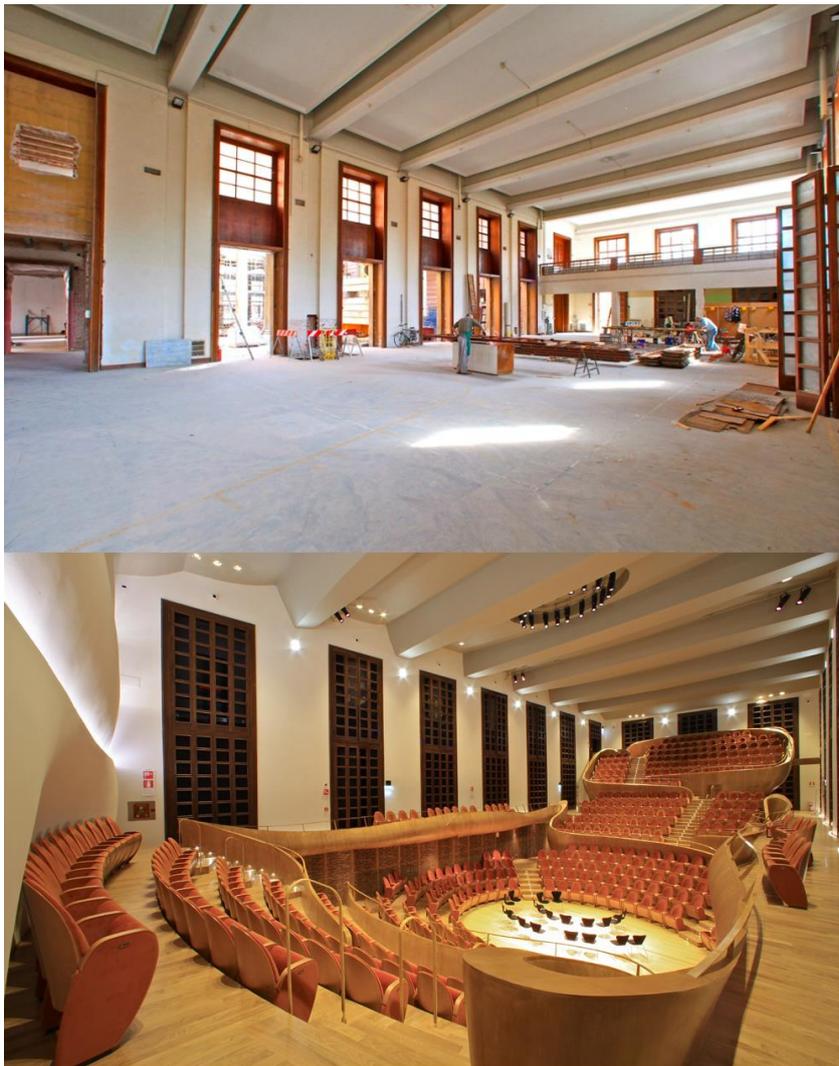
The **Giovanni Arvedi Auditorium** has been created out of what used to be the Palazzo dell'Arte's assembly room, subsequently used as a gym. The dimensions of the original room were approximately 36 m long, 14 m wide and 10 m high. To achieve an ideal volume for the hall, it was decided to excavate under the existing floor to increase the height of the ceiling, which is now 14 m above the level of the stage.

The hall is designed for performances by soloists and chamber groups, with a stage of just 85 m². This meant it could be positioned very centrally, guaranteeing an excellent view of the oval from any of the seats. The ceiling and walls could not be modified, so particular attention was paid to the acoustic experience for the audience members positioned around the stage. Simple materials, wood and plaster, were used for the auditorium. The ceiling and walls have kept their original plastering, which has been painted in neutral colours (white for the walls and pale grey for the ceiling). The new elements have been finished in a warm honey-coloured wood veneer.

All the elements that compose and characterize the entire auditorium structure have been created using a similar method to centring arranged on "contour lines". Similarly to what was used for the ceiling, also in this case the design proceeded following a constructive volumetric principle known in jargon as "slices or wedges" which allowed the spheroidal development of the body, creating what is effectively a gigantic hollow sphere in concrete.

For the auditorium's surfaces, the Studio Palù & Bianchi used a treated natural maple veneer, similar to the wood used for string instruments, with specially chosen varnishes that will not alter the acoustic qualities determined for the space by Nagata Acoustics, while at the same time giving the volumes a warm honey colour.

This last phase was completed by highly specialized artisans who patiently applied thin strips of wood, one millimetre thick, directly on to all the surfaces, including those in concrete. Thicker strips of oak wood were used to cover the floor, the stairs and the walkways leading to the different tiers. For the stage, Nagata Acoustics requested the use of a soft wood, Alaska yellow cedar, for its acoustic properties, and it was laid onto a specially designed wooden structure. Particular attention was paid to the entire system of double doors and double fixtures, with the aim of guaranteeing perfect sound-proofing outside while maintaining unaltered the acoustic qualities inside. Over the course of the two-year construction of the Museo del Violino and the Giovanni Arvedi Auditorium, the design of the acoustics was overseen by engineer Yasuhisa Toyota of Nagata Acoustics.



(excerpt from www.museodelviolino.org)