

OSKAR VON MILLER FORUM

Press release

Architect Angelo Mangiarotti – Master of Construction Technology and Aesthetics

Opening of the exhibition *Die Bausysteme von Angelo Mangiarotti* (The Building Systems of Angelo Mangiarotti) at the Oskar von Miller Forum on June 4, 2019 at 6:30 p.m.

Given the necessity to create large-scale new residential housing, system-based building has continued to gain importance in recent years due to weather-independent, prefabricated and largely cost-effective production.

These circumstances have lent particular topicality to the work of the architect and designer Angelo Mangiarotti. He created architecture of high artistic merit combined with functions whose design is not primarily influenced by the representation or symbolism of institutions as mercantile branding. Instead he developed inspiring, beautiful building systems, for instance for production halls, which are today mostly built without any claims of design quality as they are merely “functional” buildings. But they are, after all, places that play a major role in the daily work lives of millions of people.

The buildings designed by Angelo Mangiarotti are largely made of concrete, a freely malleable material without a fixed morphological structure. They are aesthetically compelling in terms of their immediate architectural diction. The classical structural components (such as columns, girders, roofs, ceilings and walls) find expression with regard to their respective function, their provenance as industrially produced parts and as a form of architectural sophistication.

Angelo Mangiarotti is an exceptional architect both in his position and objectives, and in his sophisticated aesthetic and technical skills. Twenty years ago, an honorary doctorate was bestowed upon him by the Technical University of Munich at the request of the Department of Architecture, honouring his work in particular by an exhibition presenting his building systems. The upcoming exhibition at the Oskar von Miller Forum was conceived on this basis.

The opening of the exhibition on June 4 at 6:30 p.m. will be marked by a presentation by Professor Thomas Herzog, EoE of the TU Munich, entitled “Die Bausysteme von Angelo Mangiarotti – Meister der Technologie und Ästhetik des Bauens” (The building systems of Angelo Mangiarotti – master of technology and aesthetics of building). He will discuss in particular the significance of Mangiarotti’s engineering skills for the architecture of today.

Venue and opening hours

Oskar von Miller Forum, Oskar-von-Miller-Ring 25, 80333 München

www.oskarvonmillerforum.de

June 5 to July 10, 2019, Mondays to Fridays 2 p.m. to 6 p.m. (closed on national holidays and weekends)

Free admission

Angelo Mangiarotti – Life and Work

Born in Milan in 1921, Angelo Mangiarotti studied architecture at the Politecnico di Milano between 1945 and 1948. From 1953 to 1954 he was a visiting professor at the Illinois Institute of Technology, Chicago, where Frank Lloyd Wright, Walter Gropius, Mies van der Rohe and Konrad Wachsmann lectured at the time. Upon his return to Milan in 1955, he founded a joint architectural firm with Bruno Morasutti. After opening his own practice in 1960, he began to develop support structures made of prefabricated concrete elements for industrial buildings, which he refined with each project. In the period that ensued he designed factory buildings, residential buildings, office buildings, a church and exhibition pavilions in northern Italy, which today continue to be considered groundbreaking examples of complex systems with remarkable creative power in architecture.

Angelo Mangiarotti (1921-2012) additionally worked as a designer of interior objects, also earning high acclaim in this field. He moreover lectured worldwide as a visiting professor at many universities.

Exhibition *The Building Systems of Angelo Mangiarotti*

“My architectural work, especially in terms of the study and production of industrialised instruments, I believe, can be counted among the works in which the technology of mass-production plays a significant theoretical role.”

Quote by Angelo Mangiarotti from the catalogue *Bausysteme von Angelo Mangiarotti* published by Thomas Herzog, Verlag Das Beispiel GmbH, Darmstadt 1998

The exhibition puts the spotlight on architect Angelo Mangiarotti, highlighting his work as a pioneer in the industrial production of reinforced concrete building systems with a focus on the aesthetics of construction.

He not only found compelling technical and functional solutions for construction tasks, but also demonstrated his great artistic potential as an architect by lending high sculptural quality to the structural systems. His philosophy that any separation between the architect as an artist and the civil engineer as a technician is ill-advised for future building endeavours is demonstrated by many of the presented projects. Angelo Mangiarotti generally advocated high technical excellence in the architectural profession, nurtured by studying the material properties and making proficient use of the potential offered by building technology.

The exhibition includes numerous display boards with photos, drawings and detailed sketches of the following projects, as well as information on the life and work of Angelo Mangiarotti.

Mater Misericordiae Church, Baranzate/Milan, (1957)

The longitudinal cubic hall is dominated by a reinforced-concrete framework that accentuates the orientation of the support structure towards the altar. It offers an

impressive view of the ceiling structured by a diagonal roof plate arrangement and secondary girders.

“Facep” building system; Lissone, Elmag Co. (1964)

This industrial building with offices and showrooms as well as production and storage halls is the building for which Mangiarotti developed his first construction system. The support structure consists of three prefabricated elements: supports with hammerhead, T-shaped beams and ceiling slabs with a central rib. This building system went on to become a successful product and was used in more than 100 variations.

“U 70 Isocell” building system; Alzate Brianza/Como, Lema Co. (1969)

This refined version of the building system that was designed for another industrial building made installation quick and simple. Beams and ceiling panels have the same height, so that the façade elements and interior walls connect at the same level. This allows for easy replacement of the prefabricated façade elements.

“Briona 72” multi-purpose building system; Giussano/Milan

This building system consists of nine standardised precast reinforced-concrete elements. In this project, Mangiarotti used precast concrete elements as end units for the roof edge for the first time. Combined with the exposed support structure, this system reflects Mangiarotti’s intensive contemplation on the classical trilithon motif and his attempt to reinterpret it.

“Facep” building system; Bussolengo/Verona (1976)

The system is composed of an H-shaped support, Y-shaped beams and slim corrugated panels and was developed for a showroom with workshop.

Partially prefabricated homes in Monza (1972) and in Arosio/Como

In this project, it was particularly important to Mangiarotti to accommodate the wishes of the users. The reinforced-concrete skeleton allows free organisation of floor plans. The façade consists of prefabricated, exchangeable elements and allows individual arrangements. Although all façade elements are identical in both housing projects, different building structures were implemented.

The article “Der Systemgedanke in der Architektur” (The concept of systems in architecture) by Roland Krippner in *Beton- und Stahlbetonbau* 94, 1999, issue 11 contains more detailed information on the projects presented.

OSKAR VON MILLER FORUM

The Oskar von Miller Forum is an educational initiative of the Bavarian construction industry for engineers in the field of construction and is sponsored by the foundation Stiftung Bayerisches Baugewerbe. With its programme, the international and interdisciplinary forum provides outstanding input and inspiration for the education of future civil and environmental engineers and architects at the Technical University of Munich and of construction technicians at the College of Construction Engineering.

The Oskar von Miller Forum offers regular forward-looking events and lectures in the field of construction.