

Preserving cultural heritage with advanced portable compressors

# Assuring the future of the past with modern technology

The Romanian village of Geoagiu, located in the heart of Transylvania, is home to what is believed to be the oldest medieval chapel in Romania. In the early 1990s, archaeologist Gheorghe Petrov began his quest to find out when exactly the chapel was built. On a journey of discovery that would last over a decade, he examined both the exterior and the interior of the building in minute detail. During the associated excavation work, he and his team uncovered more than 200 tombs, the oldest of which date back to the reigns of King Ladislaus I (1077-1095) and King Coloman the Learned (1095-1116).

The Romanesque chapel in Geoagiu is one of the oldest surviving sacred buildings in Romania. Due to its circular shape and the construction materials used, it is a rarity among Romanesque architecture in Transylvania. Its exact construction date is unknown, but based on the archaeological finds, especially the tombs located in the churchyard, which date back to around 1100 AD, the church must have existed as early as the late 11th century. The church is predominantly constructed from Roman fired bricks in the lower section, similar to those of the nearby ancient thermal baths of Germisara or Dodonae, while the upper section is built from river rock and square stones. Inside the church there is a valuable pipe organ built in 1870 by the pipe

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organ manufacturer Kolonics Istvan from Târgu Secuiesc. The building was used as a church until the end of the 16th century, when the new building adjacent to it in the churchyard was completed. It subsequently served as a bell tower and even as a residential building, as an inscription from 1625 shows. It is interesting to note that numerous church details, both inside and out, reference aspects of Roman history and tradition, such as the statues of two lions on the church door, which are possibly ex-voto statues for healing of the sick who used the nearby thermal baths. However, they may refer to the coat of arms of the XIVth Roman legion, the so-called Gemina, who were encamped in the Geoagiu area. To the right of the entrance there is a bas-relief depicting the demigod Hercules, who was worshiped by Roman soldiers, and directly next to it is a funerary monument embedded in the church wall with a portrait of a Roman woman.

## In-depth technical know-how

In order to preserve this unique edifice for future generations, the „Reformed Diocese of Transylvania“ commissioned Domino Construct Expert, a renowned construction company, with restoration of the sacred building in 2021. The extensive renovation work on the façade not only required in-depth technical know-how and equipment, but also particular proficiency in working at great heights, for which the term ‚Utility Mountaineering‘ was coined. Façade experts ALPIN SHUNT provided competent support for this area of restoration. The company, which was founded in 2009 by Managing Director Cseresznyes, has specialized in the restoration and professional façade cleaning of historic monuments and buildings, which is in great demand today. To carry out these special operations, the façade expert draws on its diverse and technically sophisticated equipment, with the help of which ALPIN SHUNT u. a. uses the most diverse currently available sandblasting processes (sandblasting with sand, dry ice sandblasting, hydro-sandblasting). In the case of high buildings and monuments (e.g. church towers) or metallic structures (e.g. tin roofs), cleaning and restoration work is very often combined with



climbing techniques. Aerial work platforms and facade lifts are also used. This was also the case with the work on the Romanesque chapel in Geoagiu.

## Construction site powerhouses ‚Made in Germany‘

Compressed air is essential to operate the various special equipment needed for façade restoration. It provides the power for all devices, such as vacuum cleaners, high-pressure cleaners, carbon dioxide cleaners, water jet washers, steam cleaners, etc. To deliver the necessary compressed air, Alpin Shunt relies on MOBILAIR 31 and MOBILAIR 82 portable compressors from KAESER. Equipped with advanced, fuel-saving Kubota engines and durable bodywork, these versatile powerhouses are able to meet even the toughest of construction site conditions: featuring rotation-sintered PE enclosures for maximum impact resistance, they are also intuitive and simple to operate, making them highly valued construction site partners. Costly downtime is also avoided thanks to optimal accessibility to all maintenance points,



which is especially important for timely completion of restoration work. Furthermore, the MOBILAIR 82 is equipped with a generator to provide a mobile source of energy when- and wherever it is needed on the construction site. Emission-free e-Power versions with energy-saving electric motors are also available for sensitive indoor and enclosed areas.

The portable compressors from KAESER provided a dependable supply of quality compressed air for all of our restoration equipment..

*(Thomas Pöthe, Abteilungsleiter Produktion)*