PRESS RELEASE

Ruggell, November 11, 2026

alkus® SF 3 Flex Shapes Futuristic Tunnel Portals on the A81

Flexible solid plastic formwork facing supports the construction of challenging concave concrete shapes near Böblingen and Sindelfingen.

An 850-meter-long noise protection enclosure is being built along the A81 highway near Böblingen and Sindelfingen. Its tunnel portals are particularly striking: straight surfaces, sloped sections, curves, and concave recesses flow into one another, placing high demands on planning, formwork, and construction. To achieve these complex geometries, the 3 mm-thick alkus® SF 3 Flex formwork facing is being used in custom-designed special formwork developed by MEVA.

Flexible Formwork Facing for Complex Geometries

The inward-curving sections of the portals are among the most challenging shapes in the project. For these areas, precisely assembled wooden elements were faced with the flexible alkus® SF 3 Flex solid plastic formwork facing. At just 3 mm thick, the facing is flexible enough to conform to the curved geometry of the formwork. Before the formwork is closed, the erected formwork section reaches a height of approximately nine meters.

Concrete is placed through several filling ports. Cones with Dywidag threads on both ends accommodate form ties from either side of the formwork. The formwork and work platform assembly is supported in part by MEVA's MT 60 and MEP shoring systems. Components of the MEKit modular civil engineering system and Triplex diagonal braces are used for stabilization.

Special Formwork for Four Portal Sections

The tunnel portals are being constructed in four sections. According to MEVA's project report dated October 12, 2026, two sections had already been completed on schedule. The custom-designed special formwork was engineered for reuse in the two remaining sections. For this purpose, the formwork is rotated or tilted—an important factor in the project's cost-effectiveness.

The A81 project demonstrates how flexible formwork facing and custom-designed special formwork work together. alkus® SF 3 Flex forms the direct concrete-contact surface and follows the formwork's complex curves. This is how the noise protection enclosure's distinctive, futuristic tunnel portal shapes are created.

“Where other materials reach their limits with complex geometries, that is often where new possibilities begin for us. Our solid plastic formwork facings open up new possibilities for demanding shapes, curves, and custom formwork solutions. This project clearly demonstrates how SF 3 Flex can be used to achieve even extraordinary geometries with precision,” says Daniel Keller, CEO of alkus AG.

Project Details and Participants

Project	Tunnel portals of the A81 noise protection enclosure near Böblingen/Sindelfingen, Germany
Length of the enclosure	850 m
alkus® Product	SF 3 Flex, flexible solid plastic formwork facing, 3 mm
Construction companies	ARGE A81 Tunnel, Construction Lot 3.2.1: WAYSS + FREYTAG Ingenieurbau AG, HOCHTIEF Infrastructure, STORZ Verkehrswegebau
MEVA systems	Special formwork, MEKit, Mammut 350 wall formwork, MEP and MT 60 shoring systems
Planning and support	MEVA Schalungs-Systeme GmbH, Haiterbach and Munich branch office

About alkus AG

Based in Ruggell, Liechtenstein, alkus AG distributes the alkus® solid plastic panel and specially matched accessories and provides technical support to its customers. The alkus® panel is used as a formwork panel in the construction industry and trades, offering a cost-effective and practical alternative to wood and wood-plastic panels. Supplied ready to install as standard, it fits various formwork frame systems and, thanks to its stability and formability, can also be used for tunnel and special formwork or the production of precast concrete elements. The panel is manufactured exclusively in Europe.

www.alkus.com

About MEVA

MEVA Schalungs-Systeme GmbH is a medium-sized, family-owned formwork manufacturer operating internationally, with its headquarters in Haiterbach in Germany's northern Black Forest region. Its product portfolio ranges from wall and slab formwork to shoring systems and accessories, as well as climbing and safety systems, special formwork, and digital solutions. According to MEVA, the company has approximately 700 employees at 40 locations in more than 30 countries.

www.meva.net

Image material, credits, and captions



Fig. 1: The erected formwork section faced with alkus® SF 3 Flex for the concave curve. The 3 mm-thick formwork facing follows the complex geometry of the special formwork. | © MEVA



Fig. 2: The concave curve of the tunnel portal illustrates the structure’s complex geometric transitions. | © MEVA

Press contacts

alkus AG

Yusuf Dünmez

Industriering 40
9491 Ruggell
LIECHTENSTEIN
Phone: +423 236 0034
Mail: yusuf.duenmez@alkus.com