All about Scaffolding

No. 30 – April 2010

The assurance of Quality

The gripper arm carefully sets down the finished ledger. It has just come out of final assembly, where it was rotated on a conveying station, labelled and riveted with a wedge. Quite unnoticed – and without any interruption of the production sequence – a new quality assurance process is being implemented here. During rotation, each weld is scanned once again with a laser over its height and width, and then evaluated. It's an additional measure, since the automatic welding equipment already features devices that automatically reject parts that aren't flawless. Just two of the many innovations Layher implements as part of its continuous production optimisation – to safeguard quality.

Weld monitoring by laser scanning

Quality means safety. Safety for the people working with our scaffolding systems – safety for the companies investing in our scaffolding systems. This is why the topic of quality management is one of the key tasks at Layher. It covers all the measures intended to safeguard and optimise its products and services. A quality management system was introduced at an early stage, and its requirements are based on the standard DIN EN ISO 9001, according to which we have been certified for many years now. This encompasses the entire production process – from the design of new products to the ready-to-deliver product.

Systematic and customer-oriented product design

As early as the product design stage, it's Layher's aim to look into ideas thoroughly. New developments are tested at the cross-departmental level and in a team effort to assess their benefits to customers, and then implemented. The Technical Office makes the first drawings, at all times in compliance with current standards and the latest computation methods. The next step is the construction of prototypes, which are subjected to extensive testing at Layher's own test stand. But a new product doesn't receive the green light for series production until it has passed the practical tests of its customers.

Test series at Layher test stand

Incoming goods check on raw materials

High demands on raw material

Once the green light has been given, requirements such as mechanical properties are specified for the raw material. Technical ordering regulations form the basis for the careful selection of suppliers, including initial type testing and processing tests during production. On the basis of precisely defined test instructions, we check every raw material shipment using the latest testing techniques. In addition, there is a supplier audit program to assess the quality capabilities of our suppliers. In visits to their premises, we not only learn about how they go about things, but we also help them to meet our expectations better. Partnership is something we value highly.

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Layher wins an award!

Leading in the field of safety too: the Spanish subsidiary of Layher has received an award in Barcelona for the new safety structure P2.

At the awards ceremony of the official chamber of construction companies of Catalonia (CCOC – Cámara Oficial de Contratistas de Obras de Cataluña), Layher S.A. took the overall prize in the category „Safety in construction" („Premio a la Seguridad en la Construcción"). With this prize, the jury rewarded a new assembly sequence for rolling towers: the safety structure P2. The latter was developed at our main plant in Eibensbach, the aim being to make the familiar and easy assembly of rolling towers even safer and even more convenient. At the same time, it conforms to European labour safety laws too. The latter allow working equipment to be provided only if it ensures safety and health protection when used for its intended purpose. Besides an optimum platform distance of 2 metres, the new assembly principle also permits fitting of the top guardrails even before the decks are installed. That means that there is already an all-round side protection in place when the topmost level is accessed, so that the erectors and the users of rolling towers are always on the safe side.

The coveted award was accepted by the sales manager Marco Chiesa: „With the award for this innovative assembly sequence for rolling towers, we have once again demonstrated our skills and our role as a leading innovator in scaffolding systems. We're delighted that the benefits of the safety structure P2 for its user have now received official recognition too."

Official award by the CCOC

Sales manager Marco Chiesa (left) accepts the award

The Safety Structure P2 The principle

- Attach the first ladder frame.
- Attach the Uni assembly hook and position the second ladder frame for fitting of the guardrails.

- Swivel the ladder frame with guardrail upwards and fit it in place.

- Insert diagonal braces and access deck.

- Climb up to the next level and install additional guard rails at 0.5 m level.

Layher
More Possibilities. The Scaffolding System.

A quick glance behind the scenes

bauma 2010

Come and visit us!
Hall A2, Stand 411/509

The Bauma is getting closer. From 19 to 25 April, the world's biggest trade fair for the construction industry will again be held in Munich. Our preparations too are going full speed ahead. Because the watchword at the Layher stand will once again be: a glance at the latest technical developments in scaffolding construction.

Increasing efficiency in scaffolding construction is the central challenge for the future of our customers. Efficiency from economical assembling and dismantling of scaffolding, and efficiency thanks to an even better use of material – for long-term success. At this show too, our focus will therefore be on sensible supplementary components for our scaffolding systems, which will further increase their effectivity during use and open up new applications.

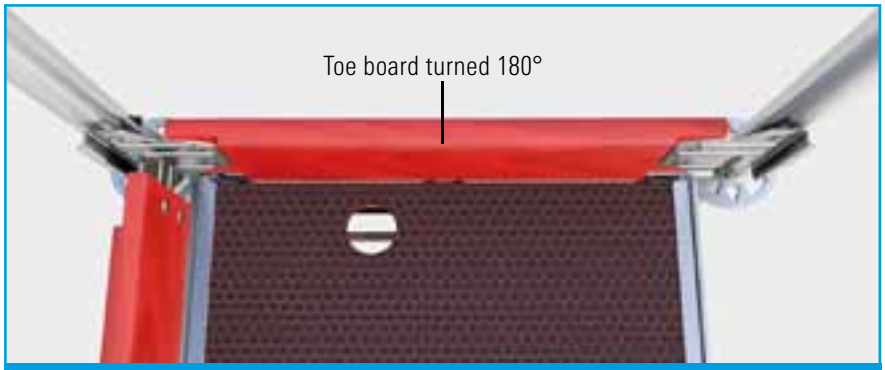
To do so, our development team has again come up with some great ideas: new scaffolding planning tools. Equipment for easy yet safe lifting of scaffolding material. New materials that are lightweight yet sturdy, and easy to handle too. System supplements that make assembly and also access to the proven SpeedyScaf structures even faster and even safer. And above all extension components for the Allround scaffolding, to further increase its efficiency and load-bearing capacity and in so doing offer completely new possibilities for use.

Much is new and yet remains the same. As usual, the new developments are completely compatible with existing systems and open up for our customers new areas of business while ensuring optimum use of material and high efficiency, true to Layher's motto of „More possibilities". You'll be surprised.

Gap-free

Layher is optimising the Allround timber and aluminium toe board fittings. The new fittings are not only reinforced by beads, but also have an offset: thanks to this offset of the fitting, the toe board lies on the scaffolding deck – this prevents any gap occurring. At the same time, the required toe board height of 150 millimetres is always assured.

With this change, Layher is complying with standard EN 12811, which states that the opening between the toe board and the deck must not exceed 25 millimetres. The aim however remains to be gap-free. In length-oriented façade scaffolding, the new and the previous variants can be installed with one another, both in the longitudinal direction and at the ends, in a fully compatible way. For tower scaffolding, certain installation rules have to be followed when combining old and new toe board versions. With a 180° rotation during installation of the end toe board, the hatch in an access deck can also be opened and closed easily.



Corner connection with timber toe board T10

Compatibility of new and previous variant in the longitudinal direction

Our job is your safety

We're focused on assuring Layher quality. To do so, the quality assurance team – that's us – helps our purchasing department to select suppliers carefully, devise detailed ordering requirements, draw up instructions for inspection of incoming raw materials, monitor production facilities and inspection equipment, check every step of production in order to assist worker self-checking procedures. We're the people to contact for external supervision or certification by independent auditors. Together with the sales team, we naturally also look into any customer complaints very thoroughly and take appropriate measures to deal with them. Our goal is the best possible prevention. So that you can always rely on the high quality of Layher products with the highest possible precision and longest service life.

Introducing ourselves – the Quality Assurance team at Layher

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Checks at every stage of production
When the raw material has been released, it goes to production. In addition to in-house monitoring by trained employees and by the colleagues from Quality Assurance, the latest inspection techniques are used on the production machinery too, for determining load-bearing capacities, dimensional accuracy and functionality. Highly automated systems with process control take random samples at regular intervals. In this way a steel deck, for example, from every batch is measured according to an inspection schedule and documented in the inspection record. Furthermore, the inspection equipment detects even minor discrepancies and automatically picks out those parts. In the case of steel decks, every weld is mechanically monitored and the welding parameters are archived in a file. The deck then receives a stamp that includes information on the machine, its production date and the welding parameters monitored. Because retraceable identification and documentation of all Layher parts is just as routine for us as stringent quality checks in every production phase.

Independent auditors inside and outside Germany also continually check, as part of the external monitoring required by building authorities, both the production process and the quality of the Layher products. Numerous approvals, test marks and quality marks are testimony to our continuous efforts to optimise quality management at Layher for the future too. After all, it was Dale Carnegie who recognised that „the successful man will profit from his mistakes". With our highly automated and continuously checked production in Germany, we intend to assure in the future too the high quality of Layher products: from the raw material to the ready-to-send product.

Dimensional accuracy check on steel decks

Checking the welding parameters

IMPRINT

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