

Tennis center roof welded with Leister machines

Game, Set and Match to Leister

Tennis is enjoying immense popularity. That holds true for Switzerland in particular. – Not only since the Swiss tennis star, Roger Federer, has been flying the flag for the Alpine nation throughout the world. The very good infrastructure is certainly one of the reasons for the prestige of tennis in Switzerland. Modern indoor tennis courts are springing up all over the country, allowing people to play all year round. One of them has just been finished, the Sports Core Belpmoos, near to Bern.

Three-section roof structure

The new tennis complex is large enough to accommodate five tennis courts, guest commercial areas and conference rooms. Two tonne roofs with a total area of 5000 m² protrude above the structure. They are supported by a solid wooden construction. An elastomer bitumen sheet was first tensioned as a vapor barrier on the wooden form-work mounted on this. 100 mm thick rock wool was then laid over it as heat insulation. To guarantee the tightness, a 1.8 mm thick plastic sealing sheet made from PVC was finally laid.



The tennis complex accommodate 5 tennis courts.

Everything from a single source

The laying company Gyger Flachdach AG was entrusted with the task of providing the roof structure on this complex building. Leister machines were used for all welding work. Mr. Heiniger, Gyger Flachdach AG: "Leister machines have proven exceptional once again. It is especially important for us to only need one device supplier for the various work and materials. That saves a lot of time and effort for providing training on the new machines while reducing the availability during service work on the devices. What is more: the Leister sales partner is also a real help for advice directly on the roof."



Easy unit guidance and clean working with the BITUMAT B2.

Flame-free welding

The BITUMAT B2 from Leister was used for the lowermost layer of the triple layer roof structure. This is the only hot air welding machine to have been developed specially for machining elastomer bitumen. Processing the bitumen sheeting with a naked flame on the wooden base was not possible at the tennis center in Belp for reasons of safety. The BITUMAT B2 working with hot air was more than an alternative. It is the perfect solution in every respect when welding bitumen sheets and has really proven its merit on this roof.

Economic work and homogenous weld seams

The use of a hot-air welding machine is not only much safer than working with a naked flame, it is also more economical. Two work steps, heating and pressing, are necessary when welding with a naked flame. Only one work step is needed with the BITUMAT B2. That means its use pays off quickly, especially seeing that it provides a working power of maximum 12 m/min. However, the welding speed was only 5 m / min owing to the challenging nature of this steep roof.

The outlet temperature at the high-performance nozzle was 620°C. The welding result itself was significantly better than with a naked flame. The BITUMAT B2 produces homogeneous, absolutely tight seams with a high weld strength. Even on the arched roof structure, the BITUMAT B2 did not pose any difficulties for "climbing" the inclines. The machine can be kept on course easily by gently correcting the height-adjustable and swiveling guide rod.

The ideal complement

Hot-air welding machines from Leister were also used for processing the plastic sealing sheets – the VARIMAT V2

Open flame



BITUMAT B2



Considerably better welding results when compared with open flame tools.

and the UNIROOF E. The two complement each other perfectly and solve every problem when it comes to machining plastic sealing sheets. The powerful VARIMAT V2 is above all suitable for large roofing areas with its working speeds of up to 12 m/min. The small and handy UNIROOF E is useful for edge seams and poorly accessible areas for which the VARIMAT V2 is too large. The VARIMAT V2 was used for the flatter areas and the smaller UNIROOF E for the highly steep points and transverse seams on the roof of the tennis center. A reliable weld was also especially important here, because the two meter wide plastic sealing sheets are exposed to a high wind load on the bare roof.

Rightly proud

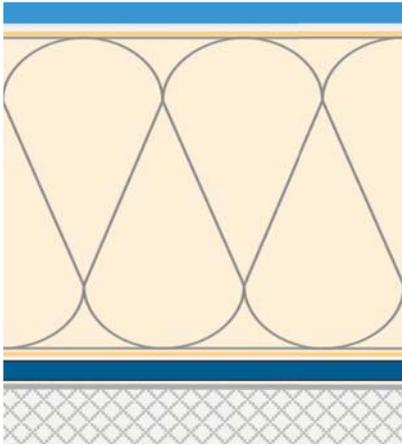
With good reason, the tennis aces now playing in the indoor court expect to play under a dry roof all year round. For the laying company Gyger Flachdach AG, On the other hand, the use of a triple layer roof structure posed a real challenge. Mr. Heiniger again: "We're more than satisfied with our work. The Leister machines allowed us to cover the 5000 m² roof fully watertight in a short time and without interruption."



The VARIMAT V2 – for faster welding of polymeric waterproofing membranes.



Its small dimensions mean that there are no obstacles for the UNIROOF E.



- Plastic sealing sheet:
PVC 1.8 mm from Sika-Sarnafil
- Thermal insulation:
Rock wool Prima 100 mm from Flumroc
- Vapor barrier:
Elastomer bitumen EP 3 from Soprema
- Wooden framework

Roof construction

BITUMAT B2



UNIROOF E



VARIMAT V2



Object:	Sports Core Belpmoos AG, Belp, Schweiz	www.sportscore.ch
Building owner:	Renova 2000 AG	
Laying company:	Gyger Flachdachfirma AG, Heimberg, Switzerland	www.gygerflachdach.ch
Machine supplier:	Leister Process Technologies, Kägiswil, Switzerland	www.leister.com
Leister sales and service partner:	F. Jannone AG, Wabern, Switzerland	www.jannone.ch

Author: Christophe von Arx, Leister Process Technologies
Photos: Jannone AG / Roland Beeler, Leister Process Technologies

Headquarters:

Leister Process Technologies
Galileo-Strasse 10
CH-6056 Kaegiswil/Switzerland
phone: +41 41 662 74 74
fax: +41 41 662 74 16
leister@leister.com
sales@leister.com

Leister Technologies LLC
1275 Hamilton Parkway
Itasca, IL 60143/USA
phone: +1 630 760 1000
fax: +1 630 760 1001
sales@leisterusa.com

Leister Technologies Ltd.
Building A, 1588 Zhuanxing Road
Shanghai 201 108 PRC
phone: +86 21 6442 2398
fax: +86 21 6442 2338
leister@leister.cn

Leister Technologies KK
Shinyokohama Bousei Bldg 1F
3-12-20, Shinyokohama, Kohoku-ku
Yokohama 222-0033
phone: +81 (45) 477 3637
fax: +81 (45) 477 3638
sales-japan@leister.com

Our close worldwide network
of more than 120 Sales and
Service Centres in more than
90 countries.

Europe:
Austria
Belgium
Bulgaria
Croatia
Cyprus
Czech

Republic
Estonia
Denmark
Finland
France
Germany
Great Britain

Greece
Hungary
Ireland
Iceland
Italy
Latvia
Lithuania

Netherlands
Norway
Poland
Portugal
Romania
Russia
Serbia

Slovakia
Slovenia
Spain
Sweden
Switzerland
Turkey
Ukraine

Leister Technologies GmbH
Aachen, Germany

Leister Process Technologies
Headquarters and Manufacturing
Kaegiswil, Switzerland

Leister Technologies LLC
Itasca, IL, USA

America:
Canada
Mexico
USA
Argentina
Brazil
Chile
Peru

Leister Technologies KK
Yokohama, Japan

Leister Technologies Ltd.
Shanghai, China

Africa:
Egypt
Kenya
Morocco
South Africa

Asia:
P. R. China
Hong Kong
India
Indonesia
Iran

Japan
Korea
Malaysia
Philippines
Saudi Arabia
Singapore

**United Arab
Emirates**
Taiwan
Thailand
Vietnam

Oceania:
Australia
New Zealand

Your Sales and Service Centre: