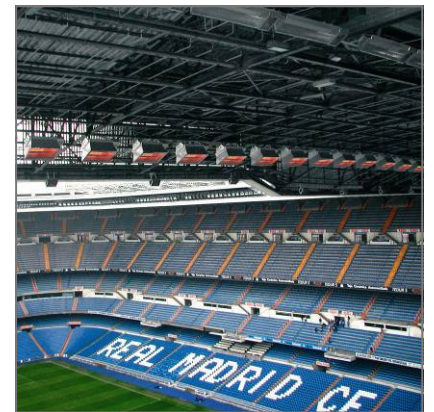
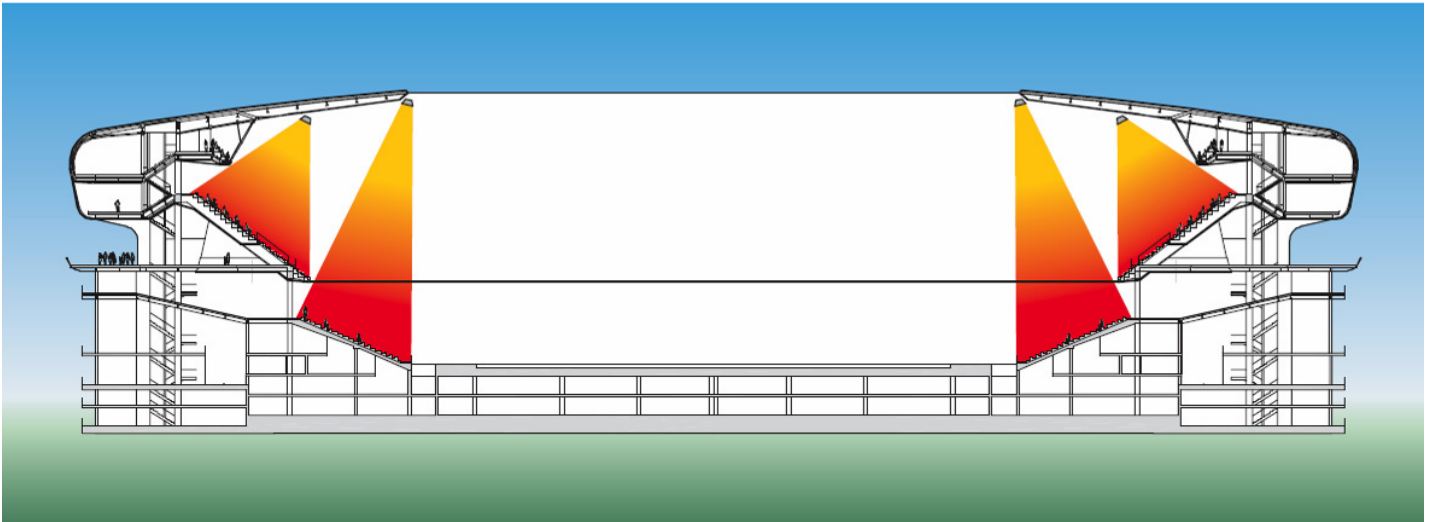


# Stadium Heating

## Comfort on Cold Days



**Schwank**  
INNOVATIVE HEATING SOLUTIONS



# Whether it's the Champion's League or the second league - Schwank stadium Heating is always well received.

## Why stadium heating?

It is important to provide special spectators such as VIPs, sponsors, politicians and business people a maximum in comfort. This includes the perceived temperature as well. Not only does the stadium operator benefit from this, but the spectator as well.



## Experience counts.

Real Madrid, Chelsea FC, AZ Alkmaar and Feyenoord Rotterdam are just some of the numerous clubs, which have benefited from the advantages of heating seating stands including a large number of smaller clubs. Our experience ranges from heating exclusive VIP areas to heating the entire stadium.



## How much does it cost?

Stadium stands can be heated for as little as € 0.03 per spectator and game – low costs that pay off in image and comfort.

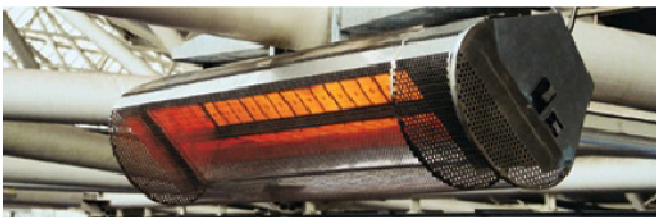


## Schwank – a powerful partner.

- The worldwide leader for radiant heating.
- For stadiums, industrial buildings, warehouses, sports arenas and outdoors.
- Patented stadium heater [sportSchwank] with wind protector.
- Over 1 million heating appliances sold.
- Distribution in over 40 countries.

## How does radiant heating work?

The radiant heating system is especially suited to heating stadiums. Thanks to a high performance and low energy consumption costs, radiant heating is popular in commerce and industry. It generates a comfortable perceived temperature despite prevailing low air temperatures – this is the same noticeable impact the sun has on cold winter days. The sportSchwank applies the principle of the sun, but can be easily turned on and off like a light bulb, is energy efficient and environmentally-friendly. Warmth with instant results.



What Graham Hughes, technical consultant for Chelsea's building services technology has to say about Schwank:

*"Schwank stadium heating has clearly exceeded all our expectations. The warmth is well received by all the VIPs, and they really appreciate comfort on cold days."*

Visit us at our website; take a look at our references and request our comprehensive information package.

# Schwank Stadium Heating

# Fenerbahçe Istanbul

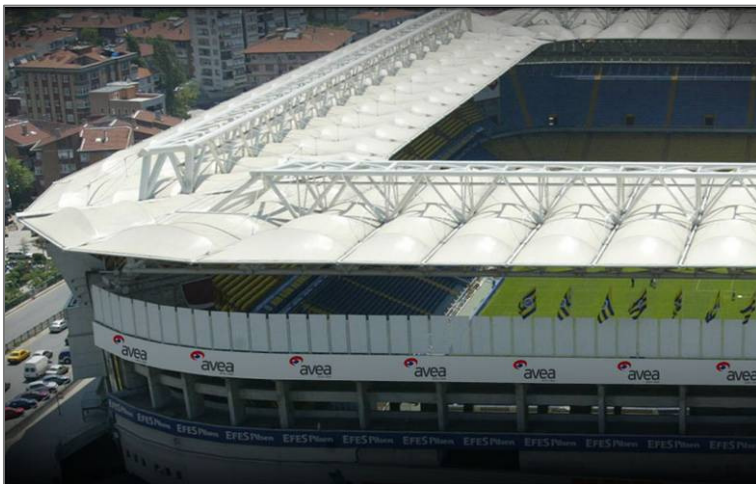
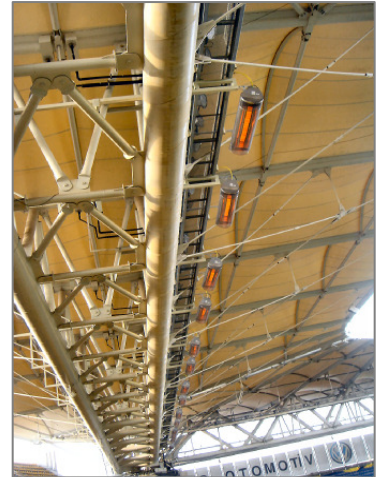
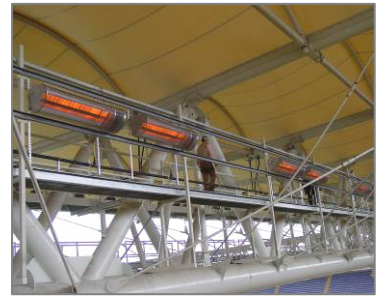
Stadium: Sükrü Saraçoğlu  
Location: Istanbul, Turkey  
Capacity: 52,000  
Built in: 2005  
Category: 5-Star UEFA  
Standing: First League [Türkcell Süper Lig]

## Heating Installation

155 x sportSchwank 10  
128 x sportSchwank 30  
160 x sportSchwank 40  
443 heating units

## Total installation

11.4 Megawatts / 39 million BTU



**Schwank Stadium Heating**

# AZ Alkmaar

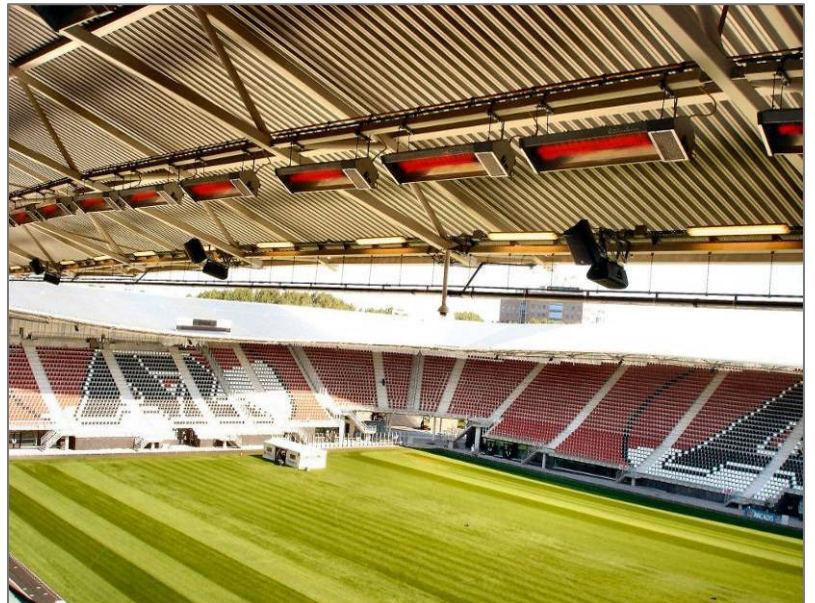
Stadium: DSB Stadion  
Location: Alkmaar, Netherlands  
Capacity: 16,000  
Built in: 2006  
Standing: First League [Eredivisie]

## Heating Installation

26 x sportSchwank 20  
59 x sportSchwank 30  
85 heating units

## Total installation

2.2 Megawatts / 7.5 million BTU



**Schwank Stadium Heating**

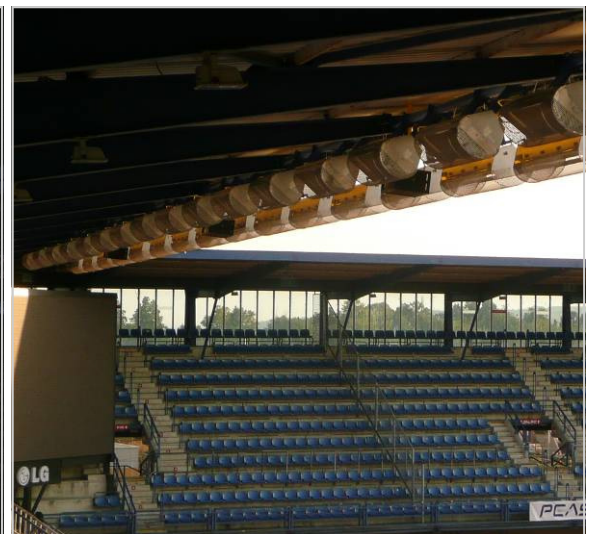
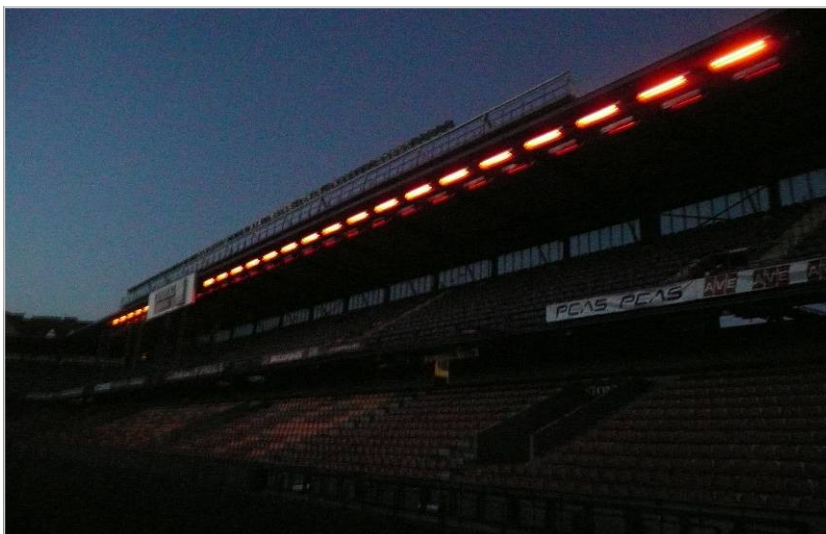
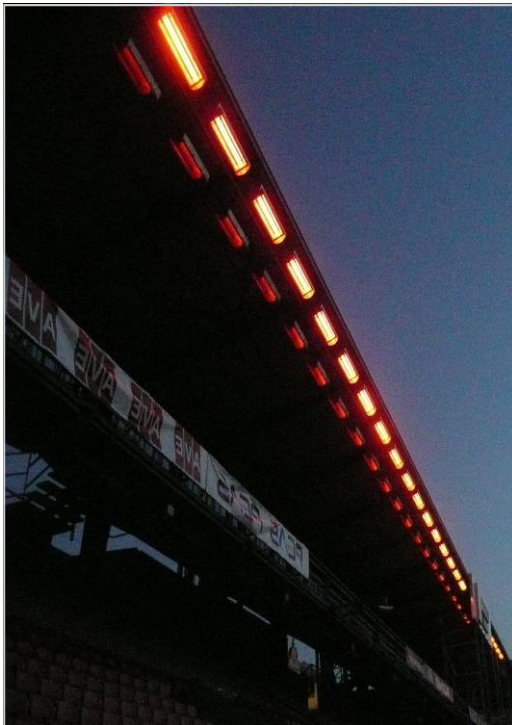


# AC Sparta Prague

Stadium: Generali Arena  
Location: Prague, Czech Rep.  
Capacity: 20,565  
Built in: 1933

**Heating Installation**  
67 x sportSchwank 30

**Total Installation**  
1.7 Megawatt / 5.6 million BTU



**Schwank Stadium Heating**

5

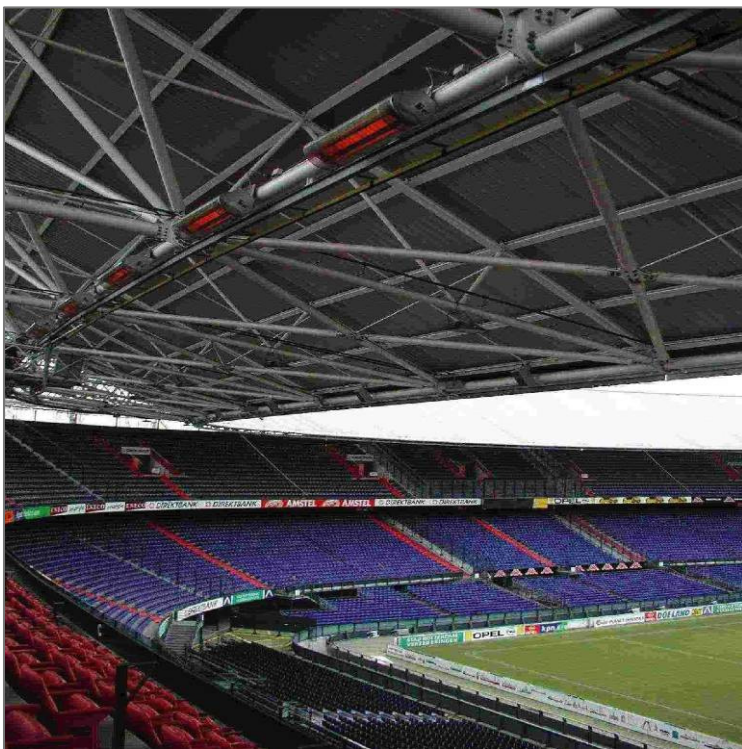
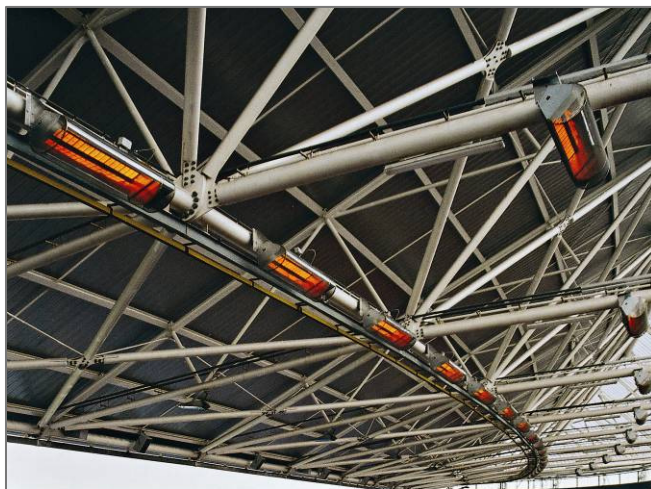
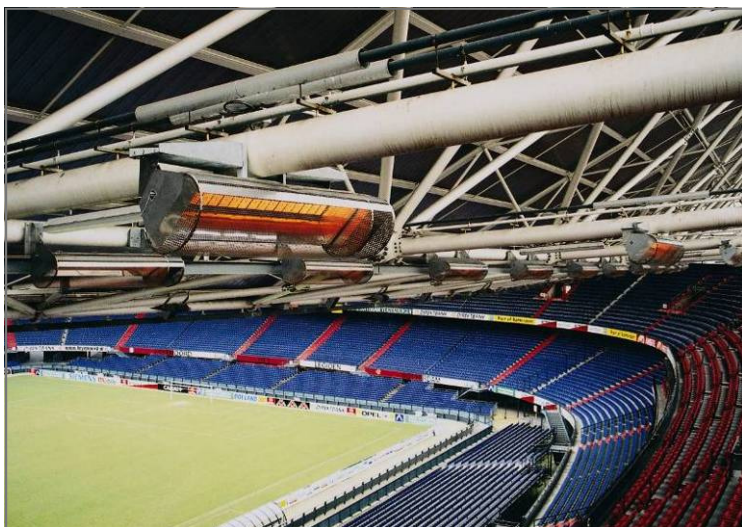


# Feyenoord Rotterdam

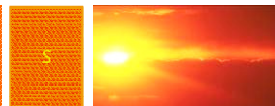
Stadium: Stadion Feyenoord  
Location: Rotterdam, Netherlands  
Capacity: 51,180  
Built in: 1994  
Category: 5-Star UEFA  
Standing: First League [Eredivisie]

**Heating Installation**  
62 x sportSchwank 30

**Total installation**  
1.8 Megawatts / 6.1 million BTU



**Schwank Stadium Heating**



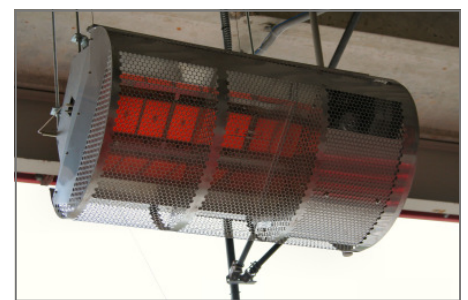
# Rutgers University

## Scarlet Knights

Stadium: Rutgers Stadium  
Location: New Jersey, USA  
Capacity: 56,000  
Built in: 1994

**Heating Installation**  
40 x sportSchwank 10

**Total installation**  
0.3 Megawatts / 1.1 million BTU  
Heating of the VIP section



**Schwank Stadium Heating**



# FC Twente

Stadium: De Grolsch Veste  
Location: Enschede, Netherlands  
Capacity: 24,000  
Built in: 1998  
Standing: First League [Eredivisie]

## Heating Installation

32 x sportSchwank 40  
37 x terrasSchwank 4A  
69 heating units

## Total installation

1.3 Megawatts / 4.3 million BTU



**Schwank Stadium Heating**



# De Graafschap

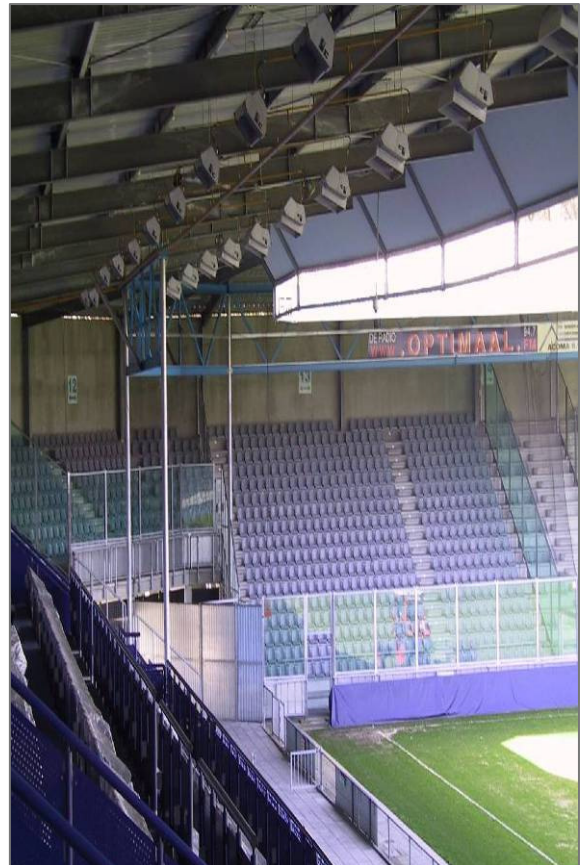
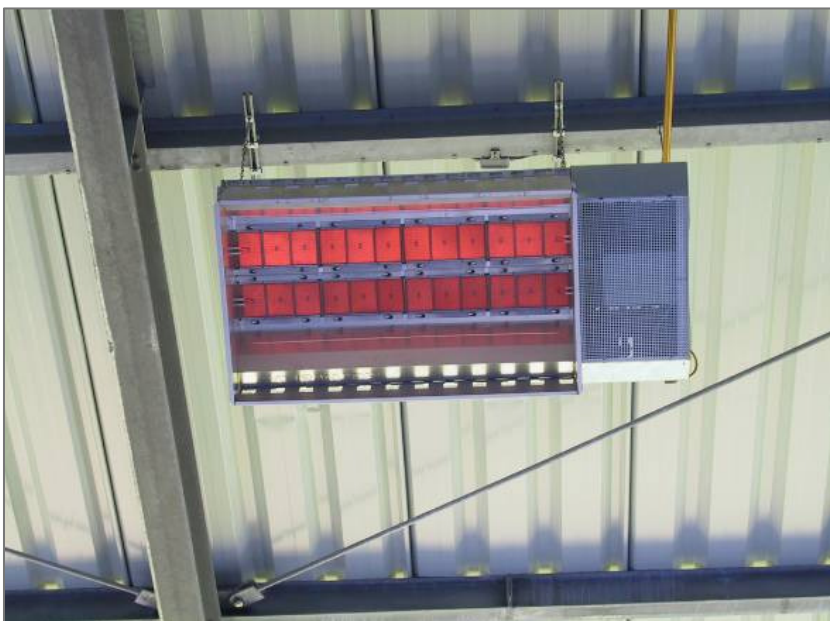
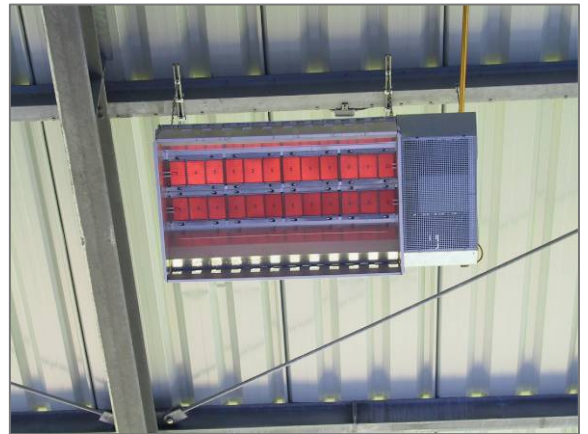
Stadium: Stadion De Vijverberg  
Location: Doetinchem, Netherlands  
Capacity: 10,900  
Built in: 1954  
Standing: First League [Eredivisie]

## Heating Installation

18 x sportSchwank 20  
18 x sportSchwank 40  
36 heating units

## Total installation

1.0 Megawatts / 3.4 million BTU



**Schwank Stadium Heating**



# Kayserispor

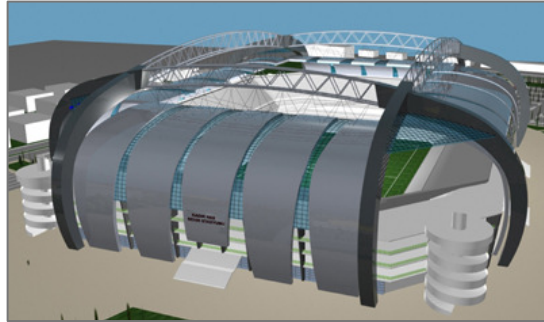
Stadium: Kadir Has Stadium  
Location: Kayseri, Turkey  
Capacity: 35,000  
Built in: 2008/9

## Heating Installation

176 x sportSchwank 30  
16 x sportSchwank 40

## Total installation

5.7 Megawatts / 17.3 million BTU



**Schwank Stadium Heating**

5



# Sparta Rotterdam

Stadium: Het Kastell  
Location: Rotterdam, Netherlands  
Capacity: 11,500  
Built in: 2000  
Standing: First League [Eredivisie]

**Heating Installation**  
24 x sportSchwank 40

**Total installation**  
0.9 Megawatts / 3.3 million BTU



**Schwank Stadium Heating**

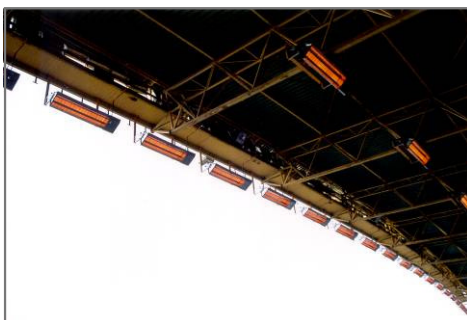


# Real Valladolid

Stadium: Estadio José Zorilla  
Location: Valladolid, Spain  
Capacity: 26,500  
Built in: 1982  
Standing: First League [League BBVA]

**Heating Installation**  
56 x sportSchwank 30

**Total installation**  
1.6 Megawatts / 5.5 million BTU



**Schwank Stadium Heating**

5

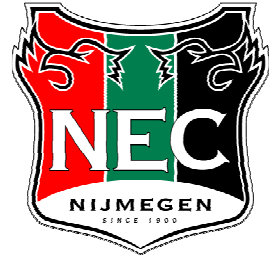


# NEC Nijmegen

Stadium: Stadion De Goffert  
Location: Nijmegen, Netherlands  
Capacity: 12,500  
Built in: 2000  
Standing: First League [Eredivisie]

**Heating Installation**  
20 x sportSchwank 30

**Total installation**  
0.6 Megawatts / 2 million BTU



**Schwank Stadium Heating**

5



# Real Madrid

Stadium: Santiago Bernabéu  
Location: Madrid, Spain  
Capacity: 80,350  
Built in: 1947/2003  
Category: 5-Star UEFA  
Standing: First League [League BBVA]

## Heating Installation

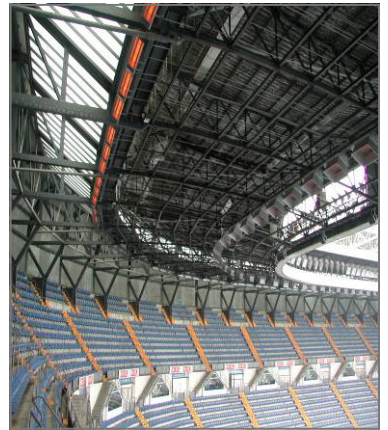
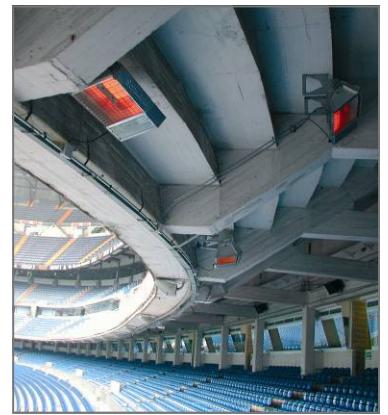
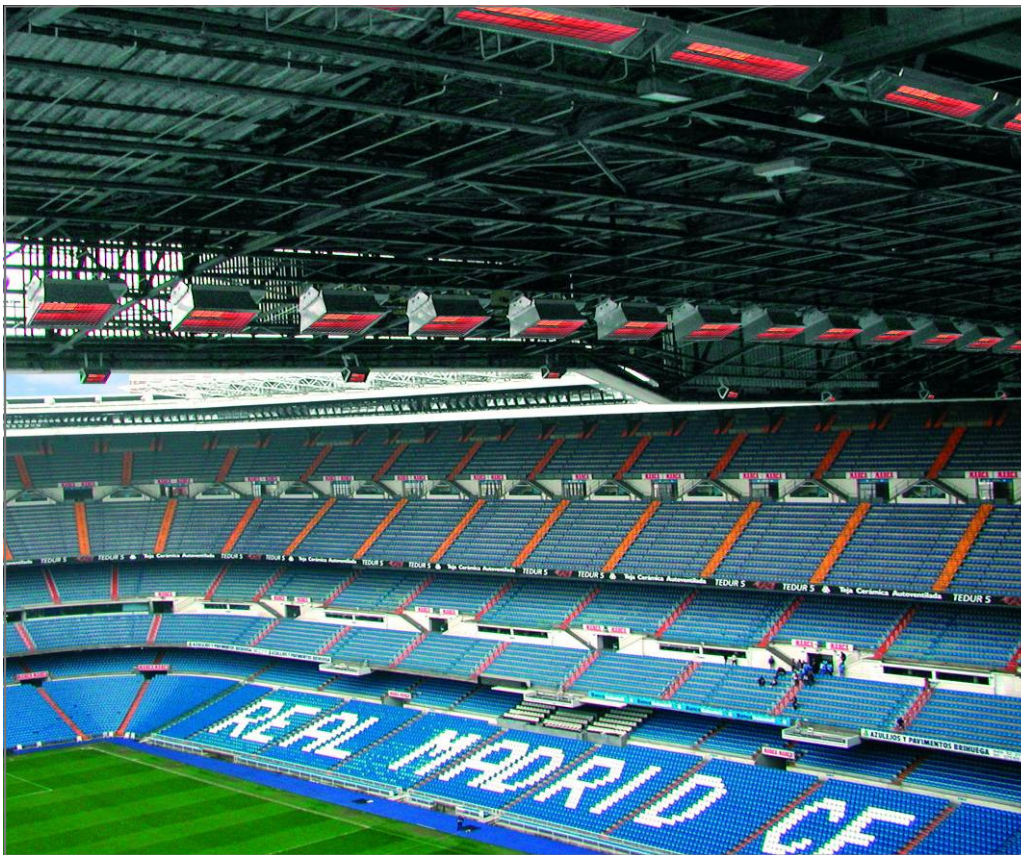
215 x sportSchwank 10  
154 x sportSchwank 20  
296 x sportSchwank 30  
524 x sportSchwank 40  
1,189 heating units

## Total installation

34 Megawatts / 116 million BTU



Remarks: Highest Installation point at 55 meters / 180 ft. from grandstands



**Schwank Stadium Heating**

5



# FC Dordrecht

Stadium: GN Bouw Station  
Location: Dordrecht, Netherlands  
Capacity: 4,100  
Built in: 1972  
Standing: Second League [Jupiler League]

**Heating Installation**  
13 x sportSchwank 20

**Total installation**  
0.3 Megawatts / 1 million BTU



**Schwank Stadium Heating**



# Chelsea FC

Stadium: Stamford Bridge  
Location: London, England  
Capacity: 42,055  
Built in: 1997  
Standing: First League [Premier League]

## Heating Installation

47 x sportSchwank 40

## Total installation

1.8 Megawatts / 6.1 million BTU

Heating of the VIP section - 3 seating rows across the stadium length



**Schwank Stadium Heating**



# FC Den Bosch

Stadium: Stadion De Vliert  
Location: 's-Hertogenbosch, Netherlands  
Capacity: 9,000  
Built in: 1999  
Standing: Second League [Jupiler League]

**Heating Installation**  
24 x sportSchwank 30

**Total installation**  
0.7 Megawatts / 2.4 million BTU



**Schwank Stadium Heating**



# Munich Olympic Park SoccaFive Indoor Arena

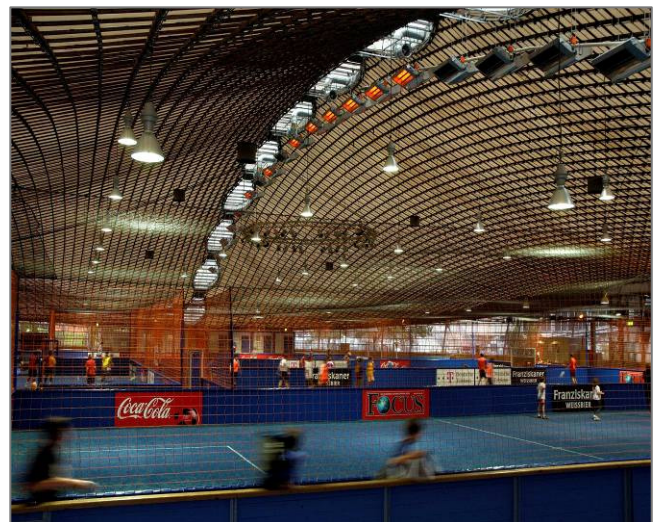
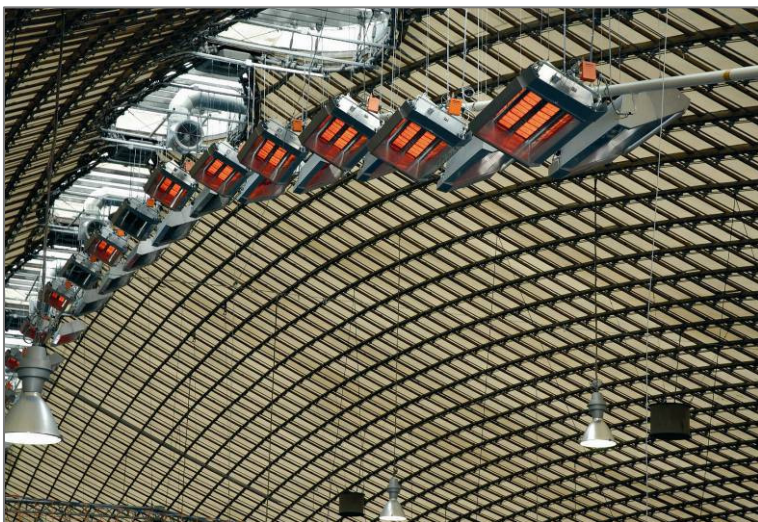
Arena: Munich Olympic Park  
Location: Munich, Germany  
Surface: 4,200 m<sup>2</sup> / 45,200 sqft  
Built in: 1972

## Heating Installation

40 x sportSchwank 40  
8 x sportSchwank 20  
48 heating units

## Total installation

1.7 Megawatts / 5.8 million BTU

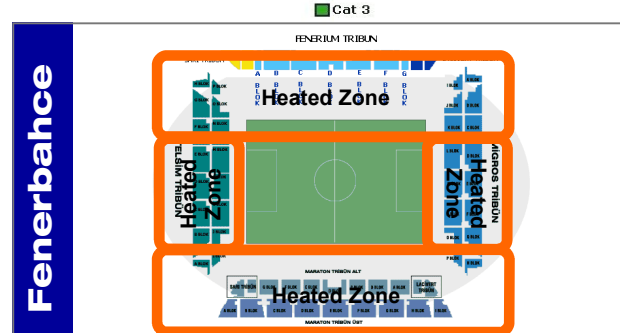
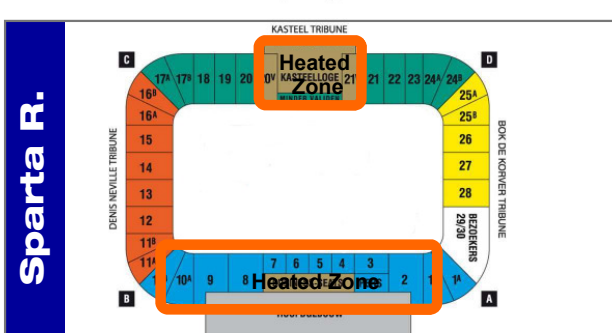
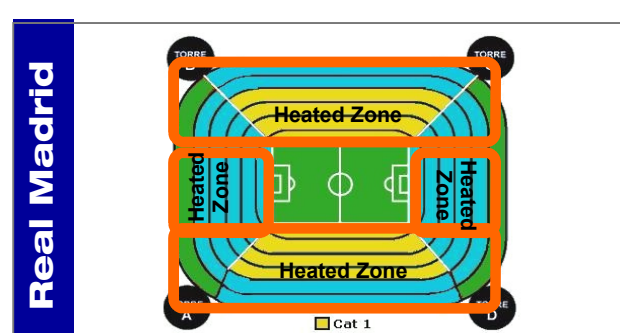
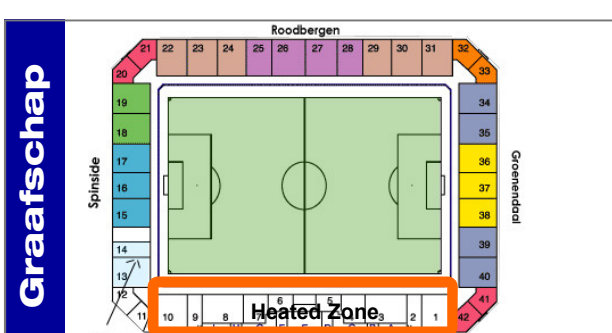
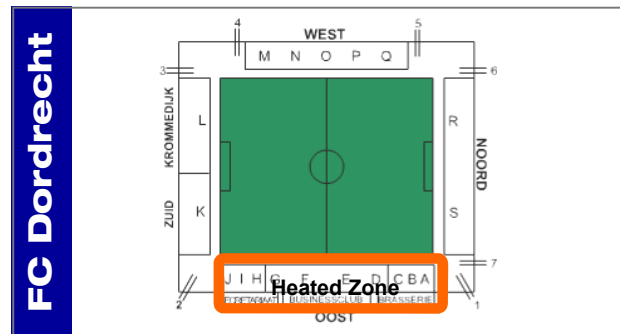
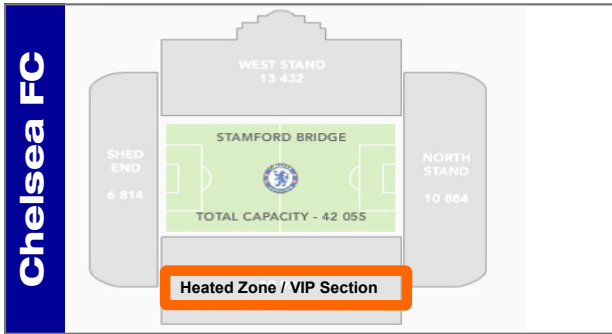


**Schwank Arena Heating**

5



# Stadium Layouts



# References



In the "Santiago Bernabéu Stadium Steering Plan", driven by the Real Madrid FC within the years 2001 to 2006, the main objective was to maximize the revenues by improving both, the comfort and the quality levels of the facilities.

A significant improvement was the installation of a heating system to heat all spectator areas, more than 78.000 seats located on the different grandstands, with a sophisticated radiant heating system equipped with high efficient gas luminous heaters (1,189 units) manufactured by Schwank GmbH company in Cologne (Germany).

The decision to install an infrared heating system with gas luminous heater units primoSchwank type, was taken by the Management of the Club after having the chance to experience the good performance of the heating systems equipped by Schwank heaters at the premises of the Feyenoord Football Stadium (Rotterdam) and at Jose Zorrilla Stadium (Valladolid).

Since the commissioning, in March 2004, the heating system is working on demand and with full availability, providing a high level of satisfaction to the spectators. Samples of it are the high number of people that attend to the stadium even in the coldest days, as well as the full availability of the facility for commercial & institutional events 365 days a year.

Our sincere thanks to all persons involved in the project from Schwank GmbH and from Kromschroeder, S.A. companies, for all the information, support and collaboration provided.

Please, do not hesitate to contact us for further information.

Yours faithfully

A handwritten signature in blue ink, appearing to read "D. Agrelo".



David Luis Agrelo  
Operation Conservation & Facility Maintenance Manager  
**Real Madrid Club de Fútbol**

# References

CHELSEA FOOTBALL CLUB



24<sup>th</sup> March 2011

To Whom It May Concern:

This is a letter to confirm that we have thoroughly evaluated infrared heaters for our West Stand. Initially we have installed Gogas K8436 for testing and found their performance insufficient in terms of wind sensitivity and radiant performance. Finally, we have selected Primo Schwank 40 and are very satisfied with the results in terms of temperature fulfilment and technical quality even under rough weather conditions.

Please do not hesitate to contact me if you have any further questions.

Yours faithfully

A handwritten signature in black ink, appearing to read 'J.S. Evans'.

Justin Evans  
Technical Services Supervisor  
Chelsea Football Club

Chelsea Football Club Ltd  
Stamford Bridge  
Fulham Road  
London SW6 1HS

Tel: 0871 984 1955  
Fax: 0207 381 4831  
www.chelseafc.com  
Registered No. 1965149  
Registered Office: Stamford Bridge



CLUB SPONSOR



KIT SUPPLIER & SPONSOR

# References



**Feyenoord  
Rotterdam**

Feyenoord Rotterdam N.V.  
Postbus 9635  
3007 AP Rotterdam • Holland  
Telefon +31 (0)10 - 2926888  
Fax +31 (0)10 - 4824843  
Internet: www.feyenoord.nl  
Fortisbank 640743 021  
Postbank 40 90 812

Rotterdam, 12. mai 2011

To whom it may concern

At the stadium "De Kuip" of Feyenoord Rotterdam we have a long experience with infrared heating systems. We were one of the first football stadiums worldwide to start using this innovative and efficient technology. In 1994 the first heaters were installed, by Schwank. In the years to follow, we also have had some experiences with other heater brands. But we have gone back to Schwank, thanks to the outstanding performance and quality. Today, we only use Schwank infrared heaters.

In the beginning, due to the unique architecture of our stadium, we experienced some unexpected problems with the wind during certain weather conditions. In close cooperation with Schwank, the company developed a custom made wind protection to ensure optimal operation during naturally occurring winds and turbulences below the roof. Since then, the heaters have been working flawlessly. Over the years we have always appreciated the continuous support of Schwank in terms of after-sales support and technical advice.

Nowadays our spectators on the VIP tribunes and in the business units enjoy their stay in our stadium at maximum comfort. Over 150 heaters make sure they can fully enjoy a great game of football or another event even on colder days.

If you have any further questions, please do not hesitate to contact me.

Yours faithfully,

**STADION FEIJENOORD N.V.**

Van Zandvlietplein 1  
3077 AA Rotterdam  
Tel. 010 - 4929444

Rico Salomons  
Facility Manager  
Feyenoord Rotterdam



# References



**AC SPARTA PRAHA**



35x Mistr ligy  
35x Czech Champions



18x Vítěz Českého poháru  
18x Czech F.A. Cup Winner

on 24th May 2011, Prague

## Recommendation letter

AC Sparta Prague is the most successful football club in the Czech Republic playing in UEFA competition every season. So we are in permanent contact with the best European football clubs not only in sports aspects, but as well in business aspects.

In the AC Sparta Praha we use modern trends and increase club's business all the time. This is the reason why we decided to install infrared heaters SCHWANK at the stadium GENERALI Arena in the season 2010/2011. By this installation we increased comfort for our supporters at the stadium, because the income from attendance makes a very important part of club's revenue.

According to good references from colleagues from other clubs, mainly from Netherlands, Turkey and England – Chelsea FC, we chose infrared heaters SCHWANK.

We are very satisfied with products and staff of company SCHWANK and we are decided to continue in this cooperation as well in the next phase of stadium heating construction.

On behalf of football club AC Sparta Prague

Ing. Michal Viktorin  
Director of Business & Marketing  
Member of the Board of Directors  
AC Sparta Praha fotbal a.s.

AC Sparta Praha fotbal, a.s., GENERALI Arena, Tř. Milady Horákové 1066/98, 170 82 Praha 7 – Letná, Tel.: +420 296 111 111, Fax: +420 220 571 661, E-mail: [football@sparta.cz](mailto:football@sparta.cz), č. ú.: 1002567734/2700 vedený u UniCredit Bank, a. s., IČO /Business ID: 46356801, DIČ /Tax ID: CZ46356801, Registrace u Městského soudu v Praze, oddíl B, vložka 2276 /Registered at the Municipal Court in Prague, Section B, Insert 2276 [www.sparta.cz](http://www.sparta.cz)

**FORTUNA**  
sázková kancelář

**GENERALI**

**DNES**



# Schwank Quick Facts

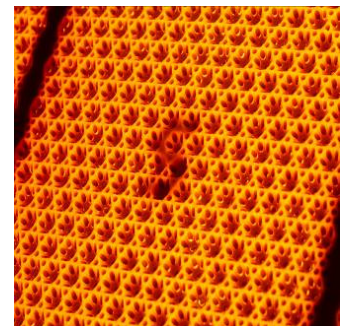
## Schwank - a Powerful Partner

- Worldwide market leader in gas infrared heating
- More than 75 years of innovation, continuous product development and cutting edge technology
- Inventor of infrared heaters - patented in 1938
- German engineering & manufacturing
- Over 2 million infrared heating appliances sold
- More than 150,000 satisfied customers
- Tailor-made heating solutions from one source



## Schwank - Compelling Comfort

- Highly energy efficient
- Immediate heat impact & results - instant comfort
- Even, comfortable heat
- Differentiation of heating zones possible
- Varying temperature differentials achievable
- Patented wind protection screen to increase wind resistance
- High quality & durability
- Simple, space-saving installation
- Professional design planning



**Schwank Stadium Heating**



# Schwank contacts

## Germany

**Schwank GmbH**  
Oliver Schwank  
Bremerhavener Str. 43  
50735 Köln

Tel.: +49 - 221-7176 0  
Fax: +49 - 221-7176 288  
Email: [info@schwank.de](mailto:info@schwank.de)  
Internet: [www.schwank.de](http://www.schwank.de)

## Netherlands

**Schwank BV**  
Floris Kristen  
Nijverheidsweg 5  
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Tel.: +31 - 345 - 513143  
Fax: +31 - 345 - 518464  
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Internet: [www.schwank.nl](http://www.schwank.nl)

## Poland

**Schwank Polska Sp.zo.o.**  
Daniel Mroz  
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40-955 Katowice

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Fax: +48 - 32 - 201 05 59  
Email: [info@schwank.pl](mailto:info@schwank.pl)  
Internet: [www.schwank.pl](http://www.schwank.pl)

## Romania

**Schwank SRL**  
Claudia Miftodi  
bd. 9 Mai nr. 21, bl. B11/43-44  
610127 Piatra Neamt

Tel.: +40 - 233 - 22 69 66  
Fax: +40 - 233 - 23 24 22  
Email: [schwank@schwank.ro](mailto:schwank@schwank.ro)  
Internet: [www.schwank.ro](http://www.schwank.ro)

## USA

**Schwank USA, Inc.**  
Marc Grandbois  
2 Schwank Way  
Waynesboro,  
GA 30830

Tel.: +1 - 706 - 554 61 91  
Fax: +1 - 706 - 554 93 90  
Email: [csr@schwankgroup.com](mailto:csr@schwankgroup.com)  
Internet: [www.schwankgroup.com](http://www.schwankgroup.com)

## Belgium

**Schwank Belgium**  
Gérard Cooreman  
Rue le Titien, 49  
1000 Bruxelles

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Fax: +32 - 2 - 73 26 783  
Email: [info@schwank.be](mailto:info@schwank.be)  
Internet: [www.schwank.be](http://www.schwank.be)

## Czech Republic

**Schwank CZ, s.r.o.**  
Aleš Fukar  
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614 00 Brno

Tel.: +420 - 545 - 211 530  
Fax: +420 - 545 - 212 139  
Email: [info@schwank.cz](mailto:info@schwank.cz)  
Internet: [www.schwank.cz](http://www.schwank.cz)

## Russia

**OOO RusSchwank**  
Oleg Pywen  
Jamskaja Str. 103  
625001 Tyumen

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## Great Britain

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