



Conex Bänninger and Wieland's K65 system specified at Atlético de Madrid's stadium Wanda Metropolitano

Date:	2018
Product:	K65
Description:	K65 specified for cold rooms, blast freezers, kitchen rooms and heating the football pitch.
Project:	Wanda Metropolitano
Location:	Madrid



Background

Conex Bänninger's K65 fittings and Wieland's K65 tubes have been specified as part of the CO2 solution designed by systems manufacturer Pecomark for the redevelopment of the Wanda Metropolitano stadium in Madrid.

Products

The stadium, the home of Spanish football giants Atlético de Madrid and the venue hosting the UEFA Champions League Final in 2019, has been transformed into a state-of-the-art facility in recent years.

At the heart of the 68,000 capacity football stadium is a cutting edge CO2 transcritical system with parallel compressors and multi-ejectors, providing cooling for a large kitchen that serves numerous restaurants within the facility as well as the VIP lounges.

A key requirement for the flagship stadium was equipping it with the latest future proof technologies, including a new refrigeration system that allowed for significant energy savings when compared to HFC/HFOs. Pecomark specified CO2 as the perfect solution.

With the ability to deliver water at high temperatures and functioning effectively even when cold rooms are far away from the plant room, the installation features cold rooms at 0°C (fresh food), -20°C (frozen food), blast freezers at -30°C and kitchen rooms at 10°C, with the heat recovery from the system used for making hot water and heating the football pitch.

Designed to work for an ambient temperature of 38°C, the CO2 solution includes the installation of four low-temperature and 12 medium and high temperature units. Pecomark designed the system working in partnership with a host of suppliers, including Conex Bänninger and Wieland (fittings and tubes), Fagor (industrial kitchens), Danfoss (ejectors), Bitzer (compressors) and ECO (gas coolers and evaporators).

José Miguel Rueda, Business Unit Director for Spain at Conex Bänninger, said: "We are delighted that we've been specified for this high-tech stadium project. K65 fittings are ideal for high pressure ACR applications, delivering a best-in-class pressure rating of up to 130 bar (1740 psi), whilst also enhancing the green credentials of any building project by utilising the highly pressured CO2 R744 refrigerant."

The lightweight but extremely durable K65 system has burst pressures in excess of 500 bar, with the fittings easily identifiable by the manufacturer's mark, as well as the K65 mark and

130 bar (1740 psi) pressure rating. In addition, the material is slightly magnetic and can be easily distinguished from copper by means of a neodymium magnet – a helpful and practical advantage for installers and system builders.

For details on the full range of Conex Bänninger fittings and valves visit www.conexbanninger.com.