



References

## Leitradlofts, Cologne

### Uponor involvement

✔ Uni Pipe PLUS | RTM-fittings | ISI box | composite piping system | Ecoflex

## Leitradlofts, Cologne

A hygienically optimal drinking water installation was integrated into the new office complex – thanks to Uni Pipe PLUS within a very short time.

The conversion of industrial buildings is always a particular challenge. The task for the Leitradlofts in Cologne was to build up a variable heat and drinking water supply system for 52 office units in a former marine propeller factory. Home stations in combination with the loop-through ring installation ensure optimal hygiene and high comfort. In addition, the newly erected pellet local heating central plant was connected through the very flexible Ecoflex piping system.

### Project Facts:

Location

Cologne, Germany, Germany

Completion

2016

Building Type

Office building

Product systems

Local Heat Distribution, Multilayer

Pipe Systems

Address

50672 Cologne, Germany

Website

<http://www.leitrad.koeln/>

Project Type

New building

## Partners

Planner/installer:

Guido Schaefer GmbH, Alsdorf

Building owner and architect:

[Hartmut Gruhl, Cologne](#)

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### Modern building complex with industry character

The Leitradlofts is an architecturally and constructionally ambitious project that entails the complete gutting of an old marine propeller factory that had been standing empty for more than 20 years. Step-by-step, a modern building complex with 12,000 m<sup>2</sup> of office space will arise as a type of factory for the creative economy. The first construction phase encompasses a total of 52 units covering four floor levels. These can be combined flexibly into office landscapes ranging from 95 m<sup>2</sup> to a maximum of 2,400 m<sup>2</sup> size.

### Impeccable hygiene through home stations and loop-through ring installation

To ensure optimal drinking water hygiene every unit was equipped with a separate home station. This ensures fresh hot water provision directly on site as needed. Furthermore central hot water and circulation lines in the supply shafts are not required. The sanitary facilities with two toilet rooms and one kitchen per unit were connected by means of the loop-through ring installation. This means that every tapping point receives its water through the ring from two sides, so that stagnations in the lines can be avoided reliably. In addition, further consumers can be included simply and flexibly if required.

### Economical installation with Uni Pipe PLUS and RTM Fittings

The loop-through ring installation in the 52 units and the connection of the radiators were carried out throughout with the pre-insulated multi-layer composite piping Uni Pipe PLUS. This is characterized by its narrow bending radii as well as high form stability. The pipe connections are realized with the RTM-Fittings with integrated press functions, without requiring tools, thus allowing rapid and reliable processing. This made it possible to lay about 12 kilometers of composite piping without a single classic mechanically pressed connection – thus reducing the required installation time by approximately 90 working days.

### Local heating network with very flexible Ecoflex pipes

The Leitradlofts are supplied completely with regenerative heat. Since the complete area does not have a basement, a separate central heating plant with two 200 kW pellet boilers was erected to this purpose. This also meant that about 400 meters of local heating pipes had to be laid between old foundations and the remaining steel and concrete supports. Here the Ecoflex piping system can exploit its high flexibility to the full extent. Although the pipes themselves are very robust, the pre-insulated pipes could be laid rapidly and simply through core drillings and also around corners with narrow radii.

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