



Bringing
comfort
to life

Uponor Unipipe system – one pipe for all applications

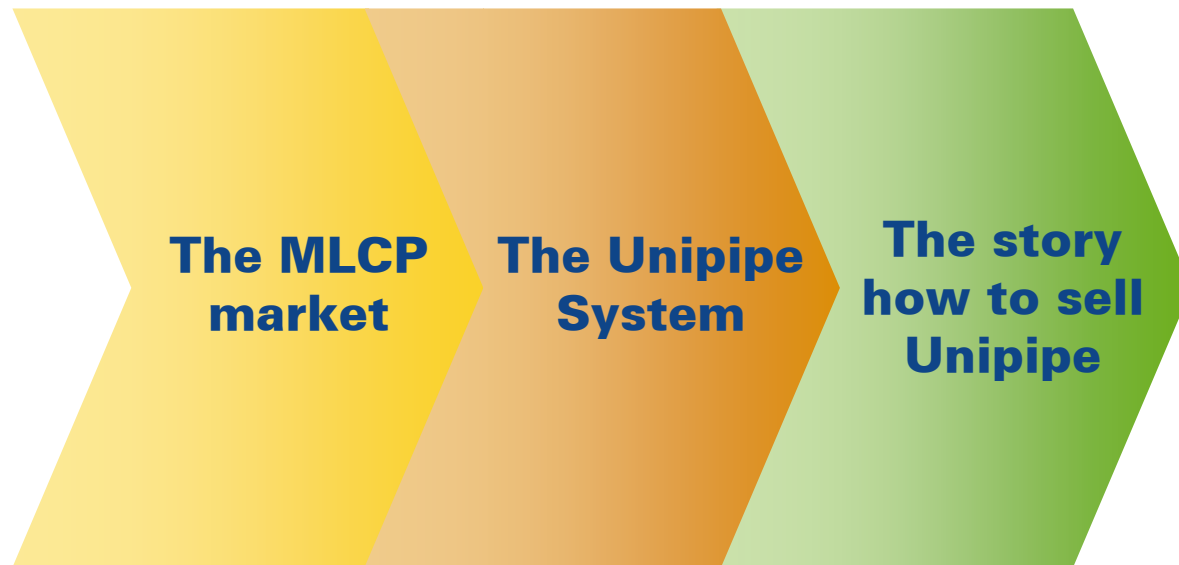
Heiko Folgmann

Vice President, Sales & Marketing, Uponor Central Europe

Capital Markets Day

Fulda/Zella-Mehlis, 14–15 September 2005

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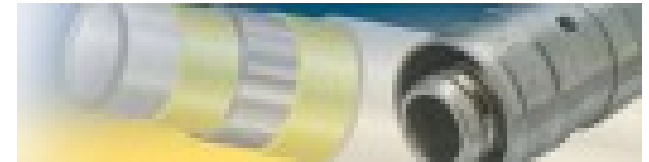
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The MLCP market

The concept of MLCP – not a pipe but a system

- With MLCP not only a new pipe generation has emerged, but a completely new system philosophy
- Today, the customer is not just paying for two components, but the **system know-how** that makes these components fit together



$$1 + 1 > 2$$

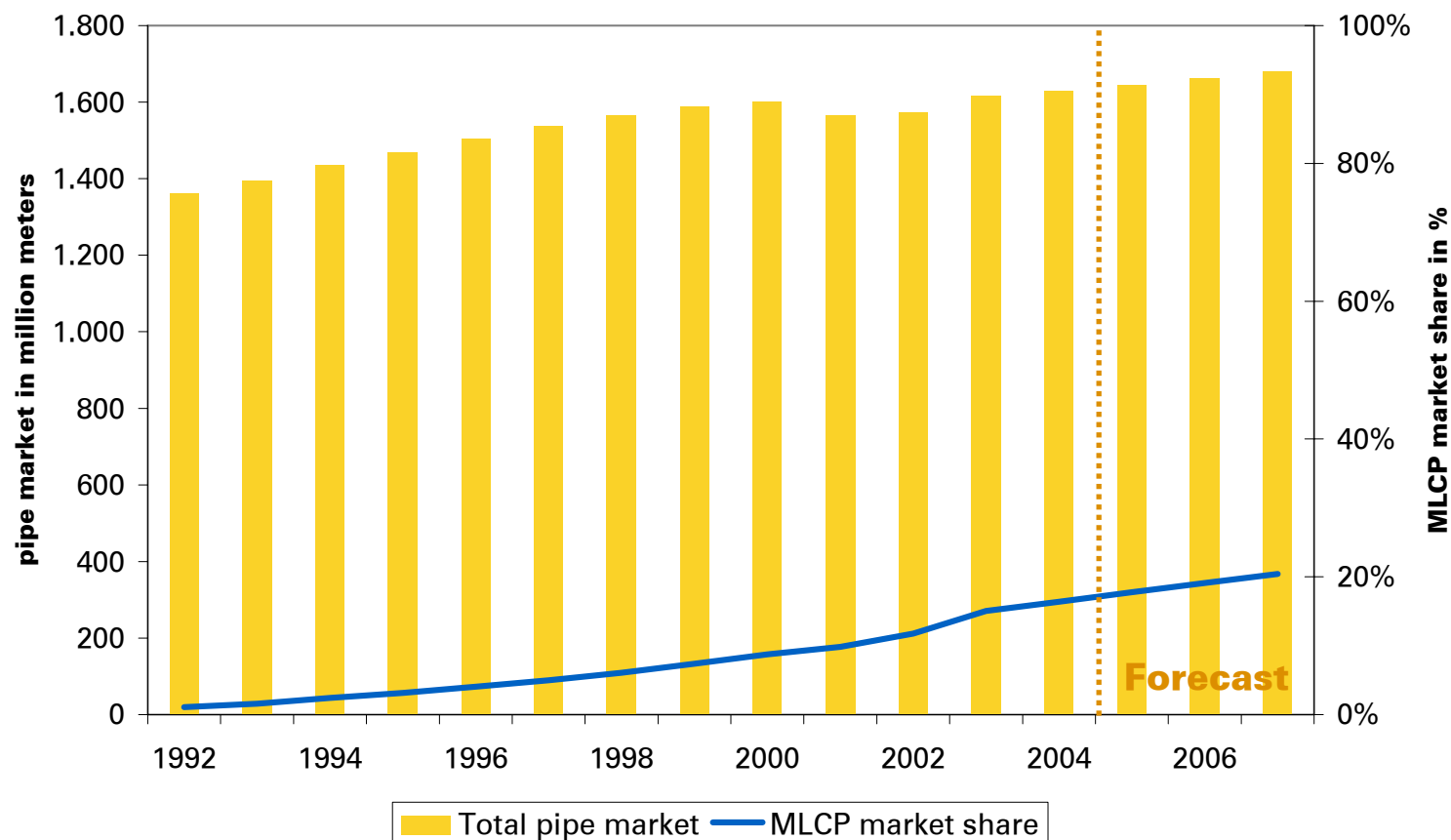


- With the development of MLCP also a new fitting technology was born: the **press fitting**
- The press fitting has become the most **preferred technology** on the plumbing and heating market

The MLCP market

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Development of the European market for plumbing and underfloor heating pipes and MLCP market share



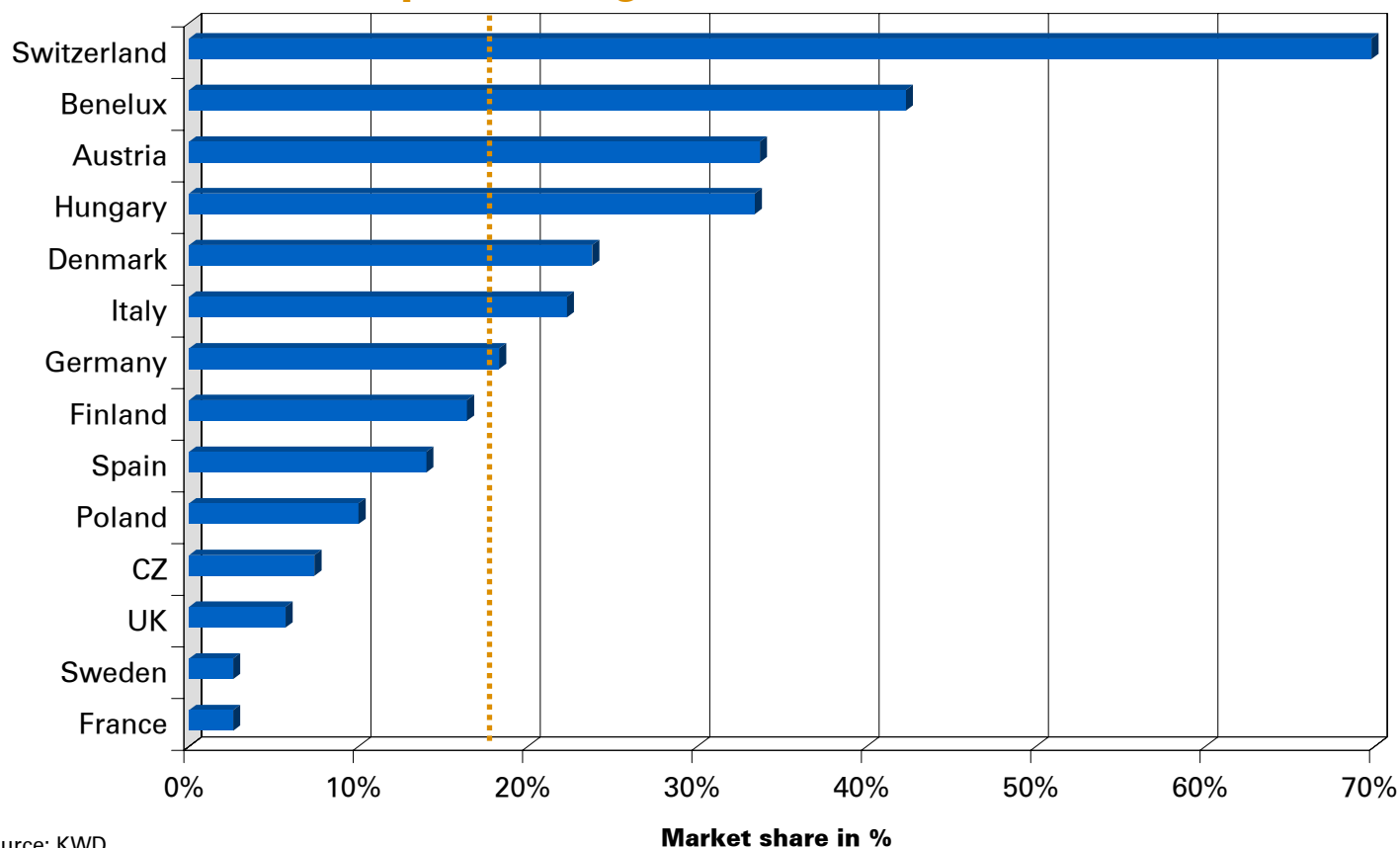
Source: KWD

The MLCP market

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MLCP shares of total market for plumbing and underfloor heating pipes 2004 in selected countries

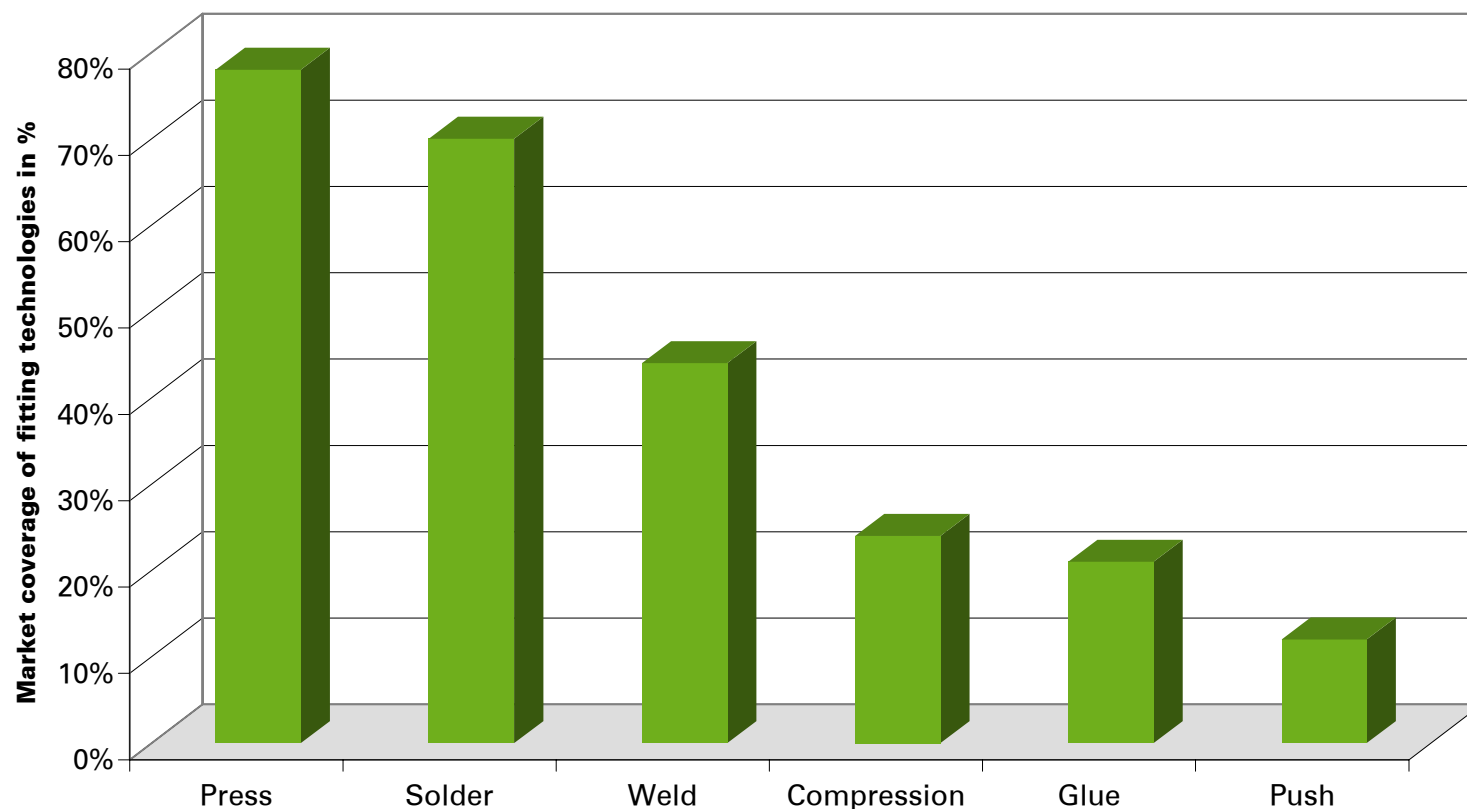
European average



The MLCP market

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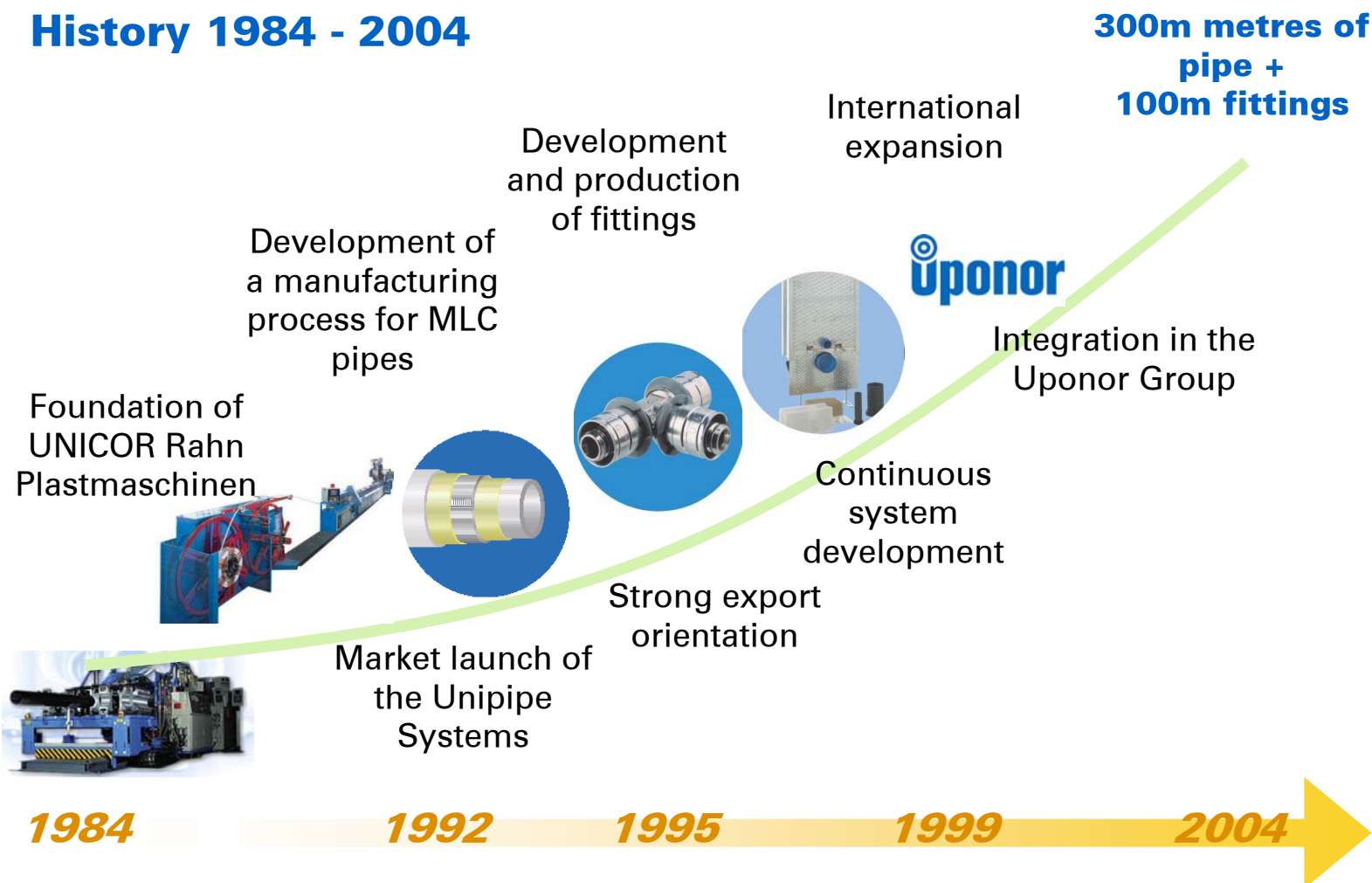
Market coverage of fitting technologies in Germany (considering all types of pipe materials)



Source: Querschiesser

The Unipipe history

History 1984 - 2004



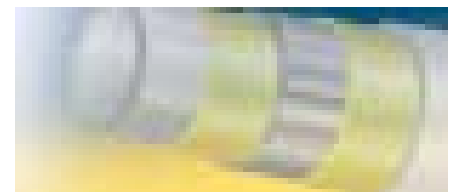
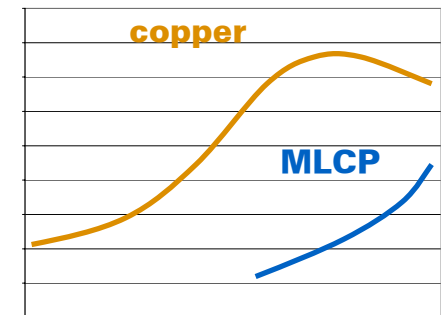
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Conclusion

- The success of multi-layer composite pipes reminds of a similar quantum leap in the plumbing and heating history:

In the early 70s copper pipes started to replace galvanised steel pipes as the number 1 choice in plumbing and heating installations. Thread-cutting was replaced by a new fitting technology: solder fittings. Copper pipes gained significant market share, but have in the meantime hit their peak.

- Multi-layer composite pipe systems have just started their lifecycle with growth accelerating quickly.
- Within a period of about 10 years, a completely new pipe philosophy changed the entire European market.



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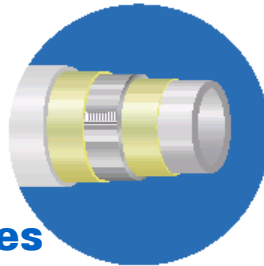


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The Unipipe system

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**Multi-layer
composite pipes**



Fittings



UNiPIPE[®]
Systems



Tools



Accessories



**Pre-wall
installation**

The Unipipe system

Applications: Plumbing

Tap Water

Pipes, fittings and accessories from the riser to the fixture



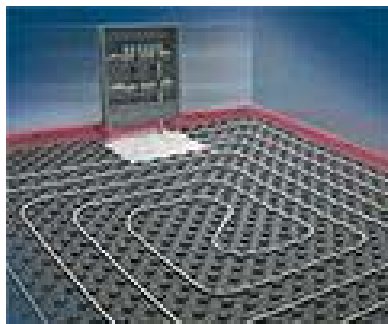
Radiator Connection

Fast and safe solutions for all kinds of requirements

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The Unipipe system

Applications: Heating / Cooling



Underfloor heating

Wall heating



Thermally activated building structures



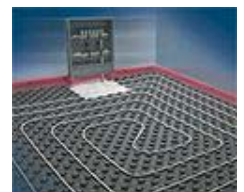
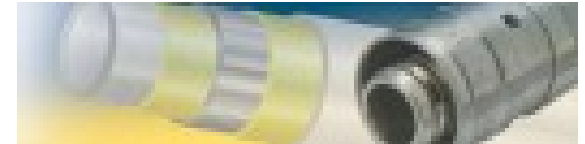
Comfort and cosiness, energy saving and protection of the environment – these are the maxims on which our heating / cooling systems are designed.

The Unipipe System

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Strengths of Uponor's Unipipe

- One pipe for all applications
- Easy installation
- Available in 12 dimensions from 14 up to 110 mm
- Comprehensive offering
- Innovative system solutions
- Pioneer and market leader in multi-layer composite pipe systems
- Highest competence due to own production of pipe and fittings
- Professional sales organisation
- Always close to the customer



Unipepe worldwide

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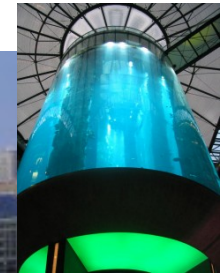
References: Germany



Uptown Munich



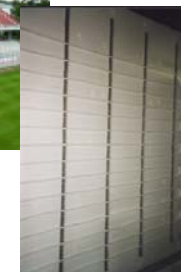
Dom Aquarée
Berlin



Bundeskantleramt Berlin



Soccer stadium
Energie Cottbus



Unipepe worldwide

References: international

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Kempinski San Lawrenz
Resort & Spa, Gozo, Malta

Lot Spa Hotel
in Israel at the Dead Sea



Al Kalaa hotel
Jeddah, Saudi-Arabia

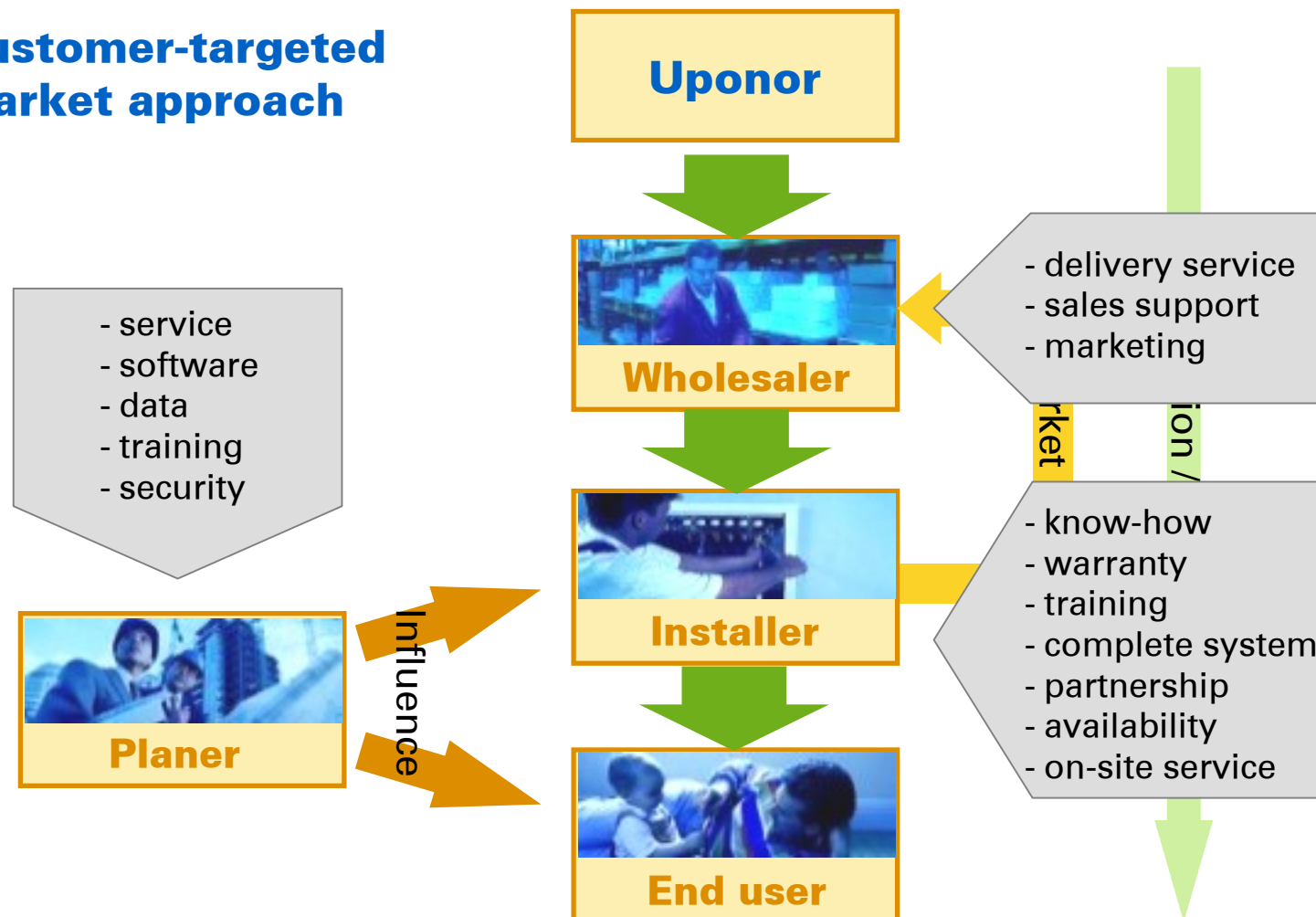
Fachadas Life Square e Le Parc
Porto Alegre, Brasil



Apartment Building
in Astana, Kazakhstan

The concept behind Unipipe

Customer-targeted market approach



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As a master craftsman, I am not only an installer but also a consultant to my customers.



**A young couple
is planning to
build a home.**





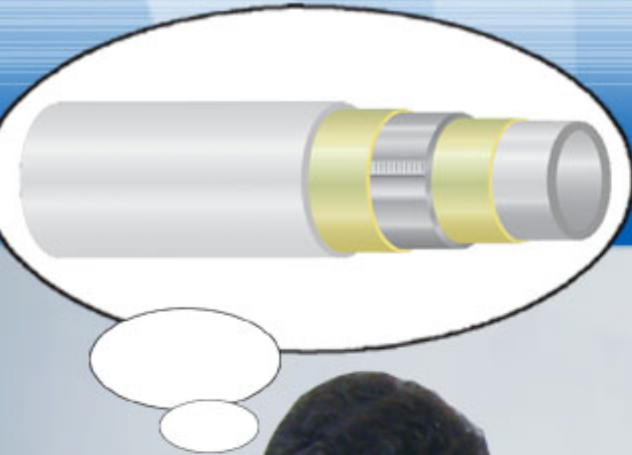
Unipipe – one system for all applications



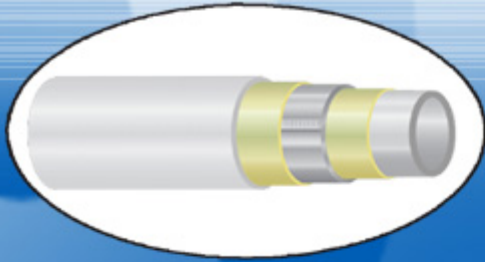
The advantages of the Unipipe system:

- **One multi-layer composite pipe system for all applications**
- **Comprehensive product program for tap water, radiator connection and underfloor heating installations**



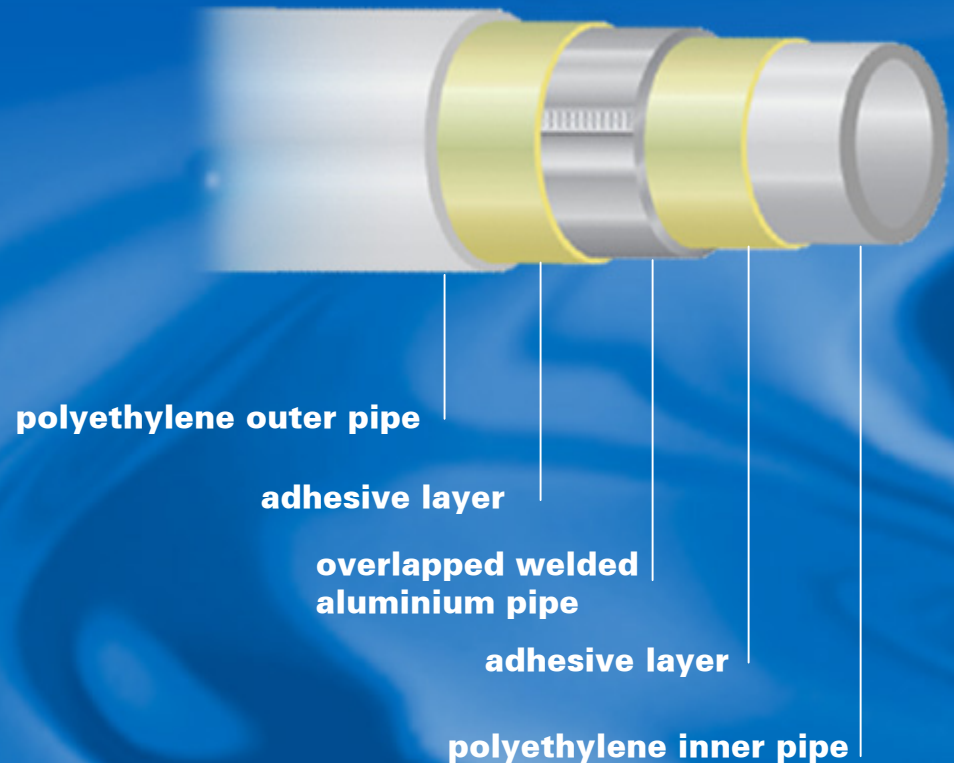


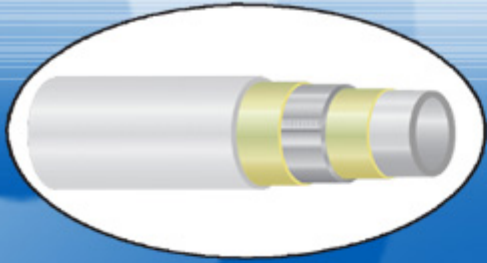
Unipipe – the multi-layer composite pipe



Unipipe advantages:

- **The ideal combination of all advantages of metal and plastic pipes**
- **5-layer composite pipe**
- **inner and outer layer made of plastic**
- **overlapped welded aluminium pipe**

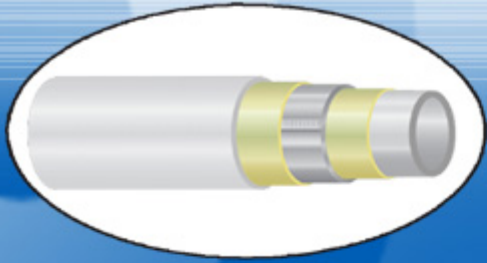




Unipipe advantages:

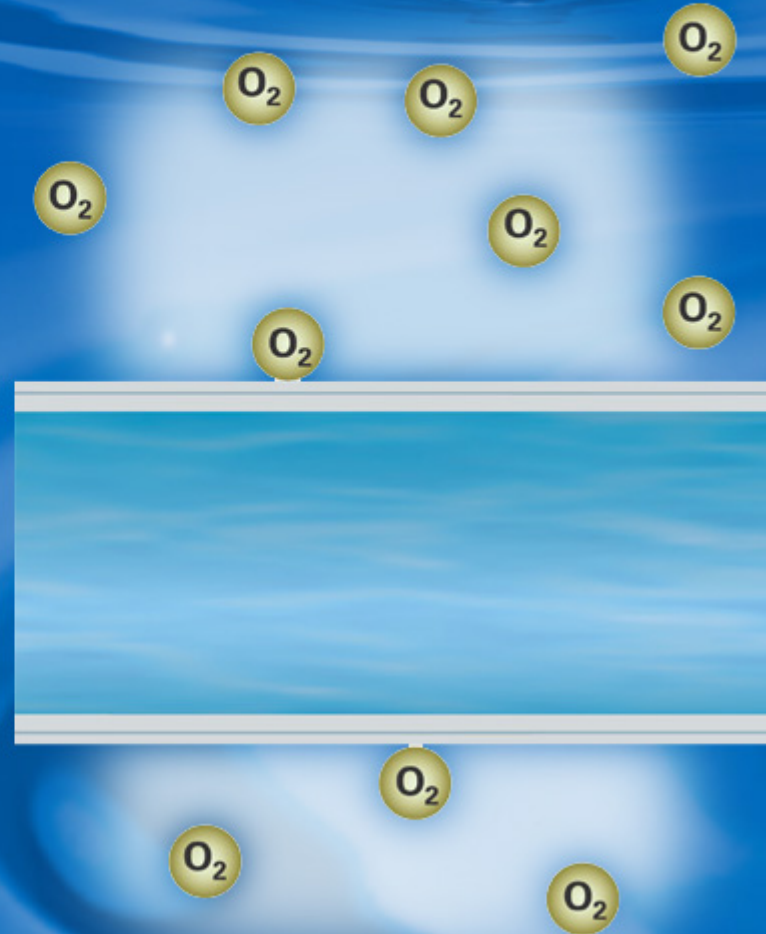
- **no corrosion**
- **no incrustation due to insignificant pipe roughness**

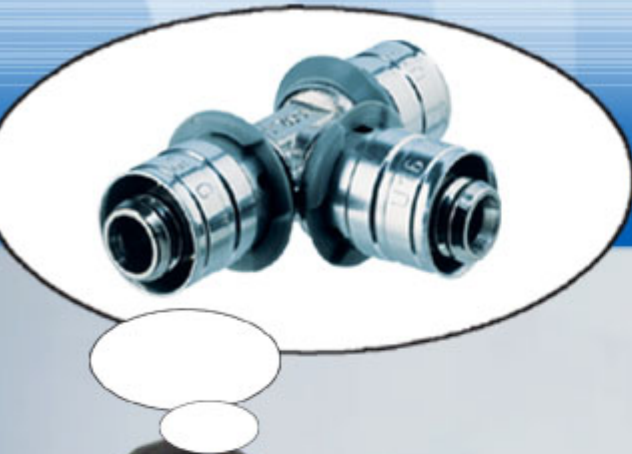




Unipipe advantages:

- **absolutely oxygen tight**
- **photo resistant, thus no danger of germ penetration**
- **insignificant heat expansion**





The fitting technology



Unipipe advantages:

- **well-fitting press, compression or screw connections**
- **highest user friendliness**
- **meets the most stringent regulations for tap water installations**
- **a fitting technology for all requirements in practice**





Unipipe advantages:

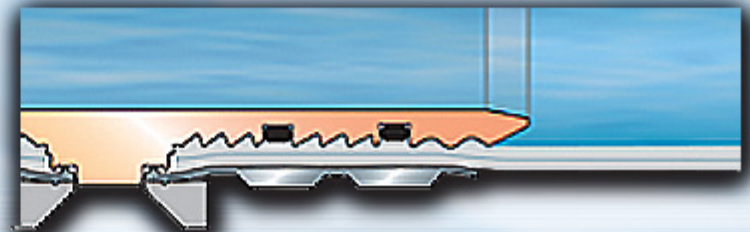
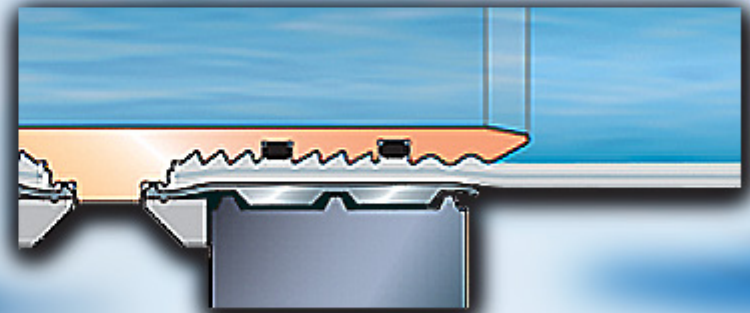
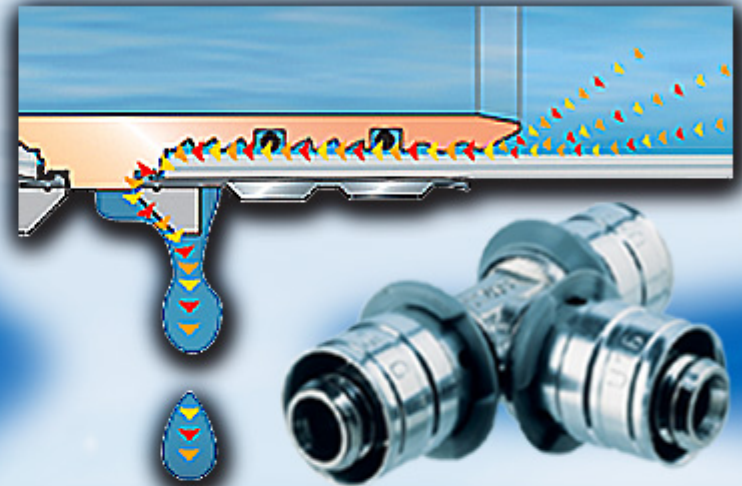
- **highest reliability in pressure testing**
- **new, innovative fitting technology**
- **easy to install**
- **with optical control and pressing jaw guidance**
- **tin-plated surface**





Unipipe advantages:

- As soon as a fitting has not been properly pressed, water will leak during the pressure test
- Just press the fitting – the connection will be tight permanently!





System safety



Unipipe advantages:

- **Highest quality from the market leader**
- **Long life-time with long-term experience**
- **Tested and permanently monitored, also by independent institutions**
- **High temperature and pressure resistance**

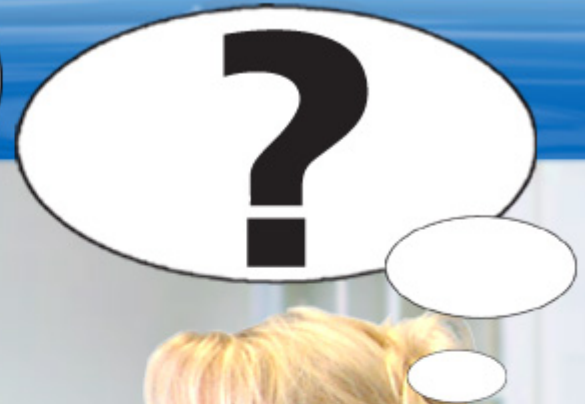




Unipipe advantages:

- **10-year-warranty**
- **Patent-protected and constantly optimised**
- **Meets the prevailing regulations for tap water installations (e. g. TrinkwV in Germany)**





The installation



Cutting, ...



... bevelling,



... insert the fitting,



Advantages for the installation:

- **Fast, easy and safe installation**
- **Adjustments of the pipe possible even after pressing**

... pressing,



... done!



Advantages for the installation:

- **Pipe can be bent very easily**
- **Flexible pipes for the distribution**
- **Rigid pipes for the risers**





Advantages for the installation:

- **With the new fitting generation, the installation is even easier**
- **No sawing, soldering, welding, thread-cutting or the like**
- **System tools for all requirement**
- **Manual, electrical and battery pressing tools**





Unipipe – the safe and durable installation



Advantages for the customer:

- **odourless**
- **tasteless**
- **hygienically harmless**
- **reliable**
- **durable**





Unipipe service



Unipipe service:

- **On-site service**
- **Planning service**
- **Delivery service**



**With Unipipe I get
everything I need to be
the number 1 choice
for my customers!**



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A high-speed photograph of a single water droplet hitting a blue surface, creating concentric ripples. The droplet is captured mid-fall, just above the point of impact, with a small splash visible below it. The background is a solid, vibrant blue.

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