

DRINKING WATER PIPE RENEWAL FOR AMBITIOUS CITIES

50 MILL

PEOPLE
WORLDWIDE
GET DRINKING
WATER FROM
AARSLEFF
CIPP PIPES



HOW MUCH DRINKING WATER IS YOUR SYSTEM LEAKING?

As populations in big cities grow, demands on water supply systems increase. Consequently, more and more cities face serious infrastructure challenges with non-revenue water.

According to the UN, 50% of the world's population will live in areas with limited access to clean drinking water in 2030. Yet, water loss in urban areas amounts to 26% in Europe and 40% of the total water distributed globally – due to deteriorating infrastructure and leakages etc.

Not only can leakages affect the security of supply and disrupt city life. Leaks in pipes also pose a serious threat to public health and safety due to the risk of drinking water contamination.

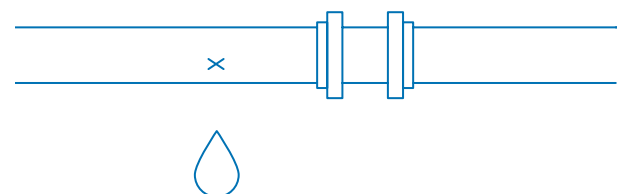
MARKET-LEADING NO-DIG RENEWAL OF MAIN PIPES

Aarsleff Pipe Technologies is a European market leader with global experience within No-Dig renewal. We have a solid background since we are both a strong contractor and an experienced engineering company – designing and manufacturing our own liners in-house.

We have more than 20 years of experience within drinking water cured-in-place pipe (CIPP) from complex projects worldwide. And we are ready to help your city in obtaining a strong and sustainable water infrastructure.

26% OF ALL CLEAN
WATER IN EUROPE
IS NON-REVENUE
WATER*

*European Environment Agency



30-50%

WATER SUPPLY AND
TREATMENT ACCOUNT
FOR UP TO HALF OF A
MUNICIPALITY'S TOTAL
ENERGY COSTS*

*IEA, World Energy Outlook



RETAINING CITY LIFE WHILE RENEWING CITY PIPES

With more than 12 million citizens, Moscow is one of the largest cities in Europe. Due to the city's complex infrastructure, several water mains were renewed using Aarsleff No-Dig technology. The pipes run beneath the River Moscow and the No-Dig method minimised disruption to the river and road traffic significantly.



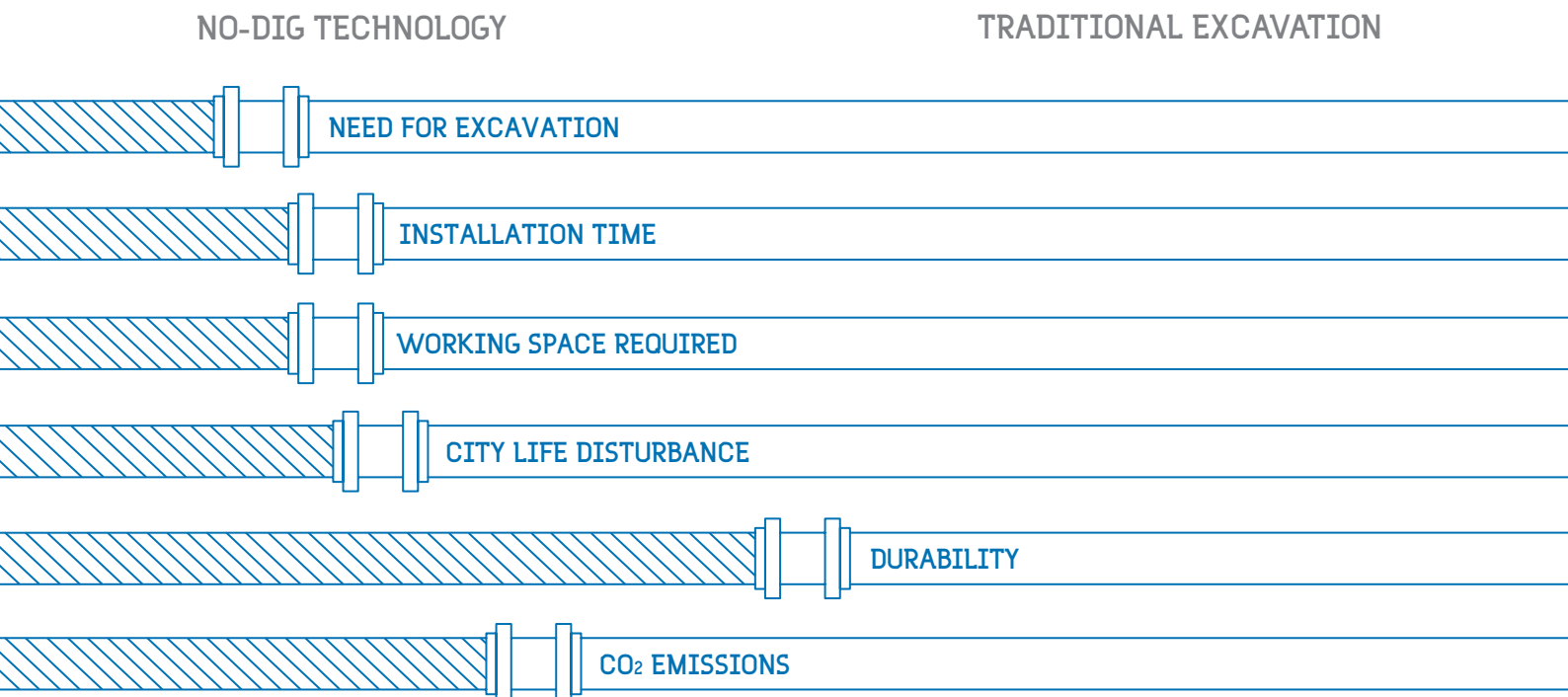
GET THE SAME DURABILITY WITH LESS HASSLE AND MINIMUM DISTURBANCE

Trenchless means less trouble and more benefits

Compared to traditional excavation methods, No-Dig has the same durability but is a much faster, easier and more cost-efficient choice for pipe renewal in many cases. The CIPP technology makes it possible to renew drinking water pipes with minimum disturbance to city life, often with fewer activities, less planning, fewer permissions from road authorities, and fewer materials needed compared to replacement of the existing infrastructure – making the total costs far less.

No-Dig is up to four times faster than traditional excavation

The biggest advantage is that No-Dig allows the renewal of city pipelines with minimal disruption to residents, businesses, traffic flow, train lines, etc. No matter whether the pipeline runs beneath roads, public areas, buildings or rivers.



WE ARE THE SAFE CHOICE FROM MANUFACTURING TO INSTALLATION

Our philosophy is to always be the safe choice for the customer. As a supplier of materials and as a contractor. We never leave before the job is done and the customer is satisfied.



We are a market-leading manufacturer of liners

In our state-of-the-art R&D laboratory and ISO-certified production facilities, we develop and carefully test the high-quality Aarsleff CIPP liners and installation equipment. Our system complies with the highest international quality standards regarding applicable materials for drinking water pipes.

We have experienced engineers

Our more than 20 years of experience with drinking water has made us a trusted No-Dig partner for water companies worldwide. We offer our extensive expertise at every step from planning to executing the project. Our skilled engineers have extensive know-how and international experience that can help you choose the optimum solution and way of executing your project.



50 YEARS

EXPECTED MINIMUM
LIFETIME OF AARSLEFF
RENEWED PIPES

**We offer our services as a contractor
and as a supplier**

1) As a contractor, we have the manpower, capacity, agility, and expertise to take on even the most complex renewal and installation tasks with our experienced installation crews.

2) As a supplier of liners to our partners throughout the world, we partner with carefully selected local contractors whom we supply with our world leading drinking water liners.

A STATE-OF-THE-ART LINER ADDING SUPERIOR DURABILITY TO YOUR EXISTING PIPES

A unique liner designed and refined for drinking water pipes

The Aarsleff CIPP liner is designed for the renewal of drinking water and raw water pipelines. The liner consists of glass-fibre-reinforced polyester-felt layers with a PP coating – tailored to each individual installation at our ISO-certified factory.

The liner is suitable for relining pipes in dimensions between 300-1500mm and with installation lengths up to 250 metres. It is inverted into the existing pipe by means of water or air pressure and is able to handle bends of up to 45°. Access is only required at the start and end of the pipe section. When the liner is in position, it is cured by heat.

International approvals for drinking water

The Aarsleff CIPP liner complies with numerous international standards regarding applicable materials for drinking water pipes, the German requirements of the DVGW W 270 and KTW-Guideline, and we live up to the highest standards in e.g. Germany, Spain, Portugal, Russia, Latvia, Estonia, Ukraine, Belarus and Taiwan.

TECHNICAL SPECIFICATIONS

Product:	PAA-PSL-Liner™
Resin:	Epoxy approved for drinking water
Diameter range:	DN300 to DM 1500mm
Wall thickness:	9-15 mm
Installation length:	Up to 250 metres
Curing media:	Water or steam
Operating pressure:	0-10 Bar
Test pressure:	1.5 × operating pressure
Color of product:	White



APPROVED

FOR DRINKING
WATER ACCORDING
TO THE GERMAN
DVGW TECHNICAL
STANDARD

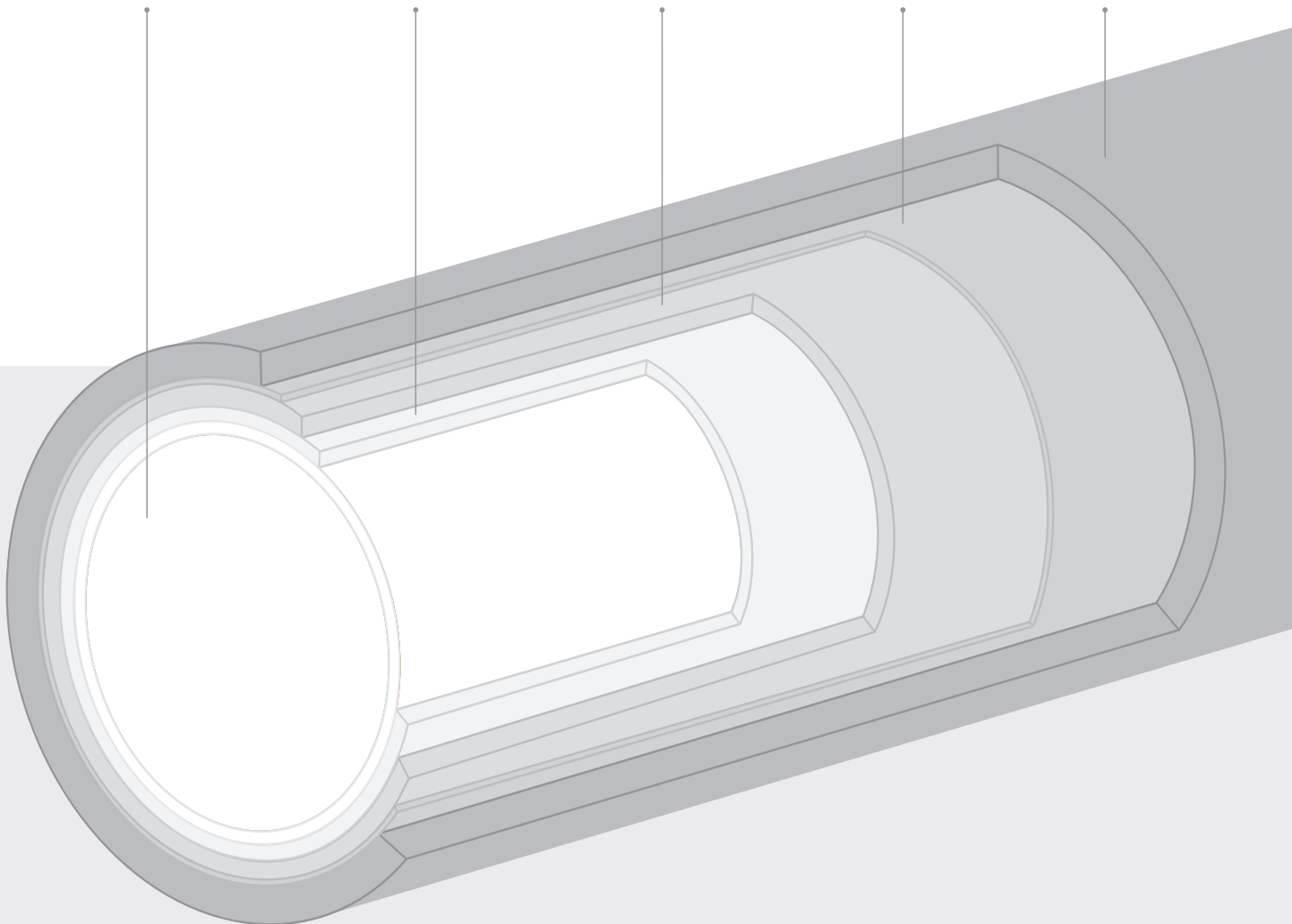
HEAVY
COATED
FELT LAYER

GLASS
REINFORCED
FELT LAYER

GLASS
REINFORCED
FELT LAYER

PRE
LINER

STEEL
PIPE



EUROPEAN MARKET LEADER WITH GLOBAL EXPERIENCE

We have more experience with water than anyone

Since 1978, Aarsleff Pipe Technology has pioneered the No-Dig technology and pushed the boundaries for trenchless solutions. With more than 900 employees in 11 countries and the largest installation base in Europe, our knowledge about trenchless water pipe renewal is second to none.

NO-DIG INSTALLATIONS BY AARSLEFF AND PARTNERS



FEEL FREE TO
CALL US,
AND TELL US
HOW WE CAN
HELP YOU

export@aarsleff.com



WANT TO KNOW MORE ABOUT AARSLEFF NO-DIG WATER SOLUTIONS?

Contact your local Aarsleff team:

Denmark - Per Aarsleff A/S
Main office
Hasselager Allé 5,
DK-8260 Viby J
+45 87 44 22 22
export@aarsleff.com

Finland - Aarsleff OY
Alhoniituntie 6,
FI-01900 Nurmijärvi
+358 9 290 2280
aarsleff@aarsleff.fi

Germany - Aarsleff
Rohrsanierung GmbH
Sulzbacher Strasse 47,
DE-90552 Rötenbach
+49 91 19 577 30
info@aarsleff-gmbh.de

Holland - Aarsleff
Leidingrenovatie BV
Molenwerf 40,
NL-1911 DB Uitgeest
+31 (0)251 74 32 00
info@aarsleff-bv.nl

Latvia - Per Aarsleff
Latvia filial
Uriekstes Iela 3,
LV-1005 Riga
+371 67 38 23 92
Aarsleff@aarsleff.lv

Lithuania - UAB Aarsleff
Partizanu 63M,
LT-50300 Kaunas
+370 37 37 07 17
info@aarsleff.lt

Norway - Olimb
Rørfornying AS
Sarpsborgveien 115,
NO-1640 Råde
+47 69 28 17 00
post@olimb.no

Poland - Per Aarsleff
Polska Sp. Z o.o.
ul. Królowej Marysieńki 20/2,
PL-02-954 Warszawa
+48 22 65 16 972
biuro@aarsleff.pl

Russia - 000 Per Aarsleff
Izmailovsky pr. 29,
RU-190005 St. Petersburg
+78 12 363 07 77
office@aarsleff.ru

Sweden - Aarsleff Rörteknik AB
Symmetrivägen 29,
SE-196 02 Kungsängen
+46 59 47 64 00
aarsleff@aarsleff.se

Ukraine - Per Aarsleff
Ukraine Filial
Schorsa Str. 29,
UA-01133 Kiev
+380 44 521 63 92
Paa-vb@ln.ua

360-DEGREE NO-DIG PIPELINE RENEWAL FROM MANUFACTURING TO INSTALLATION

Aarsleff Pipe Technologies is a European market leader with global experience within trenchless pipeline renewal.

We are producers, engineers and contractors

Since 1978, we have pioneered and produced No-Dig technologies in our advanced, in-house, R&D laboratory and production facilities. We offer our services as a supplier and as a contractor – and have carried out complex pipe-renewal projects throughout Europe and the rest of the world.

We can strengthen any existing pipeline

With our complete product range of certified No-Dig pipe solutions using LED, UV, water or steam, we are able to renew virtually any existing pipe system, profile, length and diameter with minimum disruption to city life.

We are a part of the global Aarsleff Group

Aarsleff Pipe Technologies is a part of Per Aarsleff A/S, a leading Danish contracting company with 6,200 employees worldwide. Aarsleff is listed on Nasdaq Copenhagen A/S and the Group's annual revenue amounts to EUR 1.5 billion.