



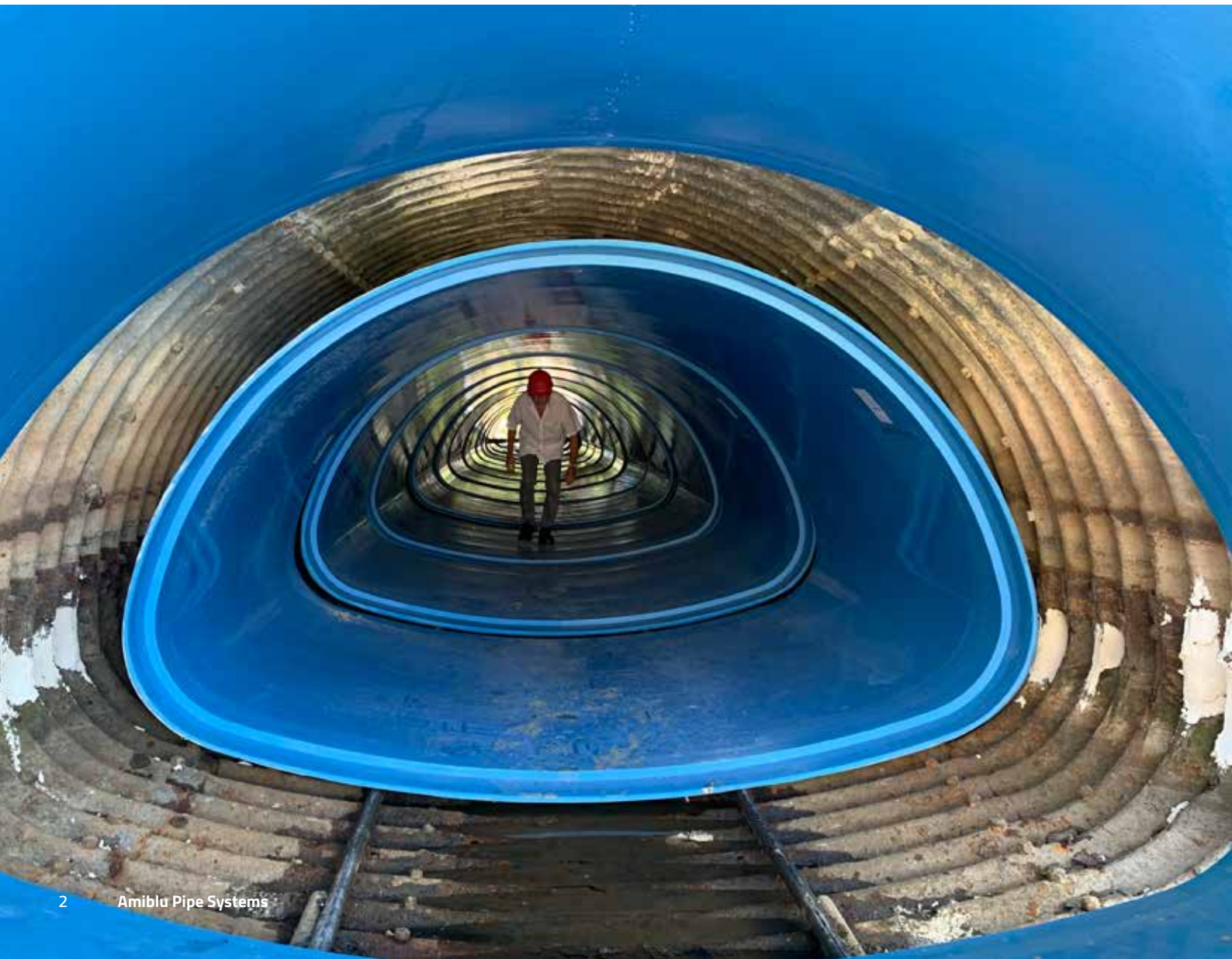
Amiblu NC Line: non-circular GRP pipe systems

Engineered to strengthen the cities we love



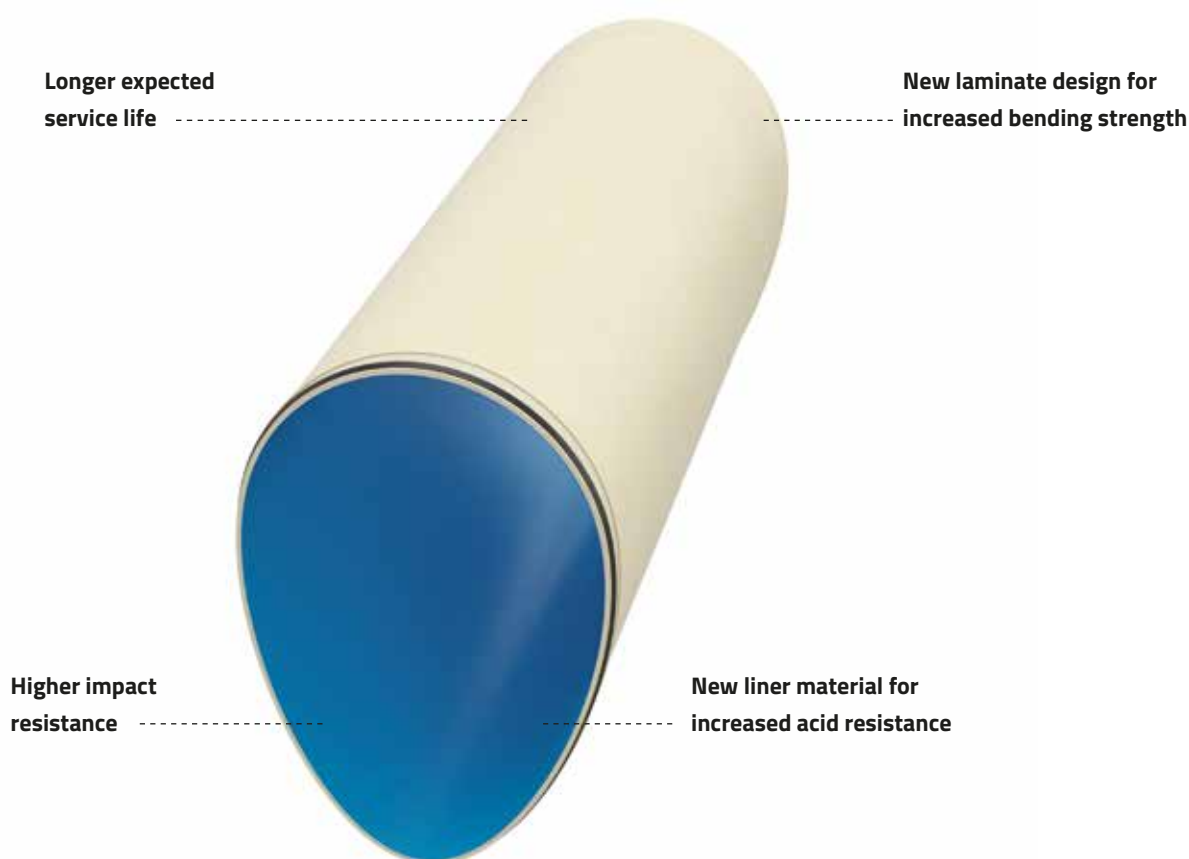
Amiblu GRP Pipe Systems engineered for the next generations

Glassfiber reinforced plastic (GRP) pipe systems by Amiblu are the product of over six decades of innovation, experience and development. We are the largest producer and technology partner for GRP pipes in the world. Because of our composite engineering and material science skills, we offer a product with an expected service life of many generations.



Introducing our revolutionary **Amiblu NC Line**

Amiblu NC Line is a new and redesigned pipe – developed by researchers and scientists at Amiblu. Years of research and development in Amiantit and Hobas has culminated in a pipe with **a longer estimated service life, increased acid resistance and with an impact resistance** that makes it easier and safer to handle. All tested and approved according to ISO 16611, the relevant international pipe standard for non-circular pipes.



Amiblu NC Line
higher bending strength

Engineered to strengthen
the cities we love

Amiblu NC Line

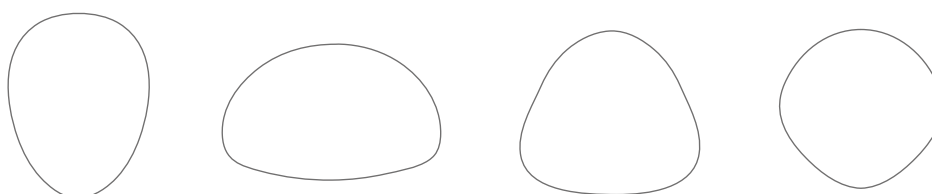
3rd generation non-circular pipe system

Amiblu NC Line makes it possible to extend the service life of old and deteriorated non-circular channels for several decades.

The bending strength of Amiblu NC Line provides new firmness to uphold deteriorating pipe walls. It withstands acidic fluids and environments better due to its special inner surface.

Amiblu NC Line has a new sewer laminate composition that makes it excellent for use in open trench applications, such as culverts and extensions to existing non-circular channels.

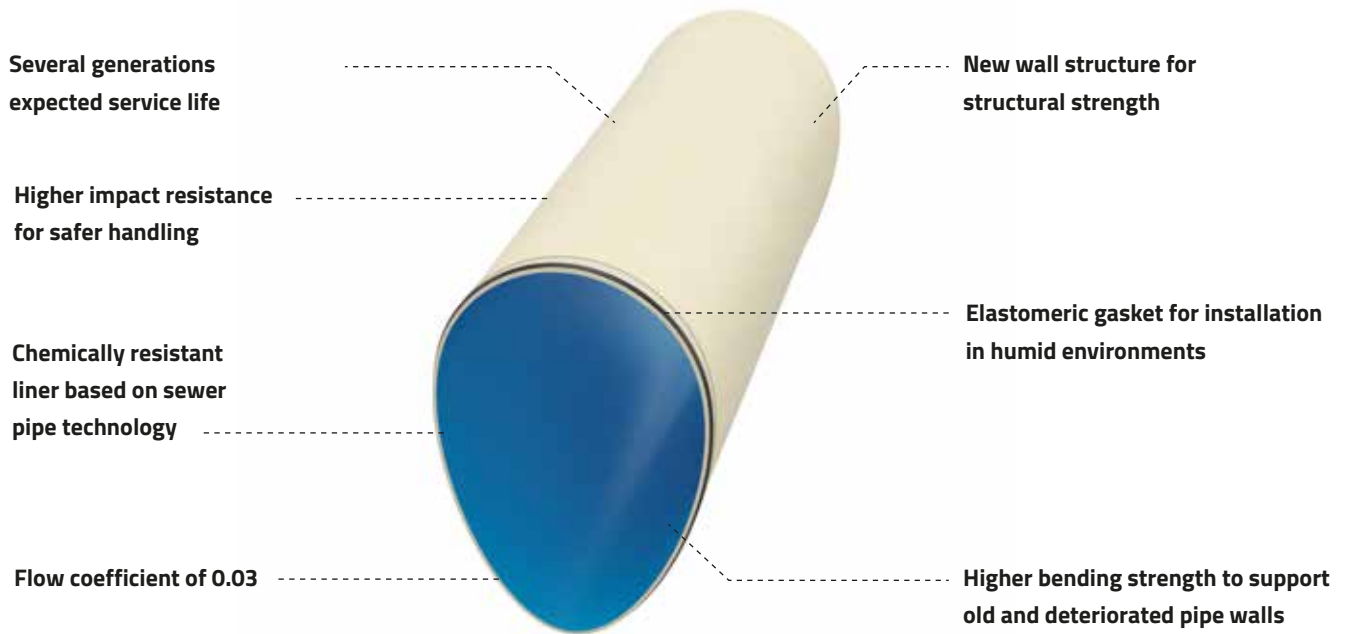
Amiblu NC Line is a new development based in the research and experience of Amiren from Amiantit and Hobas NC Line. With this new pipe, Amiblu takes another step ahead of competition.



In **any shape** you want

Amiblu NC Line

The best pipe for the job, by far



In **any shape** you want



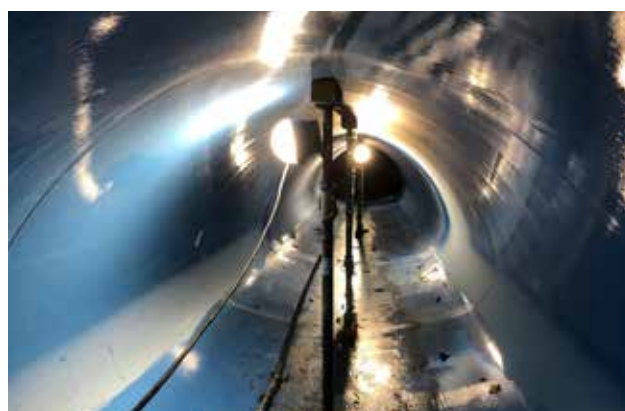
What's new?

Amiren and Hobas NC pipes have been market leaders in non-circular pipe technology for decades. Amiblu NC Line is a new pipe, founded on Amiren and Hobas NC, but with new properties and improved performance.



Service life for generations

Amiblu NC Line has an expected service life of several decades. A new laminate composition has made this possible.



Increased chemicals resistance

Amiblu NC Line has an increased resistance to chemicals. The composition of materials used in the pipe is designed to withstand the acidic environments (e.g. sulfuric acid) that exist in sewers.



Better for open trench

The new pipe is better for open trench installations than its predecessors. With increased impact resistance and better strain corrosion levels, the backfilling process is safer.



Safer handling

Amiblu NC Line has better impact resistance than Hobas and Amiren. That makes Amiblu NC Line less vulnerable to impact damage during transportation and installation.

High bending strength to strengthen old pipe walls

Amiblu is a pipe with high bending strength. This is obtained through a sandwich structure that works according to the I-beam principle. The core resists the shear forces, while the interior and exterior layers resist the bending moment experienced in the core.

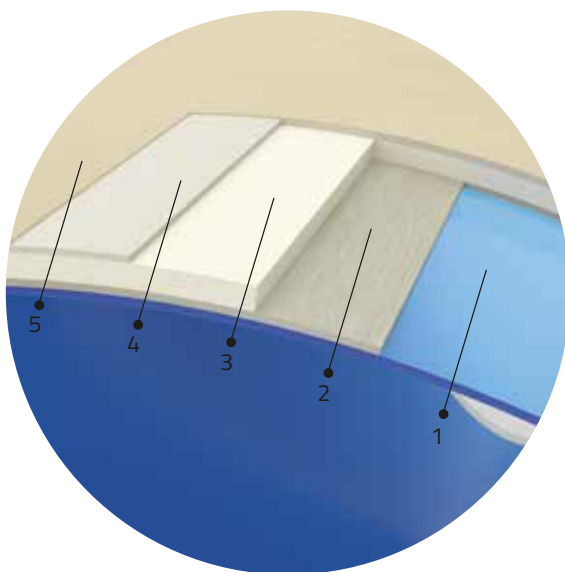
New strength to old channels

The traditional materials used in old city sewers were not designed to withstand the chloride and sulfuric acid levels of modern sewage. Acid etches the surfaces of the cement, penetrating the mortar surfaces, gradually diminishing the structural strength of these channels. A liner-only technology will add a

new surface, but not structural strength.

Amiblu NC Line, on the other hand, can provide new strength to old channels.

Thickness is defined project by project, allowing engineers to define the strength needed for the different structural challenges.



- 1 Inner liner layer
- 2 Inner structural layer
- 3 Core layer
- 4 Outer structural layer
- 5 Exterior surface

What if these pipe walls **caved in?**

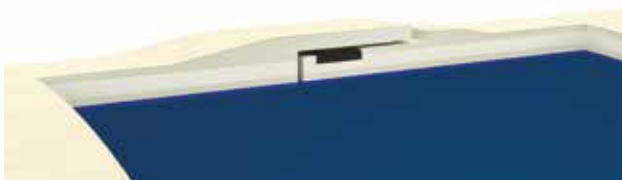
Amiblu NC Line is not merely a new liner. Amiblu NC Line is a new pipe. It provides new structural strength to the existing channel walls.

Designed for installation in **extreme humid** environments

The NC Line pipe curing process is done in the factory. Humidity found in city sewers constitutes no challenge to the quality of curing in Amiblu NC Line.



Bell & spigot joints



Elastomeric gasket

For fast installation, the use of a bell and spigot joint with an elastomeric gasket is ideal. This is therefore the standard joint for Amiblu NC Line. This joint requires no use of glue. For extra safety sealing requirements, dual gasket joints with testing nipple are also available.



Glued joints



For curves and custom structures

Glued joints are commonly used for curved pipelines and for custom shapes such as dry weather channel, where elastomeric gaskets are difficult to use.

With pre-cured pipes
half the job is already done.

Amiblu NC Line with higher bending strength

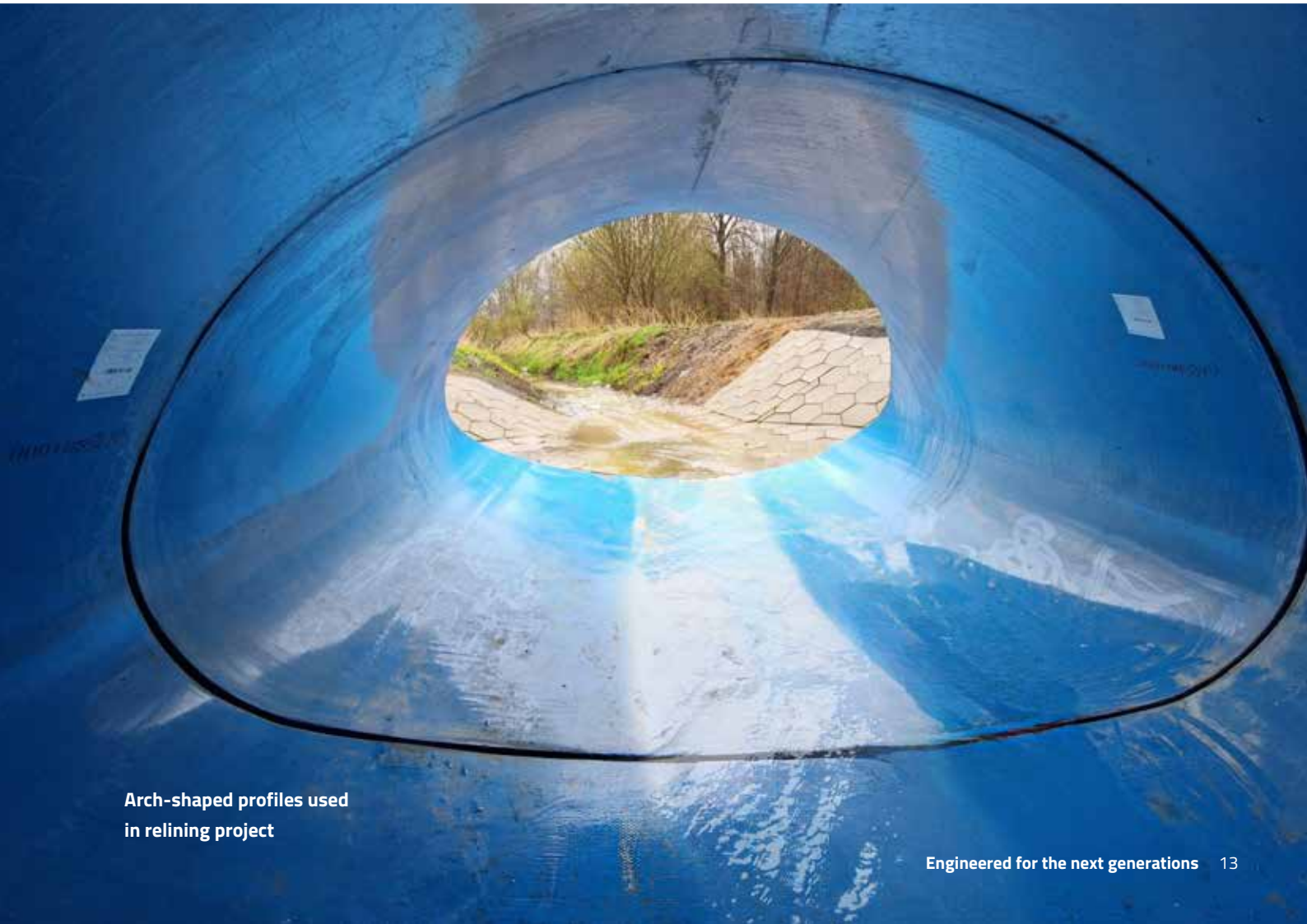
Keep cities working for the years to come



Egg-shaped non-circular pipes
ready for installation



Transportation of egg-shaped profiles



Arch-shaped profiles used in relining project

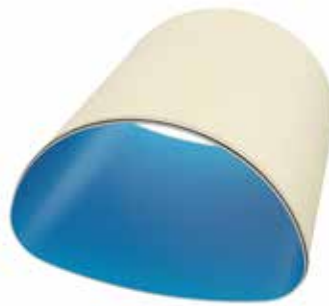
NC Line pipe range

Egg shape



Pressure (PN) : 1
Nominal lengths: 500 - 3 000 mm
Nominal height: 300 - 4 000 mm
Nominal breadth: 300 - 4 000 mm
Thickness: Load carrying and non load carrying profiles available

Arch shape



Pressure (PN) : 1
Nominal lengths: 500 - 3 000 mm
Nominal height: 300 - 4 000 mm
Nominal breadth: 300 - 4 000 mm
Thickness: Load carrying and non load carrying profiles available

Parabolic shape



Pressure (PN) : 1
Nominal lengths: 500 - 3 000 mm
Nominal height: 300 - 4 000 mm
Nominal breadth: 300 - 4 000 mm
Thickness: Load carrying and non load carrying profiles available

Customized



The above-mentioned are the most commonly used profiles. Other profiles are available on request. Most profiles may be manufactured with a dry-weather channel, or other non-standard features.

Different purpose – different shape



The **egg shape** profile is ideal for combined sewer systems. The narrow profile in the lower section of the pipe ensures a good water flow for sewage, while the upper and wider section handles heavy rain.



The **arch profiles** are ideal for culverts under the road, to collect streams and small rivers. The shape allows for inspection by personnel.



The parabolic **shape** has similar qualities as the arch profiles.

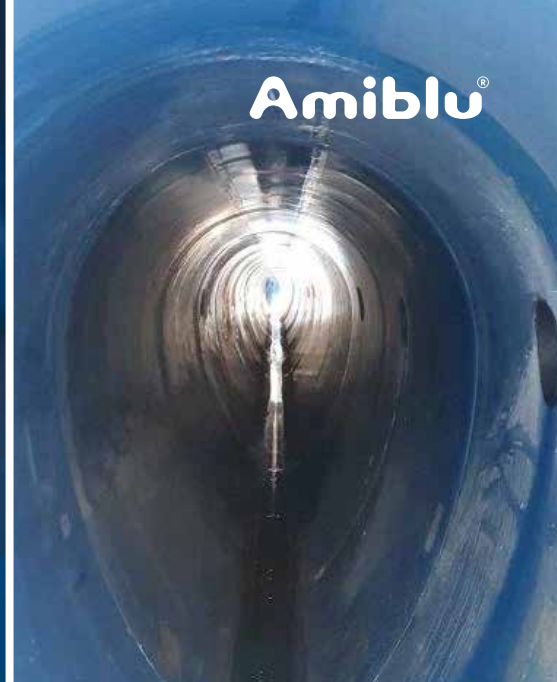


Relining requires adaptation to the original profile. The production facilities at Amiblu handle odd shapes on specifications. Amiblu engineers are available for design support.

Relining, open trench, culverts

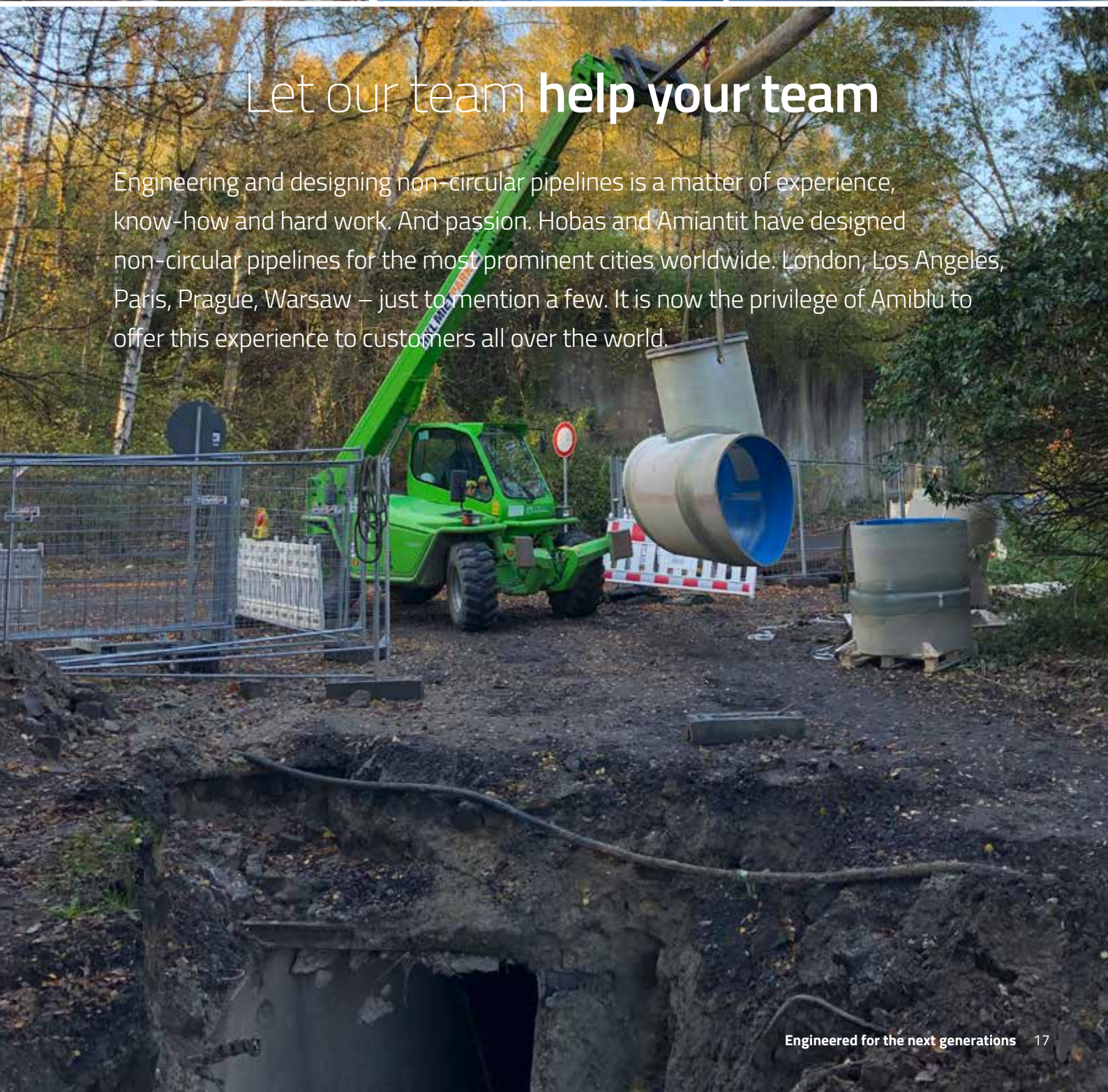
Amiblu NC Line pipes are not only for relining purposes. They can also be installed in open trench.





Let our team **help your team**

Engineering and designing non-circular pipelines is a matter of experience, know-how and hard work. And passion. Hobas and Amiantit have designed non-circular pipelines for the most prominent cities worldwide. London, Los Angeles, Paris, Prague, Warsaw – just to mention a few. It is now the privilege of Amiblu to offer this experience to customers all over the world.





Our promise – **your reassurance**

The ISO 16611: 2017 sets strict guidelines for how non-circular pipes can be produced and tested. Amiblu NC Line adheres fully to ISO 16611. External bodies confirm Amiblu compliance.

ISO 16611 requirements	What	Does Amiblu comply?
Materials	Specification of which materials are allowed	Yes
Pipe design	Specifications of how the pipe must be designed	Yes
Testing procedures	Description of requirements of sample sizes, time span and other essentials for long-term product testing	Yes
Long-term properties	Description of service life requirements	Yes

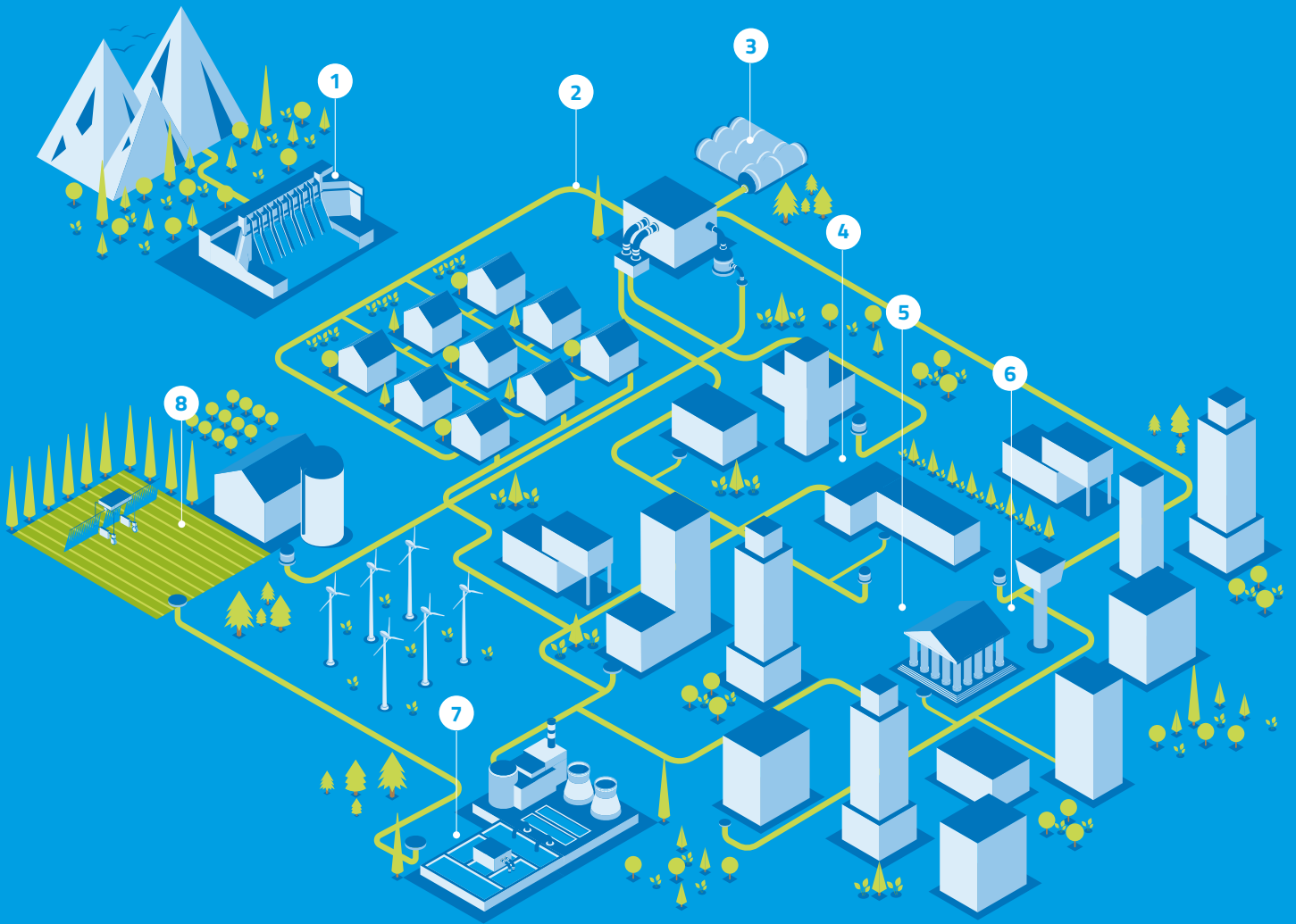
Internal testing by Amiblu Technology certified laboratory in Norway. External body approval by OFI.



Amiblu NC Line with higher bending strength
 Engineered to strengthen the cities we love

Let's value water as we should.

1. Hydropower
2. Potable Water
3. Storage Tanks
4. Sewage and Stormwater
5. NC Pipes Rehabilitation
6. Jacking Pipes
7. Industry
8. Irrigation



Amiblu Holding GmbH
www.amiblu.com | +43.463.48 24 24 | info@amiblu.com

All rights reserved. No part of this document may be reproduced in any form or by any means without prior written permission. All data, especially technical data, is subject to subsequent modifications. The given information is not binding and must therefore be checked and, if necessary, revised in each individual case. Amiblu and the companies affiliated with Amiblu are not liable for the advertising statements in this advertising brochure. In particular, Amiblu makes it clear that the advertising statements may not reflect the actual product characteristics and are for advertising purposes only, and therefore these statements do not form part of any contract for the purchase of the products advertised herein.

© Amiblu Holding GmbH, Publication: 07/2023

