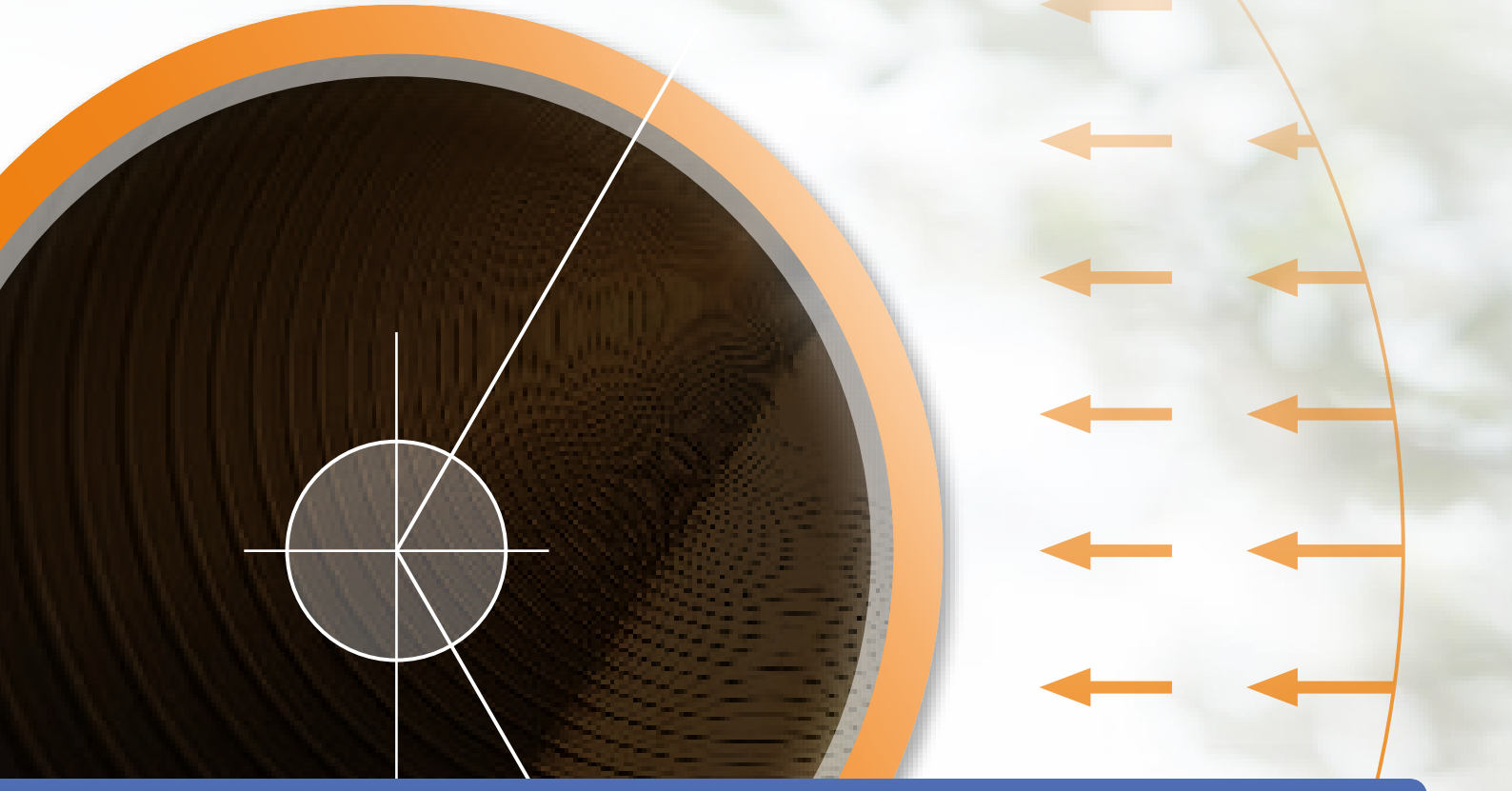
The software for structural calculation of buried pipes and manholes

ingsoft easypipe



...turning know-how into software.

IngSoft EasyPipe. An intelligent software solution by IngSoft.

www.ingsoft.de

Planning reliability and transparency – with IngSoft EasyPipe

Various work steps are encountered in the course of a project, from the preliminary plan and the proposal, to production and installation, through to acceptance with associated guarantee. IngSoft EasyPipe software provides support for every aspect of the structural analysis of pipes. Throughout the entire building project and beyond, it provides all those involved with transparent and traceable intermediate results – ensuring successful project completion.

ingsoft easypipe

- creates **trust** based on many years of expertise
- offers **variety and flexibility** by supporting the latest standards
- ensures **safety** with an extensive verification concept
- offers **reliability** thanks to our support team
- **saves time** through quick and accurate calculations
- enables **internationality** through multilingual input and output

Why structural calculation?

- **Economic sizing** of all materials used
- **Computational verification** of stability
- **Cutting-edge technology** for design and measurement
- Traceable **long-term documentation/ archiving**, also for conversions or, if relevant, later building projects
- **Legal certainty**, clear accountability, clear responsibility of the installer

Structural calculation of pipes

Buried pipes and manholes are key components of our infrastructure, which have to function properly at all times. Planning includes a reliable estimate of the environmental conditions, taking into account current standards, in order to enable permanently safe operation. Structural calculation helps us to record individual boundary conditions correctly, verify them in relation to the component, and document them in the long-term.

Advantages of IngSoft EasyPipe for you as...

Planning and engineering firm, surveyor

Your own structural calculation with IngSoft EasyPipe allows for neutral and realistic assessment of project-specific general conditions. With the help of IngSoft EasyPipe, you can tell which parameters are advantageous, and which are disadvantageous. You can also determine which other materials can be used more cost-effectively.

Pipe manufacturer and supplier

Already in the proposal phase, IngSoft EasyPipe supports you with realistic estimates of the dimensions and material properties. Required reinforcements, desired nominal stiffness classes or wall thicknesses can be determined quickly, conveniently and accurately. Profitability studies can be carried out at an early stage. This means you benefit from minimal expenditure and material costs.

Customer, municipality or stability testing engineer

Contractors often submit proposed solutions that differ from the specifications. A quick, approximate check with the help of IngSoft EasyPipe will help you to assess these alternatives correctly and detect any risks at an early stage. Meaningful comparison calculations underpin your approval.

Overview –
The structure of IngSoft EasyPipe

In this brief overview you will find the modules, extensions and languages available for both Standard and Professional Edition of IngSoft EasyPipe.

Editions (basic functions, calculation core)

The function scope differs for the Standard and the Professional Edition. Your requirements influence the choice of edition. An upgrade to the Professional Edition is possible at any time. All modules may be combined within the desired edition.

Feature	Edition	
	Standard	Professional
Investigation of numerous, pre-defined materials; free input as an alternative	✓	✓
Any kind of profile geometry: solid wall, profiled/corrugated wall, free input and much more	✓	✓
Instant display of the most important results in the program window	✓	✓
Simple changing of all entries	✓	✓
Coloured highlighting of all proofs/verifications	✓	✓
Plausibility check of all entries	✓	✓
Reproducible saving of all entries in project documentation	✓	✓
Direct printout or professional PDF file with your company logo	✓	✓
Switching between languages while working	✓	✓
User-friendly interface with a context-sensitive help function	✓	✓
Automatic software updates online	✓	✓
Creation and maintenance of user's database for pipes, profiles and materials	–	✓
Combination of multiple static calculations in one project file	–	✓
Creating copies (variants) of the calculation for a quick comparison of different boundary conditions	–	✓
Reference to and integration of external PDF files	–	✓
Switching between imperial and metric units while working	–	✓

Modules (on the basis of standards/regulations)

This table gives you insight into the concept and the performance of the modules. The individual modules are described in detail on pages 6-11.

Designation of the module	A 127	A 161	M 127-2 Basic[1]	A 143-2 Basic	M 45	SIA 190	Manhole[2]
Installation method	Trench	Jacking	Lining	Lining	GRP	Trench	Manhole
For details consider	p. 6	p. 7	p. 8	p. 8	p. 9	p. 10	p. 11

[1] The M 127-2 calculation module is still avaible for historical reasons.
[2] The module Manhole is currently being developed. Delivery on demand is possible for the stand-alone software IngSoft EasySchacht98.

Extensions

Extension for the module		A 127	A 161	M 127-2 Basic	A 143-2 Basic	M 45	SIA 190	Manhole[1]
Load editor	p. 12	✓	✓	✓	✓	✓	✓	✓
Profile from drawing	p. 13	✓	✓	–	–	✓	✓	✓
Pipe with base	p. 13	✓	–	–	–	–	–	–
Egg-shaped cross-section[2]	p. 14	–	–	✓	✓	–	–	–

[1] The module Manhole is currently being developed. Delivery on demand is possible for the stand-alone software IngSoft EasySchacht98.
[2] The extension egg-shaped cross-section in host pipe condition III (HPC III) is currently being developed.

Languages

	Module						Extension	
Language	A 127	A 161	M 127-2	A 143-2	M 45	SIA 190	Load editor	Profile from drawing
German	✓	✓	✓	✓	✓	✓	✓	✓
English	✓	✓	✓	✓	✓	–	✓	✓
French	✓	–	–	–	✓	–	–	✓
Spanish	✓	–	–	–	✓	–	–	–
Polish	✓	✓	–	✓	✓	–	–	✓
Russian	✓	–	–	✓	✓	–	–	✓
Bulgarian	✓	–	–	–	✓	–	–	–
Chinese	✓	–	–	–	–	–	–	–
Czech	–	–	✓	–	–	–	–	–

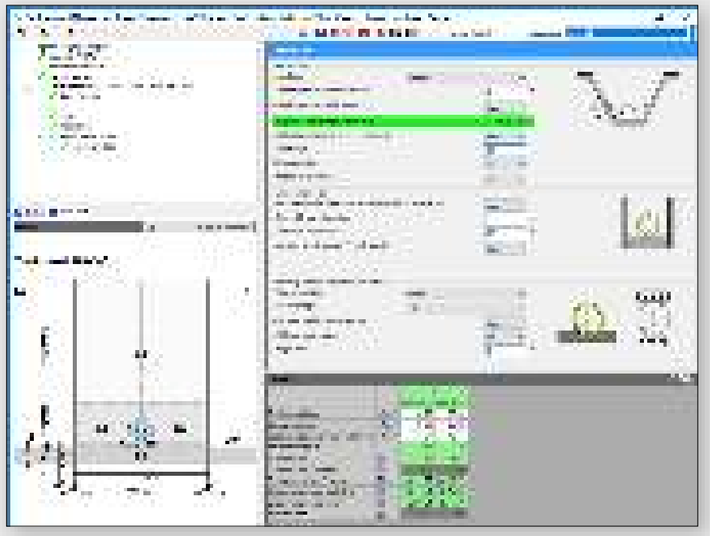
Other languages will be delivered upon request. IngSoft will gladly provide software that easily produces required translations. Please contact us if you are interested in additional languages.

Modules in detail

Module A 127 (trenching)

Module A 127 follows worksheet ATV-DVWK-A 127, 3rd edition (Edition 2000). It permits structural calculation of buried pipes installed in trenches or banks and enables sizing of pipes, taking into account all the materials mentioned in the worksheet.

With this module, trench widths are also checked against DIN EN 1610 and minimum dimensions are determined in accordance with DIN V 1201. The relevant concrete grades and any special materials can be defined. RiL 877 steel types are stored.



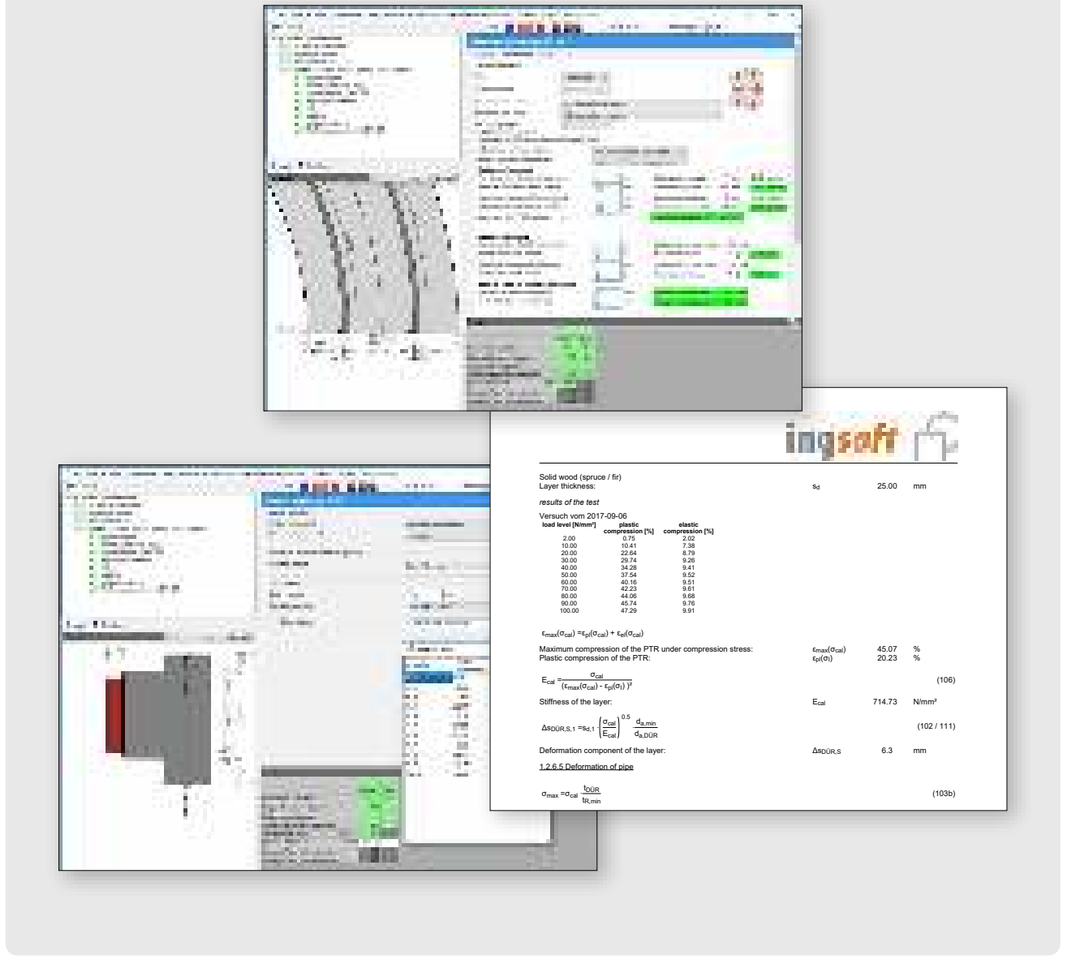
Input mask for module A 127

Material and load-dependent verification for minimum and maximum ground water levels or short and long-term conditions is carried out automatically. In the dynamic verification (fatigue), load changes of $2x10^6$ and $1x10^8$ are available as defaults in A 127. In addition, the number of cycles can be freely selected. Reinforced concrete pipes can be verified with one or two-layer reinforcement.

On request, a crack check can be carried out in accordance with DIN EN 1992-1-1. The stored stress package not only includes load model 1 (LM1) for road traffic and LM71 and UIC71 (rail) but also dimensioning aircraft (DAC) and allows for free input (see also extension for special vehicles) as well as a choice between HGV60, HGV30 and CV12.

Module A 161 (jacking pipes)

Module A 161 is used for structural calculation of jacking pipes and is based on the 2nd edition of worksheet DWA-A 161, March 2014 edition. This worksheet is the first DWA standard to contain regulations for the structural calculation of pipes with partial safety coefficients in accordance with Eurocode (semi-probabilistic approach).
Thus, you can investigate all jacking processes (shield jacking, jetting, HDD, burst lining, etc.) in the standard on straight and curved tracks.



Input masks and print preview for module A 161

Multi-level pressure transmission rings in draft design and CSV import of pressure transmission ring tests are available. Jacking in loose rock and rocky or mixed ground/transitional areas can be examined. The calculation module determines the jacking force iteratively for the construction stage and carries out interaction verification. All required proofs/verifications for the operating mode can be carried out automatically at the same time if required, such as evidence of fatigue, deformation, expansion and stability. Minimum reinforcement, internal forces and wall thicknesses can be checked easily with IngSoft EasyPipe.

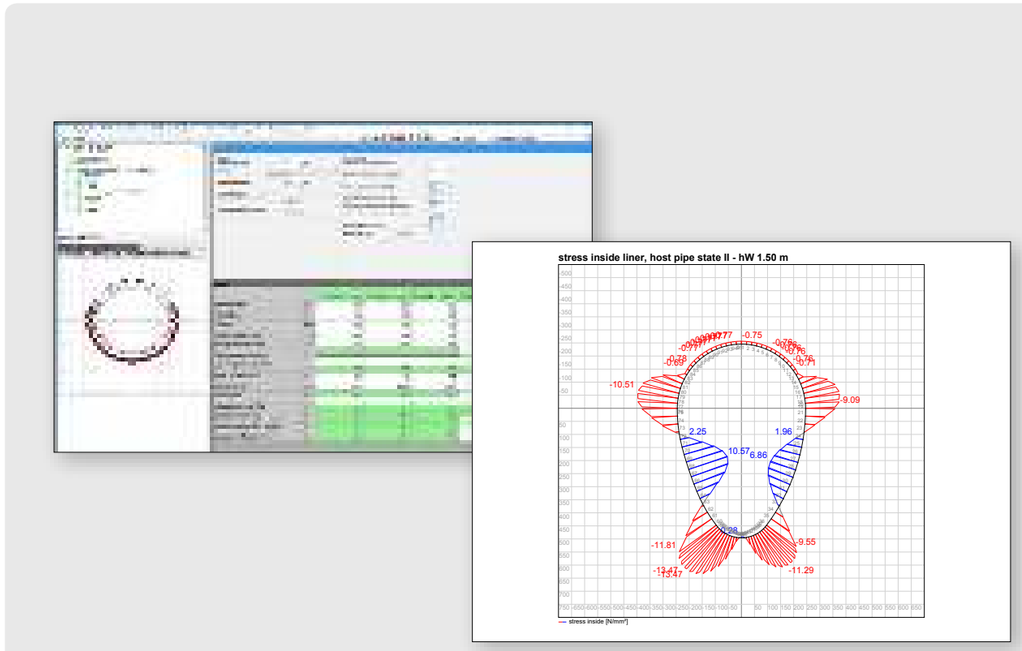
Modules for lining/relining

In cooperation with S&P Consult GmbH, Bochum, IngSoft has developed two modules for bulletin DWA-M 127-2 (2000 edition) and the draft of DWA-A 143-2, which describe the verification of existing pipe conditions I-III by means of the Finite Elements Method (FEM) according to second order theory.

S & P CONSULT GERMANY

Module M 127-2 Basic

With the M 127-2 Basic module, you can calculate all necessary load combinations **within one calculation process including interaction** in existing pipe condition III for circular profiles. Egg-shaped and circular liners can also be investigated in existing pipe conditions I-II. In addition to a material database, IngSoft EasyPipe also provides material characteristics groups, values in accordance with Table 2 in DWA-M 127-2 and manual definitions.



Print preview: Stress and torque curves for an egg-shaped liner

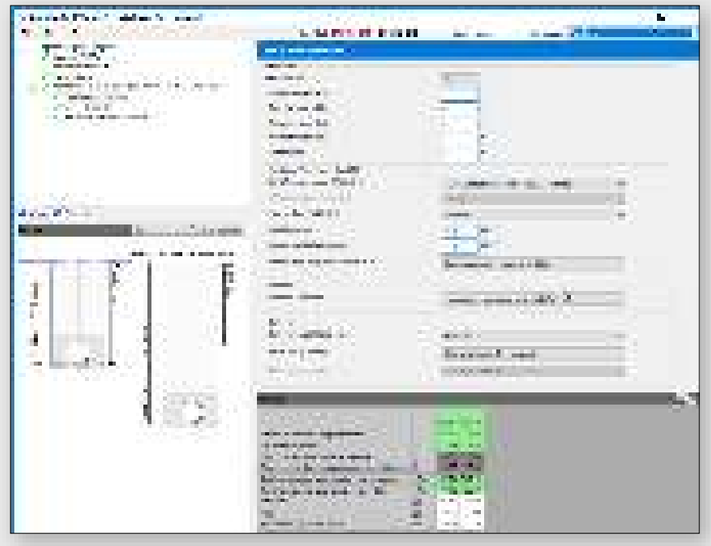
Module A 143-2

The scope of module A 143-2 is comparable with that of module M 127-2 Basic, except that work sheet DWA-A 143-2 prescribes a partial safety concept. The interaction verification is replaced with simultaneous application of soil and water pressure in existing pipe condition III.

At the time of printing of this brochure, this standard was still at the draft stage. IngSoft is prepared for publication, and the final version of this module will be available for delivery upon publication of the white copy. If you are already interested in this module, please get in touch.

Module M 45 (buried GRP pipes – USA)

The American Water Works Association (AWWA) has published a manual for buried glass-reinforced plastic (GRP) pipes, in the shape of the M 45 Fiberglass Pipe Design (Edition 2005), which has been widely recognized throughout the world. The structural calculation of GRP pipes described in M 45 is handled in the software by module M 45.

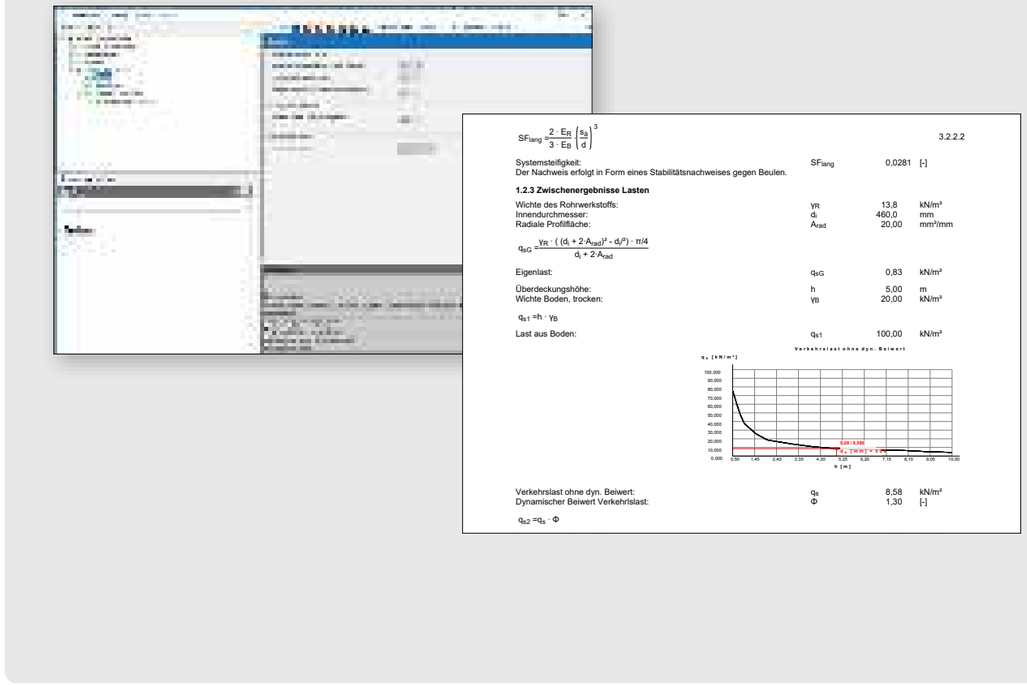


Input mask for module M 45

As the user, you can determine the maximum and minimum cover heights and ground water levels and can also specify backfill and bedding. In addition, the program accepts your inputs with regard to the existing soil and pipe geometry, which can be modelled as a pressure pipe with PN/SN/DN or taken from a database.

The E-module of the pipe material, position of the neutral fibers in the cross-section and stresses (HS 20/25 Truck, Cooper E-80 Locomotive, internal pressure (operating pressure/pressure surge/negative pressure)) must be specified. Deformations, expansions and buckling pressure are calculated with the help of IngSoft EasyPipe.

Module SIA 190 (buried pipes – Switzerland)



Print preview with load diagram from module SIA 190

Module SIA 190 follows the Swiss standard SIA 190, Sewerage systems, 2000 edition. It permits structural calculation of buried pipes in trenches or banks and enables sizing of pipes, taking into account all the materials mentioned in the worksheet, in flexible and rigid variants.

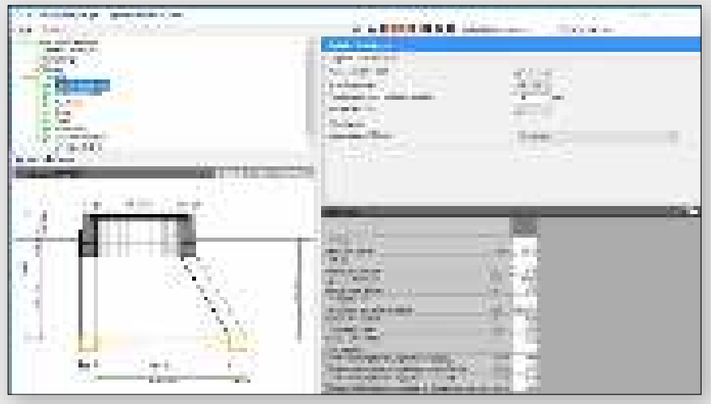
The Swiss standard distinguishes between pipes in normal, soft and hard ground. Road, rail and field are available as load models. After entering a ground water level in IngSoft EasyPipe, the buoyancy analysis is carried out, in addition to the load-bearing capacity, stress analysis and deformation analysis.

Manhole module (in development)

The manhole module is based on findings from structural analysis of pipes with engineering extensions and enables you to examine circular manholes from a structural analysis perspective. The focus is on the manhole pipe itself, and verification is carried out at two design locations of the pipe casing, at the base and head of the manhole.
General conditions such as the working space, openings, supports and fixtures are taken into account in the radial and axial analyses. If required, interactions can be studied at prominent positions. **Plastic** and **corrugated pipes** can be modelled.

Influences next to and on the manhole could include – in addition to the usual soil and traffic loads – surface friction and ground water (buoyancy analysis). Various cover designs (concrete cone, overlying or separate cover, flat roof, direct load input, manufacturer-specific special designs) and groundwork designs (with and without base plate, with and without reinforced concrete foundation, weight block for buoyancy protection, protrusion, seal against pressing water) enclose the manhole pipe from above and below.
For standard covers and base plates, the required reinforcement can be calculated using the software.

The manhole module is currently in development. The standalone IngSoft EasySchacht98 program, with optional update to the manhole module when available, is available now. Details of IngSoft EasySchacht98 can be found on the IngSoft homepage.



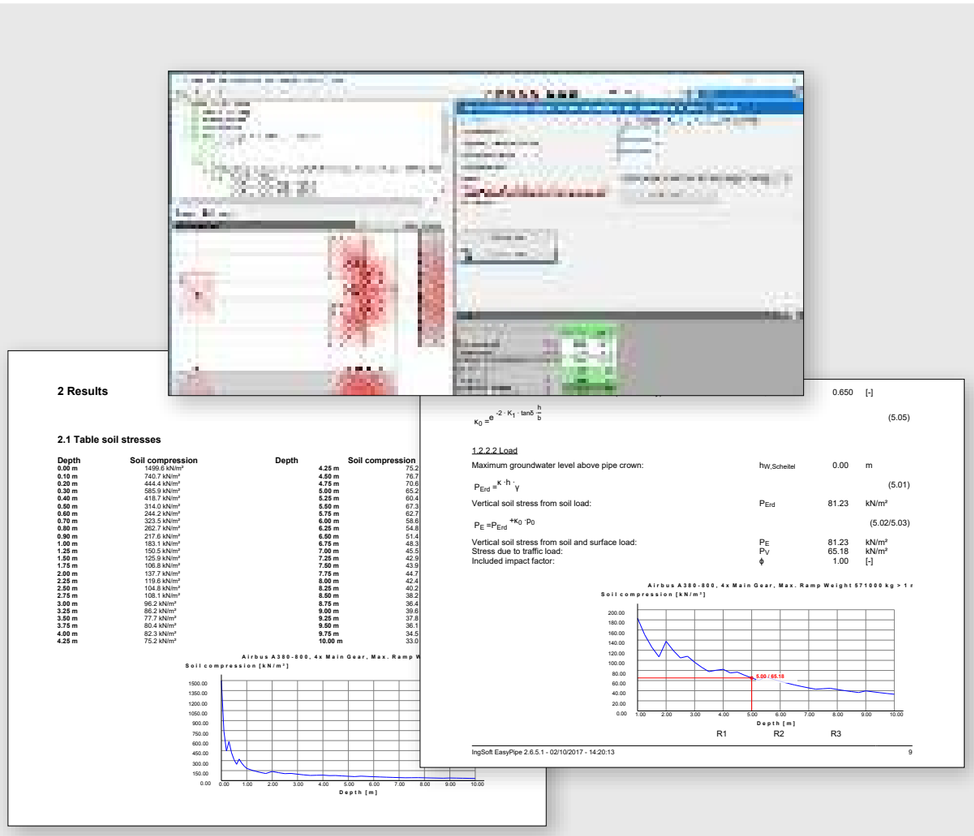
Manhole module input mask

Extensions in detail

Special vehicles extension

In order to be able to map special vehicles outside current regulations, IngSoft offers the special vehicles extension. It can be used to determine vertical stresses under forklift trucks, reach stackers or aircraft such as the Airbus A 380.

The approach is based on a pyramidal load distribution. Some vehicles are part of the extension and can be chosen via dropdown.



Input and print preview of the Special vehicles extension

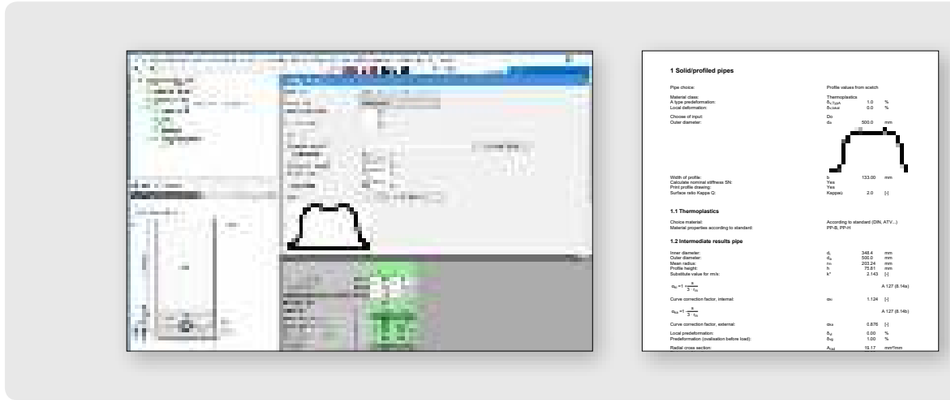
The distribution angle in the soil as well as a potential load-distributing layer (e. g. road structure) with deviating distribution angle are prescribed by the user. IngSoft EasyPipe automatically applies these vertical stresses in the calculation and shows key parameters in the printout.

Any given axle center distances, wheel arrangements and wheel loads can be entered. The load distribution is illustrated in graphics and tables, and it can also be output as a separate PDF file.

Profile from drawing extension

This extension makes it possible to determine cross-section values from image files for calculation of profiled pipes. It determines structural analysis values such as area, resistance, moment of inertia and inertia distance. The entire profile is scaled based on the profile width as an indicator for the repetition of a section. The geometry to be imported must be available as a bitmap file in black/white mode. Definite black areas are detected after import into IngSoft EasyPipe and are assigned to the profile. The calculated profile values can be output as a PDF file, independent of the current calculation.

Note: The extension is available for the modules: A 127, A 161, SIA 190.

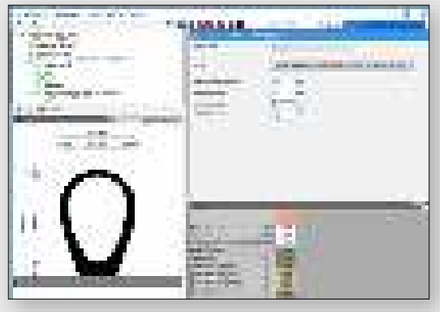


Input and print preview of the Profile from drawing extension

A 127 Pipe with base extension

This extension can be used to analyse reinforced concrete and concrete pipes with a base. The calculation is carried out by means of stress analysis in accordance with ATV-DVWK-A 127 image 9 for egg-shaped and circular pipes with base (DIN V 1201:2004-08).

This process draws on the moments/coefficients of normal force specified in the publication by Hornung and Kittel 'Statik erdüberdeckter Rohre' (Structural analysis of buried pipes), Bauverlag GmbH, 1989, page 283 et seq.



Input for the A 127 Pipe with base extension

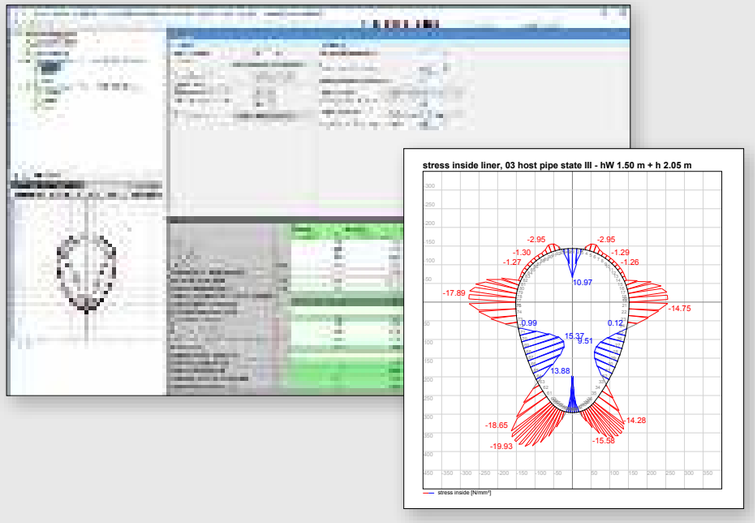
Egg-shaped profile in HPC III extension

The unique egg-shaped profile in Host Pipe Condition (HPC) III extension allows for design of standardized egg-shaped profiles on a realistic geometrical model. Until present, a substitute circle calculation method according to the DWA-A 143-2 standard was practice but not always on the safe side.

'Egg-shaped profile in HPC III' considers the real shape and converts its geometry into a standard egg-shaped finite element beam model. The algorithm automatically calculates all necessary load combinations for egg-shaped profiles in HPC III now, as is well-known from circular profiles. An additional innovation is represented by the superposition (interaction) of earth and traffic loads with pressure due to groundwater, which was not possible for the substitute circle.

The calculation now is consistent and even more retraceable with appropriate documentation in the printout. The results from all load combinations correspond to the real system much better.

Note: The extension is available for the modules: M 127-2, A 143-2.



Input and print preview for the Egg-shaped profile in HPC III extension

Customized extension

Thanks to our proximity to the customer, we know many of the user's requirements. It is our mission to integrate these wishes in our software. Extensions for IngSoft EasyPipe are therefore being constantly developed and enhanced. Are you looking for a specific extension, to map your processes exactly? IngSoft will be pleased to implement this according to your wishes.

Additional services – the extensive support offered by IngSoft

In addition to the functional scope of the software, IngSoft supports your structural calculations with additional services.

Our range of services

Software maintenance and support
for all aspects of your installation, set-up and application

Training courses
on the standards implemented, principles of soil and pipe structural analysis and the software itself

Customized software solutions
e. g. for input of special pipe geometries for even more efficient work

Engineering services
in the form of structural calculations, advice, surveys, FEM analyses

The core team in IngSoft's structural analysis department

Software maintenance and support

The purchase of a license includes a complete package covering software maintenance and software support. This package is valid for one year.
Software maintenance means you will benefit from a version that is always up-to-date in terms of technology and content. In addition, our multilingual support team will be happy to provide advice not only on "classic" support issues, but also if you have any concerns regarding the content of the standards.
The maintenance and support agreement is automatically extended by a year at a time. If you then require further maintenance and support, you can find the fees in our price list on page 22.

Apart from rental licenses, our software can be run without any time restrictions. You can decide on the scope of the program and the support requirement.

Training courses

IngSoft EasyPipe is the industry solution for structural engineers and requires knowledge of structural relationships. The software itself is largely self-explanatory. After a short briefing, even inexperienced users will soon be familiar with the basic functions. On the other hand, options for detailed configuration of the program require corresponding background knowledge.

A training course is also advisable if there is a lack of experience in structural calculation of pipes or uncertainty in handling the standards: IngSoft has the necessary expertise. Training courses are offered in German or English. For prices, please see the price list on page 22. You can choose between three training models.

Online seminar/webinar

Participation in our webinars is flexible and can be booked at short notice. This module is well suited to discussion of specific topics with a manageable scope or to offering an introduction or refresher. Targeted specialization in a feature (such as the database editor, variant formation) is also possible via a webinar. All you need is a telephone connection and internet access.

Duration: At least one hour, extended by 15 minutes at a time by prior agreement

Training at IngSoft in Nuremberg

Training is provided in our offices in Nuremberg. Up to four people can take part; larger numbers of participants can also be accommodated on request. You will be given an introduction to structural relationships, with the emphasis on soil and pipe structural analysis. Installation in trenches is a suitable introduction: the principles of economic sizing can be understood from the example of open construction.

You will be given valuable tips on practical execution with regard to installation, embedding and compressing. The underlying standards and legal background will be explained. Special features, which must be observed for pipe jacking or relining, can be added. An overview of manhole constructions is also possible – you determine the weighting of the subject blocks.

Duration: Four hours, extension by prior agreement

Training in your company

Training is provided in your offices, at a desired location. The number of participants is not limited. You provide the projector and flip chart. Key content can be agreed upon individually. We can look at your current projects in real time or discuss material-specific properties. Alternatively, we can use content from our basic training course or can demonstrate individual calculation modules.

Duration: As required, billing at daily rate plus expenses for travel (e. g. 2nd class train travel), accommodation (e. g. mid-range hotel, if required)

Training at IngSoft in Nuremberg

Customized software solutions

IngSoft offers standard software for various subject areas in the field of structural analysis. This software is set apart by its universal usability. But from time to time, the very complex requirements of our customers require specific adaptations and functional extensions to the software. From a special profile with challenging cross-sectional geometry as an input mask, or an extension of input limits, to an interface for importing database entries: lots of things can be done. That's why we create customized software solutions on request. Such special projects are developed in close collaboration with you. This means we are best able to meet the specific demands and requirements of every individual customer.

Customized programs

Examples of independent solutions which we have successfully implemented as customer orders, are:

- **AseTUB**: Website with pipe catalog and user management for server-based pipe calculations in accordance with ATV-DVWK-A 127, for the Spanish Association of Manufacturers of Plastic Pipes and Fittings
- **Greisel PBP:** Design program for cellular concrete plates in accordance with DIN 4223
- **ami-tools:** Online and offline version of design software for various standards in the field of pipework (A 127, M 45, Fascicule 70, Ciria 128, GW 310) including a profile database on behalf of the end customer: Multilingual (web) application for high user numbers with pipe database, user management and usage statistics

Please contact us and we will create a non-binding proposal for you. Contact details are provided on the back of this brochure.

Your requirements

With our consulting and engineering services, we can support you with the following questions:

- Do you need a **one-off** structural calculation for a buried pipe or manhole without buying the software?
- Do you have a **special profile**, and you can't record it accurately using tables, for example?
- Do you have an order that requires very **specialised knowledge**?
- Do you want to handle a **peak in orders** at short notice?
- Do you have a specific load situation far **outside current standards**?

Our proposal

We have experience in these special areas and have gained a good reputation as a reliable expert in the industry. Therefore, we are able to offer you the following services:

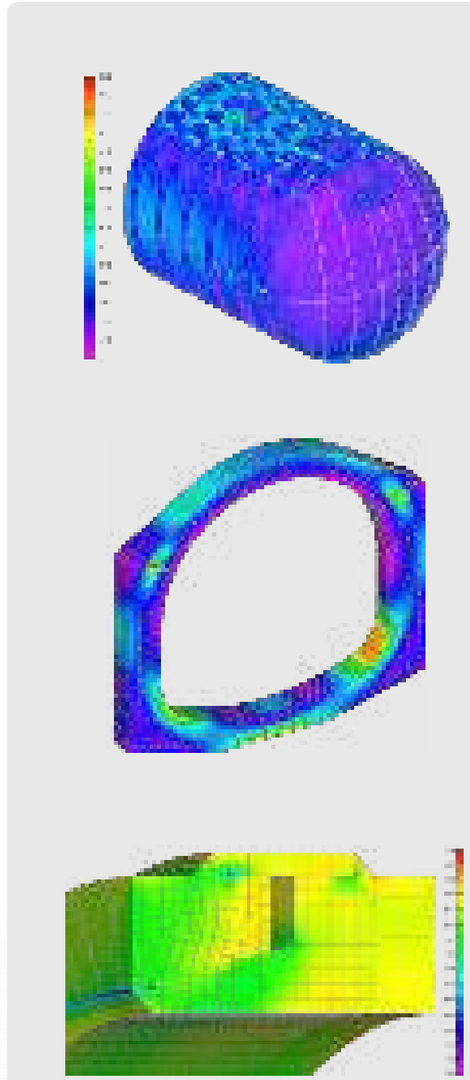
- **Calculation of all pipe cross-sections**
- **Lining/relining, refurbishment measures**
- Cooperation in **expert opinions and tests**
- **Support** with the preparation of building authority approvals (in collaboration with LGA, TÜV, EBA)
- **FEM calculations** for all cross-sections and geometries, containers, tanks, silos, tangential shafts, manhole connections, dowelling, welded seams
- Cooperation in **committees and standardization bodies for standards/regulations**

Our experience extends from current pipe materials such as concrete or stoneware to plastics and through to materials such as glass-fiber reinforced plastic or polymer concrete. We know how to handle profiled or corrugated pipes.

IngSoft would be delighted to create a specific proposal for you.

Engineering services

As a specialist in structural analysis of pipes and manholes, as well as the calculation of reservoirs and containers, we cover a wide area of activity and can model every conceivable material. We have been building on our experience in structural analysis using the Finite Element Method since 1997. These calculations have been developed in close collaboration with engineering firms, pipe, manhole and container manufacturers in Germany, Europe and worldwide.



Views of containers, jaw-shaped profiles and welds in the FE model

Technical requirements –

Background and general conditions for easy use of IngSoft EasyPipe

Provision

The software is provided as a download from the internet via the IngSoft license portal. The user acquires a license for the software with a defined number of possible installations. The program is released for the respective user.

Required user rights

Thanks to Microsoft ClickOnce technology, your normal user rights will be sufficient to run IngSoft EasyPipe. In the course of installation, administrator rights may be required for the Microsoft .NET framework. IngSoft would be pleased to provide you with detailed information.

Recommended hardware

An office PC is sufficient for the user of most computing modules. If liners need to be designed with module M 127-2, then we recommend the use of a multi-core processor (dual or quad core) and > 4 GB of working memory (RAM), so that the calculations can be carried out smoothly and the results displayed quickly.

Supported operating systems

The following current Microsoft operating systems are supported: Windows Vista, Windows 7 and Windows 8. IngSoft EasyPipe runs within Microsoft .NET Framework 4. Therefore, the software will only start in environments that support this framework. For the official list of requirements, see www.microsoft.com.

Required screen resolution

A screen resolution of at least 1024 x 768 pixels is recommended. IngSoft EasyPipe copies your user-specific settings from the operating system, e. g. a zoom factor.

Required additional software

IngSoft EasyPipe is based on the free Microsoft .NET-Framework 4.0 client, which is available on most computers. To preview the results, you will need a PDF viewer (e. g. the free Adobe Acrobat Reader, version 7.0 or higher).

Installation and automatic updates via Microsoft ClickOnce technology

IngSoft EasyPipe is based on the latest Microsoft technology and can be easily obtained by download from the internet. It is installed directly in the user profile of the currently logged on user. The software is automatically updated via the internet under a software maintenance agreement; the pre-set automated process provided for this can be configured in the program options.

We would be pleased to inform you about other installation options.

Prices

A price overview for the different editions of IngSoft EasyPipe, modules and possible extensions is listed here. You require special features? Please contact us, and we will be glad to provide an individual solution for you.

Single-user license

The functionality and possible combinations of the individual editions are described in detail on pages 4-14, so only a list of the prices is given here. The software maintenance and support fee is included for the first year.

Editions	Standard	Professional
Price	700.-	1,200.-

+ Modules

Modules	A 127	A 161	M 127-2 Basic	A 143-2 Basic	M 45	SIA 190	Manhole[1]
Price	700.-	1,110.-	1,500.-	1,500.-	700.-	700.-	2,500.-

[1] The module Manhole is currently being developed.

+ Extensions

Extensions	Load editor	Profile from drawing	Pipe with base	Egg-shaped cross-section in HPC III[1]	
Adapted for	all modules	A 127, A 161, SIA 190	A 127	M 127-2	A 143-2
Price	700.-	700.-	1,100.-	800.-	

[1] The extension egg-shaped cross-section in host pipe condition III (HPC III) is currently being developed.

+ Additional languages

Additional languages[1]	for all modules and extensions
Price for 1st language	included
Per additional language	450.-

[1] Languages are available at all times. If not agreed otherwise, a language, once acquired, is available for all past and future licensed modules and extensions. For current languages please consider page 5.

Multiple-user licenses (simultaneous working)

The first license is calculated as a single-user license. Further installations will be offered at a discount. Discounts listed below apply as long as an identical program scope and the same company logo are used.

Number of installations	Installation price as % of the single-user license
2–4	50%
5–9	30%
10 and more	25%

Multiple-user floating licenses (nonsimultaneous working)

If simultaneous working with the program is not required, the floating license is an alternative. Floating licenses allow installation of the software on any number of computers. The software can be used simultaneously on as many computers as floating licenses have been purchased. Floating licenses are managed by an internet service hosted by IngSoft and require a permanent internet connection. Discounts listed below apply as long as an identical program scope and the same company logo are used.

Floating license price (each, for one or more licenses)
175% of the corresponding single-user license price

Rental licenses

As an alternative to a purchase, the **Professional Edition** of IngSoft EasyPipe can be rented for a limited period of time. The shortest rental period is one month. The rental license authorizes single-user access.

Rental license price for one month	
first month 25% of the corresponding single-user license price	each additional month 15% of the corresponding single-user license price

Price calculation examples:

Single-user license

For the installation of IngSoft EasyPipe software under a single-user license, the **one-time** costs are calculated as follows:

Professional Edition (incl. one language, **e. g.** English)	1,200.-
Module A 127 (trench installation)	700.-
Additional language (e. g. German)	450.-
Total for one installation	**2,350.-**

Multiple-user license (simultaneous working)

For two installations of the **multiple-user license** of IngSoft EasyPipe (simultaneous working) software, the **one-time** costs are calculated as follows:

Total of the single-user license costs (see example above)	2,350.-
Price for the 2nd installation (50%)	1,175.-
Total for two installations	**3,525.-**

Multiple-user floating license (nonsimultaneous working)

For the installation of IngSoft EasyPipe software under a **multiple-user floating license**, the **one-time** costs are calculated as follows:

See example above for single-user license costs.

Price for the 1st installation (as 175% of 2,350.-)	4,112.50
Price for the 2nd installation (as 175% of 2,350.-)	4,112.50
Total for two installations	**8,225.-**

Rental license

For the rental license for IngSoft EasyPipe software, the price **for one month** is calculated as follows:

See example above for single-user license costs.

Rental price for first month (25%)	**587.50**
Rental price for add. months (15%)	**352.50**

Software maintenance and support

IngSoft EasyPipe customers receive software maintenance and support during the first year at no additional cost. Subsequent software maintenance and support is optional and is available at Basic and Premium levels.

Support level	Basic	Premium
Annual fee	15% of the current license price	20% of the current license price
Contact	by e-mail	by e-mail or telephone
Response time	max. one working day*	max. four hours (on a working day*)

* A working day is defined as Monday through Friday, excluding German and Bavarian holidays.

Courses and seminars

Course location	Country	Basic price	Supplemental price
Webinar	worldwide	150.- for the first hour	100.- for each additional hour, measured quarter-hourly
IngSoft/Nuremberg	Germany	690.- for up to four hours	
At another site of your choice	Germany, Austria, Switzerland	1,290.- daily rate	plus travel expenses
	worldwide	upon request	–

All prices are in euros (EUR) and are shown without value-added tax (VAT).
IngSoft reserves the right to adjust prices at any time.

IngSoft EasyPipe – established worldwide

As a market leader in structural calculations of pipelines and manholes, IngSoft is well established in Germany and far beyond German borders.
You get reliable and multilingual support from our software team and benefit from our continuous development and quick transfer of software and modules as well as translation into other languages. A highly competent team is at your disposal for special requirements.

IngSoft EasyPipe. An intelligent software solution by IngSoft.

www.ingsoft.de

About IngSoft

Since 1997 we have been successful at developing applications in the field of structural analysis. Our focus is on the software IngSoft EasyPipe for the structural analysis of buried pipes and manholes according to current standards.

IngSoft offers technical support, individual software solutions, customized adjustments and further engineering services such as FEM calculations.

IngSoft is a DWA partner (German association for water, wastewater and waste). Under the designation "DWA Statik-Expert" IngSoft develops software according to the DWA standards ATV-DVWK-A 127 and DWA-A 161. In addition, IngSoft is a Microsoft Gold partner.

Among our customers are nationally and internationally reputable pipe and manhole manufacturers, municipalities, universities, engineering companies and corporations such as German Rail (DB) and Frankfurt am Main Airport.

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