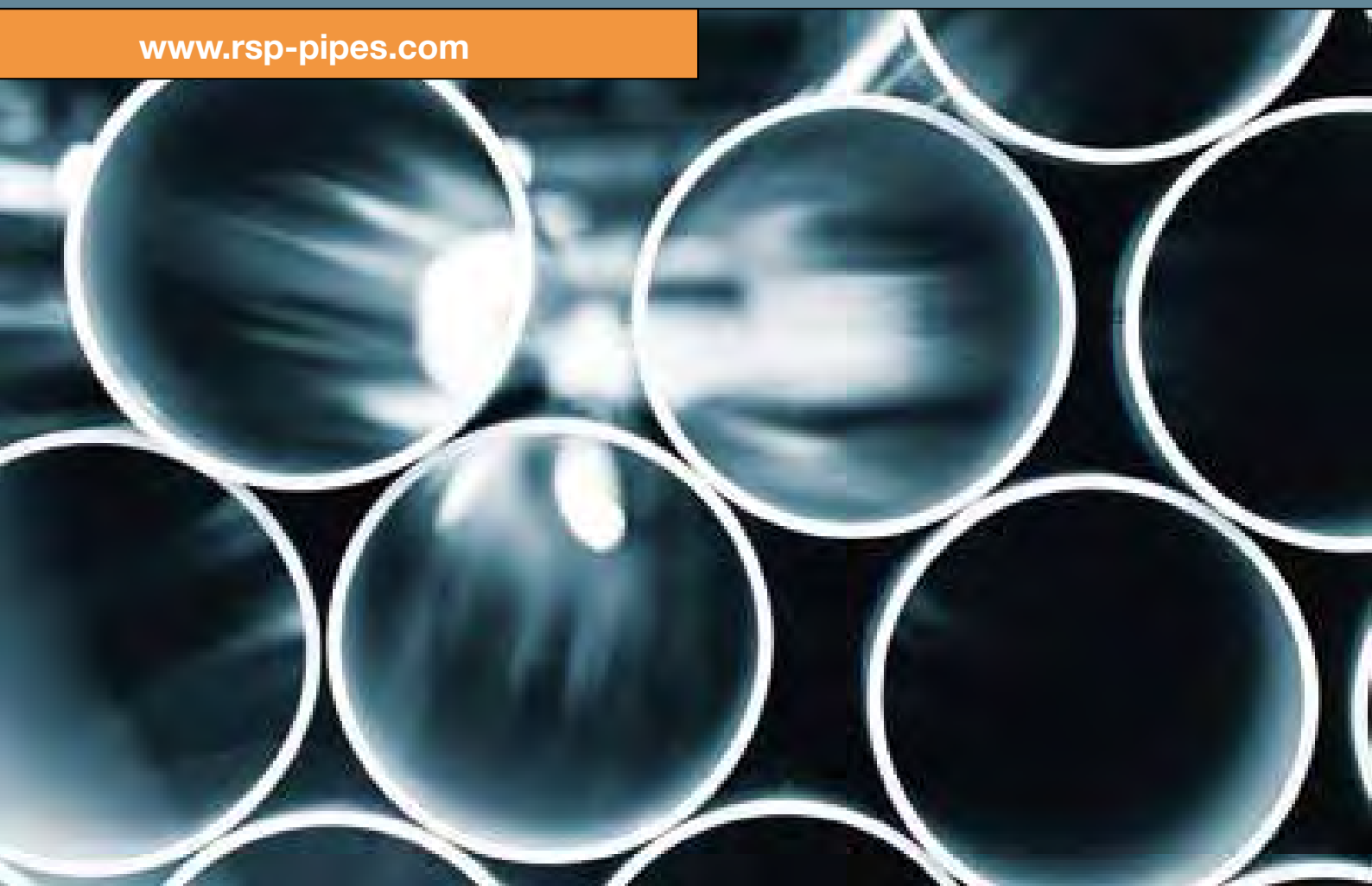


RSP®

Well connected

www.rsp-pipes.com





RSP®

Well connected

Ahead of our time – but rooted in the past

In today's age of tough competition and tight profit margins, it is more important than ever to react quickly and responsively to new developments in the market. But at the same time, traditional qualities – reliability, decency and trustworthiness – can still give a company a crucial competitive edge. RSP® believes that the key to remaining relevant to

architects, planners, distributors and tradespeople is to combine these traditional characteristics with a global, flexible, networked mindset. Our lean corporate structure and motivated, highly professional workforce enable us to supply the right advice and products to our customers exactly when it is needed. We work together effectively as a team in order to establish

personalised relationships with our customers based on mutual respect.

It is these relationships that form the basis for our success in this highly competitive market, and for our ever growing customer base in Germany and Europe as a whole. We have been successfully cooperating with countless wholesalers and

distributors around Europe for many years. Our sales area now includes more than 20 countries, stretching all the way from Iceland to Turkey and from Portugal to Russia. We keep investing in our long-term relationships with our customers by always being honest and fair in our dealings with them.

We aim to create maximum benefit for everyone involved, generating win-win situations in order to build trusting relationships. Our thinking and actions are always focused on customer satisfaction and on ensuring that we can continue to innovate and offer high-quality products in the future.

Your RSP® team

RSP® RUCK Sanitärprodukte GmbH



The perfect finish on our pipes allows unrestricted flow for diverse types of waste water.



Large stocks of products and a personalised service enable us to process orders quickly and simply.

RSP® is more than just a supplier of waste water drainage systems: it is also a team player, working with distributors, designers, planners and tradespeople, offering advice and solutions relating to building construction, laboratories and large-scale kitchens, bridge and road construction, sewer connections and pressurised drainage.

We adhere strictly to a three-tier distribution process (manufacturer-wholesaler-tradesperson-end user) because this is the only way to guarantee quality and reliability.

RSP®'s streamlined decision-making processes, on-time deliveries and personal approach to service give it a significant edge over its competitors. We are continually expanding our product range to stay up-to-date at all times for our customers. We are able to offer customised solutions and complete systems, and we keep large volumes of products in stock which means that optimal product, service and delivery quality are assured. Our products also come with a 10-year warranty.

As well as value for money and quality, there is another area that is very important to RSP®: the environment. We conserve natural resources by using scrap metal in our production, and supplying pipe systems that are 100% recyclable.

By applying very high-quality coatings to our products, we are also able to use less material.

Products SML, KML, TML, BML, couplings, accessories

RSP® has the right socketless cast iron waste water system available whatever the application: waste water drainage from buildings (SML) or laboratories or large-scale kitchens (KML), underground sewer connections (TML), and even drainage systems for bridges (BML).

We supply complete systems of pipes, fittings and couplings, with nominal diameters ranging from DN 40 to DN 400.

We can also gladly develop and manufacture customised products for use in new applications, or in non-standard dimensions. We work as a partner to wholesalers, architects, designers, planners and tradespeople, advising them in their search for a solution that is long-lasting, sustainable and saves time and money from the word go.

All of our products meet the relevant (DIN) EN requirements and bear the CE mark.

All RSP® pipes and fittings are made from grey cast iron, whose particular benefits include its good fire protection and sound insulation properties, high ring crush and tensile strength, high impact resistance, and low coefficient of expansion. Its high stability also means that fewer fixing points are required than with other materials. Grey cast iron waste water systems are quick and inexpensive to install.

They have an extremely smooth internal surface which allows the water inside to flow fast and prevents deposits and blockages from occurring.

Quality levels are kept at a consistently high level by ongoing factory production control and third-party control (by LGA) in production, shipping, warehousing and order picking in our own warehouse.



No matter how complex the requirements, RSP® has a solution.



Just-in-time delivery is made possible by high product availability.

General

Guaranteed quality

General product information

Cast iron is a traditional material that has been used in irrigation and drainage pipes for many centuries. Its success compared to other materials lies in its superior material properties. Since they were first used, cast iron pipes have changed dramatically: wall thicknesses have been substantially reduced, coatings considerably improved, and sockets have been replaced with coupling systems.

Quality

The European standard applicable to cast iron waste water pipes – (DIN) EN 877 – lays down requirements relating to materials, dimensions, mechanical properties and coatings for cast iron pipes and fittings. It also sets out precise requirements for the relevant couplings. RSP® products not only meet the tough demands of EN 877, but also satisfy far

higher quality requirements that ensure that they function smoothly for many years – as demonstrated by our numerous certificates. Naturally our production facilities are also certified compliant with the latest quality assurance criteria (ISO 9001).

Grey cast iron

RSP® fittings and pipes are produced from grey cast iron of at least grade 150 (previously GG-15) as per EN 1561. This very strong alloy makes RSP® systems very durable and resistant to wear.

Fire protection and sound insulation

This cast iron, which falls into building material class A1, offers fire protection and sound insulation properties with no need for any additional costly treatment. However, sound-insulating fixing materials can be used to provide yet more effective protection against noise if required.

Good for the environment

RSP® cast iron products save natural resources because they can be 100% recycled. The use of environmentally-friendly coatings also helps to reduce the burden on the environment.

Fire safety



The non-flammability of cast iron means that it will not promote the spread of fire between different floors and rooms. Nor will it produce any toxic gases or emissions.

Following a number of devastating major fires, fire safety regulations – particularly those relating to buildings – have been drastically tightened in recent years. The greatest benefit of cast iron waste water pipes and fittings compared to other systems available – many of which cannot withstand high temperatures – is their non-combustibility and good flame and fire stability, which prevent the spread of fire throughout the building from floor to floor and room to room. They also produce no toxic gases or emissions – the number one cause of fatalities in fires.

Non-combustible

Cast iron melts at 1147 °C, which far exceeds the temperatures that occur in building fires, and it therefore falls into building material class A1 (non-combustible) as per DIN 4102 (90 minutes at 750 °C +/- 10 °C). The non-combustibility of our pipe systems makes them ideal for all applications in building construction where enhanced fire safety requirements must be met.

According to Section 40 (1) of the German Model Building Regulation (MBO):

„Pipework may only pass through space-enclosing components for which fire resistance has been stipulated if fire spread will not pose a threat for a sufficiently long period of time, or precautions have been taken to prevent this from occurring.”
Unauthorised translation. Only the original German version is binding.

In practice this means that the space between the pipes, and the remaining cross-section of the opening, must be fully closed in the full thickness of the component with non-combustible, dimensionally stable building materials. Mineral building materials such as cement mortar or concrete are particularly suitable for this purpose. If mineral fibres are used, their melting point must be at least 1000 °C and their (compressed) density at least 90 kg/m³.

The non-combustibility, and harmlessness of the coatings used on RSP® pipe systems have also been tested according to the latest version of DIN EN 13823 by the Leipzig Institute for Materials Research and Testing (MFPA Leipzig). And RSP®'s SML, KML and TML systems have been rated class “A1” according to DIN EN 13501-1 for their reaction to fire – an aspect that is given significant attention in DIN EN 877.

Noise protection

The sound insulation characteristics of cast iron are another of its major benefits: thanks to its high density it absorbs sound very effectively, making it the ideal material for waste water pipes and fittings. No additional sound insulation measures are required, which saves time and money in building construction.

Quieter buildings

The Association of German Engineers (VDI) has lowered its guideline maximum sound pressure level for noise from waste water pipes from 35 dB(A) to 30 dB(A) with the aim of making homes and business premises quieter. Cast iron pipes and fittings easily meet the sound insulation requirements set out in DIN 4109 – RSP®'s SML waste water system, for example, can achieve outstanding results even when conventional fixing products with a rubber insert are used.

Figures well below 30 dB(A)

Sound insulation tests according to DIN 4109 and DIN EN 14366 at the Fraunhofer Institute for Building Physics (IBP) in Stuttgart in November 2011 showed with striking effect that, when used in conjunction with acoustic decoupling materials, RSP® systems allow the noise level to be reduced to well below half the limit values.

To avoid acoustic bridges across pipe penetrations, we recommend fire protection sleeves insulated against structure-borne noise (resistant up to 1000 °C).



RSP® building systems are almost noiseless thanks to their superb sound insulation.

Questions? We can help.

You can obtain further information on fire protection and sound insulation in our “**Technology and installation**” brochure, by calling our customer service number +49 (0) 8034 70 82-0, or by visiting www.rsp-pipes.com.

Mechanical properties

In addition to outstanding fire protection and sound insulation, cast iron also offers impressive mechanical advantages. Its high ring crush strength and tensile strength protect it against the large forces encountered in areas such as building and bridge construction and in buried systems. RSP® cast iron systems meet enhanced material requirements such as the ability to withstand road traffic and other loads.

Our team will provide you with professional, personalised assistance no matter how complex your project.

Clear benefits

Setting RSP® pipes in concrete presents no problems thanks to the low coefficient of expansion of grey cast iron: just 0.0105 mm/mK (between 0 and 100 °C), which is approximately the same as that of concrete.

Its high impact resistance protects it against damage from external influences such as vandalism.

The high stability of grey cast iron means it requires fewer fixing points, making installation less labour and cost-intensive.

Pressures up to 10 bar

Socketless cast iron pipes are joined using steel screw couplings with EPDM rubber inserts. This gives greater stability than a spigot-and-socket joint, reducing the number of wall fixing points required. At high pressures of the kind encountered in roof drainage systems, a simple claw is sufficient to increase the stability of the joint from 0.5 bar to 10 bar. Compared to plastic pipes, this advantage of cast iron pipes will result in considerable long-term cost savings.

Certified quality

The quality of RSP® products is guaranteed, as confirmed by numerous certifications from neutral institutes and testing bodies.

A selection of these is given below.



The LGA Quality Mark confirms that our products conform to DIN EN 877 and DIN 19522 and are subjected to regular third-party control.



ETA-Danmark certification indicates that our products meet Danish and European requirements in all areas of the applicable standards.



The Russian PCT certification is comparable with CE or ISO certification and is mandatory for products produced or sold in Russia.



Swedcert certification confirms compliance with the standards EN 877 and DIN 19522 and entitles the manufacturer to market its products in Sweden.



All RSP® products bear this mark, showing that they meet the requirements of the standard EN 877. Registration is required before a manufacturer can use this association mark.



The CE Certificate of Conformity denotes conformity with the Construction Products Directive (89/100/EEC) and the standard EN 877.

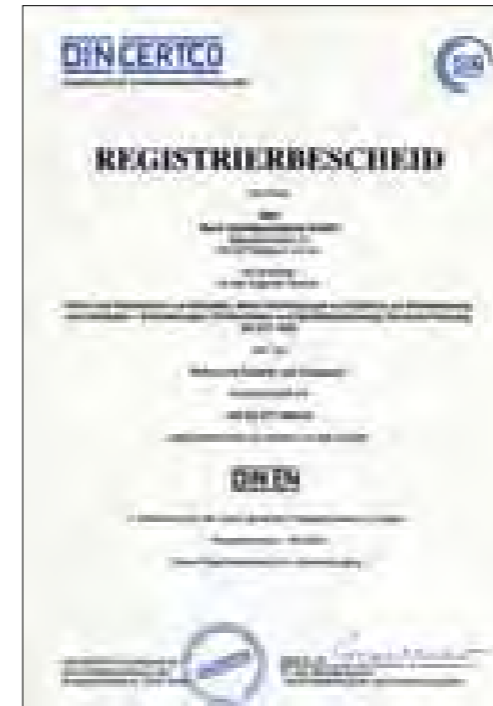
Certificates

You can trust in the high quality of our products, because they are regularly monitored by authorised, independent institutes to ensure consistently high quality standards.

This means more than just conducting a single type test: our products are subject to continuous quality control on the basis of a contract with the testing organisation TÜV Rheinland LGA Products GmbH in Würzburg, Germany.

Our production facilities and warehouses are monitored at least twice annually to ensure consistently high quality, entitling us to use the “Type approved and monitored” LGA Quality Mark. In the new version of DIN EN 877, the “Ü”-mark that was previously applicable in Germany has been superseded by the “CE” mark. This means that, since 2009, it has been mandatory for all manufacturers of cast iron waste water systems to affix the “CE” mark to their products. Manufacturers are also obliged to provide a manufacturer’s declaration of conformity.

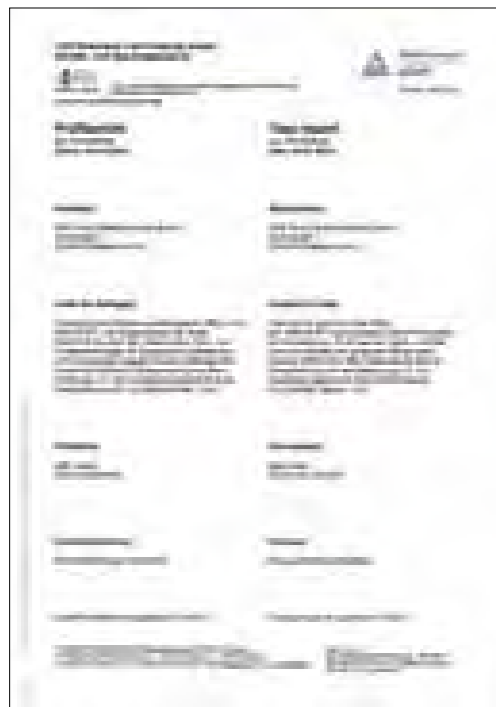
Our products are also certified and approved for use in many countries outside Germany, for example Sweden, Denmark, Croatia and Russia. You can see some of our certificates below. Other up-to-date documents are available to download from www.rsp-pipes.com.



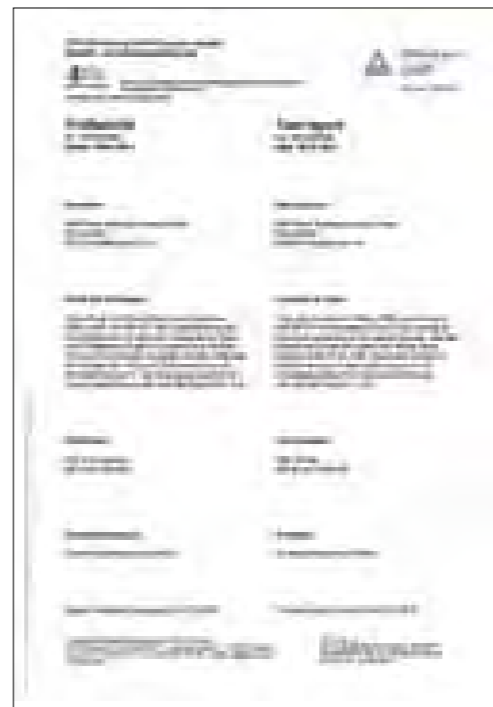
Notice of DIN EN registration



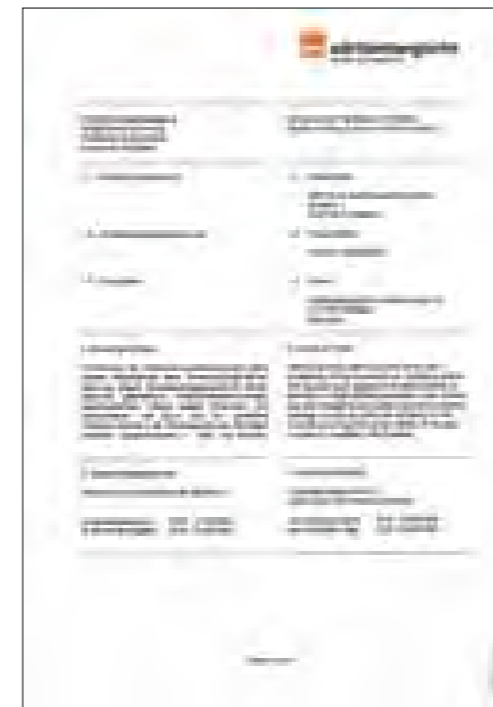
Manufacturer's declaration of conformity (CE conformity)



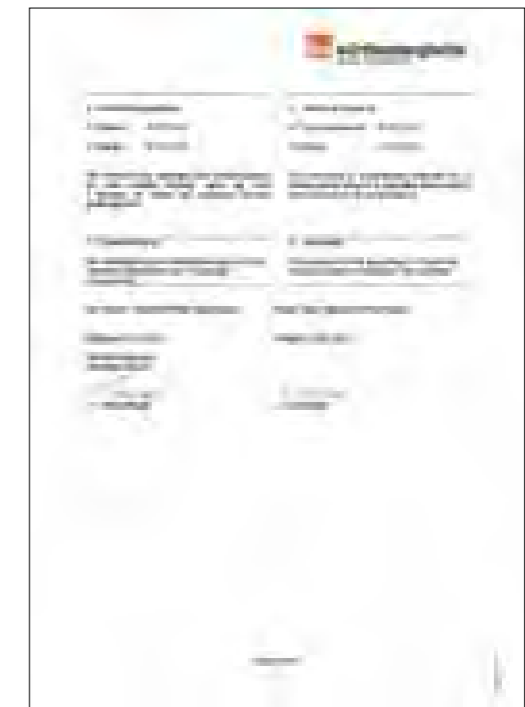
LGA Quality Certificate (pipes)



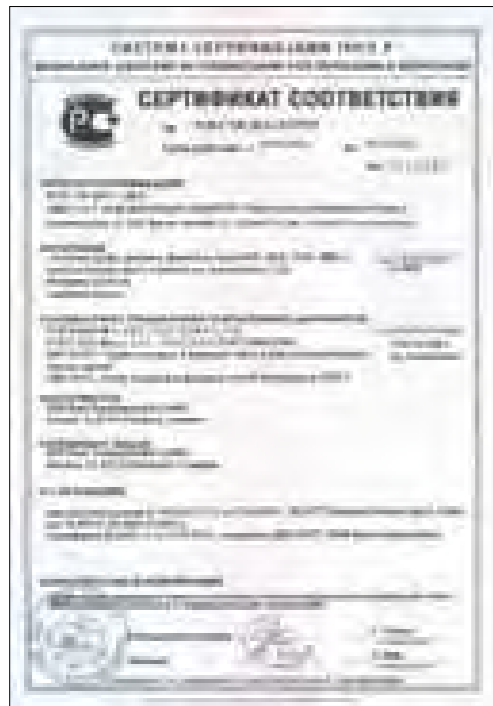
LGA Quality Certificate (fittings)



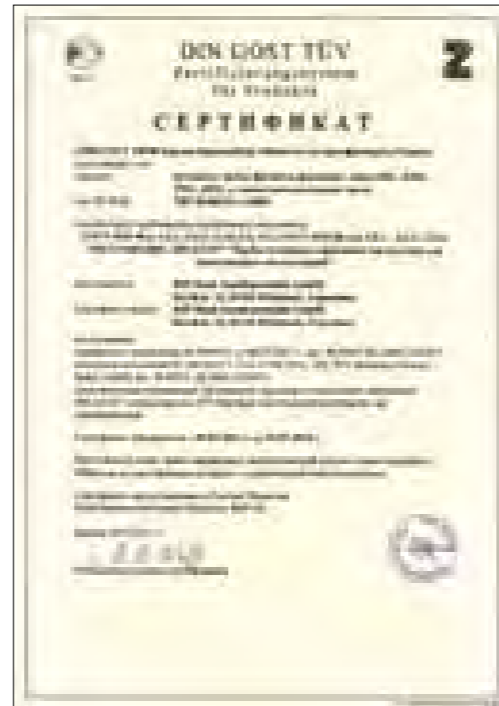
Third-party liability insurance policy (page 1)



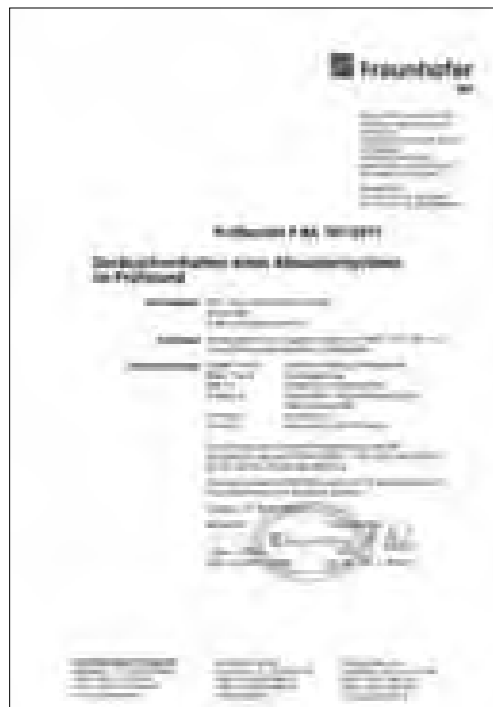
Third-party liability insurance policy (page 2)



Russia (GOST)



Russia (GOST)



Fraunhofer sound insulation report

The full set of RSP® catalogues

Cast iron waste water systems, couplings, and technology and installation

Request a catalogue now!
+49 (0) 8034 70 82-0



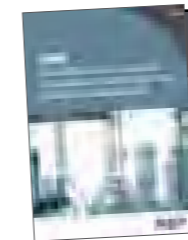
RSP®
Well connected



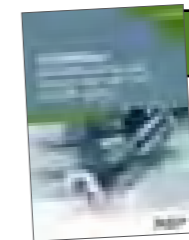
SML
Socketless cast iron waste water system for building construction



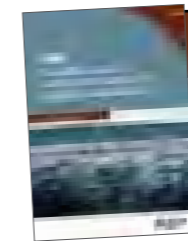
BML
Socketless cast iron waste water system for bridge construction



KML
Socketless cast iron system for aggressive waste water from kitchens and laboratories



Couplings
High tensile and standard joints for SML, KML, TML and BML systems



TML
Socketless cast iron waste water system for civil engineering applications



Technology and installation
What you need to know

Or download any catalogue from:
www.rsp-pipes.com

RSP® Ruck Sanitärprodukte GmbH | Kirchstraße 1 | 83126 Flintsbach am Inn | Tel.: +49 (0) 8034 70 82-0

www.rsp-pipes.com