

# Set news

2017



## Set Pipes

In this newsletter the production and service of Set Pipes is introduced from various perspectives.



# In this issue



**The theme is product- and technological development**



**News in assembling technique**

- 3 Introduction
- 4 Focused Product Development Results in New and Better Products
- 5 Manufacturing of Pipes for Liquefied Gas
- 6 Innovations in Assembly of District Heating Pipes
- 6 Compression Fittings for Steel Pipes
- 7 Open Shrink Casings
- 7 Insulation of Joints
- 8 Drainage Delights
- 9 Educational Courses and Product Presentations
- 9 Perfect Equipment for PVC Pipe Manufacturing
- 10 Set at International Conferences and Exhibitions
- 11 Samorka Conference in Akureyri
- 12 Georg Fischer
- 14 Set's Transport Service
- 15 AVK
- 16 Collaboration with GM Plast
- 16 Job Introduction at the South Iceland College
- 17 Set's Mechanical Engineering Division Strengthened
- 18 One of Iceland's Strongest Companies
- 19 Set's Spring Trip to Lisbon

Set Pipes | Eyravegur 41 | 800 Selfoss | Tel: +354 480 2700 | set.is | set@set.is

Set Pipes GmbH | Zum Ikenkamp 8 | D-45721 Haltern am See | Tel: (+49) (0) 2364 508894-0 | setpipes.de | info@setpipes.de

# Introduction

A word from the General manager of Set.

Set's operations consist of product development, promotional and sales activities, procurement, industrial production and transport services, as well as assembly services on site if requested. The company's customers can also gain knowledge of welding and finishing of pipes within the walls of the company.

These tasks are varied and often demanding, as Set manufactures the majority of the piping materials sold by the company and customises it according to the needs of the market. In this lies the company's uniqueness and strengths. Set is first and foremost a technology- and production-driven company and can therefore play a large part in various projects where specialised solutions are needed.

This quality means that the company can broaden its project base by taking part in many different projects, domestically and abroad. For example,

Set's technicians have lately been developing a new generation of insulated plastic pipes with better qualities, more flexibility and higher insulation value. Good results were achieved in late 2016, when the first pipe of the new type was produced.

The new pipe, named Elipex Premium, was introduced at the Ecobuild exhibition in London 2017, and the full product range will be ready in 2018. There have also been innovations in water, sewerage and fibre-optic cable solutions in collaboration with foreign material manufacturers.

Set's goal is to continue being among the most technically proficient companies in the piping field, with a special emphasis on the overseas district heating market.



**BERGSTEINN EINARSSON**  
General manager



Set Pipes has a certified quality system according to ISO-EN 9001. Vottun ehf. is responsible for evaluating and monitoring the system.



Set Pipes has a quality recognition from the European District Heating Association, Euro Heat & Power



Nýsköpunarmiðstöð Íslands supervises the internal registration for Set Pipes' quality system.



Sveriges Tekniska Forskningsinstitut is responsible for type testing the products from Set Pipes and audits for the Euro Heat & Power certification.



Fernwärme-Forschungsinstitut perform type testing for Set Pipes' products.



IMA in Dresden gmeasures the thermal conductivity in the heating pipes for Set Pipes.



Teknologisk institut handles measurements on pre-insulated pipes for Set Pipes.



Tæknipróunarsjóður supports product development and innovation at Set Pipes.

# Focused Product Development Results in New and Better Products

The new pre-insulated plastic pipe Elipex Premium is revealed.

Ever since Set Pipes completed the product development of insulated PEX pipes in 2006, under the manufacturing name of Elipex, the company has kept a close watch on developments in European markets for comparable materials and solutions in heat-resistant plastic pipes for district heating. For most of Set's history, the demand has been in the domestic market, often under difficult conditions where great resistance to heat and pressure is required. Set has also manufactured particular sizes as a subcontractor for foreign buyers of the product.

The whole production process in the last decade has been instructive and enabled Set's technicians to experiment with new technology and methods to increase insulation and flexibility.

The wide-ranging experience and high demands from customers and the market have thus strengthened the company's procedures, both in the actual production and in product development.

The idea for a new type of pipe was born soon after Set began experimenting with marketing in Europe. The aim was to use new methods and techniques to change the qualities of the product, the qualities that are considered the most advantageous and competitive.

Five years ago, Set's technicians decided to implement a new methodology in the manufacturing. This experiment yielded significant results in late 2014. Remarkable results were achieved as regards the insulation value of the pipes. The consequent question was how to achieve more flexibility in pipes that were otherwise rather rigid. In this regard, Set's technicians managed to define the factors that were worth altering, and it was soon decided to change the material and shape of the



*The Elipex Premium pipe is flexible and has good insulation.*

casing pipe. The design of the whole production technique underwent a major overhaul. In late 2016, the first new pipe with a different casing pipe and improved insulation value emerged. In the next few months, the development of all sizes will be completed and a new product in a new production line will enter the market in 2018.

Pre-insulated, heat-resistant plastic pipes have partly replaced traditional,

insulated steel piping in distribution pipes and narrower types of water mains. They are therefore highly suitable as a comprehensive solution, especially where there are long utilities routes, and costs will be reduced because there are many fewer joints in the piping system. The pipes range from 20 mm in outer diameter to 110–125 mm in folded material and are also available at up to 160 mm in straight lengths.

# Manufacturing of Pipes for Liquefied Gas

The collaboration between Set, designers and contractors in the Norwegian oil and gas industry has resulted in unexpected projects in a new field.

In 2017, Set Pipes began manufacturing piping material, pipes for liquefied natural gas, for a project in Norway. LNG is compressed natural gas, stored and transported under 14 kg pressure and at a very low temperature, ca. -160°C.

Strict requirements are made for projects such as these, and this applies to both the quality of materials and the workmanship. Inner pipelines and weld fittings are made of stainless steel.

There are very strict requirements for the quality of steel welding in fittings. A considerable portion of the units built by Set consists of long turns that are used for large expansion loops.

They are intended to absorb length variations in the piping due to the heat fluctuation and the intense cold in the pipes when the gas is pumped

through them. These pipe units are under intense strain, so there are special requirements for radiographic examination of all weldings in the pipe sections.

The system for which Set manufactured materials consists of steel pipes, 219.1 mm and 168.3 mm in diameter. The pipes are insulated with polyurethane foam and covered with a conventional plastic casing pipe with an insulation value of 4–5, which is much thicker than in standard heating utilities.

Set has collaborated successfully with Norwegian designers, contractors and monitoring

agencies on these projects. Set's involvement has greatly enhanced the company's knowledge base regarding insulation of material outside the energy and district heating fields.



# Innovations in Assembly of District Heating Pipes

It is now almost half a century since pre-insulated steel pipes were first introduced. Steel pipes have usually been welded together, but a recent mechanical pipe connection technique makes any welding unnecessary, incredible as that may seem. The technique in question is a special compression fitting from the Swiss company Haelok.

This is a historic and revolutionary development that saves time and costs spent on radiographic examinations and monitoring.

In addition to this innovation, there have also been changes in the finishing of joints on the casing. Several generations of joint materials have been used since the beginning, and the malfunction frequency of utilities

systems has always been closely linked to the finishing and quality of the material. The first district heating pipes were insulated with PVC casing pipes, but they were soon replaced by PE casing pipes.

The most widespread form of joint sleeves was achieved by heating traditional PE casing pipes and expanding them so they became oversized.

In the 1990s, the Reykjavik Heating Utility and heating utilities within Samorka stipulated the use of PE shrink casing, which is manufactured with much more accuracy, in order to preserve the contraction characteristics of the material. Application of glue and sealants at the ends was also stipulated.

The casings could therefore be heated over the joints so that they contract and tighten over and around the pipe end. It was required to use closed, whole shrink sleeves on the ends. This was referred to as a jointing solution with a double seal. In recent years, use of open casings has been increasing. These are casings that are placed over the joints once the steel pipes have been assembled.

Arc welding has also become more popular and replaced gas welding for wider sizes. That is why Set decided to partner with the Swedish company Mittel AB and market their solution in Iceland.

---

# Compression Fittings for Steel Pipes

Revolutionary innovation from Haelok.

From the beginning, district heating pipes from steel have been joined using welding or arc welding. But now there is an innovative solution that eliminates the need for welding: compression fittings that replace traditional welding. The fittings are the product of Swiss company Haelok,

which has managed to prove the safety of their pipe connection method. Haelok had previously marketed this technology for piping in industry, sea installations and oil and gas pipelines but has now expanded to include the district heating and energy markets. This innovation is among the most

revolutionary developments in the assembly of district heat pipes in many years. The method has resulted in increased productivity in assembling and reduced risk due to poor welding quality. It is also easier and healthier to do the job without any sparks, smoke, heat and cuttings.

Weather conditions have little effect on the assembly work, compared to welding, and it is not necessary to dry and clean moisture off the end of the steel pipes. The method requires less monitoring, as it is not necessary to inspect welding using radiography or ultrasonography.



# Open Shrink Casings

Affordable and safe jointing solution from Mittel AB.

The Swedish company Mittel Fjärrvärme AB, founded in 1990, began its operations as a subcontractor for finishing work on insulated district heat pipes. In the mid-nineties, ideas for the company's own version of arc-welded, open jointing solutions emerged. This resulted in the company developing custom equipment and methods that immediately garnered much attention in Sweden.

Set Pipe's managers have observed of the company's success in Scandinavia for a long time and taken note of the positive user comments about this solution. It was therefore natural that Set would partner with Mittel in marketing their product in Iceland when the company increased their manufacturing of wider pipes and the market's attention turned increasingly towards open, arc-welded casings.



## Insulation of Joints

Gæði einangrunar í samskeytum er mikilvægur þáttur

Insulation foam for joints has mostly been in the form of Polyurethane portions, where the base materials Polyol and Isocyanate are delivered in plastic bottles or special bags. The materials are mixed and poured into the joints. The use of precast shells has been growing steadily, and Set now has casts to produce all sizes. Machine foaming with a foaming

machine has been used for many years, particularly for wider pipe sizes. Set can now offer all three solutions:

1. Insulation portions.
2. Precast insulation shells.
3. Machine foaming.

# Drainage Delights

Significant increase in product supply.

Set Pipes manufactures PVC drainage pipes for building foundations, i.e. installations within the floor slab and from the foundations and similar pipes to dry soil along building foundations. Set also provides most types of fittings and connections for the drainage pipes. These pipes have been in great demand recently. Set offers the X-Stream utilities system for water mains beneath roads. They are made from Polypropylene, with a smooth inner surface and a grooved outer surface, which increases their load capacity.

Set has been involved in several big sewerage projects this year where the pipes have been used. The pipes

are manufactured by the pipes manufacturer Wavin in Europe, in the company's plants in Norway, Denmark and Poland. Set has sold this system for years, but the demand has been unusually high this year. This is due to both the increased use of plastic pipes in mains of subterranean drainage systems and the fact that the X-Stream utilities system offers great flexibility in material selection and solutions.

Set also manufactures so-called Weholite pipes, made with PE material, in wider varieties. These pipes are also often used for mains drainage, as well as for all kinds of customised connecting wells, tanks and separators. The Weholite pipes have often been

used in drainage systems over the past year, as the pipes can be customised in various ways for special projects.

The Finnish company KWH in Vasa developed the product and has a manufacturing licence from Uponor, which overtook the operations of KWH a few years ago.

Set has a wide-ranging product range in the drainage field and has met growing market demand with comprehensive product lines of materials with all attendant bonding and joining materials, either manufactured by Set or one of the company's technically advanced partners.



Construction in central Reykjavik. Weholite pipes in the foreground.



# Educational Courses and Product Presentations

Set Pipes has enhanced its educational and promotional activities, with an emphasis on joining technology in all utilities fields, particularly in the field of district heating and water utilities materials.

Special product presentations have been held along with courses, mainly presentations of new solutions, e.g. the Mittel joint product. There have been courses in different welding methods for plastic, water and drainage pipe, including the use of the Elgef electrofusion system from Georg Fischer.

Set's customers are always welcome to visit the company for education, training and advice regarding joining technology. Those who are interested can contact Set's service department to prepare courses and introduction with due notice.



# Perfect Equipment for PVC Pipe Manufacturing

PVC drainage pipes are used in the bases and foundations of newly constructed buildings as connections to drains in floor slabs for cleaning equipment, wastewater and drains. The pipes are also used to connect mains from the house with street drainage systems, where wider pipe sizes take over. Special perforated PVC pipes are used for drainage channels, alongside buildings for soil drying and leach drains from septic tanks.

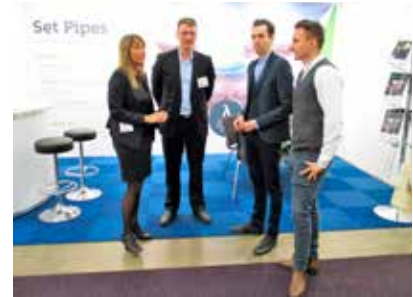
Set Pipes has manufactured PVC drainage pipes since 1985 which is natural, given that the company got its start making concrete sewage pipes. The pipes are produced in several widths. 110 and 160 mm, 4" and 6", are most common, but 200 mm, 8", pipes are also produced. Sales in this product range have almost exclusively been to resellers in the construction field, to construction material shops all over Iceland. Set recently renewed all

casts and cooling equipment for the manufacture of the pipes, which have a three-layer wall with a central core of PVC foam. This product category is highly competitive, and the foam core pipes are widely considered to be an economical solution, as they allow for less use of material while still maintaining the same strength.



*Son and father Daniel Arnar and Róbert Karel by the production line.*

# Set at International Conferences and Exhibitions



*A glimpse of 2017's exhibitions.*

In the last few years, Set Pipes has taken part in many exhibitions held by European energy and district heating associations in various countries. Set's visibility on the overseas market has increased significantly since the company first presented the pre-insulated Elipex PEX plastic pipes in Bremen in April 2008. Set's participation on that occasion led to the idea of setting up a plant in Germany.

Since Set Pipes GmbH began its operations, the company has put even more emphasis on promotion by taking part in various events. The last two years have been particularly lively in that regard, as Set participated in four international exhibitions between April 2016 and October 2017.

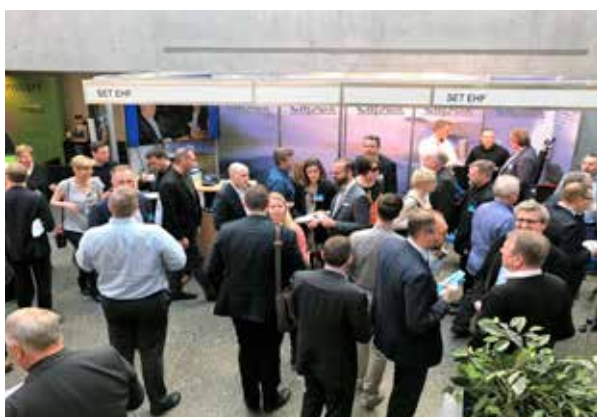
In April 2016, Set Pipes took part in the Enn+Eff exhibition in Frankfurt as well as the conference held by AGFW, the

German Heat and Power Association. In September, Set participated in a conference held in Jönköping by the Swedish district heating association, Svensk Fjärrvärme, and as usual, Set Pipes exhibited its products at the annual national gathering of the Danish district heating association in the Bella Center in Copenhagen in October 2016. In early March 2017, Set exhibited at the Ecobuild event in the ExCeL convention centre on the banks of the Thames. Set closed out the year by participating in Dansk Fjernvarme in Aalborg. All these events have, in one way or another, brought the company closer to the market and enhanced its connection to potential buyers, competitors and numerous suppliers. Many interesting current and future partners stopped by Set's exhibition stalls at these events. The presentation of the new Elipex Premium pipe caught the most attention.

In the accompanying photos, you can see Set's presentation and exhibition stalls and get a glimpse of the bustling activities in the European district heating sector. The market is different in each country. There is a developed market in Denmark, which is natural considering that pre-insulated district heating pipes are a Danish invention. Sweden and Finland follow close behind, while the countries in mainland Europe are less developed. In Germany, for example, only 12–15% of houses are connected to district heating. As is the case in Norway, the UK is practically in the first steps in district heating. It is impossible to say what the exact results of participation and presentations at conferences and trade fairs will be. There are always some results, but they are usually in the long term.

# Samorka Conference in Akureyri

Samorka is the association of Icelandic energy and utilities companies. It was founded in 1995 when the Federation of Icelandic District Heatings and Waterworks (founded in 1980) and the Federation of Icelandic Electric-works (founded in 1942) merged.



The association includes wastewater utilities, district heating utilities, waterworks, electricity producers, electricity retailers and electricity transmission and distribution companies.

Samorka hosts a grand conference in Akureyri every three years. Set has been an active participant in the event since the days of the District Heating Federation and has taken part in the concurrent trade fair from the beginning. This forum has been very fruitful for Set, not least because of the company's connections to the companies within the association and the projects that Set has carried out on behalf of these entities.

Furthermore, discussions at these conferences often revolve around technical matters and tasks that Set carries out. Set operates for the most part in the same fields as the entities within Samorka, i.e. district heating, waterworks, wastewater and electricity. The only Set division not represented in Samorka is the fibre-optic and telecommunications division.

As usual, Set installed an expressive exhibition stand and the company's main contacts were there for both conference days. Set engineer Valdimar Hjaltason gave a brief talk at the conference about the company's new Elix Premium pipe. Valdimar also gave a talk at the 2014 conference.

Similar associations operate in the Nordic countries and mainland Europe and collaborate closely, in various fields, with manufacturers of utilities products. Set's experience in manufacturing and conducting sales activities at its plant in Germany has shown that these connections are very strong.

District heating associations and manufacturers of pre-insulated piping material work closely with European standardisation bodies and

local professional councils regarding material requirements. Thus, district heating associations and pipe manufacturers have a great influence in shaping technical requirements for the products.

Iceland has no involvement in shaping EU standards in the field, as neither Samorka nor Set ehf. has taken part in the work. Dansk fjernvarme conducts annual testings of insulated steel and plastic pipes and has a special procurement committee that visits manufacturers and audits the production and quality systems of the companies. This working group has inspected Set's plants in Selfoss and Haltern am See, and Set is now one of five entities approved by Dansk fjernvarme.

There are few manufacturers of products for the utilities market in Iceland, so there is no such tradition of collaboration between them and an association of utilities companies, but that would be a worthy project in the future.



*Tommy Porsmose from AVK with Louise and Margrėti in the Set booth.*

# Georg Fischer



Set is a long-time seller of fittings from the Swiss company Georg Fischer in Schaffhausen. The company's fascinating history spans more than 200 years, from the period known as the Second Industrial Revolution, when the development of machinery and production underwent a transformation. The company is a good indicator of what transpired in rural Europe during the Industrial Revolution.

On 3 June 1802, the 29-year-old Johann Conrad Fischer (1773–1854) bought a water-driven mill in Mühlental, near Schaffhausen, and used it as a copper smelting plant.



*Johan Conrad Fischer  
(1773 - 1854)*

When Johan died in 1854, his son, Georg Fischer I, took over the business but soon passed it on to the third generation, Georg Fischer II, who completely reorganised his grandfather's factories.

In 1864, he was the first in Europe to begin the commercial manufacture of malleable cast iron fittings (cast pipe connectors). The following year saw the publication of the company's first fittings brochure, containing 91 different items for the gas lighting sector (gas lamps were used for lighting in Western cities at the time). The company had a sense of responsibility for its employees from the start, having established a sickness fund, canteen and more by 1880. This

thoughtfulness has characterised the company, and its relationship with its employees, ever since.

Next to inherit the company was Georg Fischer III, who continued building the company, e.g. by founding a plant in Singen, South Germany, in 1895. In 1898, GF established a pension fund for its employees. The company had clearly grown and prospered over its almost hundred years of operation.

Ernst Homberger (1869–1955) took over the management of Georg Fischer in 1902 and ran the company for the next 50 years, during a period of extensive growth. Several years earlier, the first steps towards listing



*Georg Fischer II  
(1834 - 1887)*

the company on the open stock market were taken. This marked the end of the involvement of several generations of Fischers with the company. Ernst Homberger had the company's trademark, GF, registered in 1903.

GF continued building housing for its employees, building an entire residential area in the first years of the 20th century. Following the end of World War I in 1918, the company bought two farm estates, abandoned decades earlier, near Schaffhausen. This was done to provide food for employees and their families during these very difficult times. GF founded the Gonzen AG iron mine in 1919 and the Maschinenfabrik Rauschenbach AG engineering works in 1921, and

in 1926, the company acquired GF AgieCharmilles, a company that produced textile machinery. The company welfare office was established in 1925, and in 1927, the Ernst Homberger Foundation was founded with the goal of giving vocational training to the children of company employees. In 1933, acquired Britannia Iron and Steel Works Ltd. of Bedford and began to produce malleable cast iron fittings in Britain.

Due to having plants in both Germany and the UK, GF encountered enormous challenges during World War II (1939–1945) despite the company's considerable scope of operations.



*Ernst Homberger  
(1869- 1955)*

However, the parent company in Switzerland always operated according to the Swiss policy of neutrality. In 1957, GF began producing PVC and PP fittings in Singen, Germany. The endless demand for building materials in the post-war era created an insatiable market for this new product.

Ever since the company began producing plastic products, GF has been active in production and development for the plastic pipes market, as well as in producing metal joinings, valves and other products. Set began working with GF in 1997 and has had a long and successful collaboration with this veteran in the piping field.

# A Wide Selection of GF Products



*Elgef PE electrical welding fittings.*



*Multi Joint.*



*PP welding fittings and valves.*



*Welding equipment.*



*Valves.*



*Instaflax PB electrical welding fittings.*



*PE welding fittings and valves.*

# Set's Transport Service

Renewing our transportation vehicles.

Set Pipe's transport service has purchased two new MAN TGX trucks and a VW Crafter van. Following a price survey where several major truck dealerships sent in bids, an agreement was made with Kraftur ehf. regarding the trucks.

Kraftur's bid was immediately considered highly interesting. The first vehicle, delivered in December, is a two-axle MAN TGX 26.480 6x2/4 with a total weight of 26 tonnes. The second vehicle, delivered in March, is a one-axle MAN TGX 18.460 4x2 BL with a total weight of 19 tonnes. The permitted total weight of both trucks, with a semi-trailer, is 44 tonnes.

This renewal in the company's transport division is intended to increase transport capacity and improve delivery and operational safety, as there is often a great strain on transport to and from the plant during peak hours. The vehicles will mainly serve the route Selfoss-Reykjavik, but they are also intended for transporting bigger loads for special projects, both in the southwest corner of Iceland and in rural areas.

The VW Crafter van was bought new from Hekla hf. and is used for smaller deliveries and express deliveries in the greater Reykjavik area and to transportation centres. It is therefore no less important, as it is vital that customers can count on the swift delivery of smaller consignments.



MAN TGX 26.480 6x2/4.



MAN TGX 18.460 4x2 BL.



VW Crafter.

# AVK



The last decades have been successful for AVK.

AVK International A/S manufactures valves, hydrants and accessories for water, gas, wastewater and fire protection applications. The company is located in Galten, Denmark.

Aage Valdemar Kjær established Aage V. Kjærs Maskinfabrik A/S (AVK) in 1941. The main task of the business was the production of compressors for refrigeration equipment, mainly for Danish customers. The machine shop also handled various plumbing services. Aage developed an excellent reputation, primary due to good organisation, quality products and close customer relations. Aage gained a large group of satisfied customers, and the business became firmly established. In 1970–1973, Aage's son,

Niels A. Kjær, took over the business from his father.

He began developing the first prototype of the AVK valve and changed the company's name from Aage V. Kjærs Maskinfabrik A/S to AVK Holding A/S. AVK has continued to hold on to its values, despite growing from a small business in Galten with a staff of five to a company with close to 3000 employees and operations in over 80 countries.

The history of this multi-national family firm has been one long success story. Niels was active in establishing plants and sales companies, taking over companies and selling manufacturing licences in various countries.

AVK International specialises in the manufacture of gate valves, butterfly valves, check valves, hydrants and accessories, as well as sells many other piping products from over 20 other AVK plants in Europe and all over the world. AVK International A/S has approximately 250 employees at four premises in and around Galten. The company's turnover is more than DKK 500 million, or more than ISK 80 billion.

Niels A. Kjær is still active in running the conglomerate, and his four children have all been involved for many years in its management and operations.

Set began its collaboration with AVK in 1998.



AVK products.

# Collaboration with GM Plast

Set began manufacturing piping material for Póstur og Sími (the national post and telephone company) in 1985, when fibre-optic technology had arrived. These were PVC pipes, but when more entities began to take part in the fibre-optic field, demands were made for more types of piping. After years of manufacturing, Set temporarily lost its lead in the domestic market in this field due to new types of pipes and increasingly complex selection of materials.

Set's managers consequently decided to collaborate with Danish company GM Plast, which has specialised in manufacturing piping material for the fibre-optic market, and sell its products alongside Set's own products.

The successful collaboration between the companies has enhanced Set's position in sales and technical capabilities, combining Set's basic processing of simpler products in bulk and GM Plast's customised solutions.



*The so-called Flatliner casing pipe for fibre-optic cables has multiple ducts in a single row, encased in a protective outer shell. It has been increasingly popular in fibre-optic markets in Europe and other countries.*

# Job Introduction at the South Iceland College

Collaborative project between Atorka (the association of employers in the south of Iceland) and the schools.

Atorka and SASS (the association of municipalities in the south of Iceland) hosted their second job introduction event on 14 March 2017. Students in the 9th and 10th grade of primary school and first and second year students in the local secondary schools were invited, and the event was open to their parents and the general public part of the day.

At least 40–50 professions, and their academic requirements, were presented. There were presentations from 30 entities, representatives of businesses, schools and organisations in the south of Iceland.

The initiative for this event came from Atorka, following a survey of the academic and professional expectations of students in the last years of primary school and the first years of secondary school. Atorka hopes that the event will increase the interest of young people in industrial and technical disciplines, manufacturing and services; these are vital disciplines that often fail to attract potential workers.



*Andrés Ólafsson, pípulagnamaður og sérfræðingur í plastsuðu kynnrir starfseminna fyrir áhugasömum nemendum á starfamesu 2017.*



# Set's Mechanical Engineering Division Strengthened

The mechanical engineering division has never been better equipped and staffed.

Set's mechanical engineering division is constantly growing with the recruitment of new employees and purchase of high-tech equipment. While experienced managers oversee conceptual work, design and development of new products, procedures and manufacturing of equipment, new employees have also joined the fold.

One of them is a mechanical engineer who will only focus on the projects undertaken by the division, which now has eight employees, and an electrician who will tend to the daily maintenance of electrical utilities and the electrical portion of equipment manufacturing.

Many were surprised when, following the financial crisis of 2008, Set embarked on developing and designing most of the equipment in Set Pipes GmbH's new plant in Haltern am See. This marked the beginning of the development that resulted in the Set workshop being what it is today.

The purchase of the facilities at Gagnheiði 1 and of the equipment owned by the machine shop Málmey completed the unit's transformation into a powerful manufacturer of machinery and equipment. The division also tends to maintenance for the manufacturing, warehouse and logistics divisions.

Now it is considerably easier than before to build complex equipment that would previously been bought from established foreign equipment manufacturers in the plastics sector, including moulding equipment for plastic pipes and equipment for production lines, such as transporters and cooling equipment.

Many other types of equipment could be mentioned. The building of plastic welders to manufacture fittings has been highly successful, for instance.



*Set has invested in new equipment. Among others DMG-MORI CTXS10 Ecoline CNC lathe with tools. This machine expands the production possibilities considerably.*



Since production commenced at Set Pipes in Germany, the mechanical manufacturing division has supported the operations by manufacturing smaller tools and other items for the growing activities there.

# One of Iceland's Strongest Companies



**F**or the fourth year in a row, Set Pipes has been acknowledged by credit assessment company Creditinfo as one of Iceland's strongest companies. Of almost 35,000 listed companies in Iceland, only 624 pass the conditions set by Creditinfo for strength and stability.

In order to gain this acknowledgement, companies must pass a strict quality assessment based on Creditinfo's professional standards and analysis. Set is currently in 233rd place.

The fact that Set is considered to be in the top 1.7% of Icelandic companies is confirmation of the company's good operations on all levels.

Creditinfo places companies in one of three categories: small, medium-sized and large companies, and Set is analysed as a large company.

## The valuation criteria are as follows:

1. Confirmed financial statements for three straight years with the Directorate of Internal Revenue.
2. A credit rating of 1–3.
3. Positive operating profit (EBITDA) for three straight years.
4. Positive annual results for three straight years.
5. 20% or higher equity ratio for three straight years.
6. Total assets in excess of ISK 80 million for for three straight years.
7. CEO is listed in the national Registry of Enterprises.
8. The company is active according to Creditinfo's definition.

# Set's Spring Trip to Lisbon

Set's employees and their spouses went on a spring trip to Lisbon in April 2017.

The group was well received in Lisbon and showed its best side during the visit on 19–23 April. Portugal is a fascinating country with a long history, and Lisbon is a city of many delights, not least of the culinary variety.

The trip was an all-around success. The 90 travellers stayed at the Jupiter, an excellent four-star hotel near the city centre. The group went on a sightseeing tour of the city, enjoyed a dinner paid for by Set and visited the mountain village of Sintra. The trip, which had been in preparation for a year, was organised by Set and the travel agency Heimsferðir.





Set ehf • Set Pipes GmbH  
Selfoss Iceland  
Haltern am See - Germany