

# GAS EQUIPMENT

REGULATORS AND PRODUCTS FOR GAS CUTTING AND WELDING, SOLDERING AND BRAZING.

# GASIQ – THE INTELLIGENT CHOICE IN GAS EQUIPMENT

GasIQ is a smart choice for gas equipment when you are looking for high quality and excellent economy. Since we offer the whole chain from regulator to cutting torch and nozzles, we can supply complete solutions providing both minimal gas consumption and a perfect flame. In Stenkullen, just outside Gothenburg, we manufacture products for gas cutting and welding, soldering and brazing, as well as regulators for gas shielded welding.

#### Intelligent solutions since 1938

GasIQ was established in 2007 through a management buyout from Elga AB, which has been manufacturing gas equipment since 1938. In the past years, we have supplemented our massive experience with major investment, partly in state-of-the-art CNC machinery. Our ambition is always to be at the cutting edge of the development and production of quality products.

#### Minimal gas consumption with Optimator®

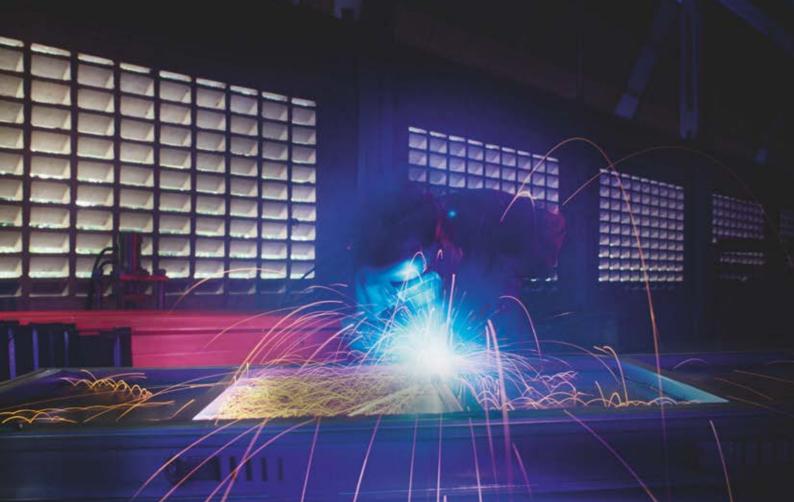
One result of our dynamic product development is Optimator®, a unique regulator which reduces shielding gas consumption by up to 50 %. Optimator® is currently slashing gas consumption and lowering welding costs at workplaces throughout the world.

#### In-house production in Sweden

We have decided to base our production in Sweden, close to our domestic market. In addition to giving us full control of the whole production chain, we also believe that, as a customer, you appreciate the fact that we are close at hand. When it is needed, we can provide you with new products rapidly and easily.

#### The specialist in gas equipment

The smarter solutions, in any sector and in any area, are usually supplied by specialists. GaslQ is the specialist in gas equipment. Working closely with you, we ensure that you benefit from a smart solution which gives both higher quality and improved economy. In partnership with us, you take your operation to the next level.





INTRODUCTION	2-7
REGULATORS Optimator Outlet points and central regulators Other regulators Special regulators	<b>8-25</b> 10-13 14-16 17-21 22-25
CUTTING AND WELDING SYSTEMS D75 Ergo Minicar S80 N76 43-2 Hand cutting torches GasIQ cutters and equipment	<b>26-47</b> 28-31 32-33 34-37 38-39 40-41 42-43 44-47
CUTTING NOZZLES	48-51
SAFETY PRODUCTS	52-53
ACCESSORIES	54-57
CONSUMABLES	58-63
SAFETY INFORMATION	64-66
REGISTER	67

# **EQUIPMENT THAT CAN TAKE IT**

Our products are used in tough environments. Often for long periods, and for very high precision work. That is why GaslQ's cutting and welding systems and products have been developed to give optimal sensitivity and precision – in very demanding situations. By combining ergonomic design and the best materials, we can create hard-wearing and easily-handled cutting and welding systems which ensure minimal gas consumption and a perfect flame.

#### Ergonomic and hard-wearing design

The ergonomic design of our cutting and welding systems gives excellent grip and controllability for the welder, vital over long working days and in projects which demand high precision. In addition, our products are manufactured from hard-wearing materials which can cope with tough environments and high workloads.

#### Volvo cut gas consumption by 43 %

In a test at Volvo Buss in Uddevalla, the amount of gas saved by GaslQ's Optimator® regulator was measured. During the test, the welder first worked through a welding cycle with the existing outlet point, and the next cycle with Optimator®. A mass flow meter with digital counter was connected to measure gas consumption during the two welding processes.

The test showed that Volvo saved at least 43 % of the gas in the welding cycle where Optimator® was used.

#### Use original parts

Using GaslQ's original parts throughout the system from regulator to cutting torch and nozzle achieves the perfect flame, which gives a perfect cut and excellent economy. Remember: never use non-OEM parts! Original parts give better flame and reduce gas consumption – they save you money in the long run.

# Some of the companies which use and trust our products:

ABB, BMW, GM, Caterpillar, JCB, Aker Kvaerner, Volvo and Autoliv.



# **GASIQ R&D**

Are you looking for a unique solution for your weld cell? Perhaps you need specially-adapted connections? GaslQ's Research & Development Centre can help you develop products and complete solutions to meet your specific requirements.



#### Product development with high flexibility

GasIQ is committed to constant product development to meet the most stringent requirements and expectations of a demanding industry. At our R&D Centre, we design using a 3D solid modulation programs, so that we can simulate function and design right on the drawing board. This gives us the flexibility essential for customised products.

#### Modern production in Sweden

Just next door to our Design Department, we have our in-house machining and assembly workshop. This gives us control over the whole process, from concept to finished product. With cutting-edge machine tools, including six axis

CNC machines, we can meet the highest standards of quality manufacturing. In our factory, we produce components focusing on quality, safety, ergonomics and economy.

#### Large and small runs

We are happy to turn out either large or small runs. Assembly is carried out by skilled personnel with considerable experience and a high level of expertise. All our products are tested and checked before delivery.

GasIQ holds ISO 9001:2008 and ISO 14001:2004 certification through Lloyd's Register of Quality Assurance.

# **MADE IN SWEDEN**

Are you looking for straight answers, fast delivery and a high level of flexibility? Our products are manufactured in Sweden, close to our market, in our own state-of-the-art production facility outside Gothenburg. We are committed to high precision and flexibility, both in our own production and in subcontract assignments.



#### Multi-operation turning of the highest quality

Our production facility uses modern machine tools providing leading-edge machining technology. They include Emco six axis multi-operation machines which are ideal for all sizes of production runs of both large and small components, with 1000 mm between spindles and a maximum turning diameter of 500 mm.

#### Double spindle machining for optimal efficiency

Our multi-operation machines are double spindle with 65 mm bar passage. Both the head spindle and the counter spindle have integrated spindle motors which are liquid-cooled for accurate tolerances. Since the machines are double spindle,

we can machine complex components completely in a single operation. The driven tools, along with the y-axis, enable us to handle a range of machining modes, such as tracyl, transmit and polygon. The machines are equipped with integrated parts capture devices for reliable removal from the machine.

#### **Subcontracting**

GasIQ carries out extensive subcontract work on behalf of a range of industries, including heating, ventilation and sanitation, as well as the gas industry. If you would like help with product development and/or manufacture, we can develop solutions tailored to your unique requirements, and can handle both large and small production runs.

# UNIQUE RANGE OF FIRST-CLASS REGULATORS

GasIQ offers a wide selection of high-quality pressure reduction valves, high-pressure regulators and two-stage regulators, for a range of applications. Optimator, our flagship, is a two-stage reducing valve, and the second stage is extremely pressure sensitive, which sharply reduces the gas puff created during the first moment of starting. This reduction cuts your gas consumption by up to 50 %.

Other popular products include Maxex, a heavy-duty regulator with high-capacity; Minex, an excellent economic alternative for gas shielded welding with smaller welding machines; and the TIGex regulator which is intended for work where particularly accurate control of the gas flow is required.

All regulators are designed to fulfil the standard EN ISO 2503.



**Make it easy to regulate** and monitor pre-set flows and pressure.

Labelled "Approved" and initialled by the fitter in charge after final check.



Equipped with **pre-installed, built-in safety valve** to prevent
the pressure gauge or flow
meter bursting in the event of an
unintended pressure surge.



Manufactured under GasIQ's quality assurance system in accordance with **ISO 9000.** 

**Durable and tough,** for long service life.

**Individually checked** and tested, and put through a simulated running-in procedure.

**Easy to mount** and remove from the cylinder, since the connection nut to the cylinder is double-length.

#### Fitted with hose connectors

for 5.0/6.3 mm or 6.3/8 mm internal hose diameter. Each regulator comes with additional seals.











# SAVE 50 % GAS WITH GASIQ OPTIMATOR®!



If you work with welding, you know only too well how much welding rods cost per kilo. But have you checked how much shielding gas costs per metre of weld run? It is just as expensive as rod. With Optimator®, you have a unique regulator and you reduce shielding gas consumption by up to 50 %. An investment which pays for itself in less than six months – the rest is pure profit.

#### Optimal flow right from the start

Every time you start a traditional regulator, a large amount of gas disappears for no benefit. Optimator® gives you an optimal start flow right from the first second – just one quarter as much as a traditional regulator.

The more stop-start welding you do, the more gas you lose and the more money you will save by switching to Optimator®.

#### Higher quality welds

Optimator® gives a steady start flow, which, in addition, gives you higher quality welds, since it avoids the turbulence which can interfere with the welding process.

#### Available in different versions

Optimator® is available in two different basic versions. One is for connection to gas cylinders and the other for use on systems for GasIQ outlet points. Optimator® can also be equipped with lockable gas flow. A real advantage if you want to ensure a high and even level of weld quality.

#### **Excellent welding economy**

We have sold previous generations of Optimator® since the beginning of the 1980s, and in tens of thousands of examples throughout the world, and we know that it delivers what we promise. We suggest that you total your costs for shielding gas and welding rods and contact your nearest authorised

distributor of GasIQ gas equipment. They can help you cut the cost of your welding.

#### Proven lower gas consumption

To check how much gas it was possible to save using Optimator®, Volvo Buss in Uddevalla carried out the following test: At one of the company's welding stations, a recurring welding cycle which takes around 60 minutes is carried out. The test involved the welder first working through one cycle with the existing outlet point, and the next welding cycle using Optimator®. A mass flow meter with digital counter was connected to measure gas consumption during the two welding processes. Checks were carried out at the welding torch using a flow meter to ensure that the gas flow was the same for both outlet points. The gas flow was recorded at 18 I per minute.

#### Resul

Consumption of gas at existing outlet point: 838 I. Consumption of gas at Optimator® outlet point: 429 I.

The test proved that Optimator® consumed a full 49 % less gas. To make absolutely sure, an error margin of 10 % was added to the measured value at the flow meter. This verified that Optimator® generated gas savings of at least 43 % in this welding cycle at Volvo.

Read more on www.gasiq.com



## **GASIQ OPTIMATOR®**

The GaslQ Optimator is a two-stage regulator for advanced gas shielded welding. The GaslQ Optimator's second stage is extremely pressure sensitive, and it substantially reduces the gas puff which normally occurs in the first moment of starting gas arc welding. The reduction in the gas puff can cut gas consumption during normal welding by up to 50 %. Lower gas consumption also means fewer cylinder changes, which increases effective production time in welding. In addition, it improves welding quality, by reducing the risk of pores.

The GasIQ Optimator's two-stage principle regulates the gas flow very accurately and keeps it constant even as the cylinder pressure gradually falls. Supplied with hose connectors for 5.0 mm and 6.3 mm internal hose diameter, as well as extra seals.



G	as type:		AR/mix	AR/mix lockable Gas flow	CO <sup>2</sup>	AR/H2mix	300 bar AR/mix Nevoc
Pa	art number						
	Group 1 Scandinavia		3737-0000	3737-9000	3738-0000	3737-1450	3737-4000
	Group 2 DIN Standard Germany, Austria, Switzerland, Poland, Czech Republic, Slovakia, Romania and Slovenia*	20 I 34 I	3737-1200 3737-1230	3737-9200 3737-9230	3737-1200 3737-1230	3737-1400 3737-1450	3737-4200 3737-4230
	Group 3 Side entry: Great Britain, India, Turkey Top entry: Great Britain	Side entry Top entry	3737-2010 3737-1010	3737-2090 3737-1090	3738-0000 3738-1010	3737-2014 3737-1014	3737-4000
	Group 4 Russia		3737-1260	3737-9260	3737-1260	3737-1460	3737-4000
	Group 5 Italy		3737-3010	3737-3090	3738-0000	3737-3014	3737-4000
	Group 6 France		3737-1350	3737-9350	3737-1350	3737-1450	3737-4350
	Group 7 Spain		3737-1300	3737-9300	3738-0000	3737-1450	3737-4000
	Group 8 Middle East		3737-8020	3737-9020	3738-0000	3737-1480	-
	Group 9 USA**		3737-8000	3737-8090	3738-8000	3737-8450	-
Flow meter		0-34 l/min	0-34 l/min	0-34 l/min	0-34 l/min	0-34 l/min	

<sup>\*</sup> These countries are also in Group 2: Hungary, Croatia, Bosnia, Serbia, Montenegro, Macedonia and Bulgaria



<sup>\*\*</sup> Flow meter calibrated 0-70 SCFH

# **GASIQ OPTIMATOR II®**

GasIQ Optimator II is a special version of GasIQ's Optimator with an extra outlet for backing gas. This regulator is used primarily in welding operations where both the shielding gas and backing gas are to be taken from a single gas cylinder. It provides the same shielding gas savings as the GasIQ Optimator above. In purely practical terms, one of the benefits is that in operations such as pipe installation work, fewer gas cylinder changes are required.

Supplied with hose connectors for 5.0 mm and 6.3 mm internal hose diameter, as well as extra seals.



Gas type:		AR/mix	AR/H2mix	300 bar AR/mix Nevoc
Part number				
Group 1 Scandinavia		3739-0000	3739-1450	3739-4000
Group 2 DIN Standard Germany, Austria, Switzerland, Poland, Czech Republic, Slovakia, Romania and Slovenia*	20 I 34 I	3739-1200 3739-1230	3739-1400 3739-1450	3739-4200 3739-4230
Group 3 Side entry: Great Britain, India, Turkey Top entry: Great Britain	Side entry Top entry	3739-2010 3739-1010	3739-2014 3739-1014	3739-4000 -
Group 4 <i>Russia</i>		3739-1260	3739-1460	3739-4000
Group 5 Italy		3739-3010	3739-3014	3739-4000
Group 6 France		3739-1350	3739-1450	3739-4350
Group 7 Spain		3739-1300	3739-9300	3739-4000
Group 8 Middle East		3739-8020	3739-1480	-
Group 9 USA**		3739-8000	3739-8450	-
Flow meter		2x0-34 l/min	2x0-34 l/min	2x0-34 l/min

<sup>\*</sup> These countries are also in Group 2: Hungary, Croatia, Bosnia, Serbia, Montenegro, Macedonia and Bulgaria

<sup>\*\*</sup> Flow meter calibrated 0-70 SCFH

<sup>\*\*\*</sup> Other versions with lockable gas flow on request

# OUTLET POINTS FOR CENTRAL SYSTEMS

#### A central gas system consists of the following main components:

- Gas cylinders/cylinder bundles
- Central gas supply system with central regulator
- Pipelines
- Outlet points

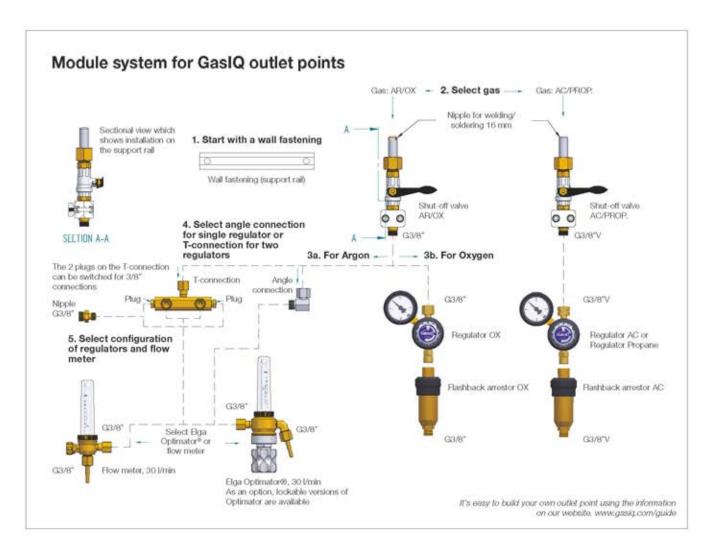
GasIQ has outlet points for both acetylene/oxygen and shielding gases. All outlet points for shielding gases are included in the Optimator range, and are supplied with GasIQ's unique gas-saving function, which slashes welding costs.

Outlet points are available as complete units or for fitting to the shut-off valves on existing outlet points.

For the installation of a simple central gas supply system with the associated components: see page 16.

For further information on central gas supply systems, please contact your nearest authorised distributor of GasIQ gas equipment.





# Complete single or double outlet point GasIQ Optimator® for AR/mix

Description	No. of	Part No.	<b>Part No.</b> <i>DIN STD</i>
Wall fastening (support rail)	1 off	3112-0050	-
Shut-off valve, complete OX/Ar	1 off	3112-0000	-
Angle connection (single)	1 off	3163-0107	-
T-connection (double)	1 off	3112-0040	-
GasIQ Optimator®, 34 I/min	1 off (2 off)	3712-3260	3712-3130
GasIQ Optimator®, 34 I/min, lockable*	1 off (2 off)	3712-9200	3712-9180

<sup>\*</sup> For more variants, see www.gasiq.com



#### Optimator® built-in to welding machine/feed

This valve is a special version of GaslQ Optimator outlet point. With its compact design, it is ideal for direct mounting or building in to the welding machine or feed. In combination with flow meter model 3712-0530, this is an excellent alternative where very long welding hoses are involved, and the regulating function is wanted close to the welding location. Supplied with hose connections for hoses with 5.0 and 6.3 mm internal hose diameter.

Connection	Part No.
R 1/4" - R 1/4"	3711-5000
R 3/8" - R 3/8"	3711-6000
Quick connector EN 561	3711-7900

As an extra, the 3712-0530 flow meter can be mounted directly on the outlet point.

# Double outlet with and without Optimator® for Altop/Minitop

This combination of flow meters has been specially developed for Air Liquide Altop and Minitop cylinders. They are easy to attach with the quick connector (EN 561), and no additional connection components are required.

Designation	Part No.
Double outlet Optimator, 1 flow meter	3711-7920
Double outlet, 2 flow meters	3711-7910

## Complete outlet point for oxygen and acetylene

Description	No. of	Part No.	Part No. DIN STD
Wall fastening (support rail)	1 off	3112-0050	-
Shut-off valve, complete OX/Ar	1 off	3112-0000	-
Regulators, Oxygen	1 off	3720-0000	3720-1500
Optional flashback arrestor SAFE-X Oxygen	1 off	3004-1000	3004-1500
Shut-off valve, complete Ac/Propane	1 off	3121-0000	-
Regulator, Acetylene	1 off	3721-0000*	-
Flashback arrestor SAFE-X Acetylene	1 off	3004-0000	-

<sup>\*</sup>For an oxygen/propane installation, the 3721-0000 regulator is replaced with the 3704-0000



Version for connecting to ALTOP-type integrated regulator. The standardised quick connections make it easy to connect between the regulator outlet and the hose.





## SINGLE CENTRAL GAS SUPPLY WITH ACCESSORIES

#### **NOTE: SCANDINAVIA ONLY**

#### Shut-off valve

Shut-off cylinder valve type with attachment for wall mounting. The shut-off is suitable for building-in to a single central gas supply system. The outlet threads are the same as the cylinder standard for the intended gas. The inlet threads are W21.8x14/1" and are suitable for connecting high-pressure hose. The maximum pressure for the shut-off valve is 200 bar.

Designation	Part No.
Shut-off Oxygen	3150-0001
Shut-off Argon/Nitrogen	3150-0002
Shut-off Acetylene	3150-0003
Shut-off Formier	3150-0004



## **High-pressure hose**

Designation		Part No.
High-pressure hose	Ox/CO <sup>2</sup> , 1m	3150-1100
High-pressure hose	Ox/CO <sup>2</sup> , 2m	3150-2100
High-pressure hose	Argon/Nitrogen, 1m	3150-1200
High-pressure hose	Argon/Nitrogen, 2m	3150-2200
High-pressure hose	Ac, 1m	3150-1300
High-pressure hose	Ac, 2m	3150-2300
High-pressure hose	Formier, 1m	3150-1400
High-pressure hose	Formier, 2m	3150-2400



Other gas types and hose lengths are available.

### **Overflow hose**

Designation	Part No.
Overflow hose Argon/Nitrogen, 1m	3150-0200
Overflow hose Formier, 1m	3150-0400

Other gas types and hose lengths are available.



For choice of regulators, see pages 18-19 or 22.

# **OTHER REGULATORS**

## **GASIQ MINEX**

GasIQ Minex has been specially developed for outlets supplying small to medium quantities of gas for gas shielded welding.

Minex is an excellent low-cost alternative for gas shielded welding in small workshops or for hobbyists.

Minex is supplied with hose connections for hoses with 5.0 and 6.3 mm internal diameter.



Gas type:		AR/mix	CO <sup>2</sup>
Part number			
Group 1 Scandinavia		3708-0000	3707-0000
Group 2 DIN Standard Germany, Austria, Switzerland, Poland, Czech Republic, Slovakia, Romania and Slovenia*		3708-1200	3708-1200
Group 3 Side entry: Great Britain, India, Turkey Top entry: Great Britain	Side entry Top entry	3708-2010 3708-1010	3707-0000 3707-1010
Group 4 <i>Russia</i>		3708-1260	3708-1260
Group 5 Italy		3708-3010	3707-0000
Group 6 France		3708-1350	3708-1350
Group 7 Spain		3708-1300	3707-0000
Group 8 Middle East		3708-8020	3707-0000
Working pressure gauge		0-30 l/min	0-30 l/min
Max working pressure		10 bar	10 bar

<sup>\*</sup> These countries are also in Group 2: Hungary, Croatia, Bosnia, Serbia, Montenegro, Macedonia and Bulgaria

## **GASIQ MAXEX**

GasIQ Maxex is a high-quality and high-capacity regulator, (class 3 ISO 2503). Maxex is ideal for normal to high gas flows, e.g. in cutting and heating with high-performance cutting and welding systems such as N76/S80 etc.

Maxex is a heavy duty and robust ergonomically-designed regulator for accurate control of gas flow. It is available for most types of gases. The regulator comes with a built-in pre-set safety valve to ensure the highest possible level of safety.

Supplied with hose connections for  $5.0\ /6.3\ \text{mm}$  or  $6.3/8.0\ \text{mm}$  internal diameter hose, and extra seals.

300 bar on request.



Gas type:		Oxygen	Acetylene	AR/mix	
Part number					
Group 1 Scandinavia		4220-0000	4221-0000	4715-0000	
Group 2 DIN Standard Germany, Austria, Switzerland, Poland, Czech Republic, Slovakia, Romania and Slovenia*		4220-1500	4221-1500	4715-1200	
Group 3 Side entry: Great Britain, India Turkey Top entry: Great Britain	Side entry Top entry	4220-2000 4220-2100	4221-2000 4221-2100	4715-2000 4715-2100	
Group 4 <i>Russia</i>		4220-1260	4221-1260	4715-1360	
Group 5 Italy		4220-0000	4221-2000	4715-3010	
Group 6 France		4220-1350	4221-1350	4715-1350	
Group 7 Spain		4220-2000	4221-2000	4715-1300	
Group 8 <i>Middle East</i>		4220-8025	4221-8025	4715-8020	
Working pressure gauge		0-10 bar	0-1,5 bar	0-35 l/min	
Max working pressure		10 bar	1,5 bar	10 bar	

<sup>\*</sup> These countries are also in Group 2: Hungary, Croatia, Bosnia, Serbia, Montenegro, Macedonia and Bulgaria

<sup>\*\*</sup> Finland 4204-1000



CO <sup>2</sup>	CO <sup>2</sup> Brewing/Foods	Nitrogen	Hydrogen	Technical air	Propane
4713-0000	4219-0000	4222-0000	4217-0000	4218-0000	4204-0000**
4715-1200	4219-1200	4222-0000	4217-0000	4218-0000	4204-1000
4713-0000 4713-2100	4219-0000 4219-2100	4222-2000 4222-2100	4217-2000 4217-2100	4218-2000 4218-2100	4204-2000 -
4715-1360	4219-1260	4222-1260	4217-1260	4218-1260	4204-1260
4713-0000	4219-0000	4222-1300	4217-3010	4218-3010	4204-3010
4713-1350	4219-1350	4222-1350	4217-1350	4218-1350	4204-1350
4713-0000	4219-0000	4222-1300	4217-0000	4218-1300	4204-1300
4713-0000	4219-0000	4222-8020	4217-8020	4218-8020	4204-8025
0-35 I/min	0-10 bar	0-10 bar	0-10 bar	0-10 bar	0-6 bar
10 bar	10 bar	10 bar	10 bar	10 bar	6 bar

## **GASIQ TIGEX I**

Regulator with flow meter tubes for gas shielded welding or backing gas cover. TIGex I is specially designed for work requiring very accurate metering of the gas flow.

Available with single or double individually adjustable flow meters. The regulator is equipped with a built-in pre-installed safety valve. To ensure the highest standards of safety, the flow meter outer tube is made from safety glass.

To cut welding costs in gas shielded welding, we recommend the GaslQ Optimator. TIGex I is supplied with connections for 5.0 and 6.3 mm internal diameter hoses, as well as extra seals.

300 bar and other flow ratings on request.



Gas type:	AR/mix	CO <sup>2</sup>	Formier /backing gas cover	
Part number				
Group 1 Scandinavia, Holland		3710-5000	3714-5000	3718-5000
Gomany, maderia, Grinzonana,	20 I 34 I	3710-1200 3710-1230	3710-1200 3710-1230	3718-5200 3718-5000
Group 3 Side entry: Great Britain, India, Turkey Top entry: Great Britain	Side entry Top entry	3710-2010 3710-1010	3714-5000 3714-1010	3718-2010 3718-1010
Group 4 Russia		3710-1260	3710-1260	3718-1260
Group 5		3710-3010	3714-5000	3718-3010
Group 6 Spain		3710-1300	3714-5000	3718-5000
Group 7 Middle East		3710-8020	3714-5000	3718-8020
Group 8 USA**		3710-8000	3714-8000	3718-8000
Flow meter		0-34I/min	0-34l/min	0-34l/min

<sup>\*</sup> These countries are also in Group 2: Hungary, Croatia, Bosnia, Serbia, Montenegro, Macedonia and Bulgaria



<sup>\*\*</sup> Flow meter calibrated in 0-70 SCHF

# **GASIQ TIGEX II**

Version with double flow meter with individually adjustable flow. Can supply, for example, two welding machines or backing gas cover.

TIGex II is supplied with connections for 5.0 and 6.3 mm internal diameter hoses, as well as extra seals.



Gas type:	AR/mix	CO <sup>2</sup>	Formier /backing gas cover	
Part number				
Group 1 Scandinavia, Holland		3710-5100	3714-5100	3718-5100
Group 2 DIN Standard Germany, Austria, Switzerland, Poland, Czech Republic, Slovakia, Romania and Slovenia*	20 I 34 I	3710-1500 3710-1530	3710-1500 3710-1530	3718-5300 3718-5100
Group 3 Side entry: Great Britain, India, Turkey Top entry: Great Britain	Side entry Top entry	3710-2020 3710-1020	3714-5100 3714-1020	3718-2020 3718-1020
Group 4 Russia		3710-1560	3710-1560	3718-1560
Group 5		3710-3020	3714-5100	3718-3020
Group 6 Spain		3710-1400	3714-5100	3718-5100
Group 7 Middle East		3710-8120	3714-5100	3718-8120
Group 8 USA**		3710-8000	3714-8100	3718-8100
Flow meter		0-34l/min	0-34l/min	0-34l/min

<sup>\*</sup> These countries are also in Group 2: Hungary, Croatia, Bosnia, Serbia, Montenegro, Macedonia and Bulgaria \*\* Flow meter calibrated in 0-70 SCHF

# **SPECIAL REGULATORS**

## **HIGH-PRESSURE REGULATOR 825 DS**

Stainless membrane and regulating valve on the outlet side. Ideal for installations requiring higher working pressure and capacity, such as laser installations or for hydrostatic tests.

Gas type:	Oxygen 0-25 bar	<b>Oxygen</b> 0-50 bar	<b>Nitrogen/Argon</b> 0-50 bar
Part number			
Group 1 Scandinavia	3781-2025	3781-2040	3781-2240
Group 2 Side entry: Great Britain, India, Turkey	3781-2026	3781-2041	3781-2241
Top entry on request.			



#### High-pressure regulator 825 DS

Connection outlet: G3/8"

Max input pressure: 230 bar

Max Working pressure: 25/50 bar

Capacity: 350/450 m³

Scale, working pressure gauge: 0-40/0-100 bar

## **HIGH-CAPACITY REGULATOR H25**

Stainless membrane. Ideal for installations requiring high capacity, such as laser installations or for plasma cutting.

Gas type:	Acetylene	Oxygen	Nitrogen/Argon
Part number			
Group 1 Scandinavia	3791-2100	3791-2025	3791-2225
Group 2 Side entry: Great Britain, India, Turkey	3791-2126	3791-2026	3791-2226
Top entry on request.			



#### **High-capacity regulator H25**

Connection outlet: G1/2"

Max input pressure: 230 bar

Max Working pressure: 25 bar

Capacity: 500 m³

Scale, working pressure gauge: 0-40 bar

## 2-STAGE REGULATOR 996 DS

Stainless membrane. Ideal for installations requiring a high level of accuracy in working pressure, such as machine cutting or laboratory systems.

Gas type:	Oxygen	Nitrogen/ Argon		
Part number				
Group 1 Scandinavia	3782-2010	3782-2210		
Group 3 Side entry: Great Britain, India, Turkey	3782-2011	3782-2211		
Top entry on request.				



#### High-pressure regulator 996 DS

Connection outlet: G3/8"

Max input pressure: 230 bar

Max Working pressure: 10 bar

Capacity: 150 m³

Scale, working pressure gauge: 0-16 bar

# **HIGH-PRESSURE REGULATOR 987**

Regulator with working pressure 0-170 bar for Nitrogen. Stainless membrane. Ideal for installations requiring extremely high working pressure and capacity, such as hydrostatic tests.

Gas type:	Nitrogen
Part number	
Group 1 Scandinavia	3781-2200
Group 3 Side entry: Great Britain, India, Turkey	3781-2201
Top entry on request.	



#### High-pressure regulator 987

Connection outlet: 1/4" NPT
Max input pressure: 230 bar
Max Working pressure: 170 bar
Capacity: 500 m³
Scale, working pressure gauge: 315 bar

# **SPECIAL GAS REGULATORS**

GasIQ Special gas regulators are a series of high/low-pressure regulators for pure and high-purity gases. Available in one-stage and two-stage designs, and as pipeline regulators.

Working pressure: 2.7 and 14 bar.

Gases: Nitrogen, Oxygen, Helium, Hydrogen etc., as well as aggressive gases (toxic and corrosive gases). This is only a brief summary of our range, please contact GasIQ for more information.

## **SERIES 700**

The Series 700 regulators in chromium-plated hot-pressed brass with stainless membrane are suitable for non-aggressive gases with a purity of up to 5.0 (99.999)

Applications: Laboratory gases and laser applications.



### **SERIES 720**

The Series 720 regulators in chromium-plated brass from rolling stock with stainless membrane are suitable for non-aggressive gases with a purity of 5.0 (99.999) and above.

Applications: Laboratory gases for analysis and emissions systems.



# **SERIES 740**

The Series 740 regulators in stainless steel are suitable for aggressive gases with a purity of 6.0 (99.9999) and above.

Applications: Laboratory gases, ideal for research and analysis.



### **ACCESSORIES**

A full range of accessories including purging valves and flow meters is available

# **CENTRAL GAS SYSTEMS**



Central gas system, semi-automatic SG 900



Central gas system, fully automatic SG 960



# **CUTTING AND WELDING SYSTEMS**

Right across the GaslQ range of cutting and welding systems, all components are manufactured with very high precision and accuracy to give optimal quality and safety in the finished products. Every component is function-tested before delivery. The seals in valves, connections and shanks, the flame form at nozzles and the welding nozzles are just some of the factors that we check. GaslQ offers two main types of cutting and welding systems: injector and pressure torch.

#### The injection principle

The injection principle means that oxygen is drawn in with the fuel gas into the torch. One of the advantages of the injection principle is that it is very easy to set the gas mixture.

#### The pressure principle

The pressure principle means that the oxygen and the fuel gas have the same input pressure to the heating flame, and the higher-pressure cutting oxygen is fed through a separate gas duct to the cutting nozzle. One of the advantages of the pressure principle is that it can cut thicker material.



# **GASIQ D75 ERGO CUTTING AND WELDING SYSTEMS**

TABLE FOR THE RANGE OF D75 SYSTEMS





Part No.	Designation	D75 kit* Lever 3595-0100 Control valve 3595-0000	D75 kit* Heating, and plumbing 3595-0200	<b>D75 kit*</b> Basic 3595-6100	MiniCar plus Lever 3936-1100 Control valve 3936-1000	MiniCar plus Heating, and plumbing 3936-1200
3308-1100	Shanks D75 ERGO complete	X	Х	X	X	X
3316-0000	Welding nozzle 80 l/h	×		Х	×	
3316-0100	Welding nozzle 160 l/h	×		Х	×	
3316-0200	Welding nozzle 315 l/h	×	Х	X		X
3316-0300	Welding nozzle 500 l/h	×	Х		×	X
3316-0400	Welding nozzle 800 l/h	×	Х			X
3362-0000	Cutting attachment 90°, control valve	(x)			(x)	
3362-0100	Cutting attachment 90°, lever valve	(x)	X	Х	(x)	×
3383-0100	Cutting nozzle 1-3 mm	X				
3383-0200	Cutting nozzle 3-8 mm	×	Х	Х	X	Х
3383-0300	Cutting nozzle 8-20 mm	X		Х		
3383-0400	Cutting nozzle 20-50 mm	Х	Х		Х	Х
3325-0100	Bendable welding nozzle 160 l/h		Х			Х
3325-0300	Bendable welding nozzle 500 l/h		Х			Х
3319-0300	Multiflame heating nozzle 500 l/h		Х			Х
3319-0400	Multiflame heating nozzle 800 l/h		Х			×
3324-1006	Sealing kit (5 seals)	X	Х	Х	Х	X
3522-0000	2-wheel cutting support	X				
3618-0000	Spanner, 15 mm	X	Х		Х	X
3574-1000	Sheet-metal storage box	X	Х	Х	Х	Х
3615-0000	Cleaning needles	X	Х	Х	Х	X
3008-0000	THERMEX, Flashback arrestor, Ac				Х	Х
3008-1000	THERMEX, Flashback arrestor, Ox				Х	X
5621-2000	Gas hose, red/blue, 5 mm, 5 m, complete with flame arrestors				X	Х
4220-0000	Maxex, Ox				X	×
4221-0000	Maxex, Ac				×	X
5538-0000	Flame resistant mittens				×	X
3122-1000	Bracket Ac				×	Х
5335-1000	Trolley for MiniCar				×	X
5527-0000	Warning sign				х	Х
5556-0000	Shurlite gas lighter				х	X
5647-0000	Protective goggles				Х	Х

 $<sup>^{\</sup>ast}$  For models with flame arrestors on the shank (standard in Finland), see page 29.



# GASIQ D75 ERGO CUTTING AND WELDING SYSTEM

#### - THE BIG SELLER WHICH COMBINES ERGONOMICS WITH EXCELLENT DESIGN!

The GasIQ D75 ERGO is one of the most popular cutting and welding systems on the market. The main component is the ergonomically-designed shank which gives perfect grip and optimal controllability for the welder. The system uses the injection principle, which means that oxygen is drawn in with the fuel gas (acetylene) in the torch. This makes it very easy to set the gas mix correctly, and to empty the acetylene cylinder more effectively.

Other components are the attachments for cutting, welding, soldering and heating. All components are interchangeable with other equivalent cutting and welding systems on the market.

#### **Cutting**

There is a range of cutting attachments in the D75 system. Lever valve or rotary control valve for the cutting oxygen. Cutting head with 90° or 0° cutting angle.

#### Welding, soldering and heating

The D75 system has a selection of welding nozzles. The standard model in wrought copper and chromium-plating for effective thermal dissipation and to prevent build-up of weld spatter. In addition, there is a bendable welding nozzle of drawn copper pipe, and a multi-flamed mixer blowpipe.

All kits come in GaslQ's sturdy metal box along with operating and maintenance instructions, and welding table.

Compatible nozzles, see page 48.

#### **Complete D75 kits**

Designation	Part No.
D75 kit, control valve	3595-0000
D75 kit, Lever	3595-0100
D75 kit, Heating and plumbing	3595-0200
D75 kit, Basic	3595-6100
D75 kit, Basic + flame arrestors	3595-6200
D75 kit, Control valve + flame arrestors	3595-7000
D75 kit, Lever + flame arrestors	3595-7100
D75 kit, Heating and plumbing + flame arrestors	3595-7200

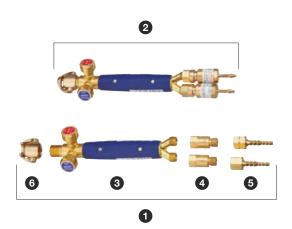




# **GASIQ D75 ERGO**

### **Shank with accessories**

De	Designation Part No.		
1.	Shank D75 ERGO, complete with non-return valves and quick connector	3308-1100	
2.	Shank D75 ERGO, complete with flame arrestor and quick connector	3308-7100	
3.	Shank D75 ERGO, only	3308-0000	
4.	Non-return valve set	3007-0000	
5.	Hose connection set complete Ac+Ox ø 5+6.3 mm	3308-0022	
6.	Quick connector	3317-0000	



# Welding nozzles

Gas flow oxygen l/h	Material thickness mm	Part No.
80	< 1	3316-0000
160	1 – 2	3316-0100
230	1 – 3	3316-0150
315	2 – 4	3316-0200
400	3 – 5	3316-0250
500	4 – 6	3316-0300
650	5 – 7	3316-0350
800	6 – 9	3316-0400
1000	8 – 10	3316-0500



## Bendable welding nozzles

Gas flow oxygen I/h	Material thickness mm	Part No.
160, fully-forged	< 2	3325-0100
315, fully-forged	2 – 4	3325-0200
500, fully-forged	4 – 6	3325-0300
160, brass tips	< 2	3325-1100
315, brass tips	2 – 4	3325-1200
500, brass tips	4 – 6	3325-1300



# Multi-flamed heating nozzles

Gas flow oxygen l/h	Part No.
500	3319-0300
800	3319-0400



# **Cutting attachments**

	Part No.
1. Lever valve, cutting head 90°	3362-0100
2. Control valve, cutting head 90°	3362-0000
3. Control valve, cutting head 0°	3362-0200
4. Nozzle nut	3388-0015
5. Sealing kit (5 off)	3324-1006



# **Cutting support and other accessories**

Designation	Part No.
Circle cutting support	3515-0000
Support for hole cutting blowpipe ø 15-70 m	3508-0100
Cutting support 2-wheel	3522-0000
Cleaning needles	3615-8000
Welding table	3619-0000
Spanner, 15 mm	3618-0000



## **MINICAR PLUS WITH D75 ERGO**

Transportable equipment for welding, cutting and soldering. The large wheels make it easy to manoeuvre the trolley, even up stairs. The extendable handle makes it very compact for transport. The equipment is easy to bring along, which makes it particularly suitable for service engineers, planners, farmers and hobbyists. The version with bendable and multi-flamed mixer blowpipes/soldering attachments is especially suited for the heating and plumbing industry.

**Two 5 or 11 litre gas cylinders** are carried on the practical trolley, which is CE approved and approved for lifting. Accessories are hung in the well protected, lockable box fitted to the trolley. (The trolley in the photograph is fitted with extra equipment.)

Contents, see table page 27. Total height with fully extended handle: 132 cm. Total height with handle in transport position: 88 cm.

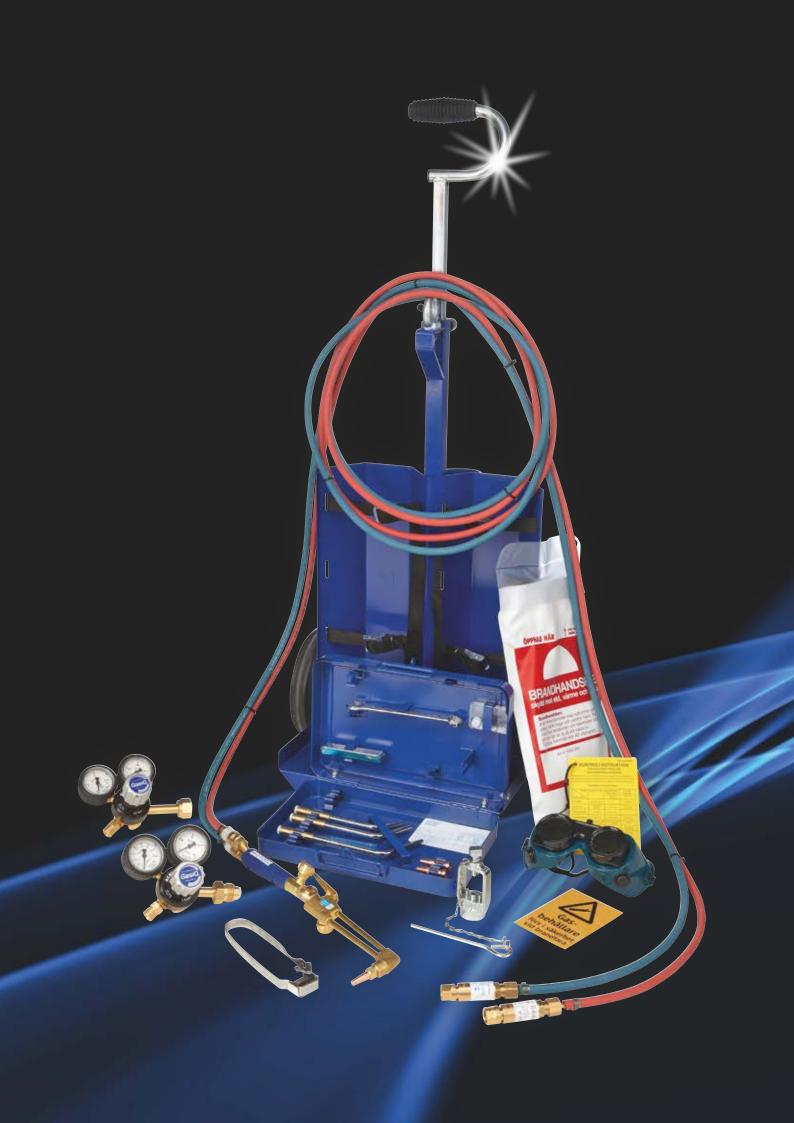
MiniCar plus	Part No.
Lever model	3936-1100
Control valve model	3936-1000
Heating and plumbing model	3936-1200

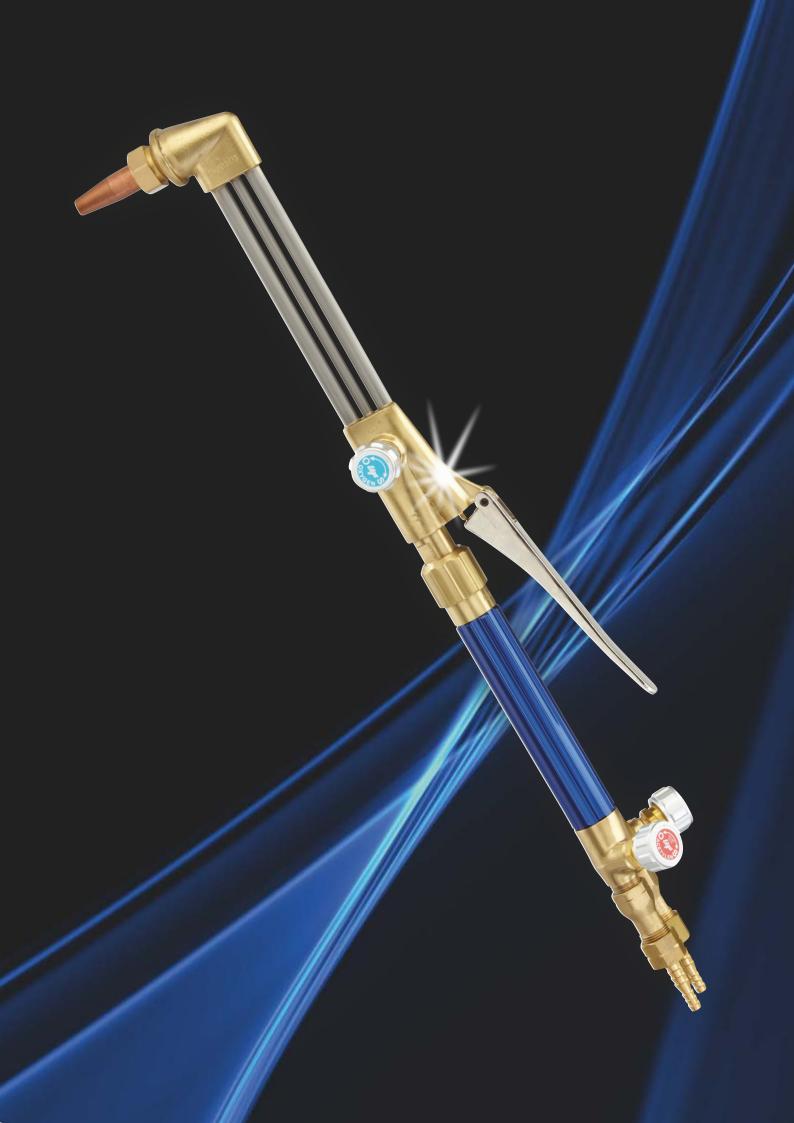


MiniCar plus trolleys	Part No.
MiniCar-trolley with box	5335-1100
MiniCar-trolley without box	5335-1000









# CUTTING AND WELDING SYSTEMS GASIQ S80

- THE NATURAL CHOICE FOR THE OFFSHORE INDUSTRY.

GasIQ S80 cutting and welding systems are designed to use the pressure principle or the injection principle, depending on which cutting attachment is selected. All S80 components are manufactured with high precision and accuracy to ensure the final product has the highest possible quality.

The GasIQ S80 system is robust and designed for medium to heavy work, including in the demanding offshore industry. All components are interchangeable with equivalent systems on the market.

#### Cutting

Cutting attachments are available with 90°, 75° and 0° cutting head. The system is supplied with lever valve or rotary control valve for the cutting oxygen. The cutting attachments are designed for heavy duty use.

#### Welding

The GasIQ S80's welding nozzles are forged entirely from chromium-plated copper, for effective thermal dissipation.

#### Heating

Single-flame and multi-flame mixer blowpipes are included in the S80 system.

#### The GasIQ S80 kit consists of:

- Shank with non-return valves (or flame arrestors)
- Connection nuts
- Welding nozzles, 6 off (80, 230, 400, 650, 1000 and 1250 l/h)
- Cutting attachment 90°
- Cutting nozzles, 3 off (10, 25 and 50 mm material thickness)
- Circle cutting attachments
- 2-wheel cutting support
- Cleaning needles
- O-ring sets

The kit is supplied in GaslQ's sturdy metal box along with operating and maintenance instructions, and welding table and O-ring sets.



#### Complete S80 kits

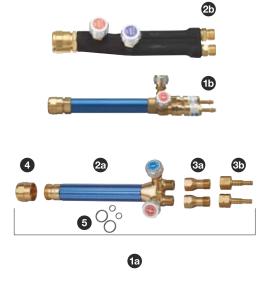
Designation	Part No.
S80-kit	3597-0000
S80-kit with flame arrestors	3597-7000

Compatible cutting nozzles S80, see page 48, 49 and 50.

# **GASIQ S80**

### Shank with accessories

Des	signation	Part No.
1a.	Shank, complete with non-return valves and connection nuts, round	3306-1000
	Shank, complete with non-return valves and connection nuts, oval	3305-1000
1b.	Shank, complete with flame-arrestor and connection nuts, round	3306-7100
	Shank, complete with flame-arrestor and connection nuts, oval	3305-7100
2a.	Shank only, round	3306-0000
2b.	Shank only, oval	3305-5500
3a.	Non-return valve set	3007-1000
3b.	Hose connection set Ac+Ox complete Ø 6.3+8mm	3215-0080
4.	Connection nuts	3306-0010
5.	O-ring sets	



# Welding and heating nozzles - single-flame

Gas flow oxygen I/h	Material thickness	Part No.
80	< 1	3322-0100
230	1 – 3	3322-0200
400	3 – 5	3322-0300
650	5 – 7	3322-0400
1000	7 – 10	3322-0500
1250	9 – 14	3322-0600
1800	14 - 20/heating	3322-0700
2500	heating	3329-0000
5000	heating	3329-0100



# Multi flamed heating nozzles

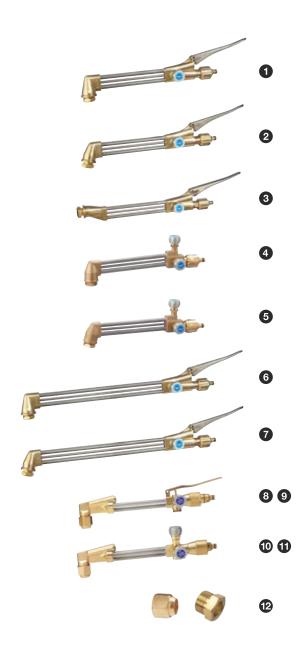
Gas flow oxygen I/h	Part No.
2500	3322-1800
5000	3322-1900



## **Cutting attachments AC-Propane/Oxygen**

Des	signation	Part No.
1.	Cutting head 90° lever valve	3350-2100
2.	Cutting head 75° lever valve	3350-2300
3.	Cutting head 0° lever valve	3350-2200
4.	Cutting head 90° control valve	3350-4100
5.	Cutting head 75° control valve	3350-4300
6.	Cutting head 90° lever valve, 790 mm	3350-3100
7.	Cutting head 75° lever valve, 790 mm	3350-3300
8.	Cutting head 90° lever valve, Injector*	3350-5100
9.	Cutting head 75° lever valve, Injector*	3350-5300
10.	Cutting head 90° control valve, Injector*	3350-6100
11.	Cutting head 75° control valve, Injector*	3350-6300
12.	Nozzle nut	3386-0015
12.	Nozzle nut, Injector	6450-7015

 $<sup>^{\</sup>ast}$  Injector model 8-11 is designed for Acetylene/Oxygen. Contact us for other variants.



## **Cutting support and other accessories**

Designation	Part No.
Circle cutting support	3515-0000
Cutting support 2-wheel	3523-0000
Cleaning needles	3615-8000
Welding table	



## GASIQ N76 CUTTING AND WELDING SYSTEM

- THE SWEDISH SHIPYARD CLASSIC!

The GasIQ N76 injector cutter is fitted with a highly-effective flashback arrestor. The N76 has an excellent reputation for safety, durability and ease of service. Its advantages include:

- Heavy-duty injector, forward located to minimise flashback risk.
- Stainless cutting oxygen pipe for increased safety and durability.
- All valves have stainless steel spindles with precision frames for easy and secure shut-off.
- The cutting attachment with lever has a smooth-opening cutting oxygen valve with stainless spindle and Viton O-rings which minimise the risk of corrosion.
- Shank in seamless drawn aluminium profile which makes servicing easy.

The main components in the N76 system are the torch shank with a range of cutting and heating attachments. All components are interchangeable with other equivalent cutting and welding systems on the market.

#### Cutting

There is a selection of cutting attachments in the N76 system. Lever valve or rotary control valve for the cutting oxygen. 90° or 75° cutting head. All cutting attachments are robustly designed to cope with heavy workloads in the toughest of environments.

#### Heating

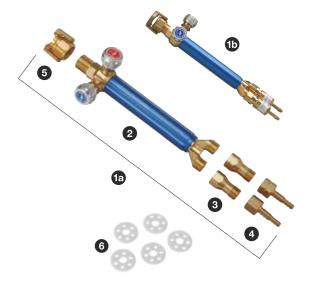
High-capacity single-flame and multi-flame heating nozzles are included in the N76 system.

Compatible nozzles, see pages 48 and 49.

#### Shank with accessories

Des	signation	Part No.
1a.	Shank, complete with non-return valves and quick connector	3304-1100
1b.	Shank, complete with flame arrestor and quick connector	3304-7100
2.	Shank, only	3304-2000
3.	Non-return valve set	3007-1000
4.	Hose connection set Ac+Ox complete ø 6.3+8 mm	3215-0080
5.	Quick connector	3318-0000
6.	Sealing kit (5 off seals)	3304-1006





## Heating nozzles - single-flame

Gas flow oxygen I/h	Part No.
1800	3323-0600
2500	3323-0800
5000	3323-0900



## Heating nozzles - multi-flame

Gas flow oxygen l/h	Part No.
2500	3323-1800
5000	3323-1900



## **Cutting attachments**

De	signation	Part No.
1.	Cutting head 90°, lever valve	3353-4000
2.	Cutting head 90°, control valve	3351-4000
3.	Cutting head 75°, control valve	3352-4000
4.	Nozzle nut	3384-0015



## **Cutting support and other accessories**

Designation	Part No.
Circle cutting support	3515-0000
Cutting support 2-wheel	3523-0000
Cleaning needles	3615-8000
Welding table	3620-0000



## GASIQ MOD 43-2 CUTTING AND WELDING SYSTEM

The GasIQ Model 43-2 is a heavy-duty cutting and welding system for a range of fuel gases including acetylene and propane, along with oxygen. It is ideal for cutting, heating and soldering.

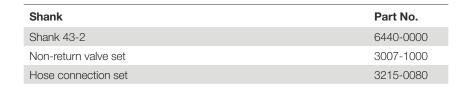
The main component in the 43-2 system is the torch shank with a range of attachments for welding, cutting and soldering. All components are interchangeable with other equivalent cutting and welding systems on the market. The system is modular, so the individual components can be chosen for the particular type of work to be carried out.

**Cutting.** Cutting attachments in the system have a lever valve for the cutting oxygen and a 90° cutting head. The cutting attachments are robustly designed to cope with heavy workloads in the toughest of environments.

**Welding/soldering.** The model 43-2s nozzles are copper, for effective thermal dissipation.

**Heating.** A selection of high-capacity heating nozzles is included in the system.

Cutting nozzles, see page 50.



Cutting attachments	Gas type	Part No.
Cutting attachment 49-3F 90 Gr Lever	Propane	6490-0100
Cutting attachment 49-3F 90 Gr Lever	Acetylene	6490-1100
Nozzle nut		6490-0015

Mixer	Gas type	Part No.
Mixer E 43	Acetylene	6490-1101
Mixer F 43	Propane	6490-0101

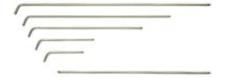
Tip tube			Part No.
2393-F	bent	915 mm	6490-0001
2393-F	bent	710 mm	6490-0002
2393-F	bent	380 mm	6490-0003
2393-F	bent	275 mm	6490-0004
2393-F	straight	915 mm	6490-0005
2393-F	bent	1200 mm	6490-0006
Nozzle adapter 23	57-3		6490-0102













Flame cleaning	ng nozzle	Flow	Gas type	Part No.
RBP 43	50 mm	700-1050 l/h	Propane	6490-0151
RBP 43	100 mm	1850-2500 l/h	Propane	6490-0152
RBP 43	150 mm	3000-4150 l/h	Propane	6490-0153



<b>Heating nozzle – single-flame</b> <i>Propane/Ox</i>	Flow	Gas type	Part No.
2290-13N	850 l/h	Propane	6490-0161
2290-15N	1050 l/h	Propane	6490-0162
2290-20N	1500 l/h	Propane	6490-0163
2290-30N	2000 l/h	Propane	6490-0164
2290-80N	2400 l/h	Propane	6490-0165
<b>Heating nozzle – multi-flame</b> <i>Propane/Ox</i>			
	1000-2000 l/h	Propane	6490-0171
Propane/Ox	1000-2000 l/h 1500-3200 l/h	Propane Propane	6490-0171 6490-0172
Propane/Ox 2290-1H			
Propane/Ox 2290-1H 2290-2H	1500-3200 l/h	Propane	6490-0172
Propane/Ox 2290-1H 2290-2H 2290-3H	1500-3200 l/h 2200-5700 l/h	Propane Propane	6490-0172 6490-0173





Tip tube	Gas type	Part No.	
8593	Propane/Acetylene	6490-1100	



Welding and brazing nozzle Ac/Ox	Flow	Gas type	Part No.
Nozzle 1390 -0	45 l/h	Acetylene	6490-1150
Nozzle 1390 -1	65 l/h	Acetylene	6490-1151
Nozzle 1390 -2	100 l/h	Acetylene	6490-1152
Nozzle 1390 -3	160 l/h	Acetylene	6490-1153
Nozzle 1390 -4	250 l/h	Acetylene	6490-1154
Nozzle 1390 -5	350 l/h	Acetylene	6490-1155
Nozzle 1390 -6	500 l/h	Acetylene	6490-1156
Nozzle 1390 -7	700 l/h	Acetylene	6490-1157
Nozzle 1390 -8	1000 l/h	Acetylene	6490-1158



Brazing nozzle Propane/Ox	Flow	Gas type	Part No.
Soldering nozzle 1390-H, multi-flame	1050 l/h	Propane	6490-0161
Soldering nozzle 1390-2N	75 l/h	Propane	6490-0182
Soldering nozzle 1390-3N	140 l/h	Propane	6490-0183
Soldering nozzle 1390-4N	175 l/h	Propane	6490-0184
Soldering nozzle 1390-5N	225 l/h	Propane	6490-0185
Soldering nozzle 1390-6N	275 l/h	Propane	6490-0186
Soldering nozzle 1390-7N	345 l/h	Propane	6490-0187
Soldering nozzle 1390-8N	375 l/h	Propane	6490-0188
Soldering nozzle 1390-9N	415 l/h	Propane	6490-0189
Soldering nozzle 1390-10N	500 l/h	Propane	6490-0190





## **GASIQ 62-5 HAND CUTTING TORCH**

- UNRIVALLED FOR CUTTING SCRAP AND SIMILAR TOUGH JOBS

The GasIQ 62-5 is a robust and rugged hand cutting torch for propane and oxygen, for cutting materials up to 300 mm thick. The GasIQ 62-5 is primarily intended for demanding work in cutting scrap, and meets the EN ISO 5172 standard.

The cutter is a stock item in accordance with the table. If special variants such as different lengths and  $0^{\circ}$  cutting head are required, we are, of course, happy to supply them.

Compatible nozzles: NX and NFF, see page 50.



#### Available with the following options:

Designation	Part No.
Hand cutting torches GasIQ 62-5, 530 mm, 70 gm	6450-0200
Hand cutting torches GasIQ 62-5, 530 mm, 90 gm	6450-0250
Hand cutting torches GasIQ 62-5, 900 mm, 70 gm	6450-0400
Hand cutting torches GasIQ 62-5, 1210 mm, 70 gm	6450-0500
Hand cutting torches GasIQ 62-5, 1500 mm, 70 gm	6450-0600
Non-return valve set	3007-1000
Hose connection set complete Ø 6.3+8 mm	3215-0080
Nozzle nut	6450-7015





## GASIQ CUTTEX HAND CUTTING TORCH

Cuttex is a hand cutting torch with flat shank, which uses the pressure principle (II), meets the standards of EN ISO 5172 and has a lockable lever valve for the cutting oxygen.

Various fuel gases, such as acetylene and propane can be used. 3-cone sealed cutting nozzles are compatible. Naturally, cutting support and non-return valves also fit this cutter. Standard lengths supplied are 510 mm and 900 mm. Other lengths and designs are available on request.

Compatible cutting nozzles: all 3-cone sealed, on page 49.



#### Available with the following options:

Designation		Part No.
Hand cutting torches GasIQ Cuttex 75°	510 mm	6690-0000
Hand cutting torches GasIQ Cuttex 90°	510 mm	6690-0100
Hand cutting torches GasIQ Cuttex 75°	855 mm	6690-0400
Hand cutting torches GasIQ Cuttex 90°	855 mm	6690-0500
Non-return valve set		3007-1000
Hose connection set complete Ø 6.3+8 mm		3215-0080
Nozzle nut		3386-0015







### **GASIQ CUTTING MACHINE PLUS**

High-quality, compact, mortar-driven cutting machine, with a well-earned reputation for versatility and flexibility.

- For different types of fuel gas; acetylene and propane.
- Continuously-variable drive system which maintains a constant cutting speed even in high temperatures. Ensures problem-free cutting.
- Light weight, 9.5 kg, makes it easy to carry.
- Accessories such as straight rail and circle cutting attachments are available to order.
- Supplied complete with hoses, cutting (model 198-4F or 198-4 depending on gas type), three cutting nozzles, tool set, instructions and power cable.
- Tiltable cutting head
- Continuously-variable speed control

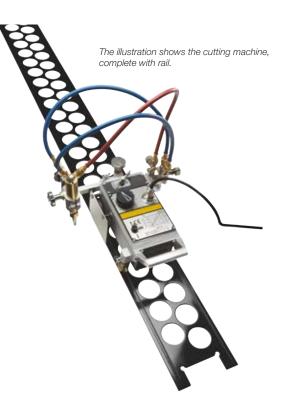


Voltage: 230V
Cutting depth: 3-150 mm
Cutting rate: 150-800 mm/min

Weight: 9.5 Kg

Dimensions: L=360 mm B=140 mm H=175 mm

Cutter: Propane or Acetylene
Cutting nozzles: VVC or VAX (page 51)



#### Available with the following options:

Designation		Part No.
Cutting machine	Acetylene/Oxygen	6711-0000
Cutting machine	Propane/Oxygen	6711-1000
Cutting rail	1800 mm	6711-0010
Circle cutting attachment	Ø 50-2400 mm	6711-0020
Non-return valve set	Fuel gas/Oxygen	6711-0300



## **GASIQ MACHINE CUTTING TORCH**

Our machine cutting torch provides high-quality, operational reliability and long service life.

#### Models 198-2TF and 198-2T

Separate heat and cutting oxygen ducts for better capacity. Fast opening oxygen valve.

Cutting capacity: < 380 mm

Length: 250 mm (other lengths on request)

Diameter: 32 mm

#### Compatible cutting nozzles, see page 51.

Designation	Gas type	Part No.
Model 198-2TF	Propane/Oxygen	6710-0010
Model 198-2T	Acetylene/Oxygen	6710-0020
Non-return valve set	Fuel gas/Oxygen	6711-0300



# Pop

#### Models 198-4F and Model 198-4

Standard cutter for GasIQ PLUS cutting machine. Separate heat and oxygen ducts for better capacity. Delivered as standard with PLUS cutting machine.

Cutting capacity: < 200 mm
Length: 110 mm
Diameter: 32 mm



#### Compatible cutting nozzles, see page 51.

Designation	Gas type	Part No.
Model 198-4F	Propane/Oxygen	6710-0110
Model 198-4	Acetylene/Oxygen	6710-0120
Non-return valve set	Fuel gas/Oxygen	6711-0300



#### Models 133-2FV and Model 133-2V

3-duct model with separate shut-off valves.

Cutting capacity: < 200 mm
Length: 65 mm
Diameter: 30 mm



#### Compatible cutting nozzles, see page 51.

Designation	Gas type	Part No.
Model 133-2FV	Propane/Oxygen	6710-0210
Model 133-2V	Acetylene/Oxygen	6710-0220
Non-return valve set	Fuel gas/Oxygen	6711-0300



TH-98 twin cutter

Part No.

Twin cutter for making two cuts simultaneously. Adjustable from 30 to 305 mm.

6710-0013

Compatible cutting nozzles, see page 51.



Beveling head with extra preheating BV-98-2

Part No.

Phase cutter attachment for Propane/Oxygen

6710-0012

WC (Propane) Page 51. Compatible cutting nozzles:

1390-3H, **Part No.** 6490-0163 Heating nozzles:



S-98-C adjustable tip adapter

Part No.

Adjustable tip adapter to enable adjustment of nozzle angle between 0 and 90 degrees. O-ring sealed.

6710-0011

Capacity:

< 200 mm

Compatible cutting nozzles, see page 51.





## **CUTTING NOZZLES**

GasIQ has a range of cutting nozzles for various applications. The most important functions for the nozzle are to control the heating flame and the cutting oxygen jet. The geometry of the nozzle determines its capabilities. That is why it is essential to use cleaning needles with particular care to avoid altering the geometry.

GasIQ has two main types of cutting nozzles: face sealed and 3-cone sealed. The face sealed type is used for injector torches, and the 3-cone sealed type is used for pressure torches.

REMEMBER: A bad nozzle can destroy the whole job!

## **CUTTING NOZZLES FOR GASIQ D75**

The nozzles are also compatible		Working pressure F		Part No.
with face-sealed torches from other manufacturers.	Material thickness mm	Fuel gas bar	Oxygen bar	
1. Swaged type nozzles	1-3	0.1-0.8	0-1.5	3383-0100
Face-sealed forged entirely from copper. The gas ducts	3-8	0.1-0.8	1.5-2.0	3383-0200
have a precisely cylindrical geometry to ensure a turbulence-free cutting jet.	8-20	0.1-0.8	3.0-4.0	3383-0300
	20-50	0.1-0.8	4.0-4.5	3383-0400
	50-100	0.1-0.8	3.0-6.5	3383-0500
2. Ring-type cutting nozzles	1-10	0.1-0.8	1.5-2.0	3377-0000
Face sealed with ring-shaped heating flame, which gives a gentle heating flame. This type is ideal for cutting thin sheet	10-30	0.1-0.8	2.0-2.5	3377-0100
	30-50	0.1-0.8	2.5-3.0	3377-0200





### **CUTTING NOZZLES FOR GASIO N76**

(MA ALSO COMPATIBLE WITH S80 INJECTOR)

		Workin	Working pressure	
	Material thickness mm	Fuel gas bar	Oxygen bar	
3. Ring-type cutting nozzle	1-5	0.1-0.8	1.5-2.0	3370-0000
Face sealed nozzle with ring- shaped heating flame, which	5-20	0.1-0.8	2.0-3.0	3370-0100
gives a gentle heating flame.	20-30	0.1-0.8	3.0-4.0	3370-0200
Ideal for cutting thin sheet metal. The nozzle is three-part.	30-75	0.1-0.8	4.5-5.0	3370-0300
	75-150	0.1-0.8	5.0-7.0	3370-0400
4. MA-nozzle	3-8	0.2-0.8	3.5-5.0	3813-0000
Face sealed 2-part nozzle for acetylene-oxygen. Used	8-15	0.2-0.8	5.0-6.0	3813-0100
for cutting up to 100 mm.	15-30	0.2-0.8	6.0-7.0	3813-0200
Produces a concentrated cutting jet. The nozzle is easy to take apart for cleaning.	30-50	0.2-0.8	6.5-7.5	3813-0300
	50-70	0.2-0.8	7.0-7.5	3813-0400
	70-100	0.2-0.8	7.0-8.0	3813-0500





## **Cutting nozzles for GasIQ N76, cont.**

			Working pressure		Part No.
	Joint width mm	Joint depth mm	Fuel gas bar	Oxygen bar	
5. Gouging nozzle	4-6	2-4	0.3-0.8	2.5-3.5	3372-1000
4-part slotted-flame nozzle. Used for oxygen gouging and	6-8	2-6	0.3-0.8	3.0-4.0	3372-2000
edge preparation.	9-11	5-8	0.3-0.8	4.0-5.0	3372-3000



## **CUTTING NOZZLES FOR GASIQ S80 AND GASIQ CUTTEX**

The nozzles are also compatible		Workin	g pressure	Part No.
with torches from other manufacturers.	Material thickness mm	Fuel gas bar	Oxygen bar	
6. Swaged type nozzles	3-10	0.3-0.8	1.0-2.0	6370-0200
s-cone sealed nozzle forged from single piece of copper. For all	10-25	0.3-0.8	3.0-4.0	6370-0300
pes of cutting up to 300 mm.	25-50	0.3-0.8	3.0-5.0	6370-0400
	50-100	0.3-0.8	4.0-5.5	6370-0500
	100-200	0.3-0.8	4.5-6.0	6370-0600
	200-300	0.3-0.8	5.0-7.0	6370-0700
7. Rivet cutting nozzle	5-25	0.2-0.5	2.0-3.0	6119-0100
one sealed swaged-type nozzle. ged entirely from copper.	25-50	0.2-0.5	3.0-4.0	6119-0200
Specially designed to cut rivet joints and rusted screw joints. The joints are cut level with the metal.	50-100	0.2-0.5	3.0-6.0	6119-0300
	75-150	0.2-0.5	4.0-7.0	6119-0400
8. Propane nozzle 3-cone sealed 2-part nozzle for all types of cutting. The inner part has milled slits to control the propane flame effectively. The nozzle is easy to clean.	1-3	0.3-1.5	1.0-1.5	6470-0100
	3-10	0.3-1.5	1.5-2.0	6470-0200
	10-25	0.3-1.5	3.0-4.0	6470-0300
	25-50	0.3-1.5	3.0-5.0	6470-0400
	50-100	0.3-1.5	4.0-5.5	6470-0500
	100-200	0.3-1.5	4.5-6.0	6470-0600
	200-300	0.3-1.5	5.0-7.0	6470-0700
	300-500	0.3-1.5	7.0-10.0	6470-0800

	300-500	U	.3-1.5	7.0-10.0	6470-0800
			Workin	g pressure	Part No.
	Joint width mm	Joint depth mm	Fuel gas bar	Oxygen bar	
9. Straight gouging nozzle	6-8	3-6	0.3-0.6	3.0-4.0	6196-0600
3-cone sealed fully-forged nozzle for oxygen gouging and	8-11	6-8	0.3-0.6	4.0-5.0	6196-0800
edge preparation.	9-12	8-11	0.3-0.6	5.0-6.0	6196-1000
10. Bent gouging nozzle	6-8	3-6	0.3-0.8	3.0-4.0	6183-0600
3-cone sealed fully-forged nozzle for oxygen gouging	8-11	6-8	0.3-0.8	4.0-5.0	6183-0800
and edge preparation.	9-12	8-11	0.3-0.8	5.0-6.0	6183-1000
	10-15	10-13	0.3-0.8	6.0-7.0	6183-1200

## **CUTTING NOZZLES FOR GASIQ 62-5, GASIQ 49-3 AND S80 INJECTOR**

For GasIQ and HARRIS		Working pressure		Part No.
cutting torches	Material thickness mm	Fuel gas bar	Oxygen bar	
1.Cutting nozzle Propane NX     Cutting nozzle for normal preheating. This nozzle is	5-10	0.3-0.8	1.5-2.0	6415-0100
	10-15	0.3-0.8	2.0-3.0	6415-0200
particularly well-suited to cutting	15-25	0.3-0.8	2.5-3.5	6415-0300
scrap with the GasIQ 62-5 torch or the Harris Injector hand	25-50	0.3-0.8	3.0-4.0	6415-0400
cutting torch.	50-75	0.3-0.8	3.0-4.5	6415-0500
	75-150	0.3-0.8	3.5-5.5	6415-0600
	150-200	0.3-0.8	4.5-5.5	6415-0700
2. Cutting nozzle Propane NFF Capabilities are as for NX but with more preheating.	15-25	0.3-0.8	2.5-3.5	6414-0100
	25-50	0.3-0.8	3.0-4.0	6414-0200
	50-75	0.3-0.8	3.0-4.5	6414-0300
	75-150	0.3-0.8	3.5-5.5	6414-0400
	150-200	0.3-0.8	4.5-5.5	6414-0500
	200-300	0.3-0.8	5.0-6.5	6414-0600
3. Cutting nozzle	5-10	0,3-0,8	1.0-2.0	6418-0100
<b>Acetylene 6290</b> This nozzle is specially adapted	10-15	0.3-0.8	1.5-2.5	6418-0200
for the GasIQ 49-3 cutting attachment or the Harris injector cutter.	15-25	0.3-0.8	2.0-3.5	6418-0300
	25-50	0.3-0.8	3.0-4.5	6418-0400
	50-100	0.3-0.8	3.0-4.5	6418-0500
	100-175	0.3-0.8	3.5-5.5	6418-0600
	175-250	0.3-0.8	4.5-5.5	6418-0700
	250-300	0.3-0.8	5.0-6.5	6418-0800









## **VVC, VAX AND VPM MACHINE CUTTING NOZZLES**

F 0 10 111APP10		Working pressure		Part No.
For GasIQ and HARRIS machine cutting torches	Material thickness mm	Fuel gas bar	Oxygen bar	
VVC Propane/Oxygen     WC-nozzle with high capacity.	1-4	0.2	4.0	6413-0000
	4-6	0.2	2.5	6413-0100
	6-9	0.2	5.0	6413-0200
	9-12.5	0.2	5.0	6413-0300
	12.5-20	0.2	6.0	6413-0400
	20-35	0.2	7.0	6413-0450
	35-60	0.2	7.0	6413-0500
	60-75	0.2	6.5	6413-0550
	75-100	0.2	6.5	6413-0600
	125-150	0.2	6.5	6413-0650
	150-175	0.2	7.0	6413-0700
	175-200	0.2	6.5	6413-0800
	200-225	0.2	6.0	6413-0900
2. NH Propane/Oxygen VVC-nozzle with high capacity.	225-250	0.2	4.0	6413-1000
	250-275	0.2	4.0	6413-1100
	275-300	0.2	4.5	6413-1200
	300-380	0.2	4.5	6413-1300
3. Machine cutting nozzle	1-8	0.2	2.5-4.0	6416-0100
VAX Acetylene/Oxygen Cutting nozzles for machine cutting torches.	8-15	0.2	5.0	6416-0200
	15-35	0.2	7.0	6416-0300
VAX=High-speed	35-75	0.2	7.0	6416-0400
	75-150	0.2	5.0	6416-0500
	150-200	0.2	6.5	6416-0600
4. Machine cutting nozzle	1-4	0.2	3.0	6417-0100
VPM MAPP/OXYGEN Cutting nozzles for machine	4-8	0.2	3.5	6417-0200
cutting torches. VPM=High-speed	8-15	0.2	5.0	6417-0300
	15-35	0.2	7.0	6417-0400
	35-75	0.2	7.0	6417-0500
	75-150	0.2	7.0	6417-0600
	150-200	0.2	7.0	6417-0500
	200-300	0.2	4.0	6417-0600









## **SAFETY PRODUCTS**

GasIQ has a wide selection of safety equipment for both combustible gases and for oxygen. The Swedish Civil Contingencies Agency's Regulations on Inflammable Gas in Loose Containers, SÄIFS 1998:7, lay down that a flashback arrestor must be fitted to the regulator/outlet point for acetylene.

Since oxygen increases the speed of combustion, a flashback arrestor should also be fitted to regulators and outlet points for oxygen. The blocking and protective function of the flashback arrestor must be tested every 24 months.

Non-return valves must be fitted to the torch shank in accordance with the Swedish Work Environment Agency's Regulations for Fusion Welding and Thermal Cutting, AFS 1992:9, on both the acetylene and the oxygen side.

### GASIO SAFE-X 2000 FLASHBACK ARRESTOR

**The GasIQ SAFE-X 2000** is a resettable flashback arrestor with a number of unique properties.

- Designed to be user-friendly.
- Clear indication of operating mode or blocked mode.
   A green stripe indicates operating mode. In the event of a flashback, the valve closes and the red stripe indicates that the gas flow has been blocked.
- Very easy resetting in the event of a flashback. When the system has been depressurised and the cause of the flashback determined, the SAFE-X 2000 is reset by pulling out the reset button until the green stripe appears.
- No loose handles or catches which can be damaged or disappear. The reset mechanism is integrated into the design.

**As you would expect, the SAFE-X2000** has all the safety functions of a modern flashback arrestor, and is recommended by the Swedish Welding Commission.

- Filter which prevents contamination affecting the operation of the non-return valve.
- Sinter metal flame arrestor which stops and extinguishes flashback.
- Non-return valve which prevents flow-back.
- Flow arrestor which automatically shuts off the gas flow on flashback.
- Thermal fuse which shuts off the gas flow on overheating.

The SAFE-X 2000 is manufactured in accordance with EN-730.

Designation	Part No.
SAFE-X 2000 Acetylene	3004-0000
SAFE-X 2000 Oxygen	3004-1000



**NOTE!** A flashback arrestor is a legal requirement on

## GASIQ SAFE-X 1000 FLASHBACK ARRESTOR

The SAFE-X 1000 is a flashback arrestor with lower capacity, but with all the functions of its big brother, the SAFE-X 2000. Dimensioned for the D75 system.

Designation	Part No.
SAFE-X 1000 Acetylene	3005-0000
SAFE-X 1000 Oxygen	3005-1000



#### GENERAL

For more information on safety, an excellent resource is the Swedish Welding Commission's control instruction, "Gula kortet" [the Yellow Card], order from www.svets.se.



### GASIO THERM-X FLASHBACK ARRESTOR

THERM-X includes the most important safety functions, but is not resettable. This means that the flashback arrestor must be replaced after a flashback has occurred.

- Filter which prevents contamination affecting the operation of the non-return valve.
- Sinter metal flame arrestor which stops and extinguishes flashback.
- Non-return valve which prevents flow-back.
- Thermal fuse which shuts off the gas flow on overheating.

Designation	Part No.
THERM-X Acetylene	3008-0000
THERM-X Oxygen	3008-1000
THERM-X Oxygen DIN standard (G 1/4")	3008-1500

THERM-X is manufactured in accordance with EN-730.

NOTE! It is a legal requirement to fit non-return valves fitted on the cutter shank on both the acetylene and the oxygen side.



## **NON-RETURN VALVES**

The non-return valves functions as a complement to the flashback arrestor to prevent flow-back of gases. If flow-back is permitted, there is a risk that the gases will mix, which can lead to a hose explosion if the gas mixture is ignited.

Non-return valves Ox-Ac with threaded connection	Part No.
<b>1.</b> D75 G1/4"	3007-0000
2. S80 / N76 / Cuttex / 62-5 / 43-2 G3/8"	3007-1000
3. Machine torch (2x Ox, 1x Ac) G3/8"	6711-0300





## **FLAME ARRESTOR**

The flame arrestor is a safety device which gives increased protection compared with the use of a non-return valve alone. The flame arrestor consists partly of a non-return valve, and partly of a flame filter which blocks and extinguishes any flashback.

Designation	Part No.
3. Ox 1/4" x 5.0 mm	3009-0500
3. Ac 1/4"V x 5.0 mm	3009-0600
3. Ox 1/4" x 6.3 mm	3009-0100
3. Ac 1/4"V x 6.3 mm	3009-0200
3. Ox 3/8" x 6.3 mm	3009-0700
3. Ac 3/8"V x 6.3 mm	3009-0800
3. Ox 3/8" x 8.0 mm	3009-0300
3. Ac 3/8"V x 8.0 mm	3009-0400
3. Ox 9/16" x 8.0 mm	3009-0350
3. Ac 9/16"V x 8.0 mm	3009-0450



## WARNING SIGNS

Must comply with the instructions in the Swedish Code of Statutes. Black text on a yellow reflective background.

Designation	Part No.
Self-adhesive, plastic, A5	5527-0100
Self-adhesive, plastic, 90x130 mm	5527-0000



## **ACCESSORIES**

We offer an extensive range of accessories including protective mittens and goggles. The other equipment includes gas lighters and electric gas preheaters for carbon dioxide and argon/mix. We also supply selected components as spare parts for our most popular products.

#### Flame-resistant protective mittens

Full-hand model with separate thumb, fits both right and left hand. CE approved. Made from flame-retardant wool.

Flame-resistant protective mittens

**Part No.** 5538-0000



#### Protective goggles - CE marked

Model 220. Made from sturdy soft plastic. Adjustable elastic headband and raisable glasses. May be used over ordinary vision spectacles.

Protective goggles

Part No. 5647-0000



#### Gas lighter

Model Shurlite. Spring-loaded blade, replaceable flints.

Shurlite gas lighter Part No. 5556-0000
Spare flints, Shurlite 5 off Part No. 5556-0002



#### **Bracket**

For connecting the regulator to the 5-litre acetylene cylinder.

Bracket **Part No.** 3122-1000



#### Opener

For acetylene gas cylinders.

Opener **Part No.** 5607-0000



#### Gas preheater for CO2 and AR/mix

The gas preheater is connected between the gas cylinder and the pressure regulator and is used for high-capacity outlets for carbon dioxide or AR/mix, as the regulator is exposed to extreme chilling. Supplied with 3 m earthed cable. Max flow: 1,200 l/h

220 V, 1-phase, 25 W, W21.8 x 14/1", Co<sup>2</sup> Part No. 3707-1500 220 V, 1-phase, 25 W, W24.32 x 14/1", AR/mix Part No. 3707-1600

**NOTE!** Must not be connected to oxygen.



#### Gas hose

Complete with hose connections, nuts, flame arrestors.

Ø 5.0 mm, 5 m, Ox+Ac (blue/red)

**Part No.** 5621-2000



#### **Double outlet**

Double outlet for two gas outlets from one regulator. Fitted with connections for 5.0 and 6.3 mm internal diameter hose.

Gas outlet valve Ox/AR G3/8"	Part No. 3020-0000
Gas outlet valve Ac G3/8"V	Part No. 3020-0100



#### **T-connection**

T-connection for connection of two regulators to one cylinder.

Argon/Nitrogen connection (W24.32 x 14/1")	<b>Part No.</b> 3020-0500
Co2/Oxygen (W21.8 x 14/1")	Part No. 3020-0600



#### Hose accessories

Hose connector, complete	Part No.
Intended for a hose with internal diam. 5.0 mm	3541-0000
Intended for a hose with internal diam. 8.0 mm	3541-0200



Connections adapter for hose joint systems	Part No.
G3/8" Right	3201-0025
G3/8" Left	3202-0025



Hose connections complet	e	Part No.
G1/4"R+L	Ø5+6.3 mm	3308-0022
G3/8"R+L	Ø5+6.3 mm	3215-0080
G3/8"R	Ø5+6.3 mm	3215-0075
G3/8"L	Ø5+6.0 mm	3216-0075
G3/8"R	Ø6.3+8 mm	3215-0085
G3/8"L	Ø6.3+8 mm	3216-0085
(loose hose connections in va	arious dim+nuts: see p	oricelist)





## **QUICK CONNECTORS**

Quick connectors approved in accordance with EN 561.

#### **Female**

For connection at regulator or flashback arrestor.

Designation		Part No.
Quick connector female G3/8" int.	Ox	3010-0100
Quick connector female G3/8" int. left	Ac-Propane	3010-0200
Quick connector female G3/8" int.	AR/MIX	3010-0300
Quick connector female G1/4" int.	Ox	3010-0400
Quick connector female G1/4" int.	AR/MIX	3010-0500



#### Male

For connection on the hose side.

Designation		Part No.
Quick connector male 5.0 + 6.3 mm	Ox	3010-0150
Quick connector male 8.0 + 9.5 mm	Ox	3010-0180
Quick connector male 10.5 mm	Ox	3010-0190
Quick connector male 5.0 + 6.3 mm	Ac-Propane	3010-0250
Quick connector male 8.0 + 9.5 mm	Ac-Propane	3010-0280
Quick connector male 10.5 mm	Ac-Propane	3010-0290
Quick connector male 5.0 + 6.3 mm	AR/MIX	3010-0350



#### Female with hose connector

For connection on the hose side.

Designation		Part No.
Quick connector female 5.0 + 6.3 mm	Ac-Propane	3010-0240
Quick connector female 8.0 + 9.5 mm	Ac-Propane	3010-0245
Quick connector female 5.0 + 6.3 mm	Ox	3010-0140
Quick connector female 8.0 + 9.5 mm	Ox	3010-0145
Quick connector female 5.0 + 6.3 mm	AR/MIX	3010-0340
Quick connector female 8.0 + 9.5 mm	AR/MIX	3010-0345



#### Male with thread

For connection on the shank non-return valve. NOTE! It is a legal requirement to fit non-return valves between shank and quick connector.

Designation		Part No.
Quick connector male G1/4" int. left	Ac	3010-0210
Quick connector male G3/8" int. left	Ac	3010-0220
Quick connector male G1/4" int.	Ox	3010-0110
Quick connector male G3/8" int.	Ox	3010-0120



For overview of applications, see www.gasiq.com

## **PRESSURE GAUGES AND FLOW METER**

Optimator	Part No.
0-400 bar, Ar+CO <sup>2</sup>	3033-4500
Flow meter complete 0-34 l/min	3712-2210
Outer flow meter tubes	3712-2205

Tigex		Part No.
0-400 bar	Ø 50 mm G1/4"	3033-1500
Flow meter	complete 0-34 l/min	3712-2210
Outer flow n	neter tubes	3712-2205

Minex (fror	n 2012)	Part No.
0-315 bar	Ø 50 mm G1/8"	3033-3500
0-30 l/min	Ø 50 mm G1/8"	3033-3600

Maxex/Arg	onex	Part No.
0-40 bar	Ø 50 mm G1/4", Ac HT	3033-1400
0-4 bar	Ø 50 mm G1/4", Ac LT	3033-1200
0-400 bar	Ø 50 mm G1/4", all apart from Ac HT	3033-1500
0-16 bar	Ø 50 mm G1/4", OX, Hydr. Nitr. Air LT	3033-1300
0-35 l/min	Ø 50 mm G1/4", Ar+CO <sup>2</sup> LT	3033-1600
0-6 bar	Ø 50 mm G1/4", Propane LT	3033-1700

Inlet stem gaskets	Part No.
Acetylene (5 off)	3202-0070
OX, AR-Co <sup>2</sup> and other gases	3710-0050

Flow meter tubes	Part No.
For measuring the precise gas flow at the welding torch gas nozzle	3712-9000













## CONSUMABLES

GaslQ's range of consumables for gas welding and soldering includes products for the majority of applications. The main groups consist of gas welding rods, silver solder, copper-phosphorus brazing rods and fluxes. For product information sheets: se www.gasiq.com. See also the chapter on handling on page 66.

The main range is listed in our catalogue. Since we represent one of the world's largest producers in the soldering/ brazing sector, we can also provide special solders in a range of formats, including thread, ring and band.

Please get in touch with us at GasIQ to discuss your application.

### **GAS WELDING RODS**

#### GasIQ H-44

The GasIQ H-44 is a bright-drawn quality welding rod with a weld metal tensile strength of 430 N/ mm2 for gas welding unalloyed steel. The rod is suitable for welding in accordance with the Boiler Welding Standard and the Construction Welding Standard. Sold in minimum quantities of 20 kg.

<b>Diameter</b> mm	<b>Length</b> mm	Weight /casing kg	Part No.
1.60	700	5.0	5144-1500
2.00	700	5.0	5144-2000
2.50	700	5.0	5144-2500
3.00	700	5.0	5144-3000
4.00	700	5.0	5144-4000
5.00	700	5.0	5144-5000

#### GasIQ H-44 Mo

GasIQ H-44 Mo is a bright-drawn molybdenum alloy welding rod for unalloyed and low alloyed steel. The addition of molybdenum gives wider applications than standard H-44 in, for example, applications such as welding pressure vessels and pipes. Sold in minimum quantities of 20 kg.

<b>Diameter</b> mm	Length mm	Weight /casing kg	Part No.
2.00	700	5.0	5144-2010
2.50	700	5.0	5144-2510
3.00	700	5.0	5144-3010

#### GasIQ G-4

GasIQ G-4 is alloyed with 0.5 % molybdenum (Mo). Applications include welding pipelines and pressure vessels. The rod is copper coated which guarantees a clean and pore-free weld. GasIQ G-4 is approved by TÜV and DB.

<b>Diameter</b> mm	<b>Length</b> mm	Weight /casing kg	Part No.
2.00	1000	5.0	5160-2000
2.50	1000	5.0	5160-2400
3.00	1000	5.0	5160-3000

## **TECHNICAL DATA**

Туре	Star	Standards Technical data		Prin	Principal analysis %			
	AWS A5.2	DIN 8554	Weld metal tensile strength	С	Si	Mn	Мо	Fe
H-44	R60-G	GII 21	390-440 N/mm <sup>2</sup>	0.10	0.15	1.0		Rest
H-44 Mo		GIV 22	450-520 N/mm <sup>2</sup>	0.11	0.20	1.1	0.5	Rest
G-4		GIV 22	450-520 N/mm <sup>2</sup>	0.11	0.20	1.1	0.5	Rest

## **SELECTING SOLDER**

#### Steel and cast steel:

All silver solder can be used for soldering steel. For soldering tool steel, the usual preference is to use as low a bonding temperature as possible, and we recommend starting with silver solder S-44 or S-55.

#### Stainless steel:

Silver solder S-55 is recommended for soldering stainless steel, since it is a good colour match and has a low working temperature.

#### Nickel and nickel alloys:

Use silver solder S-44 or S-55.

#### Copper and copper alloys:

All solders are usable. For soldering pure copper, use S-2-K (Heating and plumbing solder) or S-5-K, (the silver content improves the flow, fluxes are required only for soldering copper alloys such as brass). For brass, the easiest method is to use silver solder e.g. S-44 or S-55 FC.

	Copper	Brass	Bronze	Red metz,	Carbons	Stainless.	Stee, Heat-trees	Steel Steel Cast-iron	Malleable ir	Nickel, nickel	Cemente	Low-alloy ste
Copper	• 🔻											
Brass	• 🔻	•										
Bronze	•	•	•									
Red metal	•	•	•	•								
Carbon steel	•	•	•	•	•							
Stainless steel	•	•	•	•	•	•						
Heat-treated steel	•	•	•	•	•	•	•					
Cast-iron	•	•	•	•		•	•	•				
Malleable iron castings	•	•	•	•		•	•	•	•			
Nickel, nickel alloys	•	•	•	•	•	•	•	•	•	•		
Cemented carbide	•	•	•	•	•	•	•	•	•	•	•	
Low-alloy steel	•	•	•	•		•	•	•	•	•	•	•

#### Silver solder

GasIQ S-44 GasIQ S-55 / S-55 FC

#### Fluxes for silver solder

GasIQ H-flux GasIQ H-pasta

#### **▼** Copper-phosphorus brazing rods

GasIQ S-2-K GasIQ S-5-K GasIQ S-15-K

## **SILVER SOLDER**

#### GasIQ S-44

A cadmium-free silver solder used, for example, in the food processing industry and where the soldered joint may come into contact with drinking water.

Туре	<b>Diameter</b> mm	Length mm	Weight /casing kg	Part No.
S-44	1.5	500	1.0	5244-1015
S-44	2.0	500	1.0	5244-1020
S-44	1.5	500	3 pcs.	5244-1515
S-44	2.0	500	3 pcs.	5244-1520

#### GasIQ S-55 / S-55 FC

A cadmium-free solder with high silver content (55%) which makes it extremely easy flowing with a high capillary action and deep penetration. It has excellent corrosion resistance, which is particularly suitable, for example, for petrochemical applications. The non-toxic formulation of the solder also makes it ideal for soldering stainless components in the food processing industry. The high silver content gives an excellent colour match for soldering stainless steel and silver. Also available flux-coated (FC).

Туре	<b>Diameter</b> mm	Length mm	Weight /casing kg	Part No.
S-55	1,5	500	1.0	5255-1015
S-55	2,0	500	1.0	5255-1020
S-55 FC	1,5	500	1.0	5255-2015
S-55 FC	2,0	500	1.0	5255-2020
S-55 FC	2,0	500	0.25	5255-5020
S-55 FC	1,5	500	4 pcs.	5255-5015

Туре	Standards		-	Technical data			Principal analysis %			
	AWS 5,8	DIN 8513	EN 1044	Weld metal tensile strength	Working temp.	Melting range	Ag	Cu	Sn	Zn
S-44	B-Ag- 44CuZn	L-Ag44	AG 203	400 N/mm²	650°C	620-650°C	44.0	30.0		26.0
S-55/ S-55 FC	B-Ag- 55CuZnSn	L-Ag55Sn	AG 103	350 N/mm²	660°C	630-660°C	55.0	21.0	2.0	22.0

## **FLUXES**

#### GasIQ Silver flux

Used in conjunction with GaslQ's silver solder S-44 and S-55. Also used for soldering brass and other copper alloys using GaslQ's copper-phosphorus brazing rods. Working temperature: 500-800 °C.

Туре	Weight/unit gram	Part No.
GasIQ H-flux	250	5491-0700
GasIQ H-paste	500	5492-0800

## **SOFT SOLDER**

Silver alloy soft solder is particularly useful in heating and plumbing applications – soldering with all metals apart from Aluminium. Good capillary properties. Silver content: 3.5 %

<b>Diameter</b> mm	<b>Weight</b> kg	Part No.
Ø 2.0	0.5	5435-1020
Ø 3.0	0.5	5435-1030

## COPPER-PHOSPHORUS BRAZING RODS

#### GasIQ S-2-K

An approved heating and plumbing solder with 2 % silver for increased flow in the binding zone, which ensures that the joints have excellent durability.

#### GasIQ S-5-K

The addition of 5 % silver gives a solder with excellent flow properties and a certain amount of ductility in the soldered joint. GaslQ S-5-K is also a popular solder for heating and plumbing applications.

#### GasIQ S-15-K

An easy-flowing solder with 15 % silver content, and exceptional soldering properties. Particularly well-suited for series production.

<b>Diameter</b> mm	Length mm	Weight /casing kg	Part No.
Ø 2.0	500	1.0	5202-1020
Ø 2.5	500	1.0	5202-1025
Ø 3.0	500	1.0	5202-1030
2x2	500	1.0	5202-1120
2.5x2.5	500	1.0	5202-1125
3x3	500	1.0	5202-1130
Ø 2.0	500	1.0	5205-1020
Ø 2.5	500	1.0	5205-1025
Ø 3.0	500	1.0	5205-1030
2x2	500	1.0	5205-1120
2.5x2.5	500	1.0	5205-1125
3x3	500	1.0	5205-1130
Ø 2.0	500	1.0	5215-1020

Туре	Standards			Technical data			Principal analysis %			
	AWS/SFA 5,8	DIN 8513	EN 61190	Weld metal tensile strength	Working temp.	Melting range	Ag	Cu	P	Sn
S-2-K	BCuP6	L-Ag2P	CP 105	250 N/mm <sup>2</sup>	710°C	645-825°C	2.0	91.5	6.5	-
S-2-K	BCuP3	L-Ag5P	CP 104	250 N/mm <sup>2</sup>	715°C	645-815°C	5.0	89.0	6.0	-
S-15-K	BCuP5	L-Ag15P	CP 102	250 N/mm <sup>2</sup>	705°C	645-800°C	15.0	80.0	5.0	-
Silver soft	-	-	Sn96Ag04	-	221°C	217°C	3.5	-	-	96



# SAFETY INFORMATION AND HANDLING

In all types of work involving acetylene and oxygen, there is always a risk of accident. Using the proper procedure and safe equipment minimises the risk. The most important part of this chapter is the section on safety and choice of equipment.

To make sure that you can utilise GaslQ's products efficiently, this chapter also contains information on the best way of carrying out various types of work.

### SAFETY INFORMATION

A complete set-up for welding and soldering must consist of the following:

- 2 gas cylinders, oxygen and acetylene, which must be solidly fixed.
- 2 regulators (1 acetylene and 1 oxygen)
- 1 flashback arrestor, to be connected to the acetylene valve

**NOTE!** For increased safety, we also recommend fitting a flashback arrestor to the oxygen regulator.

- Gas hose, red for acetylene and blue for oxygen
- Cutter shank
- · Non-return valve on the cutter shank
- · Welding nozzles for welding
- · Cutting attachment with cutting nozzle for cutting
- Flame-resistant mittens
- Protective goggles
- Warning sign

### **ASSEMBLY**

Before the regulator is fitted, the cylinder valve must be blown clean by opening it briefly. Make sure that the gas jet is not pointing towards a naked flame, hot objects or another person.

- Unscrew the regulator screw until the spring pressure releases (important to avoid damage to the regulator).
- Screw the regulator firmly to the cylinder valve.
- Open the cylinder carefully and note the gas pressure on the contents pressure gauge. Set the required gas pressure using the regulating screw.

**NOTE!** Oxygen cylinders and armatures must be kept free from oil and fat. Even small quantities can cause explosions.

- The flashback arrestor is fitted to the acetylene regulator.
   The connection nut has a left-hand thread. For increased safety, we also recommend fitting a flashback arrestor to the oxygen regulator.
- Connect the hoses to the oxygen valve and to the acetylene flashback arrestor.

#### NOTE!

Blue – oxygen
Red – acetylene
Use only clean and undamaged high-quality hoses
(EN/ISO marked).

- Fit the non-return valve to the shank of the welding torch and then connect the hoses. The connection nipples on the torch are marked Ox and Ac to avoid mistakes.
- Fit the welding nozzle or cutting attachment using the quick connector on the shank. Secure all gas hoses with hose clamps.

### CHOICE OF EQUIPMENT

#### Regulators

If you are new to welding, you should select regulators with very easy to read pressure gauges (MAXEX), which show both the cylinder pressure and the set working pressure. This helps you set the correct values in accordance with the recommendation table and to avoid emptying the gas cylinders completely, which makes filling more difficult and may even leave you without gas.

#### Flashback arrestor

There are some imported products on the market which are of dubious quality. Remember that the flashback arrestor is there to protect you! Do not put your safety at risk. Always choose a flashback arrestor of a known make and which is approved by the Swedish authorities. Our SAFE-X2000, SAFE-X 1000 and THERM-X are excellent examples.

#### Welding and cutting equipment

Gas welding equipment is a high-precision tool. Highlyinflammable gases are involved. Leaks and incorrect mixtures can often destroy the equipment totally, and even lead to serious accidents! Always choose quality Swedish equipment when you are buying kit for gas welding.

The GasIQ D75 will cope well with the vast majority of work. If you need higher-capacity equipment, choose the GasIQ N76 or GasIQ S80.

#### GasIQ D75 kit.

The sturdy metal box contains a complete welding and cutting system.

### SAFETY INSTRUCTIONS

- Make sure that the workplace is well-ventilated and free from combustible material and rubbish.
- Keep a bucket of water beside the worksite.
- Take note of where fire fighting equipment is located, so that you can deploy it immediately. Familiarise yourself with how it works.
- Set out the warning sign in a highly visible place at the door of the room in which the gas cylinders are stored.
- Check that there is no leakage from hoses and connections. This can be done using soapy water or leak spray.
- The flashback arrestor must be used to prevent a flashback entering the regulator and gas cylinder. If a flashback arises, close the valves on the torch and on the gas cylinders. This means that you must always keep the cylinder key and flame-retardant gloves where they are easily accessible.
- Through external heating all gas cylinders, and, where acetylene cylinders are concerned, also through events such as flashback from the torch, hose explosions etc., the working temperature of the cylinder can become so high that there is a risk that it might explode. To avoid this, in the event of leaks, shut off the cylinder valve and cool the cylinder from a safe place.
- To avoid burns and eye damage, the welder must use suitable protective equipment at all times.



### GAS WELDING

Gas welding is suitable for welding pipes, fabrications in thin and medium sheet metal, cast iron and non-ferrous metals, as well as surfacing and hard-facing.

#### Lighting and extinguishing the torch:

Make sure that both valves on the shank are closed.

Set the required working pressure on the regulator (see welding table).

First open the oxygen valve on the shank and let the gas flow for a second or two. Then open the acetylene valve about 1/4 turn.

Light the flame with the gas lighter. **NOTE!** When using the pressure torch (S80), always light the flame on acetylene only, and then open the oxygen valve.

Adjust the size and appearance of the flame using the valves on the shank.

When you are extinguishing the flame, first close the acetylene valve on the shank and then the oxygen valve.

**Leftward welding method:** With this method, the flame is directed away from the molten pool. It is used for welding material thicknesses up to 3 mm.

**Backward welding:** With this method, the flame is directed towards the molten pool. It is used for material thicknesses over 3 mm, as it gives better burn-through.

## **SOLDERING**

Soldering is the process of joining the soldered objects together through the use of a consumable which has a lower melting point than the base material. To achieve a good result, it is essential that the joint surfaces are free from oil, fat and scale, and that the edges are rounded to avoid local overheating and to increase the binding zone. The binding zone is the area on which the solder flows out to achieve a metallic bond. It is also known as the diffusion zone.

The most important thing in soldering is that the solder is applied only when the work piece has been evenly heated to the melting point of the solder, which can then "wet" the base material.

**Lighting and extinguishing the torch:** See under gas welding above.

**Braze welding:** The method is similar to gas welding and is used for the same type of joints. It does not, however, melt the base material, but only heats the joint surfaces to the working temperature of the filler metal. The filler metal is then applied using the leftward welding method.

**Brazing:** The working temperature of the filler metal is above 450 °C. Used with small gaps where the filler metal is drawn into the joint by capillary action when the object for brazing is heated. But joints and overlap joints are the most common joint types for capillary brazing. With overlap joints, an overlap of 3-6 times the thickness of the thinnest material is recommended.

**Soft soldering:** The working temperature of the solder is below 450 °C, otherwise, the process is similar to brazing. The recommended gap for the best capillary action is 0.05-0.2 mm. The maximum permitted gap is 0.5 mm.

### **CUTTING**

Gas cutting is a fast and simple method of cutting and bevelling ferrous metals. The process involves heating the object in advance so that the ferrous metal can burn in pure oxygen.

In cutting, the work piece is heated using the cutter flame. The nozzle is held around 2-3 mm over the location at which the cutting is to begin. When the material is heated to a yellowish-white colour, the cutting oxygen valve (rotary or lever) is opened. The heated ferrous metal then begins to burn and is forced out by the pressure of the flame as the cutter is advanced. To achieve a straight cut, a guide should be used. The torch must be advanced gently and steadily.

#### Lighting and extinguishing the torch:

Fit the cutting attachment to the shank. Attach an appropriate cutting nozzle (see the section on nozzles, page 48).

Open the oxygen valve on the shank fully and close the acetylene valve. Close the heating oxygen valve on the cutting attachment.

Open the shut-off valve on the regulator if there is one. Set the recommended working pressure using the regulating screw on the regulator.

Open the heating oxygen valve and allow the gas to flow for a second or two. A long hose or small cutting nozzle requires a longer flow time. Do not close the valves fully, but maintain a low gas flow.

Open the acetylene gas valve and allow the gas to flow for a second or two. Light the flame using the gas lighter. **NOTE!** When using a pressure torch (S80 and Cuttex), ignite the flame on the acetylene only and then open the heating oxygen valve.

Open the cutting oxygen valve. Adjust to the correct pressure using the regulating screw on the regulator.

Adjust the heating flame using the acetylene gas valve on the shank and the heating oxygen valve on the cutting attachment with the cutting oxygen turned on. The torch is now ready for cutting.

When extinguishing the flame, make sure that the cutting oxygen valve is closed. Close the acetylene gas valve on the shank first, and then the heating oxygen valve on the cutting attachment.

## REGISTER

GasIQ cutters Plus

GasIQ machine cutting equipment

INTRODUCTION		CUTTING NOZZLES	
The intelligent choice R&D Centre	4 6	GasIQ D75 GasIQ N76 GasIQ S80 and GasIQ Cuttex GasIQ 62-5 and 49-3 Machine cutting nozzles VVC, VAX and VPM	48-49 48-50 48-50 50
REGULATORS		Machine cutting nozzies VVC, VAX and VPIVI	S
GasIQ Optimator® GasIQ Optimator® GasIQ Optimator II®	8-15 12 13	SAFETY PRODUCTS	
Outlet points and central regulators Complete outlet point AR/mix Double outlet Altop/Minitop For building in to welding machine/feed Complete outlet point oxygen and acetylene Single central gas supply with accessories	<b>14-15</b> 15 15 15 15 16	GasIQ SAFE-X 2000 flashback arrestor GasIQ SAFE-X 1000 flashback arrestor GasIQ THERM-X 2000 flashback arrestor Non-return valves Flame-arrestor Warning signs	5: 5: 5: 5: 5:
Other regulators GasIQ Minex GasIQ Maxex GasIQ Tigex I GasIQ Tigex II	<b>17-21</b> 17 18-19 20 21	ACCESSORIES  Quick connectors Pressure gauges and flow meter	5( 5
Special regulators High-pressure regulator 825 DS High-capacity regulator H25 2-stage regulator 996 DS	<b>22-25</b> 22 22 23	CONSUMABLES  Gas welding rods	5
High-pressure regulator 987 Series 700 Series 720 Series 740 Accessories Control and systems	23 24 24 24 24 25	Choice of solder Silver solder Fluxes Soft solder Copper-phosphorus brazing rods	6 6 6 6 6
Central gas systems	25		
CUTTING AND WELDING SYSTEMS	ŝ	SAFETY INFORMATION AND HANDLING	
Table D75 Cutting and welding systems GasIQ D75 Ergo Minicar Plus Cutting and welding systems GasIQ S80 Cutting and welding systems GasIQ N76 Cutting and welding systems GasIQ MOD 43-2 Hand cutting torches GasIQ 62-5	27 28-31 32-33 34-37 38-39 40-41 42	Safety information Assembly Choice of equipment Safety instructions Gas welding Soldering Cutting	64 64 64 66 66 66

44-45

46-47



GasIQ is a Swedish manufacturer of leading products for gas cutting and welding, soldering brazing, and of regulating equipment for gas shielded welding. The company's range includes Optimator®, a unique regulator which reduces gas consumption by at least 43 %. GasIQ's products are sold through local distributors in Europe and throughout the world. GasIQ uses state-of-the-art CNC machinery, and the company has been located in Stenkullen outside Gothenburg since 2003.

www.gasiq.com



**GasIQ AB** 

Täljstensvägen 5 SE-443 61 Stenkullen, SWEDEN info@gasiq.com Phone: +46 (0)302-246 80 Fax: +46 (0)302-246 90 www.gasiq.com