KEMPPI GUNS & TORCHES

PRODUCT CATALOGUE

EN

KEMPPI
The Joy of Welding

www.kemppi.com

Kemppi Oy Subsidiaries

Kemppikoneet Oy
PL 13
15801 LAHTI
FINLAND
Tel. +358 3 899 11
Telefax: +358 3 734 8398
e-mail: myynti.fi@kemppi.com

Kemppi Sverige AB
Instrumentvägen 2
Box 717
194 27 UPPLANDS VÄSBY
SVERIGE
Tel. +46-8-590 783 00
Telefax: +46-8-590 823 94
e-mail: sales.se@kemppi.com

Kemppi Norge A/S
Danholmen 19
3115 Tønsberg
Postboks 2151, Postterminalen
3103 Tønsberg
NORGE
Tel. +47 33 34 60 00
Telefax: +47 33 34 60 10
e-mail: sales.no@kemppi.com

Kemppi A/S
Literbuen 11
2740 Skovlunde
DANMARK
Tel. +45 4494 1677
Telefax: +45 4494 1536
e-mail: sales.dk@kemppi.com

Kemppi Benelux B.V.
Minervum 7284
4817 ZM Breda
THE NETHERLANDS
Tel. +31 76 571 7750
Telefax: +31 76 571 6345
Kemppi Benelux B.V.
Belgium
Tel. +32 15 212 880
Fax +32 15 211 143
email: sales.nl@kemppi.com

Kemppi (U.K) Ltd.
Martti Kemppi Building
Fraser Road
Priory Business Park
BEDFORD, MK443WH
ENGLAND
Tel. +44 845 6444201
Telefax: +44 845 6444202
e-mail: sales.uk@kemppi.com

Kemppi France S.A.
65 Avenue de la Couronne des Prés
78681 EPONE CEDEX
FRANCE
Tel. + 33 (0) 1 30 90 04 40
Telefax: + 33 (0) 1 30 90 04 45
e-mail: sales.fr@kemppi.com

Kemppi GmbH
Otto - Hahn - Straße 14
35510 BUTZBACH
DEUTSCHLAND
Tel. +49 6033 88 020
Telefax: +49 6033 72 528 (GmbH)
e-mail: sales.de@kemppi.com

Kemppi Spolka z.o.o.
ul. Piłsudskiego 2
05091 ZĄBKI
POLAND
Tel. +48 22 7816162
Telefax: +48 22 7816505
e-mail: info.pl@kemppi.com

Kemppi Australia Pty Ltd
25A, Stennett Road
Ingleburn NSW 2565
AUSTRALIA
Tel. +61-2-9605 9500
Telefax: +61-2-9605 5999
e-mail: info.au@kemppi.com

Kemppi Oy Limitada
Av. Pdte. Edo. Frei Montalva
6001-81
Conchali
Santiago
CHILE
Tel. +56-2-949 1990
Telefax: +56-2-949 1991
e-mail: arturo.silva@kemppi.com

OOO Kemppi
Polkovaya str. 1
Building 6
127018 Moscow
RUSSIA
Tel +7 495 739 4304
Telefax +7 495 739 4305
e-mail: info.ru@kemppi.com

Kemppi Oy Sales Offices

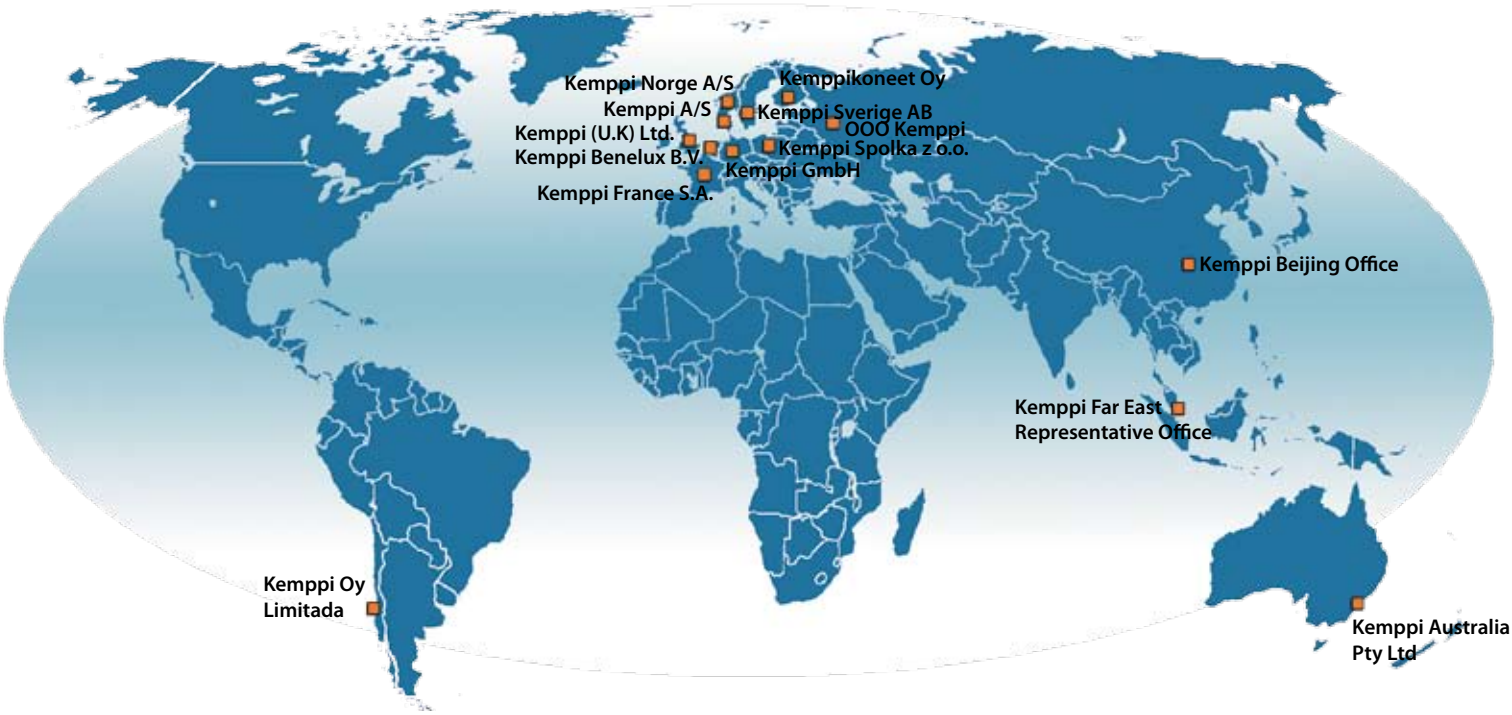
Kemppi Beijing Office
Room 1602, Block A,
Wantone New World Plaza
No. 2, Fuwaidajie, Xicheng District
100037 Beijing
China
Tel. +86-10-6857 9113
+86-10-6857 9114
Telefax: +86-10-6857 8729
e-mail: sales.cn@kemppi.com

Kemppi Far East Representative Office
583 Orchard Road
Forum # 16-01 / 17-01
Singapore 238884
Tel. +65-7371 318
Telefax +65-7371 107
e-mail: sam.lim@kemppi.com

Contents

Kemppi – The Joy of Welding

Kemppi Oy is a pioneer in future welding technologies. Founded in 1949, this family-owned company is one of the world's leading manufacturers of arc welding equipment and related products. Although Kemppi operates all over the world, its headquarters and production plants are still located in Finland. Kemppi maintains sales companies in Finland, Sweden, Norway, Denmark, Germany, France, England, Holland, Australia, Poland, Chile and Russia as well as sales offices in China and Singapore.



KEMPPI
The Joy of Welding

Kemppi's values reflect company's development

of almost 60 years. These values form a basis for all of our activities:

Entrepreneurship
From the very beginning our company's success has been based on this value.
Believing in one's own capabilities forms a solid basis for the courage needed in new situations.
There is no entrepreneurship without risk taking.
Difficulties every once in a while are inevitable – true entrepreneurs come out even stronger and keep their spirits high.
Never give up the joy in whatever you do.

Innovation
Curiosity, energy and courage are needed when exploring the unknown.
True genius and madness are close.
Don't be afraid of making a mistake – just remember to learn from it.
Doing things differently from others can bring you far – just look at our own development.

Honesty
For Kemppi-people honesty comes naturally – Finland is known as the world's least corrupted country.
Being honest with yourself is a pre-requisite for being honest with others.
Honesty always pays off.
Honesty is linked with reliability – we keep our promises.

Respect for the individual
We are all different.
A successful team is a combination of people with different qualities.
Good decisions are made when several opinions are heard and taken into consideration.
Understanding what others do and why, makes co-operation easier – both within our international company and with our customers.

Our vision:

„We are the preferred choice for customers by providing the best solutions for productive welding – our focus is on technology leadership, customer service, flexibility and fast reaction speed."

General about welding torches

Overview

This product catalogue contains information on the characteristics, applications, maintenance and spare parts of Kemppi welding torches.

Faultless operation of the torch and high-quality design combined with ergonomics are of primary importance for successful welding and comfortable work experience. Therefore, one should take the time to carefully select the correct torch type.

The task of the torch is to convey the welding current, shielding gas and filler material, if necessary, to the work piece. The torch, therefore, is the part of the welding equipment that is located closest to the arc and is therefore most exposed to heat and spatter.

If you follow Kemppi's instructions on the maintenance, servicing and spare part acquisition for the torch, you can increase the useful life of the torch while making your work more comfortable and productive.

Torch or gun?

In the common language usage, there is a difference between a welding torch and a welding gun.

A welding torch is usually the torch used in TIG welding. This term is often also used in the general meaning both MIG gun and TIG torch.

A welding gun only refers to the gun-like welding torch used in MIG welding, which operates significantly differently than a TIG torch.

The torch cable connects the welding torch and the welding machine. It is usually a multi-purpose cable through which the weld piece gets the current needed to produce the arc, the control current for the operating switch, the shielding gas, cooling liquid if any and the filler wire used in MIG/MAG welding.

Air or liquid cooling?

The welding arc and the torch's voltage losses may significantly heat the torch during the work. Therefore the cooling of the torch must be the more powerful the higher welding power and the hotter arc are used. The cooling requirement must be carefully considered when selecting the torch.

At low welding powers, air cooling is sufficient. In this case, a significant part of the torch's heat is transmitted to the surrounding air. Furthermore, the shielding gas that flows through the torch will cool down the torch handle and tip. This is a good and economic cooling method, where no separate cooling mechanism is needed.

At greater welding powers, a liquid-cooled torch must be used. In this case, the welding equipment will have a separate cooling unit, which pumps cooling liquid to the torch via the multi-purpose cable. Another benefit of liquid cooling is its greater cooling power as well as lighter and more flexible welding cable, as the cross-section of the power cable is then smaller.

One should bear in mind, though, that pure water is not suitable as a cooling liquid, because it can freeze. The cooling liquid must be the ethanol mix referred to in the operating manual.

Taking care of the sufficient cooling power of the welding torch increases the welding comfort and prolongs the useful life of the consumable parts of the torch.

Liquid-cooled Kemppi torches are equipped with the W label, such as the MIG gun PMT 52W and the TIG torch TTK 350W.

Torch characteristics

The technical specifications of a welding torch may contain certain electro-technical concepts and operational features. The following explains some of the basic technical data that welding torch characteristics involve.

The **duty cycle** refers to the time the device can continuously be in operation during a ten-minute working period when using a specific welding power. For example, the duty cycle 60% means that the device can be used for 6 minutes, after which it needs to cool for 4 minutes.

Load capacity refers to how great a duty cycle can be attained at different welding currents. For example, the marking 200A (60%) means that the torch has 60-percent duty cycle at a welding current of 200 amperes.

The **2T function** refers to 2-touch welding; welding begins when you press the torch trigger and ends when you release the trigger.

The **4T function** refers to 4-touch welding; the shielding gas will start to flow when you press the torch switch, and the welding begins when you release the switch. When you press the switch again, welding ends. The shielding gas will flow until you release the switch for the second time.

Remote control refers to a torch feature where the operation of the welding device can be controlled with a switch in the torch or with a remote control unit that can be connected to the torch.

The **euro connector** is a fast and easy-to-use connector type for connecting the torch cable to the wire feeder.

The **length of the torch** refers to the length of the torch cable. A long cable gives you better reach but also causes voltage loss and presents challenges to wire feeding.

Operating safety and ergonomics

- Exercise caution when handling parts heated. The end of the torch and the work piece will heat during use to a burning temperature.
- Keep the torch cable and the earthing cable as close to each other as possible and straighten any looped welding cables. This minimises your exposure to harmful magnetic fields, which may interfere with a pacemaker, for example.
- Ensure that cables or welding torches are not squashed by heavy objects and that they are not exposed to sharp edges or a hot work piece.
- Make sure that faulty and damaged welding torches are changed immediately as they can be lethal and may cause electrocution or fire.
- Never touch the work piece and welding rod, welding wire, welding electrode or contact tip at the same time.
- Do not put the welding torch or earthing cable on the welding machine or other electric equipment.
- If you load the welding torch in excess of its recommended value, the torch will overheat, which reduces the comfort of use and causes extra pauses in the welding.

You should also take ergonomic factors into consideration in selecting the torch. For example, a winding or bending torch neck helps you find a comfortable working position. A long torch cable, on the other hand, reduces the need to move in difficult work situations. In addition, the cable of a liquid-cooled torch is lighter to carry than that of an air-cooled one.

MIG/MAG WELDING

Overview

The torch used in MIG/MAG welding is called a welding gun. It is used for conveying the welding current, shielding gas and the filler wire to the work piece.

A high-quality welding gun and cable are of primary importance to successful MIG/MAG welding. Non-obstructed and smooth wire run from the wire feeder via the torch cable to the gun and to the weld pool are required for good welding results.

The significance of the gun and the torch cable is emphasised in synergic welding machines and particularly in double-pulse MIG welding, where the feed speed of the filler wire is changed in pulses. In that use, rapid reactions in wire feed are very important to successful welding.

MIG gun parts

The **wire liner** is a tube usually made of steel spiral or plastic located inside of a multi-purpose cable, through which the filler wire moves from the wire feeder to the gun.

The DL wire liners developed by Kemppi have a durable and low-friction special Teflon inner surface, and therefore they are well suited for long welding cables, too. DL wire liners are intended for stainless steel wires and aluminium wires.

The **gas nozzle** is an exterior nozzle at the tip of the gun that helps the shielding gas spread evenly to the weld area.

The task of the **gas diffuser** is to diffuse the shielding gas in the gas nozzle so that it flows out smoothly and without swirl to protect the weld pool. It also isolates the live interior parts from the non-voltage exterior parts.

The **contact tip** is a live nozzle piece made of copper within the gas nozzle. Its task is to convey the filler wire to the weld area and transfer the welding current to the filler wire. The diameter of the contact tip hole determines the filler wires that the nozzle is suitable for.

The **contact tip adapter** connects the contact tip to the current part of the gun neck. It also guides the wire feeder to the middle line of the gun.

The **insulating bush** and **insulating ring** isolate the live parts from the gas nozzle and from the external parts of the gun neck.

MIG gun maintenance

The welding end of the welding gun, i.e., the parts close to the arc, are subject to high temperatures and great temperature variations. Therefore you need to pay special attention to the care of the welding end.

Check the condition of the gas and contact tip regularly. Remove welding spatter but do not hit the work piece with the gun. Also avoid damaging the nozzle surfaces.

Great temperature changes may loosen the fastening of the nozzles, and therefore you should check the fastening before you start welding.

Clean the wire liners with pressurised air whenever you change the wire reel. Replace the wire liner with a new one, if necessary.

For more information, refer to the operating manuals of Kemppi machines and Kemppi's Web site at www.Kemppi.com.

The gun product groups MMT, PMT, MMG and WeldSnake are presented below. These product groups are intended for MIG/MAG welding.

Characteristics of Kemppi MIG guns

Easy-to-use connector

Almost all Kemppi MIG guns are equipped with the euro conector. It is a snap connector with which you can easily connect the gun to the welding machine. The gold-coated contact pins as well as the wire liner end pieces and tightening bushes that are independent of the wire diameter, guarantee rapid connection and reliable electric contact with Kemppi MIG guns under all circumstances.

Reliable wire run

The wire liners of Kemppi guns use thick spiral steel with anti-oxidation surface. The sturdy structure of the wire liner reduces its tendency to bend or stretch during installation. Each wire liner has the same colour as the corresponding feed roll, which makes it easy and fast to replace consumable parts in wire feed mechanism.

DL wire liner

The DL wire liner developed and patented by Kemppi has a two-layer plastic tube throughout the torch cable length with low-friction special Teflon inner surface. It provides reliable wire feed even with long torch cables.

Sturdy structure

The structure of the guns has been designed for heavy-duty use down to the smallest detail. For example, the switch is protected against shock and the overheating guard inside the machine-end connector of PMT guns will abort wire feed immediately if a fault is detected in the cooling of the gun.

Non-turbulent flow of shielding gas

Particular attention has been paid to the smooth shielding gas flow. The gas diffuser at the gun end minimises the turbulences in the flow of the gas and feeds the shielding gas smoothly to the gas nozzle. Liquid-cooled cables are equipped with a separate shield gas hose.

Lightweight and ergonomic

Kemppi guns are known for their excellent ergonomics. The shape of the handle and the dimensions and centre of gravity of the gun have been developed so as to minimise the strain caused by the gun to the welder's wrist.

The ergonomic structure of the gun is an essential factor in attempting to reduce stress-induced damage in welding, which often involves working prolonged periods of time in one position.

Top-class comfort

Finished details, such as roughened handle, unrestricted turning of gun handle and the 360-degree turn of air-cooled gun necks allow for firm grip, good reach and a comfortable working position even in difficult places. Thanks to these features, Kemppi's MIG guns are well suited also for position welding.

Remote control option

Kemppi's PMT guns can be equipped with an optional remote control unit situated in the gun handle. It can be used, for example, for adjusting the welding power and wire feed as well as for selecting a memory channel. Remote control reduces the need for the welder to move between the work piece and the welding machine.

Good availability of consumables

Kemppi guns are designed so that the consumable parts are compatible with a broad range of gun models. For example, you can use the same contact tips in all Kemppi MIG guns.

In addition, the low number of spare part types in the stock makes it easy for the customer to get the spare parts quickly. For instance, there are only two kinds of threads in the contact tips, M6 and M8. There are dedicated, stamped tip kits for different filler wire types.

Always use original Kemppi spare parts.

Easy serviceability

The serviceability of the guns is made easier by features such as replaceable parts in the hose kit even in air-cooled guns, and stainless steel contact tip connector surface, which is not as prone to damage as brass surfaces. Rapid cone connection and roughened surfaces make it easy to service the gas nozzle.

MMT GUNS

FOR MIG/MAG WELDING

Features

- Sturdy structure
- Ergonomic design
- DL wire liner
- Euro connector
- Easy serviceability

Applications

- Kempact
- Kempomat
- Kempoweld
- All machines with the euro connector

Reliable MMT basic guns

Kemppi's MMT welding guns are reliable basic guns for MIG/MAG welding. They have been developed particularly for the Kempact, Kempomat and Kempoweld machines, but are also perfectly suitable for any MIG/MAG welding machine with a euro connector.

The MMT welding guns carry on the good reputation of discontinued, yet popular MT guns as the basic guns for MIG/MAG welding.

This model combines the finished design and ergonomics of PMT guns as well as years of development of the basic operating features of MT guns, such as reliability, durability and ease of use.

The simple structure and water hose caps make it easy to service the gun. In addition, the availability of consumable parts is good, as MMT guns use the same parts as the PMT models.

MMT is a basic MIG/MAG gun, which still has the typical features of Kemppi guns, such as the 360-degree turn of the gun neck for air-cooled models, excellent gas shielding and durable structure.

Technical specifications and order data

		MMT 25	MMT 27	MMT 32	MMT 35	MMT 42	MMT 30W	MMT 42W	MMT 52W
Load capacity, Ar + CO_2	35 %	250 A	270 A	320 A	350 A	420 A	-	-	-
	100 %	-	-	-	-	-	300 A	400 A	500 A
Cooling		Air	Air	Air	Air	Air	Liquid	Liquid	Liquid
Filler wires	ø mm	0.6 - 1.2	0.6 - 1.2	0.8 - 1.6	0.8 - 1.6	0.8 - 1.6	0.8 - 1.6	0.8 - 1.6	0.8 - 1.6
Length / Ordering number	3 m	6252513MMT	6252713MMT	6253213MMT	6253513MMT	6254213MMT	6253043MMT	6254203MMT	6255203MMT
	4.5 m	6252514MMT	6252714MMT	6253214MMT	6253514MMT	6254214MMT	6253044MMT	6254204MMT	6255204MMT

PMT GUNS

FOR MIG/MAG WELDING

Features

- Sturdy structure
- Ergonomic design
- DL wire liner
- Euro connector
- Remote control
- Overheating guard
- Easy serviceability

Applications

- Kempact
- Weldforce
- FastMig Synergic
- ProMig and Pro Evolution
- All machines with the euro connector

The professional's PMT guns

Kemppi's PMT welding guns are the choice of the true professional. Their excellent ergonomics combined with their design bring a new type of comfort of use to welding. The flexible frame and their light weight improve performance by reducing the amount of physical strain on the welder's hand.

The PMT gun range is an excellent choice for demanding professional use. The small gun neck allows for good reach even in tight places without compromising wire feed, current transfer and gas shielding.

Liquid-cooled models provide additional operating safety thanks to their overheating guard, which stops the wire feed if there is a fault in the cooling system.

In air-cooled devices, the neck turns the full 360 degrees, which makes position welding easier and allows for welding the overhead weld without having to turn the wrist to a non-ergonomic position.

It is also possible to connect an RMT remote control unit to PMT guns, which allows for controlling a wide variety of Kemppi welding machine models directly from the PMT gun. The remote control unit can adjust the wire feed speed and, in synergic models, the welding power. It can also be used for selecting the memory channel used in welding.

Technical specifications and order data

		PMT 25	PMT 27	PMT 32	PMT 35	PMT 42	PMT 30W	PMT 42W	PMT 52W
Load capacity, Ar + CO_2	35 %	250 A	270 A	320 A	350 A	420 A			
	100 %						300 A	400 A	500 A
Cooling		gas	gas	gas	gas	gas	liquid	liquid	liquid
Filler wires	ø mm	0.6 - 1.2	0.6 - 1.2	0.8 - 1.2	0.8 - 1.6	0.8 - 1.6	0.8 - 1.6	0.8 - 1.6	0.8 - 1.6
Length / Ordering number	3 m	6252513	6252713	6253213	6253513	6254213	6253043	6254203	6255203
	4.5 m	6252514	6252714	6253214	6253514	6254214	6253044	6254204	6255204

The optional remote control unit RMT 10 (6185475). The gun's standard delivery has welding set for steel wire (see Consumable parts)
The remote control unit and the overheating guard only work in certain welding devices (see page 16).

WELDSNAKE™ GUNS

FOR MIG/MAG WELDING

Features

- Lightweight
- Ergonomic design
- Euro connector
- DL wire liner
- Long reach
- Easy serviceability

Applications

- Aluminium and stainless steel
- All machines with the euro connector

WeldSnake™ provides more reach

The DL wire liner developed and patented by Kemppi makes it possible to use exceptionally long cables in MIG/MAG welding.

The 6 and 8 metre cables of the WeldSnake™ gun provide considerably more reach for welding aluminium and stainless steel. This reduces the need to move the welding equipment, which increases the comfort of welding. In addition, the lightweight structure of the gun makes it easy to handle even in tight places.

The consumables and spare parts of this gun model are compatible with Kemppi's PMT and MMT guns, which guarantees good availability of spare parts and easy serviceability of the gun.

For more information on the DL wire liner, see "Leading wire liner technology" in this product catalogue.

Technical specifications and order data

WeldSnake™		35	30W	42W
Load capacity, Ar + CO_2		300 A/35 %	250 A (100 %)	300 A (100 %)
Filler wires	Ss	1.0	1.0 - 1.2	1.0 - 1.2
	Al	1.2	1.2 (1.6)	1.2 (1.6)
Cooling		Air	Liquid	Liquid
Order information	6 m Al 1.2	6253516A12	6253046A12	6254206A12
	6 m Ss 1.0	6253516S10	6253046S10	6254206S10
	6 m Ss 1.2	-	6253046S12	6254206S12
	8 m Al 1.2	-	6253048A12	6254208A12
	8 m Ss 1.0	-	6253048S10	6254208S10
	8 m Ss 1.2	-	6253048S12	6254208S12

The ordering number comprises the gun, the DL Teflon wire liner and 5 contact tips.

MMG GUNS

FOR MIG/MAG WELDING

Features

- Bending support
- Lightweight and delicate handle
- Ergonomics
- Smooth wire feed
- Impressive, yet practical design

Applications

- MinarcMig Adaptive 150
- MinarcMig Adaptive 180

New MMG guns

Kemppi's MMG 18 welding gun has evolved into a new shape, as Kemppi developed for it a completely reformed successor with new appearance and features: the MMG 20 gun. It has considerably smoother design and goes therefore well along with the MinarcMig Adaptive 180 welding machine, which has been awarded for its good design and usability.

The MMG 20 is also equipped with gas pipe material that tolerates heat very well. Thanks to its renewed structure, also the surface temperature of the handle is lower than before.

The gun handle is extended with a bending support that improves the ergonomics of working. It allows for more versatile welding positions without causing a sharp bend in the cable behind the handle. This also makes wire feed smoother than before.

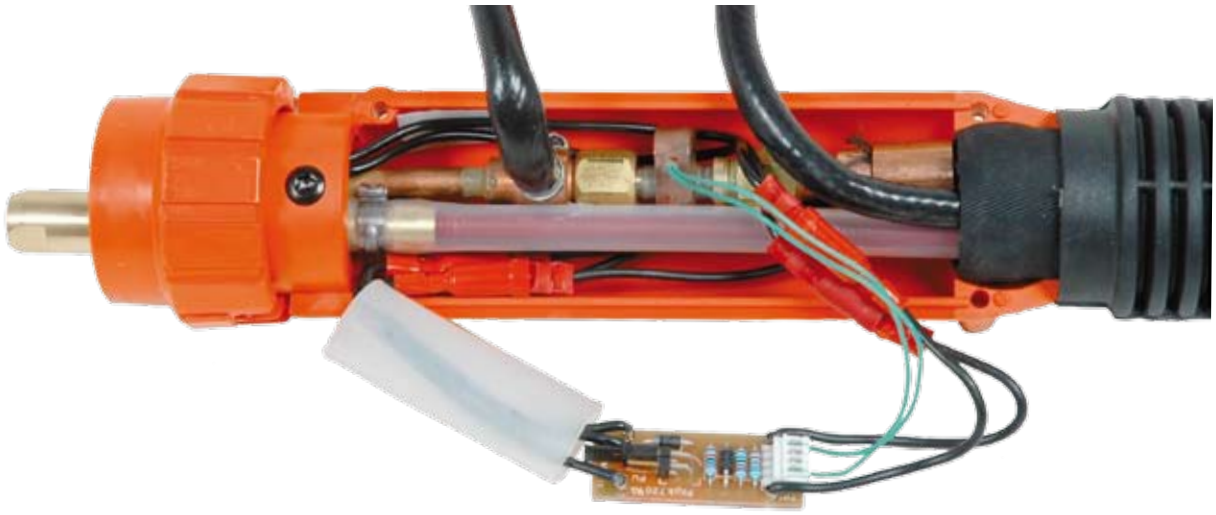
The MMG 20 welding gun is included in the standard MinarcMig Adaptive 180 delivery.

Technical specifications and order data

		MMG18	MMG20
Load capacity, Ar + CO_2		(150 A/35 %)	(180 A/25 %)
Cooling method		Air	Air
Filler wires to be welded, ø	Fe	0.6 - 1.0 mm	0.6 - 1.0 mm
	Ss, Al		0.8 - 1.0 mm
Length / Ordering number	3 m	6250180	6250200

PMT GUN SPECIAL FEATURES

THE RMT 10 REMOTE CONTROL UNIT AND OVERHEATING GUARD



The RMT 10 gun remote control unit

Kemppi's PMT welding guns can be equipped with the RMT 10 remote control unit. It allows for adjusting certain wire feeder and power source functions straight from the gun.

The gun remote control unit makes welding faster and reduces the need to move between the work piece and the welding machine. The remote control unit is installed in the handle of the gun.

The following welding machines allow the RMT 10 gun remote control unit to adjust the welding power and wire feed speed.

- Kempact Pulse 2800 Automotive

The following welding machines allow the RMT 10 gun remote control unit to adjust the welding power and wire feed speed as well as the selection of the memory channel.

- Promig machines
- Kempact Pulse 3000
- WeldForce KWF 200 and 300
- FastMig Synergic machines with the MSF 53, MSF 55 or MSF 57 wire feeder and the SF 52 or SF 53 control panel.

Overheating guard

Kemppi's liquid-cooled PMT guns (W models) are equipped with a special overheating guard. Its purpose is to prevent overheating of the gun and increase the comfort and safety of the welder's work.

The overheating guard is a mechanism inside the machine-end connector of the gun cable, which stops the machine if the circulation of the cooling liquid is prevented.

The overheating guard works with the following welding machines:

- Promig machines
- Kempact Pulse 3000 WeldForce KWF 200 and 300
- WeldForce KWF 200S, 300S, 200A and 300A
- FastMig Synergic machines with the MSF 53, MSF 55 or MSF 57 wire feeder and the SF 52 or SF 53 control panel.

Recommendation table of MIG guns

	MMT25	MMT 27	MMT 32	MMT 35	MMT 42	MMT 30W	MMT 42W	MMT 52W	PMT 25	PMT 27	PMT 32	PMT 35	PMT 42	PMT 30W	PMT 42W	PMT 52W	WeldSnake 35	WeldSnake 30W	WeldSnake 42W
Kempomat 2100	■																		
Kempomat 2500	■	■	■														■		
Kempomat 3200			■	■													■		
Kempomat 4200				■	■												■		
Kempomat 2001	■	■																	
Kempomat 2501	■	■	■																
Kempomat 1701, KMG20	■																		
Kempoweld 3200			■	■													■		
Kempoweld 3200W						■	■											■	■
Kempoweld 4200				■	■												■		
Kempoweld 4200W							■	■											■
Kempoweld 5500W								■											■
Kempoweld 2501, KMG25	■	■	■																
Kempact MIG 2520	■	■	■																
Kempact MIG 2530	■	■	■																
Kempact Pulse 2800 Automotive	■	■	■	■					■	■	■	■					■		
Kempact Pulse 3000	■	■	■	■		■			■	■	■	■		■			■	■	
FastMig KM 300, KM 400, KM 500			■	■	■	■	■	■									■	■	■
FastMig KMS 300, KMS 400, KMS 500											■	■	■	■	■	■	■	■	■
WeldForce KPS 3500, KPS 3500 MVU			■	■		■	■				■	■		■	■		■	■	■
WeldForce KPS 4500, 4500MVU				■	■		■	■				■	■		■	■	■	■	■
WeldForce KPS 5500, 5500MVU				■	■		■	■				■	■		■	■	■	■	■
Kemppi Pro Evolution 3200, 3200 MVU											■	■		■	■		■	■	■
Kemppi Pro Evolution 4200, 4200 MVU												■	■		■	■	■	■	■
Kemppi Pro Evolution 5200, 5200 MVU												■	■		■	■	■	■	■


MINARCTIG
KEMPPI

TIG WELDING

Overview

A TIG torch differs from a MIG/MAG gun both in its structure and functioning. In TIG welding, the weld seam is fused together either with the welding arc alone or with the arc and filler wire.

The TIG welding torch works as the holder of the welding electrode and also conveys the shielding gas to the weld area.

Unlike in MIG/MAG welding, no feeder is usually used in TIG welding for feeding the filler wire. Instead, the wire is fed manually. Therefore, a wire liner is not needed in the TIG torch and cable.

Parts of a TIG welding torch

The **electrode** conveys the welding current to the arc. The electrode is a metal rod made of tungsten or tungsten alloy with very high melting point. The TIG in the name of the welding method comes from the words "tungsten inert gas".

The **torch body** is a central part of a TIG torch. All other parts of the torch are attached to it.

The welding electrode is inserted through a **tightening bush** and **tightening bush housing** inside the torch body to an **electrode shield**, which is turned to tighten the electrode in place.

The tightening bushes, tightening bush housings and electrode shields are available in different sizes. The tightening bush and its housing must be replaced if you want to use a different thickness of welding electrode.

There are different lengths of electrode shields for different welding tasks. The use of long electrode shields is not always possible in tight places.

There is a **gas nozzle** at the torch head through which the shielding gas flows to the welding area. The gas nozzle of a TIG torch is usually made of a ceramic material.

There are also available tightening bush housings with a **gas lens**. The shielding gas flows through the net-like structure of the lens smoothly and without swirls to protect the weld pool.

The **insulating ring** between the gas nozzle and the torch body isolates the live parts of the torch from the voltageless ones. It also protects the torch body from overheating.

TIG welding torch maintenance

The welding end of the TIG torch, i.e. the parts close to the arc, are subject to high temperatures and great temperature variations. Therefore you need to pay special attention to the care of the welding end.

Regularly check the insulation of the welding end and the suitability of the parts to the work piece and the welding electrode. It is recommended that you keep a sufficient supply of consumable parts of different sizes at hand.

Great temperature changes may loosen the fastening of the nozzles, and therefore you should check the fastening before you start welding.

Make sure that the electrode is the right size for the job and has been sharpened appropriately to the welding job. For more information, refer to the product manuals of Kemppi machines and Kemppi's Web site at www.kemppi.com.

Kemppi's torch series TTK, TTC and scratch TIG torches for TIG welding are presented below.

Features of Kemppi's TIG torches

Handle that fits the hand

The shape and length of Kemppi's TIG torches make the welding grip natural and ergonomic. Roughened handle surface guarantees a firm grip, while the movable finger supports allow the welder to adjust the balance so that it fits the hand perfectly.

Good welding position

The torch neck can be turned the full 360 degrees, which guarantees that an optimal welding position can be found under all circumstances. The neck angles are 90 or 105 degrees depending on the type.

There are also special neck models that make it easier to reach the work piece and the visibility of the weld seam in tight grooves and particularly in pipe welding.

The S type label means that the torch has a pivot-type neck while torches with the F label have a bending neck.

Cool torch handling

Kemppi's TIG torches have a handle that is well protected against overheating. The great cross-section of the power cable reduces the temperature increase in the handle.

The cable only has 2 metres of water hose. Thanks to the special cable structure, the temperature of the cooling liquid remains low. Furthermore, the neck structure minimises the conduction of heat to the torch handle, which itself is made of a material with low thermal conductivity.

The torches also allow for pulling out the torch head so that the radiation from the arc does not heat the welder's glove hand too much. The pull-out torch head also increases reach in difficult welding situations.

Light to use even in difficult places

Kemppi's TTK and TTC torches have a patented rubber joint extension, which allows sharp bending of cable without effort. The torch does not put stress on the welder's hand even in hard conditions. In addition, the gas and water hoses are made of soft materials that allow for bending the torch according to the welding needs.

Reach out in TIG welding

Kemppi's torches reach far. The standard torch cable can be up to 16 metres long. The temperatures of the torch head and the handle are independent of the torch length in liquid-cooled models.

Easy-to-use switch

The shape of the torch switch and the adjustable finger supports allow for adjusting the torch for different grips and fingers. The switch surface is long and roughened, so that you find always a suitable spot where to press it. The switch is also impact-proof and has a distinct operating click tone, which further increase its ease of use.

Reliability with TTC machine connectors

Kemppi's TTC torches are equipped with a machine connector with a special bending support. It prevents the hoses from bending too sharply at the welding machine end and further increases the safety and reliability of the torch. The machine connector makes it easy to tighten the torch to the welding machine without any tools.

Optional TTC torch remote controller

Kemppi's TTC torches allow the use of an optional remote control unit. It is easy to install in the torch with screws.

The remote control unit RTC 10 has an adjustment wheel, which allows you to adjust the welding current in the range 1–10. The RTC 20 model allows you to increase and decrease the welding current as well as select a memory channel of the welding machine. The control device is easy to install in the torch handle with screws.

Good availability of consumable parts

A plentiful selection of consumable parts is available for the torches for all uses and weld shapes. The gas lens is an accessory that ensures efficient and non-swirled flow of the shielding gas to the weld pool, which makes it easy to weld tight grooves.

All Kemppi torches have the same type of consumable parts, which guarantees good availability.

TTK TORCHES
FOR TIG WELDING

Features

- Good interconnectibility with different welding machines
- Broad selection of features for varying welding needs
- Good availability of consumable parts
- Natural and ergonomic welding grip

Applications

- MasterTig
- MasterTig AC/DC
- ProTig

The connectible TTK torches

Kemppi's TTK welding torches are versatile basic torches for TIG welding with good availability of consumable parts.

The machine connector of the TTK torches conforms to the type and sizes of torch connectors typically used in welding machines. Therefore, Kemppi's TTK torches are broadly compatible with welding machines from Kemppi and other manufacturers.

The torches are available for different welding currents and cable lengths. You can select from models with 4, 8 and 16-metre torch cables.

You can also choose a torch model equipped with a special S or F torch neck. They increase reachability and the visibility of the weld seam in tight spaces.

The cooling of the torch can be implemented with air or liquid. Liquid-cooled torches can be identified with the letter W (for water) in the type label.

A torch remote controller cannot be connected to TTK torches.

Technical specifications and order data

		TTK 130	TTK 130F	TTK 160	TTK 160S	TTK 220	TTK 220S	TTK 300W	TTK 350W	TTK 250WS
Load capacity	DC -40 % ED	130 A	130 A	160 A	160 A	220 A	220 A	300 A	350 A	250 A
	DC -100 % ED	-	-	-	-	-	-	200 A	250 A	200 A
	AC 40 % ED	100 A	100 A	120 A	110 A	160 A	120 A	250 A	300 A	250 A
	AC 100 % ED	-	-	-	-	-	-	140 A	200 A	140 A
Electrode sizes ø mm		1.0…2.4	1.0…2.4	1.0…2.4	1.0…2.4	1.0…3.2	1.0…3.2	1.0…2.4	1.0…4.0	1.0…4.0
Connection to TIG-unit	gas/current	R¼	R¼	R¼	R¼	R¼	R¼	-	-	-
	water/current	-	-	-	-	-	-	R3/8	R3/8	R3/8
	gas	-	-	-	-	-	-	R¼	R¼	R¼
Length / Ordering Number	4 m	627063004	627063104	627066004	627066204	627072004	627072304	627080504	627085504	627075704
	8 m	627063008	627063108	627066008	627066208	627072008	627072308	627080508	627085508	627075708
	16 m	627063016	627063116	627066016	627066216	627072016	627072316	627080516	627085516	627075716

TTC TORCHES

FOR TIG WELDING

Features

- Torch remote controller compatible
- Easy-to-use machine connector
- Good availability of consumable parts
- Natural and ergonomic welding grip

Applications

- MinarcTig
- MasterTig MLS
- MasterTig MLS AC/DC

Special features of TTC torches

Kemppi's TTC welding torches are intended for use with Kemppi's MLS™ welding machines. The difference to the TTK torches is in the machine connector and the compatibility with the RTC 10 and RTC 20 torch remote controllers. The availability of consumable parts is good, as the TTC torches use the same consumables as the TTK torches.

The machine connector of a TTC torch is easy to connect, and it has a special bending support, which prevents the cables from bending too much at the welding machine end.

The torches are available for different welding currents and cable lengths. You can select from models with 4, 8 and 16-metre torch cables.

You can also choose a torch model equipped with a special S or F torch neck. They increase reachability and the visibility of the weld seam in tight spaces.

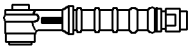
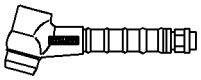
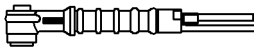
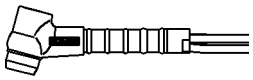
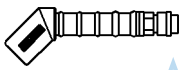
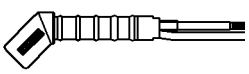
The torches are available with air or liquid cooling. Liquid-cooled torches can be identified with the letter W (for water) in the type label.

Technical specifications and order data

		TTC 130	TTC 130F	TTC 160	TTC 160S	TTC 220	TTC 200W	TTC 250W	TTC 250WS
Load capacity	DC -40 % ED	130 A	130 A	160 A	160 A	220 A	300 A	350 A	250 A
	DC -100 % ED	-	-	-	-	-	200 A	250 A	200 A
	AC 40 % ED	100 A	100 A	120 A	110 A	160 A	250 A	300 A	250 A
	AC 100 % ED	-	-	-	-	-	140 A	200 A	140 A
Electrode sizes ø mm	ø	1.0…2.4	1.0…2.4	1.0…2.4	1.0…2.4	1.0…3.2	1.0…2.4	1.0…4.0	1.0…4.0
Connection to TIG-unit	gas /current	R¼	R¼	R¼	R¼	R¼	R¼	R¼	R¼
	water	-	-	-	-	-	snap conn.	snap conn.	snap conn.
Length / Ordering number	4 m	627013004	627013104	627016004	627016204	627022004	627020504	627025504	627025704
	8 m	627013008	627013108	627016008	627016208	627022008	627020508	627025508	627025708
	16 m	627013016	627013116	627016016	627016216	627022016	627020516	627025516	627025716

The RTC 10 (6185477) and RTC 20 (6185478) remote control units are available as options.

TORCH NECKS

TTC/TTK		TTC 130 / TTK 130	TTC 130F / TTK 130F	TTC 160 / TTK 160	TTC 160S / TTK 160S	TTC 220 / TTK 220	TTK 220S	TTC 200 W / TTK 300 W	TTC 250 W / TTK 350 W	TTC 250 WS / TTK 250 WS
□	4285650 	■	●	●	●	●	●			
□	9878040 (Flex) 	●	■	●	●	●	●			
	4270580 	●	●	■	●	■	●			
□	4285660 							■	●	●
	4270600 							●	■	●
	4276530 	●	●	●	■	●	■			
□	4276300 	●	●	●	■	●	●	●	●	■
	4276290 	●	●	●	●	●	■	●	●	●
	4276550 							●	●	■
■	Standard delivery									
●	Accessory									
□	Small consumable parts									

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Kemppi's TIG torches

FOR MMA WELDING POWER SOURCES

Scratch and contact TIG torches

Kemppi's TIG torch range includes three torches equipped with a torch neck shielding gas valve. This makes it possible to use these TIG torches also with MMA power sources.

In manual metal arc welding (MMA), the TIG arc can normally be ignited only with the scratch method, and therefore these torches are called scratch-start TIG torches. The arc is ignited by scratching the work piece with the electrode and turned off by pulling the torch away from the work piece.

NOTE: When using scratch-start ignition, the torch remains live after welding.

The TTC 220GV torch is an exception to this rule. It allows for using scratch-start ignition and is live only when the switch is pressed.

TTM 15 V torch

The type label letter V means that there is a valve in the torch neck for the shielding gas. The torch is equipped with a 4-metre torch cable.

This torch model is suitable for use with all MMA welding power sources with a small cable connector. These are, for example, the Kemppi Master 1500 and Minarc 110, 140 and 150.

TTM 15 V BC torch

The type label letter V means that there is a valve in the torch neck for the shielding gas. The torch is equipped with a 4-metre torch cable.

This torch model is suitable for use with all MMA welding power sources with a big cable connector (BC = big connector). These are, for example, the Kemppi Master 2200, Master 2850 and Minarc 220.

TTC 220 GV torch

The type label letters GV mean that there is a valve in the torch neck for the shielding gas. The torch is equipped with a 4-metre torch cable.

This torch model is equipped with a big connector and is compatible with the following Kemppi welding machines: Master 2500 MLS™, Master 3500 MLS™ and Minarc 220.

Benefits of the TTC 220GV torch

- **Operational safety.** The arc will not ignite or burn if the switch is not pressed down.
- **Ease of use.** The welding current can be adjusted from the torch, as the torch handle comes with the RTC 10 remote control unit.
- **Versatility.** The torch remote controller can also be used for MMA welding.

Torch	Load capacity, DC-TIG	Machine connector	Part number
TTM 15 V	140 A (35 %)	Small	6271432
TTM 15 V BC	150 A (35 %)	Big	627143201
TTC 220 GV	220 A (40 %)	Big	627022304

Gun holders

GH30

Safety to welding work with Kemppi gun holders

Welding guns and torches often heat to dangerous temperatures during welding. The welder should therefore exercise caution in handling the torch.

Furthermore, the tip of the torch must be protected from excess impact to keep the torch operational.

Electrical safety regulations for welding work require that the welding gun and torch is never put on the welding machine or another electric device.

Therefore, to increase the safety of welding and prolong the useful life of welding torches, it is recommended that you use a gun holder in welding.

Kemppi has introduced a gun holder series with three holders: GH 10, GH 20 and GH 30. They are primarily intended for attaching to the welding machine, but the GH 30 model can be attached to the workbench, for example.

The GH gun holders can be installed to all MIG and TIG welding machines manufactured by Kemppi.

GH10

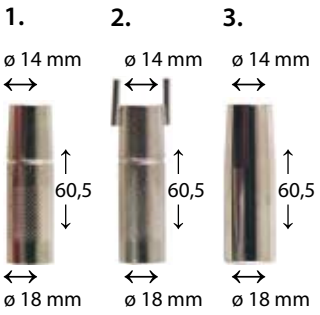
GH20

Part numbers for Kemppi gun holders

Gun holder	Part number
GH 10	6256010
GH 20	6256020
GH 30	6256030

Consumable parts, MIG

PMT 25, MMT 25



Gas nozzle	
1. 9580101*	Standard
2. 4113470	For spotwelding
3. 9580101E	Thick wall

Insulating bush
9591010*

Contact tip	
9876636*	1,0 mm / M6
See *Contact tips* on page 34.	

Contact tip adapter
9580173*

Insulating ring
9591079*

Locking spring
4275240*

Neck 45°
4153040*

Wire conduits			
4188581*	Spiral	0.9-1.2	3m/red
4188582*	Spiral	0.9-1.2	4.5m/red
Suitable liners: white, red, yellow, DL-teflon. See *Wire Liners* on page 33.			
* Standard delivery			

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PMT 27, PMT 32, PMT 30W, MMT 27, MMT 32, MMT 30W, WS 30W

Gas nozzle	
1. 4295760*	Standard / M8
2. 4295760L	Long
3. 4295760C	Conical
4. 4294970	Standard / M6

Contact tip	
9580123*	1.0 / M8

See *Contact tips* on page 34.

Contact tip adapter
4295740* M8
4294890 M6

Gas diffuser
4294880*
4294880CER

1. Neck 50°	
3146800	MMT 30W/PMT 30W/WS 30W

2. Neck 50°	
3146780	MMT 27/PMT 27/MMT 32/PMT 32

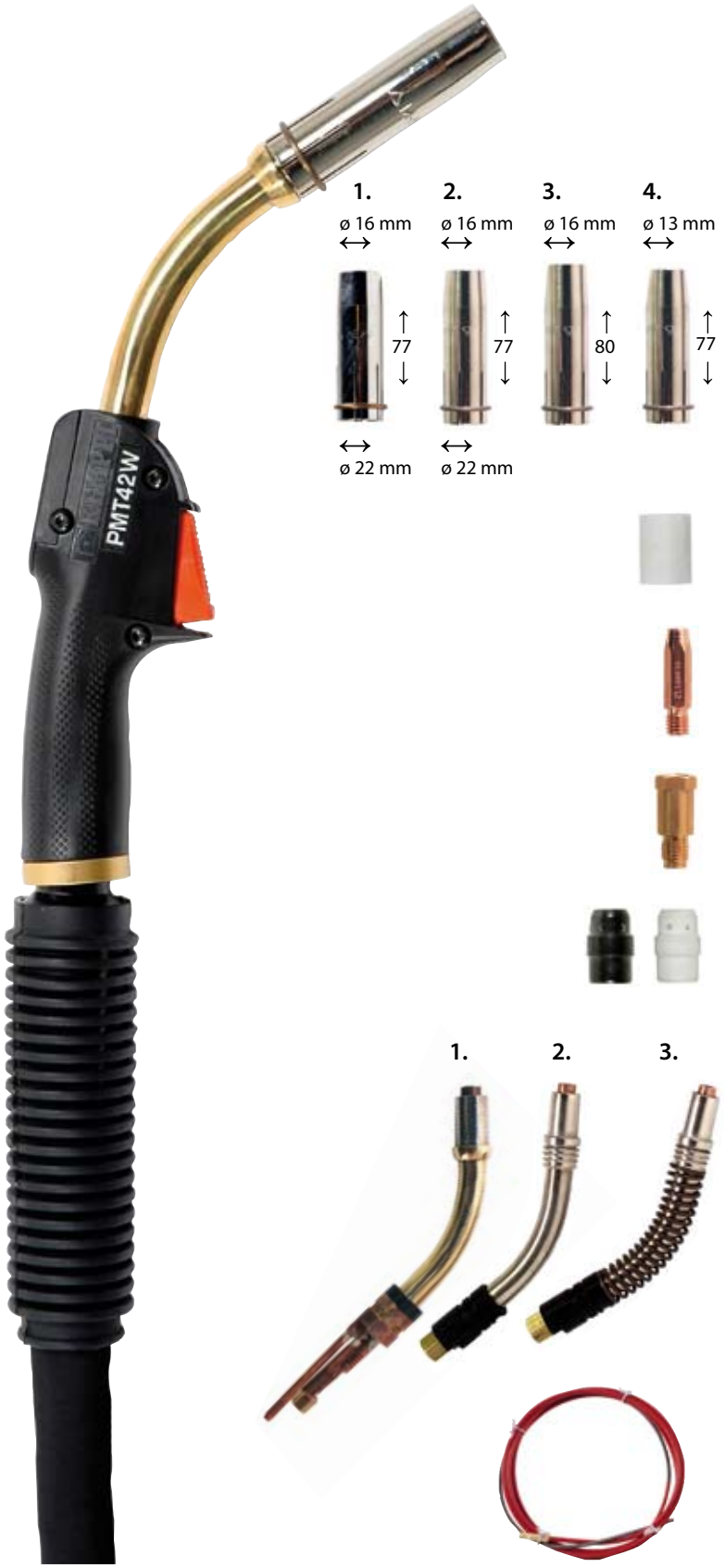
Wire conduits			
4188581*	Spiral	0.9-1.2	3m/red
4188582*	Spiral	0.9-1.2	4.5m/red

Suitable liners:
white, red, yellow, DL-teflon.

See *Wire Liners* on page 33.

* Standard delivery/WeldSnake according to filler wire.
See table on page 33.

PMT 35, MMT 35, WS 35, PMT 42W, MMT 42W, WS 42W



Gas nozzle	
1. 4307050*	Standard, isolated
2. 4300260	Standard
3. 4300260L	Long
4. 4300260C	Conical

Insulating bush
4307020*

Contact tip
9580123* 1.0 / M8
See *Contact tips* on page 34.

Contact tip adapter
4295740* M8

Gas diffuser	
4298290*	MMT 42W/PMT 42W/WS 42W
4298290CER*	MMT 35/PMT 35/WS 35, ceramic

1. Neck 50°	
3149600*	MMT 42W/PMT 42W/WS 42W

2. Neck 50°	
3151110*	PMT 35/MMT 35

3. Neck 50°	
4304950	PMT 35/MMT 35

Wire conduits			
4188581*	Spiral	0.9-1.2	3m/red
4188582*	Spiral	0.9-1.2	4.5m/red

Suitable liners:
white, red, yellow, DL-teflon.
See *Wire Liners* on page 33.

* Standard delivery/WeldSnake according to filler wire.
See table on page 33.

PMT 42, MMT 42, PMT 52W, MMT 52W

Gas nozzle

1. 4307070*	Standard, isolated
2. 4300380	Standard
3. 4300380L	Long
4. 4300380C	Conical
5. 4308190	Special long (89.5 mm)

Insulating bush

4307030*

Contact tip

9580124* 1.2 / M8

See *Contact tips* on page 34.

Contact tip adapter

4300390 M8*	PMT 52W/MMT 52W
4304600 M8*	PMT 42/MMT 42

Gas diffuser

4298300*	PMT 52W/MMT 52W
4298300CER*	PMT 42/MMT 42

1. Neck 50°

3149640*	PMT 52W/MMT 52W

2. Neck 50°

3151140*	PMT 42/MMT 42

3. Neck 50°

4304960	PMT 42/MMT 42

Wire conduits

4188581*	Spiral	0.9-1.2	3m/red
4188582*	Spiral	0.9-1.2	4.5m/red

Suitable liners:
white, red, yellow, DL-teflon.
See *Wire Liners* on page 33.

* Standard delivery

MMG18, MMG20

Gas nozzle	
1. 9580101*	
2. 9580101E	Thick wall

Insulating bush
9591010*

Contact tip
9876635* 0.8 / M6
See *Contact tips* on page 34.

Contact tip adapter
9580173* M6

Insulating ring, neck
9591079*

Locking spring
4275240*

Neck 45°
4153040*

Wire conduits			
4307650 *	Fe	0.6-1.0	3 m
4307660	Ss, Al	0.6-1.0	3 m

* Standard delivery

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Wire liners

Kemppi's wire liners are strong and durable. The sturdy and stiff spiral supports the filler wire excellently and prevents it from bending too much when installing in the gun. The liners have the same colour as the corresponding feed rolls of the same wire diameter in Kemppi wire feeders. The selection table for consumable parts includes the liner colours which fit to the gun in question. The liners are also suitable for welding of cored filler wires of the corresponding wire diameter. Kemppi's new solution for aluminium, stainless steel and acid-resistant steel welding is the two-layer DL-teflon liner. It is suitable for all common wire diameters and materials, and all Kemppi MIG guns.

Steel/cored wire	Filler wire ø	Order number 3 m	Order number 4.5 m
White	0.6 - 0.8	4188571	4188572
Red	0.9 - 1.2	4188581	4188582
Yellow	1.4 - 1.6 (1.2)	4188591	4188592
Green	1.6 - 2.0	4188601	4188602
Black	2.0 - 2.4	4188611	4188612
Blue	2.8 - 3.2	4188621	4188622
Aluminium			
DL-teflon liner	0.8 - 1.6	4300840	4300850
- Neck part (spiral/teflon)		4302150	4302150
Stainless steel			
DL-teflon liner	0.8 - 1.0	4302680	4302690
- Neck part (spiral/teflon)		4302740	4302740
DL-teflon liner	1.2 - 1.6	4302700	4302710
- Neck part (spiral/teflon)		4302750	4302750
WeldSnake™	**Filler wire ø**	**Order number 6 m**	**Order number 8 m**
DL-teflon liner /AL	1.0 - 1.6	4304100	4304110
DL-teflon liner /SS	1.0	4304120	4304130
DL-teflon liner /SS	1.2 - 1.6	4304140	4304150

Contact tips

When you replace the contact tip, always check the label on the tip to make sure that the part is suitable for the filler wire.

As a general rule, the contact tip hole must be 0.2–0.5 mm greater than the filler wire diameter.

M8 Standard contact tips M8 (DHP) for solid mild steel and flux cored wire				
Marking: Kemppi 1.2	Wire ø	Hole ø	Tolerance	Order number
	0.8	0.9	+0.1/-0.0	9580122
	0.9	1.05	+0.05/-0.02	9580121
	1.0	1.15	+0.05/-0.02	9580123
	1.2	1.4	+0.05/-0.05	9580124
	1.4	1.6	+0.05/-0.05	9580125
	1.6	1.8	+0.1/-0.0	9580126
	2.0	2.3	+0.0/-0.1	9580127
	2.4	2.7	+0.05/-0.05	9580128
	2.8	3.1	+0.1/-0.0	9580129
	3.2	3.6	+0.05/-0.05	9580130
Contact tips M8 (DHP) for Aluminium wire				
Marking: Kemppi 1.2 A	0.8	1.05	+0.05/-0.02	9580122A
	0.9	1.15	+0.05/-0.02	9580121A
	1.0	1.4	+0.05/-0.05	9580123A
	1.2	1.6	+0.05/-0.05	9580124A
	1.4	1.8	+0.10/-0.00	9580125A
	1.6	2.3	+0.00/-0.10	9580126A
Contact tips M8 (CuAg) for Fe and flux cored wire				
Marking: Kemppi 1.2 Ag	1.0	1.15	+0.05/-0.02	9580123AG
	1.2	1.4	+0.05/-0.05	9580124AG
Contact tips M8 (CuCrZr) for solid mild steel and flux cored wire				
Marking: Kemppi 1.2 CRZR	1.0	1.15	+0.05/-0.02	9580123ZR
	1.2	1.4	+0.05/-0.05	9580124ZR
	1.4	1.6	+0.05/-0.05	9580125ZR
Contact tips M8 (DHP) for stainless and high acid-resistant steel				
Marking: Kemppi 1.2 SS	0.8	1.15	+0.05/-0.02	9580122SS
	0.9	1.4	+0.05/-0.05	9580121SS
	1.0	1.6	+0.05/-0.05	9580123SS
	1.2	1.8	+0.10/-0.00	9580124SS
	1.6	2.3	+0.00/-0.10	9580126SS
M6 Standard contact tips M6 (DHP) for solid mild steel and flux cored wire				
Marking: Kemppi 1.2	0.6	0.8	+0.05/-0.02	9876634
	0.8	0.95	+0.05/-0.02	9876635
	0.9	1.05	+0.05/-0.02	9876633
	1.0	1.15	+0.05/-0.02	9876636
	1.2	1.37	+0.05/-0.02	9876637
	1.6	1.8	+0.05/-0.02	9876639


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Consumable parts, TIG

Big torch head: TTK 160, 220, 220S, 350W, TTC 160, 220, 250W

1. Gas nozzle		mm			
No.	Ordering number	a	b	c	d
4	7990766	18.0	11.5	6.5	47.5
5	7990770	18.0	12.5	8.0	47.5
6	7990771 *	18.0	14.5	9.5	47.5
7	7990772	18.0	16.0	11.0	47.5
8	7990773	18.0	18.0	12.5	47.5
10	7990775	21.0	21.0	16.0	47.5
12	7990776	24.0	24.0	19.0	47.5

2. Gas nozzle/lens		mm			
No.	Ordering number	a	b	c	d
5	7990783	25.0	12.5	7.5	42.0
6	7990784	25.0	14.0	9.0	42.0
7	7990785	25.0	15.5	11.0	42.0
8	7990786	25.0	16.5	12.0	42.0
11	7990787	25.0	22.0	17.0	42.0

Housing for tightening bush			
1. standard		2. gas lens	
ø 1.6	7990681	ø 1.6	7990711
ø 2.4	7990682 *	ø 2.4	7990712
ø 3.2	7990683	ø 3.2	7990713
ø 4.0	7990684	ø 4.0	7990714

Insulating ring	
1. 9580266 *	2. 9876860

Torch body
See the torch body from the separate table, page 24.

Tightening bush	
ø 1.6	9876867
ø 2.4	9876868 *
ø 3.2	9876869
ø 4.0	9876870

Electrode shield including O-ring	
short	7990731
medium	7990735
long	7990741 *
O-ring	7990791

* Delivery equipment is for ø 2.4 mm electrode. Lens equipment is delivered as an accessory. The above-mentioned dimensions are directive.

1.

2.

1. 2.

1. 2.

Height/Standard gas nozzle

Height/Lens equipment

Electrode		
grey	ø 1.6	9873532
	ø 2.4	9873533 *
	ø 3.2	9873534
	ø 4.0	9873535
white	ø 1.6	9873521
	ø 2.4	9873522
	ø 3.2	9873523
	ø 4.0	9873524
green	ø 4.0	9873505

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Small torch head: TTK 130, 130F, 160S, 250WS, 300W, TTC130, 130F, 160S, 200W, 250WS

1. Gas nozzle		mm			
No.	Ordering number	a	b	c	d
4	7990760	14.5	10.0	6.5	30
5	7990761*	14.5	11.0	8.0	30
6	7990762	14.5	14.5	10.0	30
7	7990763	14.5	14.5	11.0	30
Special Gas nozzle		**mm**			
4	9878019	15.0	10.5	6.5	48
5	9878020	15.0	11.5	8.0	48
6	9878021	15.0	13.5	9.5	48
2. Gas nozzle/gas lens		**mm**			
No.	Ordering number	a	b	c	d
4	7990779	18.5	10.5	7.0	25.5
5	7990780	18.5	12.0	8.0	25.5
6	7990781	18.5	13.5	9.5	25.5
7	7990782	18.5	15.0	11.0	25.5
7	7990782	18.5	15.0	11.0	25.5

Housing for tightening bush			
1. standard		2. lens	
ø 1.0	7990660	ø 1.0	7990700
ø 1.6	7990661	ø 1.6	7990701
ø 2.4	7990662 *	ø 2.4	7990702

Insulating ring
9878013 *

Torch body
See the torch body from the separate table, page 24.

Tightening bush			
1.		2. short	
ø 1.0	7990635	ø 1.0	7990640
ø 1.6	7990636	ø 1.6	7990641
ø 2.4	7990637 *	ø 2.4	7990642

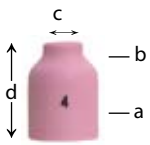
Electrode shield including O-ring	
short	7990730
medium	7990734 *
long	7990740
O-ring	7990790

* Delivery equipment is for ø 2.4 mm electrode. Lens equipment is delivered as an accessory. The above-mentioned dimensions are directive.

1.

Height / Standard gas nozzle

2.

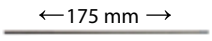


Height / Lens equipment

1. **2.**

1. **2.**

Electrode		
grey	ø 1.0	9873531
	ø 1.6	9873532
	ø 2.4	9873533 *
white	ø 1.0	9873520
	ø 1.6	9873521
	ø 2.4	9873522



Kemppi Develops Its Welding Gun Production

Kemppi has substantially invested in torch and wire feeder research and development recently.

As a part of organisational changes at Kemppi, the company established a new product development unit concentrating solely on the development of Kemppi's wire feed technology and torch products.

The majority of Kemppi's MIG guns and TIG torches are manufactured in a factory that is located at a scenic spot in the small village of Kalkkinen in Asikkala, about 60 kilometres north of Kemppi's headquarters in Lahti's Okeroinen.

Kemppi Oy's production site at Kalkkinen has a long history. The buildings have been used for many different purposes, but today they serve as a modern torch production facility.

The beautiful rural scenery of Kalkkinen is where Kemppi's torches and cables are manufactured.

Welding gun manufacturing involves a great deal of precision work in which high quality can only be achieved through experience-based craftsmanship.

The Kalkkinen factory produces great amounts of air-cooled and water-cooled MIG guns and TIG torches, as well as hundreds of kilometres of cable each year.

Welding is the ultimate means to make more out of metals. To fully exploit our state-of-the-art welding equipment and profound know-how, better together means a fruitful partnership with us.

KEMPPI
The Joy of Welding

www.kemppi.com