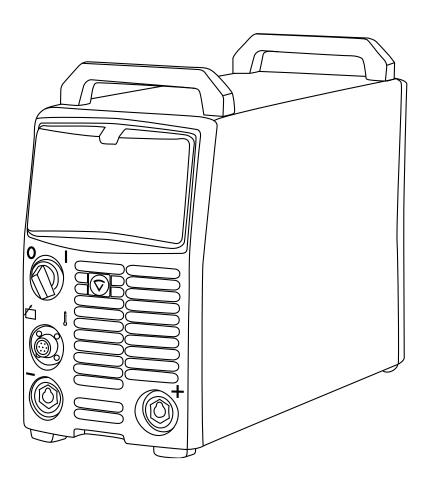


FastMig™ KMS 400 MVU



Operating manual • English

NO Bruksanvisning • Norsk

EN

OPERATING MANUAL

English

CONTENTS

1.	PREFACE	3
1.1	General	3
1.2	Product introduction	
	1.2.1 Operation control and connectors	
1.3	Accessories	
	1.3.1 Remote control devices	
	1.3.2 Cables	
2.	GENERAL SAFETY INSTRUCTIONS	5
3.	INSTALLATION	7
3.1	Positioning of the machine	7
3.2	Distribution network	
3.3	Connection to the mains supply	
3.4	Welding and earth cables	
4.	OPERATION CONTROL SWITCHES AND POTENTIOMETERS	
4.1	Main switch I/O	
4.2	Pilot lamps	
4.3	Operation of cooling fan	
5.	MANUAL METAL ARC WELDING	9
6.	MAINTENANCE	9
6.1	Cables	9
6.2	Power source	
6.3	Regular maintenance	
7.	OPERATION DISTURBANCES	10
7.1	Operation of the overload protection	10
7.2	Control fuses	
7.3	Under- and overvoltages in the mains supply	
7.4	Loss of a phase in the mains supply	
8.	DISPOSAL OF THE MACHINE	11
9.	ORDERING NUMBERS	11
10.	TECHNICAL DATA	12
11.	WARRANTY POLICY	13

1. PREFACE

1.1 GENERAL

Congratulations on choosing the FastMig welding equipment. Used correctly, Kemppi products can significantly increase the productivity of your welding, and provide years of economical service.

This operating manual contains important information on the use, maintenance and safety of your Kemppi product. The technical specifications of the equipment can be found at the end of the manual.

Please read the manual carefully before using the equipment for the first time. For your own safety and that of your working environment, pay particular attention to the safety instructions in the manual.

For more information on Kemppi products, contact Kemppi Oy, consult an authorised Kemppi dealer, or visit the Kemppi web site at www.kemppi.com.

The specifications presented in this manual are subject to change without prior notice.

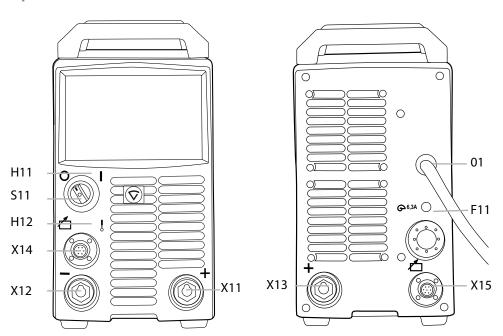
Important notes

Items in the manual that require particular attention in order to minimise damage and personal harm are indicated with the 'NOTE!' notation. Read these sections carefully and follow their instructions.

1.2 PRODUCT INTRODUCTION

FastMig KMS 400 MVU is multi-operator power source designed for demanding professional use. It is suitable for MMA and MIG welding in DC.

1.2.1 Operation control and connectors

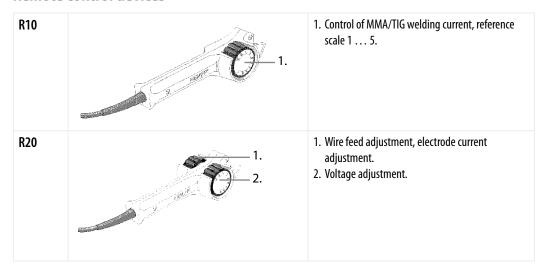


F11	Fuse for connection for control table	6,3 A delayed	X12	Earth connection	
H11	Signal lamp	1/0	X14, X15	Connection for control cable	parallel
H12	Warning lamp for thermal protection		01	Inlet of mains cable	
S11	Main switch	1/0			
X11, X13	Welding connection	parallel			

EN

1.3 ACCESSORIES

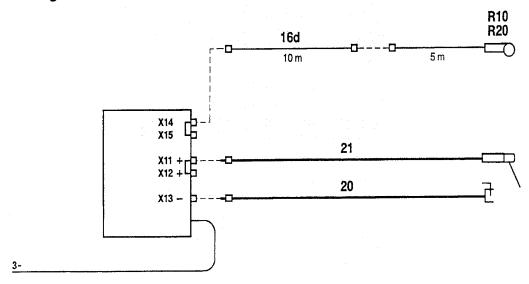
1.3.1 Remote control devices



MIG-MAG remote control device with controls for wire feed and voltage, memory scales 1 ... 5. You can use control device also for control of MMA current.

1.3.2 Cables

FastMig KMS 400 MVU



16d	Extension cable for remote control
20	Earth cable
21	MMA welding cable
R10, R20	Remote control devices

2. GENERAL SAFETY INSTRUCTIONS

Kemppi welding equipments conform to international safety standards. Safety is an important issue in equipment design and manufacturing. Therefore, Kemppi welding solutions are unparalleled in safety. There are, however, always certain hazards involved in using welding equipment. Therefore, to ensure your personal safety and the safety of your working environment, carefully read the safety instructions below and respect them.

Use of personal protective equipment

- The arc and its reflecting radiation damage unprotected eyes. Shield your eyes and face appropriately before you start welding or observe welding. As the welding current increases, the welding face screen lens darkness should also increase.
- Arc radiation and spatters burn unprotected skin. Always wear protective gloves, clothing and footwear when welding.
- Always wear hearing protection if the ambient noise level exceeds the allowable limit (e.g., 85 dB).

General operating safety

- Exercise caution when handling parts heated during welding. For example, the tip of the welding torch or gun, and the end of the welding rod and the work piece. The temperature of items burn unprotected skin.
- Never wear any welding device on the shoulder during welding and never suspend it by the carrying strap during welding.
- Do not expose the machine to high temperatures, as this may cause damage.
- Keep intermediate and earth return cables as close to each other as possible throughout their length. Straighten any loops in the cables as this limits inductive effects on welding performance. This also minimizes your exposure to harmful magnetic fields, which may, for example, interfere with a pacemaker.
- Do not wrap the welding cables around your body.
- In environments classified as dangerous, only use S-marked welding equipments with
 a safe idle voltage level. These work environments include, for example, humid, hot or
 small spaces, where the user may be directly exposed to the surrounding conductive
 materials.
- Do not use arc welding equipment for pipe thawing.

Spatter and fire safety

- Welding is always classified as hot work, so pay particular attention to the fire safety regulations during welding and after it.
- Remember that fire can break out from sparks, even several hours after the welding work is completed.
- Protect the environment from welding spatter. Remove combustible materials, such as flammable liquid from the welding vicinity, and supply the welding site with adequate fire fighting equipment.
- In special welding jobs, be prepared for hazards such as fire or explosion when welding
 inside enclosed work spaces, such as tanks and vessels. Ensure you have authority to
 work
- Never direct the sparks or cutting spray of a grinder toward the welding machine or flammable materials.
- Beware of hot objects or spatter falling on the machine when working above. Welding in flammable or explosive sites is absolutely forbidden.

General electric safety

- Only connect the welding machine to an earthed electric network. Note the recommended mains fuse size.
- Do not take the welding machine inside a container, vehicle or similar work piece unless authorized to do so.
- Do not place the welding machine on a wet surface and do not work on a wet surface.
- Do not allow the mains cable to be directly exposed to water.
- Ensure 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
 may cause electrocution or fire.
- Remember that the cable, plugs and other electric devices may be installed or replaced only by an electrical contractor or engineer authorized to perform such operations.
- Turn off the welding machine when it is not in use.

Welding power circuit

- Insulate yourself from the welding circuit by using dry and undamaged protective clothing.
- 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 ground cable on the welding machine or other electric equipment.

Welding fumes

- Ensure proper ventilation and avoid inhaling the fumes.
- Ensure a sufficient supply of fresh air, particularly in closed spaces. You can also ensure an adequate supply of clean breathing air by using a filtered fresh-air mask.
- Take extra precautions when working on metals or surface-treated materials containing, for example, lead, cadmium, zinc, mercury or beryllium.

Transportation, lifting and suspension

- Pay attention to correct working position when lifting a heavy device risk of injury to the back.
- Never pull or lift the machine by the welding torch or other cables. Always use the lifting points or handles designed for that purpose.
- Only use a transport unit designed for the equipment. Try to transport the machine in an upright position, if possible.
- Never lift a gas cylinder and the welding machine at the same time. There are separate provisions for gas cylinder transportation.
- Never use a welding machine when suspended unless the suspension device has been designed and approved for that particular purpose.
- Do not exceed the maximum allowable load of suspension beams or the transportation trolley of welding equipment. It is recommended that the wire coil be removed during lifting or transportation.

Environment

- Welding equipment is not recommended for use in rain or snow see manual. Protect the equipment against rain and strong sunlight. Always store the machine in a dry and clean space.
- Protect the machine from sand and dust during use and in storage. The recommended operating temperature range is -20 to +40 °C. The machine's operation efficiency decreases and it becomes more prone to damage if used in temperatures in excess of 40 °C.
- Place the machine so that it is not exposed to hot surfaces, sparks or spatter.
- Make sure the airflow to and from the machine is unrestricted.
- Always use the machine in an upright position only.
- EMC classification of this product is class A in accordance with electromagnetic compatibility standards CISPR 11 and IEC 60974-10, and therefore the product is designed to be used in an industrial environment only.
 - WARNING: This class A equipment is not intended for use in residential locations where the electrical power is provided by a public low-voltage supply system. In those locations it may be difficult to ensure the electromagnetic compatibility due to conducted and radiated disturbances.
- Arc welding equipments cause electromagnetic disturbance. To minimize the harmful
 effects, strictly use the equipment according to the operating manual and other
 recommendations.

ΕN

Gas bottles and pneumatic devices

- Adhere to the instructions for handling pneumatic devices and gas bottles.
- Make sure that gas bottles are used and stored in properly ventilated spaces.
- A leaking gas bottle may replace the breathable air, causing suffocation.
- Before use, make sure that the gas bottle contains gas suitable for the intended welding purpose.
- Always fix the gas bottle securely in an upright position, against a bottle wall rack or purpose-made bottle cart.
- Never move a gas bottle when the regulator or flow adjuster is in place. Replace the valve cover during transportation. Close the bottle valve after use.

Circuit diagram and spare part lists

If the circuit diagram and the spare parts list are not included in delivery package, please inquire for them at your local Kemppi service representative. For more information, please visit www.kemppi.com.

Disclaimer

While every effort has been made to ensure that the information contained in this guide is accurate and complete, no liability can be accepted for any errors or omissions. Kemppi reserves the right to change the specification of the product described at any time without prior notice. Do not copy, record, reproduce or transmit the contents of this guide without prior permission from Kemppi.

3. INSTALLATION

3.1 POSITIONING OF THE MACHINE

Place the machine on a firm, dry and level surface. Where possible, do not allow dust or other impurities to enter the machines cooling air flow. Preferably site the machine above floor level; for example on a suitable carriage unit.

Notes for positioning the machine

- The surface inclination should not exceed 15 degrees.
- Ensure the free circulation of the cooling air. There must be at least 20 cm of free space in front of and behind the machine for cooling air to circulate.
- Protect the machine against heavy rain and direct sunshine.

NOTE! The machine should not be operated in the rain as the protection class of the machine, IP23S, allows for outside preserving and storage only.

NOTE! Never aim metallic grinding spray/sparks towards the equipment.

3.2 DISTRIBUTION NETWORK

All regular electrical devices without special circuits generate harmonic currents into distribution network. High rates of harmonic current may cause losses and disturbance to some equipment.

This equipment complies with IEC 61000-3-12 provided that the short-circuit power Ssc is greater than or equal to 4.7 MVA at the interface point between the user's supply and the public supply network. It is the responsibility of the installer or user of the equipment to ensure, by consultation with the distribution network operator if necessary, that the equipment is connected only to a supply with a short-circuit power Ssc greater than or equal to 4.7 MVA.

3.3 CONNECTION TO THE MAINS SUPPLY

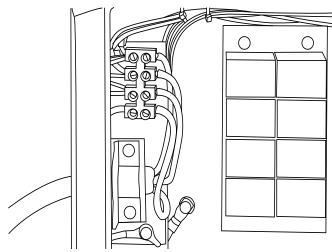
FastMig power sources are delivered equipped with 5 m mains cable without plug. If local electricity regulations of operating country are stating otherwise, the mains cable should be replaced in conformity with the local regulations.

Connection of the mains cable, mounting and change of the plug should only be carried out by a competent electrician.

If changing the mains cable take into consideration the following:

The cable is entered into the machine through the inlet ring on the rear panel of the machine and fastened with a cable clamp (05). The phase conductors of the cable are coupled to connectors L1, L2 and L3. The earth protection coloured green-yellow is coupled to connector.

NOTE! If you are using 5-lead cable, do not connect neutral conductor.



Sizes of the mains cables and fuse ratings for the machine at 100 % duty cycle are specified in the table below:

Rated voltage	Fuses, slow-blow	Connection cable *) mm ²
400 V 3~	35 A	H07RN-F 4G10 (10 mm ²)
230 V 3~	50 A	H07RN-F 4G10 (10 mm ²)

^{*)} In cables of S type there is a protective grounding conductor coloured green-yellow.

3.4 WELDING AND EARTH CABLES

Recommended copper cables with cross-sectional area are as follows:

FastMig KMS 400 MVU 70 ... 90 mm²

In enclosed table are shown typical load capacities of rubber insulated copper cables, when ambient temperature is 25° C and lead temperature is 85° C.

Cable	Duty cycle ED			Voltage loss / 10 m
	100 %	60 %	30 %	
50 mm ²	285 A	370 A	520 A	0,35 V / 100 A
70 mm ²	355 A	460 A	650 A	0,25 V / 100 A
95 mm ²	430 A	560 A	790 A	0,18 V / 100 A

Do not overload welding cables due to voltage losses and heating.

Fasten the earth clamp of the return current cable carefully, preferably direct onto the piece to be welded. The contact surface of the earth clamp should always be as large as possible. Clean the fastening surface from paint and rust.

EN

4. OPERATION CONTROL SWITCHES AND POTENTIOMETERS

4.1 MAIN SWITCH I/O

When you turn the switch into I-position, pilot lamp H11 on the front face is illuminated and the machine is ready for use.

NOTE! Always turn the machine on and off with the mains switch, never use the mains plugs as a switch.

4.2 PILOT LAMPS

The pilot lamps of the machine report the electric operation:

The green pilot lamp H11 when lit indicates that the machine is on and ready for use and it is connected to the mains supply with the main switch in the l-position.

H12 indicates when lit that the thermal protection of the machine has been activated due to over heating. The cooling fan will continue to run and cool the machine down and when the lamp is off the machine is ready to weld.

4.3 OPERATION OF COOLING FAN

In FastMig power sources there are two simultaneously operating fans.

- The fan is started for a moment when main switch is placed into position I.
- The fan will start during welding as the machine heats up and it will run for 1 to 10 minutes after the welding has stopped.

5. MANUAL METAL ARC WELDING

The FastMig power source can be used in electrode welding by connecting a FastMig MFS 53, MFS 55 or MSF 57 wire feeder to it. The power source can be made suitable for electrode welding without a wire feeder by connecting an R10 or R20 remote control to the X14 or X15 terminal at the back of the power source for welding current adjustment, and the welding power cable connected to the power source's (+) connector X11 or X12.

6. MAINTENANCE

The amount of use and the working environment should be taken into consideration when planning the frequency of maintenance of the machine. Careful use and preventive maintenance will help to ensure trouble-free operation.

6.1 CABLES

Check the condition of welding and connection cables daily. Do not use damaged cables. Make sure that the mains cables in use are safe and according to laid down regulations. The repair and mounting of a mains connection cable should be carried out only by an authorised electrician.

6.2 POWER SOURCE

NOTE! Disconnect the plug of the machine from the mains socket and wait approx. 2 minutes (capacitor charge) before removing the cover plate.

Check at least every half year:

- Electric connectors of the machine clean the oxidised parts and tighten the loosened ones
- Note! You must know correction tension torques before starting the reparation of the ioints
- Clean the inner parts of the machine from dust and dirt e.g. with a soft brush and vacuum cleaner. Also clean the ventilation net behind the front grate.
- Do not use compressed air, there is a risk that dirt is packed even more tightly into gaps of cooling profiles.

- Do not use pressure washing device.
- Only authorised electrician shall carry out repairs to the machines.

6.3 REGULAR MAINTENANCE

Kemppi Service Workshops make regular maintenance according to agreement.

The major points in the maintenance procedure are listed as follows:

- Cleaning of the machine
- · Checking and maintenance of the welding tools
- Checking of connectors, switches and potentiometers
- Checking of electric connections
- · Checking of mains cable and plug
- Damaged parts or parts in bad connection are replaced by new ones
- Maintenance testing. Operation and performance values of the machine are checked, and adjusted when necessary by means of test equipment.

7. OPERATION DISTURBANCES

In the event of a failure of the machine, contact an authorised Kemppi service agent or your local Kemppi dealer.

Check the maintenance objects before the machine is sent to the Service Workshop.

7.1 OPERATION OF THE OVERLOAD PROTECTION

Yellow pilot lamp H12 of thermal protection is lit when thermostat has operated due to overheating of machine.

The thermostat of machine will operate, if machine is continuously loaded over rated values or cooling air circulation is blocked.

Cooling fan cools down the machine and when the pilot lamp is not lit the machine is automatically ready for welding.

7.2 CONTROL FUSES

Fuse F11, 6,3 A delayed, on the rear wall of machine is as protection for connection of auxiliary devices X14-15.

NOTE! Use same type and rating of fuse which is marked beside the fuse adapter. Damage caused by a wrong type fuse is not covered by the guarantee.

7.3 UNDER- AND OVERVOLTAGES IN THE MAINS SUPPLY

Primary circuits of machine are protected against sudden, transient overvoltages.

Machine is designed to withstand $3 \times 440 \text{ V}$ voltage continuously (see technical data). See to it that voltage is kept within admissible limits especially when mains supply is taken e.g. from combustion engine generator.

If the mains has undervoltage (under approx. 300 V) or overvoltage (over approx. 480 V) machine control stops to operate automatically.

7.4 LOSS OF A PHASE IN THE MAINS SUPPLY

Loss of a phase causes noticeable poorer welding properties than normally or the machine doesn't get started at all. Loss of a phase can be due to following:

- blowing of mains supply fuse
- defective mains cable
- bad connection of mains connection cable on terminal block or plug of machine

EN

8. DISPOSAL OF THE MACHINE



Do not dispose of electrical equipment with normal waste!

In observance of European Directive 2002/96/EC on waste electrical and electronic equipment, and its implementation in accordance with national law, electrical equipment that has reached the end of its life must be collected separately and taken to an appropriate environmentally responsible recycling facility.

The owner of the equipment is obliged to deliver a decommissioned unit to a regional collection centre, per the instructions of local authorities or a Kemppi representative. By applying this European Directive you will improve the environment and human health.

9. ORDERING NUMBERS

FastMig KMS 400 MVU		605400003
Wire feeders		
MXF 65		6152100EL
MXF 67		6152200EL
MXF 63		6152300EL
MXF 65		6152100
MXF 67		6152200
MXF 63		6152300
MSF 53		6065300
MSF 55		6065500
MSF 57		6065700
Panels for wire feeders		
SF 51		6085100
SF 52W		6085200W
SF 53W		6085300W
SF 54		6085400
Accessories		
Return current cable	5 m, 50 mm ²	6184511
Return current cable	5 m, 70 mm ²	6184711
Cable for MMA welding	5 m, 50 mm ²	6184501
Cable for MMA welding	5 m, 70 mm ²	6184701
R10		6185409
Remote controlled interconnecting cable	10 m	6185481
Cooling unit FastCool 10		6068100
Transport unit PM 500		6185291
Gun holder GH 30		6256030

EN

10. TECHNICAL DATA

FastMig™ KMS 400 MVU			
		400 V	230 V
Connection voltage	3∼, 50/60 Hz	400 V -15 %+20 %	230 V -10 %+10 %
Rated power		19 kVA	20 kVA
Primary current	MIG, 80%ED I _{1max}	27A	48A
	MIG, 100%ED I ₁	26A	45A
	MMA, 80%ED I _{1max}	29A	50A
	MMA, 100%ED I ₁	27A	47A
Connection cable	H07RN-F	4G6 (5 m)	4G6 (5 m)
Fuse (delayed)		35 A	35 A
Duty cycle 40 °C	80 % ED	400 A/36 V	400 A/36 V
	100 % ED	380 A/35 V	380 A/35 V
Welding range	MIG	10 V 39 V	10 V 39 V
Max. welding voltage		46 V	46 V
Open circuit voltage	MIG	55 69 V	55 69 V
	MMA	50 V	50 V
ldle power		25 W	25 W
Efficiency at max. current		87 %	87 %
Power factor at max. current		0.8	0.8
Operating temperature range		-20 +40 °C	-20 +40 °C
Storage temperature range		-40 +60 °C	-40 +60 °C
Degree of protection		IP23S	IP23S
EMC class		Α	Α
Minimun short circuit power Ssc of supply network*		4.7 MVA	4.7 MVA
External dimensions	length	590 mm	590 mm
	width	230 mm	230 mm
	height	580 mm	580 mm
Weight		49 kg	49 kg
Operating voltage (for cooling unit)		400 V -15 %+20 %	400 V -15 %+20 %

^{*} See paragraph 3.2.

ΕN

11. WARRANTY POLICY

Kemppi Oy provides a warranty for products manufactured and sold by the company if defects in materials or workmanship occur. Warranty repairs are to be carried out only by an authorised Kemppi Service Agent. Packing, shipping, and insurance are at the orderer's expense.

The warranty starts on the date of purchase. Spoken promises not included in the terms of warranty are not binding on the warrantor.

Limitations of the warranty

The following conditions are not covered under the terms of warranty: defects arising from normal wear and tear, non-compliance with operation and maintenance instructions, overloading, negligence, connection to incorrect or faulty supply voltage (including voltage surges outside equipment specifications), incorrect gas pressure, anomalies or failures in the electric network, transport or storage damage, and fire or damage due to forces of nature. This warranty does not cover direct or indirect travel costs, daily allowances, or accommodation related to warranty service.

The warranty does not cover welding torches and their consumables, feeder drive rolls, and feeder guide tubes. Direct or indirect damage caused by a defective product is not covered under the warranty.

The warranty becomes void if modifications are made to the machine that are not approved by the manufacturer or if non-original spare parts are used in repairs. The warranty is also voided if repairs are carried out by a repair agent not authorised by Kemppi.

Undertaking warranty repairs

Warranty defects must be reported to Kemppi or an authorised Kemppi Service Agent without delay.

Before a warranty repair is undertaken, the customer must present proof of warranty or otherwise prove the validity of the warranty in writing. The proof must indicate the date of purchase and the manufacturing number of the unit to be repaired. The parts replaced under the terms of this warranty remain the property of Kemppi and must be returned to Kemppi if requested.

After a warranty repair, the warranty of the machine or equipment, repaired or replaced, shall be continued to the end of the original warranty period.

KEMPPI OY

PL 13 FIN-15801 LAHTI **FINLAND** Tel +358 3 899 11 Telefax +358 3 899 428 www.kemppi.com

KEMPPIKONEET OY

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

KEMPPI SVERIGE AB

Box 717 S-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

Postboks 2151, Postterminalen N-3103 TØNSBERG NORGE Tel +47 33 346000 Telefax +47 33 346010 e-mail: sales.no@kemppi.com

KEMPPI DANMARK A/S

Literbuen 11 DK-2740 SKOVLUNDE DANMARK Tel +45 4494 1677 Telefax +45 4494 1536 e-mail:sales.dk@kemppi.com

KEMPPI BENELUX B.V.

Postbus 5603 NL-4801 EA BREDA **NEDERLAND** Tel +31 765717750 Telefax +31 765716345 e-mail: sales.nl@kemppi.com

KEMPPI (UK) Ltd

Martti Kemppi Building Fraser Road **Priory Business Park** BEDFORD, MK44 3WH **ENGLAND** Tel +44 (0)845 6444201 Telefax +44 (0)845 6444202 e-mail: sales.uk@kemppi.com

KEMPPI FRANCE S.A.S.

65 Avenue de la Couronne des Prés 78681 EPONE CEDEX **FRANCE** Tel +33 1 30 90 04 40 Telefax +33 1 30 90 04 45

e-mail: sales.fr@kemppi.com

KEMPPI GmbH

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

KEMPPI SPÓŁKA Z 0.0.

UI. Borzymowska 32 02-565 WARSZAWA POI AND 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

000 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 000 КЕМППИ

ул. Полковая 1, строение 6 127018 Москва Tel +7 495 739 4304 Telefax +7 495 739 4305 e-mail: info.ru@kemppi.com

KEMPPI, TRADING (BEIJING) COMPANY, LIMITED

Room 420, 3 Zone, Building B, No.12 Hongda North Street, Beijing Economic Development Zone, 100176 Beijing CHINA Tel +86-10-6787 6064 +86-10-6787 1282

Telefax +86-10-6787 5259 e-mail: sales.cn@kemppi.com 肯倍贸易(北京)有限公司 中国北京经济技术开发区宏达北路12号 创新大厦B座三区420室 (100176) 电话: +86-10-6787 6064

+86-10-6787 1282

传真: +86-10-6787 5259 e-mail: sales.cn@kemppi.com

KEMPPI INDIA PVT LTD

LAKSHMI TOWERS New No. 2/770. First Main Road, KAZURA Gardens, Neelangarai, CHENNAI - 600 041 TAMIL NADU