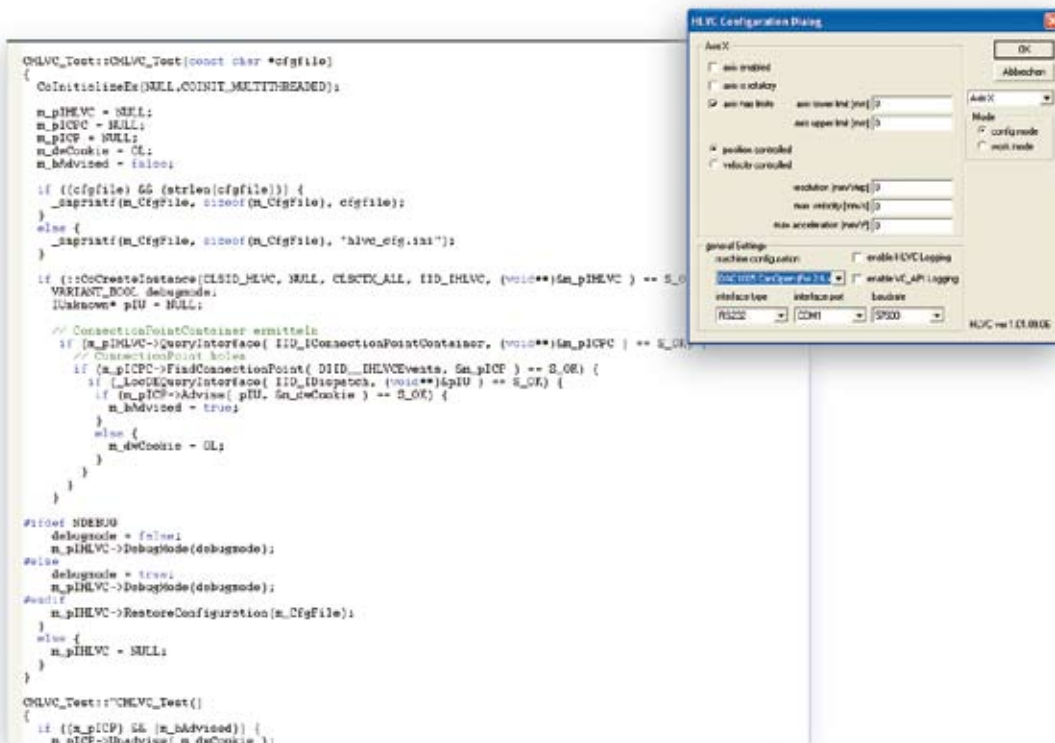





The integrated, universal LKPF MotionScript programming language enables you to program flexibly. Communication between the PC and the controller is done via the PC serial port (RS232).



We provide several Windows-based programming interfaces so that you can integrate our control technology into your application software. The VisualControl® – APIs and their expansion packages support programming in C/C++, VisualBasic and LabView™. Communication with the master computer is done via the serial port (RS232) or the CAN bus (CANopen).







i	LPKF MotionTools	
MotionTools Item no. 730033	Configuration and diagnostic software for motion.net™ controllers	
	Technical Data	<ul style="list-style-type: none"> Wizard-based configuration of the controllers User-friendly, clear operation Versatile diagnostic functions Visualization tool for user-friendly control loop tuning Execution of MotionScript files Wizard for the firmware update Runs on Windows 98SE/2000/XP Documents: Manual Use free of charge
		

i	VisualControl® – API	
VisualControl – API Item no. 730023	Full version of programming interface for implementing motion.net™ controllers in your own Windows applications	
	Technical Data	<ul style="list-style-type: none"> Supports all the functions of the motion.net™ controllers Supported programming languages: C / C++, VisualBasic, Runs on Windows 98SE/2000/XP One-off license fee including 4 hour support by e-mail Free of charge product updates for 12 months from date of purchase. Documents: Manual and Help file Training: see trainings
		

i	VisualControl® – API-Easy	
VisualControl – API-Easy Item no. 730038	Compact, easy to handle programming interface for implementing motion.net™ controllers in your own Windows applications	
	Technical Data	<ul style="list-style-type: none"> Supports the basic functions of the motion.net™ controllers Prerequisite: The controllers must be preconfigured by LPKF MotionTools Supported programming languages: C / C++, VisualBasic, LabView™ Runs on Windows 2000/XP One-off license fee including 4 hour support by e-mail Free of charge product updates for 12 months from date of purchase. Documents: Manual and Help file Training: see trainings
		

	VisualControl® – LabView™-Toolbox	
VisualControl – LabView-Toolbox Item no. 730040	Comprehensive toolbox with LabView™-VIs, which enables simple integration of motion.net™ controllers into your own LabView™ applications.	
	Technical Data	extends VisualControl®–API and VisualControl®–API-Easy with LabView™-VIs Supports all the functions of the motion.net™ controllers Supported LabView™ versions: 7.x, 8.x Runs on Windows 2000/XP One-off license fee including 4 hour support by e-mail Free of charge product updates for 12 months from date of purchase. Documents: Manual and Help file Training: see trainings

	VisualControl® – CAA package	
VisualControl – CAA package Item no. 730041	Software package for compensating for systematic errors in positioning drives.	
	Technical Data	Expands the functionality of the VisualControl®–API and VisualControl®–API-Easy Two-dimensional, sampling point-based corrective algorithm for improving static positional accuracy. Supported programming languages: C / C++, VisualBasic, LabView™ Runs on Windows 98SE/2000/XP One-off license fee including 4 hour support by e-mail Free of charge product updates for 12 months from date of purchase. Documents: Manual Training: see trainings

	VisualControl®– CANopen-API	
VisualControl – CANopen-API Item no. 730039	Compact, easy to use programming interface for integrating CAN bus networked motion.net™ controllers in your own applications	
	Technical Data	Supported CANopen profiles: DS 301, DSP 402 Functionality: Starting / Stopping the network or individual nodes Error handling SDO- / PDO communication Maximum 8 network nodes Supported programming languages: C / C++, VisualBasic, LabView™ Runs on Windows 2000/XP Supported CAN hardware: see accessories One-off license fee including 4 hour support by e-mail Free of charge product updates for 12 months from date of purchase. Documents: Manual and Help file Training: see trainings





Accessories for control modules


We offer a wide range of accessories to complete our motion.net™ control technology.


We provide:

- Power packs
- Starter kits
- Connector sets
- Communication interfaces for the PC
- Communication cables
- Joysticks

i	Power pack +5 V / 25 W															
Power pack +5 V / 25 W Item no. 420178	Compact switch mode power pack +5 V / 25 W with international approval															
Power pack +5 V / 25 W Item no. 420178	Technical Data	<table border="1"> <tr> <td>Input voltage:</td> <td>AC 100 – 240 V (Wide Range), 47–63 Hz</td> </tr> <tr> <td>Output voltage</td> <td>DC 5.1 V</td> </tr> <tr> <td>Output voltage:</td> <td>5 A (continuous)</td> </tr> <tr> <td>Approvals:</td> <td>UL, EN, CSA, CB</td> </tr> <tr> <td>Dimensions (WxHxD):</td> <td>45 × 75 × 91 mm</td> </tr> <tr> <td>Weight:</td> <td>240 g</td> </tr> <tr> <td>Assembly:</td> <td>On the 35 mm wide DIN mounting rail</td> </tr> </table>	Input voltage:	AC 100 – 240 V (Wide Range), 47–63 Hz	Output voltage	DC 5.1 V	Output voltage:	5 A (continuous)	Approvals:	UL, EN, CSA, CB	Dimensions (WxHxD):	45 × 75 × 91 mm	Weight:	240 g	Assembly:	On the 35 mm wide DIN mounting rail
Input voltage:	AC 100 – 240 V (Wide Range), 47–63 Hz															
Output voltage	DC 5.1 V															
Output voltage:	5 A (continuous)															
Approvals:	UL, EN, CSA, CB															
Dimensions (WxHxD):	45 × 75 × 91 mm															
Weight:	240 g															
Assembly:	On the 35 mm wide DIN mounting rail															
																

i	Power pack +24 V / 50 W															
Power pack +24 V / 50 W Item no. 420179	Compact switch mode power pack +24 V / 50 W with international approval															
Power pack +24 V / 50 W Item no. 420179	Technical Data	<table border="1"> <tr> <td>Input voltage:</td> <td>AC 100 – 240 V (Wide Range), 47–63 Hz</td> </tr> <tr> <td>Output voltage</td> <td>DC 24 V</td> </tr> <tr> <td>Output voltage:</td> <td>2.1 A (continuous)</td> </tr> <tr> <td>Approvals:</td> <td>UL, EN, CSA, CB</td> </tr> <tr> <td>Dimensions (WxHxD):</td> <td>45 × 75 × 91 mm</td> </tr> <tr> <td>Weight:</td> <td>240 g</td> </tr> <tr> <td>Assembly:</td> <td>On the 35 mm wide DIN mounting rail</td> </tr> </table>	Input voltage:	AC 100 – 240 V (Wide Range), 47–63 Hz	Output voltage	DC 24 V	Output voltage:	2.1 A (continuous)	Approvals:	UL, EN, CSA, CB	Dimensions (WxHxD):	45 × 75 × 91 mm	Weight:	240 g	Assembly:	On the 35 mm wide DIN mounting rail
Input voltage:	AC 100 – 240 V (Wide Range), 47–63 Hz															
Output voltage	DC 24 V															
Output voltage:	2.1 A (continuous)															
Approvals:	UL, EN, CSA, CB															
Dimensions (WxHxD):	45 × 75 × 91 mm															
Weight:	240 g															
Assembly:	On the 35 mm wide DIN mounting rail															
																

i	Power pack +24 V / 100 W															
Power pack +24 V / 100 W Item no. 420211	Compact switch mode power pack unit +24 V / 100 W with international approval															
Power pack +24 V / 100 W Item no. 420211	Technical Data	<table border="1"> <tr> <td>Input voltage:</td> <td>AC 100 – 120 V / 220 – 240 V (Auto Select), 47–63 Hz</td> </tr> <tr> <td>Output voltage</td> <td>DC 24 V</td> </tr> <tr> <td>Output voltage:</td> <td>4.2 A (continuous)</td> </tr> <tr> <td>Approvals:</td> <td>UL, EN, CSA, CB</td> </tr> <tr> <td>Dimensions (WxHxD):</td> <td>73 × 75 × 103 mm</td> </tr> <tr> <td>Weight:</td> <td>360 g</td> </tr> <tr> <td>Assembly:</td> <td>On the 35 mm wide DIN mounting rail</td> </tr> </table>	Input voltage:	AC 100 – 120 V / 220 – 240 V (Auto Select), 47–63 Hz	Output voltage	DC 24 V	Output voltage:	4.2 A (continuous)	Approvals:	UL, EN, CSA, CB	Dimensions (WxHxD):	73 × 75 × 103 mm	Weight:	360 g	Assembly:	On the 35 mm wide DIN mounting rail
Input voltage:	AC 100 – 120 V / 220 – 240 V (Auto Select), 47–63 Hz															
Output voltage	DC 24 V															
Output voltage:	4.2 A (continuous)															
Approvals:	UL, EN, CSA, CB															
Dimensions (WxHxD):	73 × 75 × 103 mm															
Weight:	360 g															
Assembly:	On the 35 mm wide DIN mounting rail															
																


i	Power pack +48 V / 240 W															
Power pack +48 V / 240 W Item no. 420227	Compact and feedback protected switch mode power pack +48 V / 240 W with active PFC and international approval															
Power pack +48 V / 240 W Item no. 420227	Technical Data	<table border="1"> <tr> <td>Input voltage:</td> <td>AC 100 – 240 V (Wide Range), 47–63 Hz</td> </tr> <tr> <td>Output voltage</td> <td>DC 48 V</td> </tr> <tr> <td>Output voltage:</td> <td>5 A (continuous)</td> </tr> <tr> <td>Approvals:</td> <td>UL, EN, CSA, CB</td> </tr> <tr> <td>Dimensions (WxHxD):</td> <td>60 × 124 × 117 mm</td> </tr> <tr> <td>Weight:</td> <td>900 g</td> </tr> <tr> <td>Assembly:</td> <td>On the 35 mm wide DIN mounting rail</td> </tr> </table>	Input voltage:	AC 100 – 240 V (Wide Range), 47–63 Hz	Output voltage	DC 48 V	Output voltage:	5 A (continuous)	Approvals:	UL, EN, CSA, CB	Dimensions (WxHxD):	60 × 124 × 117 mm	Weight:	900 g	Assembly:	On the 35 mm wide DIN mounting rail
Input voltage:	AC 100 – 240 V (Wide Range), 47–63 Hz															
Output voltage	DC 48 V															
Output voltage:	5 A (continuous)															
Approvals:	UL, EN, CSA, CB															
Dimensions (WxHxD):	60 × 124 × 117 mm															
Weight:	900 g															
Assembly:	On the 35 mm wide DIN mounting rail															
																

<p>i</p>	<p>Starter kit for SMCU II / SMCU II-P</p>	
<p>Starter kit SMCU II / SMCU II-P Item no. 780069</p>		
	<p>Components:</p>	<p>Connector set for SMCU II / SMCU II-P RS232 cable – 2.0 m CD with LPKF MotionTools and documentation</p>
<p>i</p>	<p>Starter kit for SMCU II-M / SMCU II-MP</p>	
<p>Starter kit SMCU II-M / SMCU II-MP Item no. 780069-1</p>		
	<p>Components:</p>	<p>Connector set for SMCU II-M / SMCU II-MP RS232 cable – 2.0 m CD with LPKF MotionTools and documentation</p>
<p>i</p>	<p>Starter kit for SMCU II-A / SMCU II-AP</p>	
<p>Starter kit SMCU II-A / SMCU II-AP Item no. 780069-2</p>		
	<p>Components:</p>	<p>Connector set for SMCU II-A / SMCU II-AP RS232 cable – 2.0 m CD with LPKF MotionTools and documentation</p>
<p>i</p>	<p>Starter kit for SMCU II-AM / SMCU II-AMP</p>	
<p>Starter kit SMCU II-AM / SMCU II-AMP Item no. 780069-3</p>		
	<p>Components:</p>	<p>Connector set for SMCU II-AM / SMCU II-AMP RS232 cable – 2.0 m CD with LPKF MotionTools and documentation</p>
<p>i</p>	<p>Starter kit for DAC1005 / DAC1005-P</p>	
<p>Starter kit DAC1005 / DAC1005-P Item no. 780089</p>		
	<p>Components:</p>	<p>Connector set for DAC1005 / DAC1005-P RS232 cable – 2.0 m CD with LPKF MotionTools and documentation</p>

<p>i</p>	<p>Connector set for SMCU II / SMCU II-P</p>
<p>Connector set SMCU II / SMCU II-P Item no. 390391</p>	
	<p>All plugs for the I/O, limit switch, motor and power supply interfaces</p>
<p>i</p>	<p>Connector set for SMCU II-M / SMCU II-MP</p>
<p>Connector set SMCU II-M / SMCU II-MP Item no. 390391-1</p>	
	<p>All plugs for the I/O, limit switch, encoder, motor and power supply interfaces</p>
<p>i</p>	<p>Connector set for SMCU II-A / SMCU II-AP</p>
<p>Connector set SMCU II-A / SMCU II-AP Item no. 390391-2</p>	
	<p>All plugs for the I/O, limit switch, motor, trigger and power supply interfaces</p>
<p>i</p>	<p>Connector set for SMCU II-AM / SMCU II-AMP</p>
<p>Connector set SMCU II-AM / SMCU II-AMP Item no. 390391-3</p>	
	<p>All plugs for the I/O, limit switch, encoder, motor, trigger and power supply interfaces</p>
<p>i</p>	<p>Connector set for DAC1005 / DAC1005-P</p>
<p>Connector set DAC1005 / DAC1005-P Item no. 390407</p>	
	<p>All plugs for the I/O, limit switch, encoder, motor and power supply interfaces</p>

i

PCI-RS232 Interface
Item no. 440309



PCI interface board RS232

Standard PCI-RS232 interface for the PC, suitable for connecting devices with an RS232 interface

Technical Data	2 RS232 interfaces with 16C550 UART
	Data transfer rates up to 1 Mbps
	Port plug: 9 pin sub-D plug
	Driver software for Windows 98/2000/XP

i

USB-RS232
Item no. 730037



Interface converter USB 2.0 to RS232

Universal USB 2.0 to RS232 converter for connecting a device with an RS232 interface to the PC's USB interface

Technical Data	Compatible with USB 2.0
	Supports hardware handshake
	LED for indicating data traffic
	Driver software for Windows 98/2000/XP

i


PCI-CAN
Item no. 730035





PCI interface board CAN – PCI-CAN

Passive CAN interface for the PCI bus

Technical Data	CAN-Controller Philips SJA1000, electrically decoupled
	Driver software for Windows
	Documents
	VisualControl® – CANopen-API supports this CAN Interface

i	PC Card – CAN Interface – PC-CAN	
	PC-CAN Item no. 730036	
	Passive CAN interface for PC card slots (type II)	
	Technical Data	Two channels equipped with the CAN Controller Philips PCA82C200
		Driver software for Windows
		Documents
		VisualControl® – CANopen-API supports this CAN Interface

i	USB- / CAN Interface – USB-CAN-GTI	
	USB-CAN-GTI Item no. 730015	
	CAN interface with USB interface for industrial applications	
	Technical Data	High-performance 16-bit microcontroller with internal CAN controller
		Supports the CAN protocols 2.0A and 2.0B
		USB communication and CAN data transfer are indicated by LED
		Power supply via USB
		Driver software for Windows
Documents		
VisualControl® – CANopen-API supports this CAN Interface		


i	Ethernet- / CAN Interface – EtherCAN-CI	
	Ethernet-CAN-CI Item no. 730022	
	Ethernet based interface to CAN bus	
	Technical Data	Filters and intermediate storage of the CAN bus data transfer
		Micro controller (ARM7-Core) with CAN controller SJA1000
		Supports the CAN protocols 2.0A and 2.0B
		Serial interface for configuring the device
		Driver software for Windows
Documents		
VisualControl® – CANopen-API supports this CAN Interface		

i

RS232 cable

RS232 cable for connecting an SMCU II two-axis controller or a DAC1005 axis controller to the serial port of the PC. Suitable RS232 interfaces for the PC, see accessories.

Ordering designation:	RS232 cable 2 m long	RS232 cable 5 m long	RS232 cable 10 m long
Item number:	710336	710336-5M	710336-10M




Technical Data:	Plug: RJ45 – 9 pin SUB-D socket
	Colour: grey
	Length: 2 m / 5 m / 10 m

i

CAN interface cable T

CAN cable for connecting a DAC1005 axis controller to a CAN interface on the PC. Suitable CAN interfaces for the PC, see accessories.

Ordering designation:	CAN interface cable T 2 m long	CAN interface cable T 5 m long	CAN interface cable T 10 m long
Item number:	710413	710413-5M	710413-10M




Technical Data:	PC-side, permanently integrated termination resistor, 120 ohms
	Plug: RJ45 – 9 pin SUB-D socket
	Colour: green
	Length: 2 m / 5 m / 10 m

i

CAN cable

CAN cable for connecting a DAC1005 axis controller to the CAN interface (LocalCOM) on the back of the SMCU II two-axis controller.

Ordering designation:	CAN cable 0.5 m long	CAN cable 1 m long	CAN cable 5 m long	CAN cable 10 m long
Item number:	710403	710236	710403-5M	710403-10M




Technical Data:	Plug: RJ45 – 7 pin Phoenix socket
	Colour: green
	Length: 0.5 m / 1 m / 5 m / 10 m

i


CAN patch cable


CAN patch cable for connecting two DAC1005 axis controllers

Ordering designation:	CAN patch cable 0.3 m long	CAN patch cable 0.5 m long	CAN patch cable 1 m long	CAN patch cable 5 m long	CAN patch cable 10 m long
Item number:	710412	710319	710235	710410	710411



Technical Data:	Plug: RJ45 – RJ45
	Colour: green
	Length: 0.3 m / 0.5 m / 1 m / 5 m / 10 m

i	3D joystick – RS232						
3D Joystick – RS232 Item no. 780127	User-friendly joystick for controlling of up to 6 axes. Three axes can be controlled simultaneously.						
	Technical Data:	<table border="1"> <tr> <td data-bbox="798 300 1141 360">The motion velocities of the axes can be configured and selected on the integrated keyboard</td> </tr> <tr> <td data-bbox="798 360 1141 394">The axes to be moved are selected on the keyboard</td> </tr> <tr> <td data-bbox="798 394 1141 427">RS232 Interface to PC</td> </tr> <tr> <td data-bbox="798 427 1141 461">Supply adapter for fitting in the PC</td> </tr> <tr> <td data-bbox="798 461 1141 602">Length of the connection cable: 5 m</td> </tr> </table>	The motion velocities of the axes can be configured and selected on the integrated keyboard	The axes to be moved are selected on the keyboard	RS232 Interface to PC	Supply adapter for fitting in the PC	Length of the connection cable: 5 m
The motion velocities of the axes can be configured and selected on the integrated keyboard							
The axes to be moved are selected on the keyboard							
RS232 Interface to PC							
Supply adapter for fitting in the PC							
Length of the connection cable: 5 m							

i	3D joystick – USB				
3D Joystick – USB Item no. 501583	User-friendly joystick for controlling of up to 3 axes				
	Technical Data:	<table border="1"> <tr> <td data-bbox="798 808 1141 875">The motion velocities of the axes can be configured and selected on the integrated keyboard</td> </tr> <tr> <td data-bbox="798 875 1141 909">USB interface to PC</td> </tr> <tr> <td data-bbox="798 909 1141 1079">Length of the connection cable: 2 m</td> </tr> </table>	The motion velocities of the axes can be configured and selected on the integrated keyboard	USB interface to PC	Length of the connection cable: 2 m
The motion velocities of the axes can be configured and selected on the integrated keyboard					
USB interface to PC					
Length of the connection cable: 2 m					

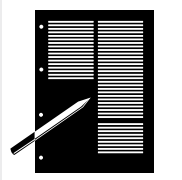



Training and service

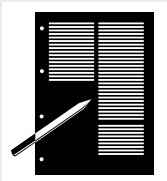
We offer you a well-matched training package for our motion.net™ controller family and the VisualControl® programming interfaces.


Our tutors will show you how to optimally configure, parameterize and use our motion.net™ controllers. In our advanced training, we provide you with detailed knowledge of our VisualControl® programming interfaces.


As a service, we can assemble customized controls for you based on our motion.net™ controllers, and install them on-site. We will also adapt your application software to our control technology.

i	Module 1 – An introduction to the hardware, configuration and parameterization of the DAC1005 and SMCU II axis controllers.	
Training Module 1 Item no. 760005	Let our engineers show you how to optimally configure, parameterize and use our motion.net™ controllers.	
	Training location	LPKF Motion & Control GmbH or in your company (see item no. 760006)
	Length of training	1 day (7 hours)
	Training syllabus	See agenda
	Number of participants	Two up to four people
	The price includes	Participation fee per person, training documentation, participation certificate, food and drinks


i	Module 2 – Introduction to VisualControl® - API	
Training Module 2 Item no. 760007	Our tutors give you detailed knowledge of the VisualControl® programming interfaces.	
	Training location	LPKF Motion & Control GmbH or in your company (see item no. 760006)
	Length of training	1 day (7 hours)
	Training syllabus	See agenda
	Prerequisite	Successful participation in module 1, knowledge of PC programming
	Number of participants	Two up to four people
The price includes	Participation fee per person, training documentation, participation certificate, food and drinks	

i	Additional charge for holding the training in your company	
Additional charge for external training Item no. 760006	We offer you the option of one of our tutors holding the training in your company.	
	Daily rate for the trainer	
	Overnight accommodation, travel and other expenses	

i	Customized control solutions based on motion.net™ controllers
Ordering designation on request	
	<p>Assembly of a control adapted to your requirements, including solutions for the wiring and installation</p> <p>Configuration and commissioning of the entire control</p> <p>Commissioning on-site: Is offered separately</p> <p>Manufacturing of single items and series</p> <p>Documents</p>

i	Support for the configuration and commissioning of motion.net™ controllers and/or customized controls on-site
Ordering designation on request	
	<p>Support for the configuration and commissioning of motion.net™ controllers and/or customized controls on-site</p> <p>Assembly, configuration and commissioning are done by one of our qualified service workers</p> <p>Billing is on the basis of daily rates, plus overnight accommodation, travel costs and other expenses for our employee</p>

i	Adaptation of your application software to our motion.net™ control technology
Ordering designation on request	
	<p>We adapt your application software to our motion.net™ control technology so that you can establish your product quickly and successfully in the market.</p> <p>Billing on the basis of a detailed offer</p>

i	Support for the adaptation of your application software to our motion.net™ control technology
Ordering designation on request	
	<p>The support is provided by one of our highly qualified software engineers.</p> <p>Billing on the basis of daily rates, plus overnight accommodation, travel costs and other expenses for our engineer.</p>

Publisher:

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Dr.-Ing. Gunter Blank

Registration Court:

Kreisgericht Suhl
Registration number HRB 1523

VAT-ID no.

DE 150932457

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