

LÜTZE-REPORT

The international magazine of the Lütze Group

IF A PIONEER CELEBRATES 100 YEARS

THE PT100 TRANSDUCER

TERMINAL SOCKET RELAY
FROM LÜTZE

LÜTZE SUPERFLEX®-PLUS CABLES

ADDITION TO CABLEFIX RANGE

EMC-COMPLIANT MACHINES
AND EQUIPMENT INSTALLATIONS

LÜTZE INTERNATIONAL

CUSTOMER-SPECIFIC CABLE
ASSEMBLIES

PREWIRING WITH APIFACE

e d i t o r i a l EDITORIAL



Friedrich Lütze
Founder
of the Lütze Group

Lütze International presents ...

In forthcoming editions of "Lütze Report", I will be presenting the subsidiary companies of the "Lütze International" group to you...

The first subsidiary to be founded was LÜTZE SARL in 1976 in Mulhouse, Upper Alsace, France. Just a few years after the company was founded, we moved the headquarters to Eaubonne and then to Taverny, where we were able to construct and move into a prestigious, yet highly functional building.

From an organisational point of view, this was most important, as Taverny is very central (it lies close to Paris) and has good transport links to the whole of the country. We have a number of well trained sales engineers in our team and they travel to all parts of France, taking care of all our customers in industry. Needless to say, if you contact the office of LÜTZE S.A. in Taverny, you will also be able to get all the technical information you need from our team of expert engineers which is based there.

With our team of skilled, committed members of staff, it is our objective to offer our customers the best possible solutions in the automation field, as well as reliable, on-site service. Company Director, Mr. J. Oebel, and his team are always at the disposal of our customers in France.

Further information can be found at our website: www.luetze.com

Yours sincerely,

F. Lütze



INDEX

Trade fairs	Page 3
New Vice President at Lütze USA	3
If a pioneer celebrates...	4/5
The PT100 transducer	6
Terminal socket relay from Lütze	6
Lütze Superflex®-Plus cables	7
Addition to Cablefix range	7
EMC-compliant machines and equipment installations	8/9
Lütze International	9
Customer-specific cable assemblies	10
Prewiring with APIFACE	11

IMPRINT

Published by:
LÜTZE INTERNATIONAL GmbH
Bruckwiesenstrasse 17-19
D-71384 Weinstadt/Germany
Tel. 0049 7151 60 53-0 • Fax 0049 7151 60 53-277
E-mail: info@luetze.de
Internet: www.luetze.com

Editorial/Coordination:
LÜTZE AG
Oststrasse 2 • CH-8854 Siebnen/Switzerland
Tel. 0041 55 450 23 23 • Fax 0041 55 450 23 13
E-mail: info@luetze.ch
Internet: www.luetze.ch

Copywriting/Layout:
RITTER KREATIV...
Unternehmensberatung + Kommunikation AG
Gerberngasse 44 • 3000 Bern 13
Tel. 0041 31 313 30 30 • Fax 0041 31 313 30 39
E-mail: info@ritterkreativ.ch
Internet: www.ritterkreativ.ch

Photography by:
zVg + FOTarena Bern • Tel. 0041 31 313 30 36
E-mail: fotarena@complot.ch

Printed by:
Hertig + Co. AG, Biel

TRADE FAIRS

Lütze goes around the world:

Exhibition	Place	Dates	
Amper	Prague (CZ)	01.04. – 04.04.	Lütze A
HMI	Hanover (D)	07.04. – 12.04.	Lütze D
Industria	Budapest (H)	27.05. – 30.05.	Lütze A
Maschinenbaumesse	Nitra (SK)	27.05. – 30.05.	Lütze A
Maschinenbaumesse	Brünn (CZ)	16.09. – 20.09.	Lütze D
INELTEC	Basle (CH)	02.09. – 05.09.	Lütze CH
Viet	Vienna (A)	30.09. – 03.10.	Lütze A
SPS/IPC/DRIVES	Nuremberg (D)	25.11. – 27.11.	Lütze D
ET 2003 (Eisenbahn-Technologie)	Basle (CH)	03.12. – 05.12.	Lütze CH

NEW VICE PRESIDENT AT LÜTZE USA



On October 14, 2002, **Mr. Juergen Seybold** was appointed Vice President of Lütze Inc. in Charlotte, NC.

Mr. Seybold has extensive experience in the machine tools industry. Together with his wife, he has lived in the US for more than 12 years in various places like Chicago, Detroit, and since 2001 in Charlotte. Even though he is still able to speak his southern German dialect, Mr. Seybold decided a long time ago to stay in the US for good.

In his current position it is his task to align the US organisation with current customer needs and help advance the company into a big-league position in our industry. Mr. Seybold is the designated successor of the current President and CEO, Mr. Udo Lütze, who is to take over global management of the whole Lütze Group.

Company founder, Friedrich Lütze, is 80 IF A PIONEER CELEBRATES . . .

Karl Heberle

Actually, when you reach 80 you should be enjoying well-earned retirement. – Actually. But what does “actually” mean in the case of Friedrich Lütze? Actually scarcely exists for him, and if it does, then it means: only just! This is the image you should have of Mr. Lütze, even if you have never had the pleasure of meeting him personally, for example at his glittering 80th-birthday party.

Many illustrious guests accepted the invitation to the festivities ... the fitting birthday speech was delivered by Senator Klaus Freytag, Director of Siemens AG A&D, further good wishes came from Chief District Administrative Officer J. Fuchs, Lord Mayor J. Oswald, District Assembly member R. Kurz, not to mention K. Eisert from ZVEI and W. Scholz from IHK. Customers, suppliers, friends of the man himself and the company, members of staff – all made up the cheerful party crowd which was there to congratulate Friedrich Lütze, the pioneer.

In the “Schwabenlandhalle” in Stuttgart, everything was centred around him, the achiever from Weinstadt, who still holds responsibility to this day and holds the reins of Lütze International.



Detail to be gleaned from the eulogy: **For us, Friedrich Lütze is an entrepreneurial personality with a remarkable curriculum vitae.** His professional career stretches from manufacturing in a back yard to high-tech production, from local to global sales, from wholesaling niche products to component production. Behind all this is a hard worker. His humanity and dependability, an ability to think strategically and solve problems, a delight in making decisions and dogged persistence all combine to form the ideal image of an entrepreneur. **What stands out in Friedrich Lütze is his original Swabian mentality and strength of character.**

He returned to his homeland in 1952 as a so-called “Swabian resettler” after a period as a prisoner-of-war. Fortified with the intention to become “independent”, just like many others from his country, he took his fate in his own hands. He rolled his sleeves up and got onto his motor scooter, later a second-hand Volkswagen, so he could visit his customers in neighbouring countries himself. He supplied them with everything to do with the electrotechnical accessory trade that the traditional wholesalers did not stock. **So the keys to his success were a capacity for invention, spontaneity and a talent for improvisation.** The one-man business eventually became a strong global player in the electrical and electronic components sector, employing a staff of 350 people, not only in Europe, but also in the USA.



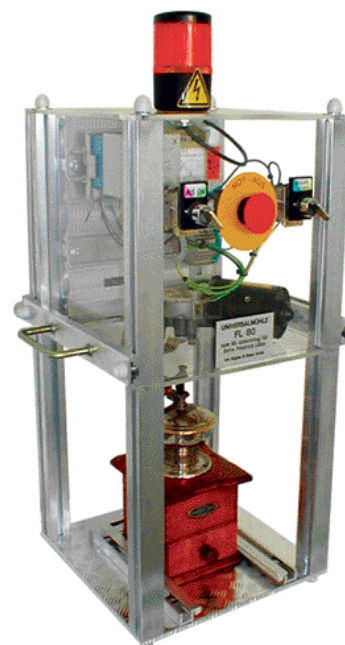
After so much praise it only remains for us to wish you one thing: "Start the next decade of your life in good health, strength and with a thirst for action."

Mr. Lütze obviously took this to heart, as he was on the dance floor throughout the whole evening and sat out hardly any dances to the swinging music. And some people rightly assumed that the "senior citizen" seemed so young that we didn't have to worry about him.

And one thing just could not be forgotten – his present of course. A discrete envelope? A dusty old painting in a boring frame? No: **a delightful and ever-so practical machine to constantly remind him of the dynamics of his life's work.**

As Regina and Elmar Rothe (employees of Lütze, Germany) unpacked the parcel measuring almost 2 metres in length, one thing became clear. This was something of a very technical nature!

The FL 80 Universal Mill. A virtuoso construction made up of different components (chosen to fit the job) really looked the part. Because put to use here were a milling mechanism, a DC motor, which up to now had been the wind-screen wiper motor in a VW Golf, an LSC plug-in unit, key switches, a warning light and a few other appropriate items, making **a veritable household appliance ... almost Lütze-like!**

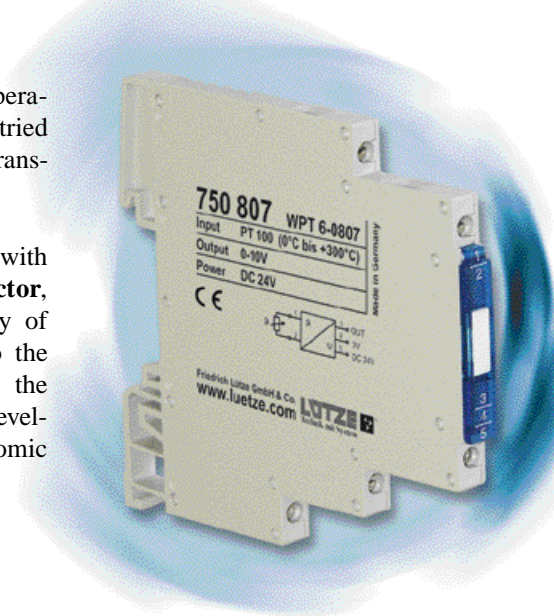


New to the tried and trusted MICROKON transducer range THE PT100 TRANSDUCER

Jürgen Wendel

This year, a PT transducer and temperature sensor are being added to the tried and trusted **MICROKON** range of transducers:

This range of PT transducers starts with a **PT100 twin conductor connector**, with an output signal and accuracy of 0.2%. This transducer is built into the **space-saving 6.2-mm housing** of the MICROKON range and has been developed for mass ranges where economic temperature monitoring is required.



The following transducers are built to the same quality standards as the analogue-analogue transducers previously used in the MICROKON series, i.e. with an accuracy of 0.1% and precalibrated. **Secure isolation, optimised and universal cable termination** are of prime importance here.

A selection of four different temperature ranges will be available as standard: -50° to $+50^{\circ}$, 0 to 100° , 0 to 200° and 0 to 300° . Other temperature ranges will be available on request.

The only TOP connector in the world for screw terminals TERMINAL SOCKET RELAY FROM LÜTZE

Jürgen Wendel

6

The range of Lütze relay modules, which is marketed under the Microcompact name, is being expanded by the addition of a **version in a 6.2-mm housing** that is the **only TOP connector in the world** for screw terminals.

This form of connector has proved to have several advantages: The TOP connector offers **greater reliability** when wiring, because the wire entry and screw head are always visible from above. In addition, TOP connectors **save space**, as the distance from the cable duct in the area of the cable entry can be reduced.

Also linked in with the development of this new terminal socket relay were the **requirements of the market for improved flexibility** as regards the switching function of this module. Therefore, for example during the commissioning of the equipment when it is adapted to suit the user's needs, in spite of the existing wiring, the type of switch can be changed from relay to semi-conductor.

A further important benefit offered by this new module: **The design of the terminal base for widespread SNR relays is such that all terminals can be bridged.**

TOP connector and **plug-in relay** are two functions in one housing which further **optimise** previous relay applications and make possible **optimum functionality**.



Lütze Superflex®-Plus cables AWARDED cUL CERTIFICATE

Andreas Braun

Over the last 25 years, **top-quality Lütze Superflex® cables suitable for drag chain use** have proved themselves in thousands of installations.

Now the **Plus version** of this cable, which is **halogen-free** and with a **PUR outer casing**, has been **cUL-certified** and is therefore approved for the entire North American market.

The advantages of Lütze Superflex®-Plus cables at a glance:

- Halogen-free
- UV-resistant
- Resistant to mineral oils and greases, as well as many chemicals
- Burning behaviour as per VDE 0472, part 804, test type B IEC 60332-1
- Smallest bending radius of 7.5 times external diameter
- Smaller bending radii also possible, depending on application
- Acceleration of up to 10 m/s
- Series test stopped at 20 million bending cycles



Ingenious new product

ADDED TO CABLEFIX RANGE

Andreas Braun

Yet another module has been added to the **time- and space-saving Cablefix cable bushing** range: A **new 6-way bushing** for cable diameters ranging from **6.3 to 8.9 mm** covers the majority of control cables usually found on the market.

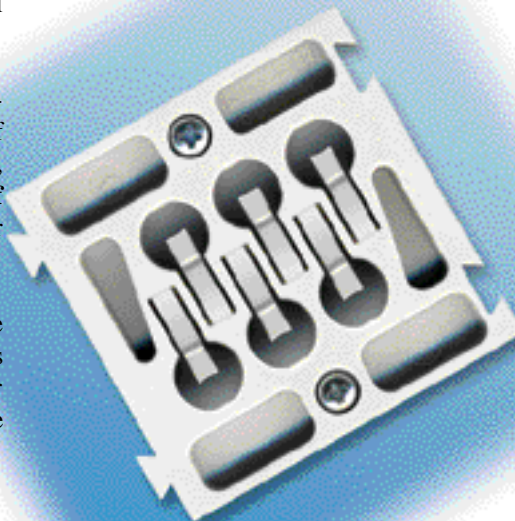
This means it is possible to take advantage of Cablefix not only in the case of **bushings for actuator-sensor cables**, but also in the case of the **installation of control cables in the industrial or building automation sectors**.

There is no longer need to spend time and money on individually drilled holes and screw fittings: instead of four, six or even eight individual holes, just one

cut-out the same size as for standard chassis models has to be made in the switch cabinet door and then the Cablefix secured in place with two

screws. The cables are simply pushed through the flange with its integrated strain relief and rubber seal, and then connected.

The ingenious design enables not only a good seal around cables, but also a clear allocation of cables to terminals. In the event of any modifications, it is no problem to remove cables and refit them.



Lütze AG and the "University of Technology Zürich" present: EMC-COMPLIANT MACHINES AND PLANT INSTALLATIONS

Niyazi Ari / Carmine Russo

Technical systems are getting more and more complicated. As a result of continuous development, they are increasingly subjected to interactions, be this internally between individual components and modules or externally between different systems. Interaction between systems and parts of systems are usually lumped together under the term "electromagnetic compatibility (EMC)".

"Electromagnetic compatibility" is the ability of a piece of electrical equipment to keep functioning satisfactorily in its electromagnetic environment, without having an inadmissible effect on this environment, which also includes other items of equipment.

Engineers, technicians and professionals with a practical involvement in this field are being confronted more and more by EMC problems. The precise definition of electromagnetic compatibility is specified in various norms (DIN/VDE) and standards (IEEE).

Lütze AG, Siebnen, working in collaboration with the **University of Technology Zürich**, is offering you support in the solution of EMC problems.

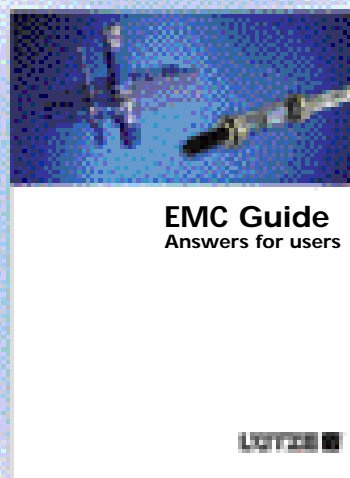
The experience and **know-how of the Lütze company** in the field of interference suppression and the correct installation of plant and machinery is being combined with the theoretical knowledge of the **University of Technology Zürich**. When planning electrical and electronic systems, it pays to carefully plan and deal with EMC measures in advance. An EMC concept, which is put into practice step by step from the start, protects against unwanted surprises and costly consequences. It is expensive to take corrective EMC measures at a later stage, and this can usually only be achieved with certain compromises. In many instances, however, it is no longer possible at all.

Does this make you curious? Would you like to learn more about EMC?

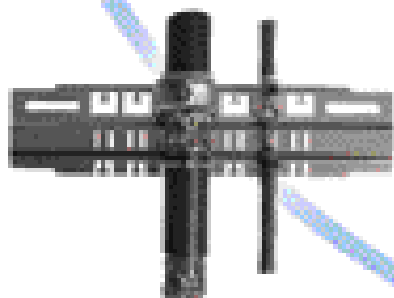
Then do not hesitate to ask Mr. Niyazi Ari, Prof. Dr. sc. techn. ETH, Dipl. Ing. ETH, at the University of Technology Zürich, and the capable staff of Lütze AG in Siebnen.

Have a discussion with us, we would be only too pleased to advise you if you are facing problems relating to EMC in your projects and have to design your plant and machinery to be EMC-compliant. **Lütze's extensive product range** will help you deal with matters in this area **at a reasonable cost**.

We would be pleased to send you, free of charge, our practical EMC Compendium, information on the **range of offerings** of the **University of Technology Zürich**, as well as our catalogue including **products for EMC-compliant** machinery and installations.



EMC Shielding
Rails



EMC-Suitable Field Bus
Technology



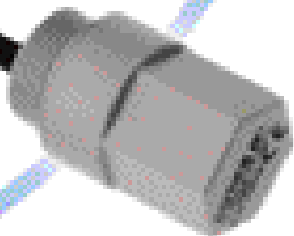


Niyazi Ari,
Prof. Dr. sc.techn.ETH,
Dipl. Ing. ETH,
University Zürich

Suppressors
for Valves



Suppressors
for Motors



LÜTZE INTERNATIONAL

Think global, act local.

Get in direct contact with your local Lütze partner.



Friedrich Lütze GmbH & Co.
Postfach 1224 (PLZ 71366)
Bruckwiesenstrasse 17-19
D-71384 Weinstadt
Tel. 0049/7151/60 53-0
Fax 0049/7151/60 53-277
E-mail: info@luetze.de
www.luetze.de



LÜTZE S.A.
52, avenue des Châtaigniers
BP 76
F-95157 Taverny CEDEX
Tel. 0033/1/34 18 77 00
Fax 0033/1/34 18 18 44
E-mail: lutze@lutze.fr
www.lutze.com



LÜTZE
Elektrotechnische Erzeugnisse GmbH
Niedermoserstrasse 18
A-1220 Wien
Tel. 0043/(0)1/257 5252-0
Fax 0043/(0)1/257 5252-20
E-mail: office@luetze.at
www.luetze.at



LÜTZE AG
Oststrasse 2
CH-8854 Siebnen
Tel. 0041/55 450 23 23
Fax 0041/55 450 23 13
E-mail: info@luetze.ch
www.luetze.ch



LÜTZE Inc.
13330 South Ridge Drive
USA-Charlotte, NC 28273
Tel. 001/704/504-0222
Fax 001/704/504-0223
E-mail: info@lutze.com
www.lutze.com



LÜTZE Ltd.
Unit 4, Brabazon Court
Borman
Lichfield Road Industrial Estate
GB-Tamworth, Staffordshire B79 7T A
Tel. 0044/(0)1827/31 3330
Fax 0044/(0)1827/31 3332
E-mail: sales.gb@lutze.com
www.lutze.com



Friedrich Lütze GmbH & Co.
Via G. Verdi, 6/a
I-23870 Cernusco Lombardone (LC)
Tel. 0039/039 928 49 36
Fax 0039/039 599 573
E-mail: info@luetze.it
www.luetze.it



Please send us more information about articles in this magazine.

Subject _____ Page _____

_____ Page _____

_____ Page _____



Please send us information about your entire product range.



We would like some advice. Please call us.

From:

Firm _____

Surname/Forename _____

Address _____

Tel./Fax _____

E-mail _____

Customer-specific cable assemblies

AN AREA OF KEY INTEREST FOR UK CUSTOMERS

Nigel Broad

The automation systems of today are becoming ever more complex in order to meet the demands of high-speed production requirements. PC control, servo and field bus systems are now commonplace in modern machinery. The connections for these components are vital to **ensure high reliability of the complete machine system and require the correct specification of cables and connectors.** Parameters to be considered are

- electromagnetic compatibility
- signal compatibility
- high IP rating suitable for the environment
- many of these assemblies are subject to continuous movement, and therefore the correct selection of cable is important to ensure maximum reliability.

Recognising the need to maintain a high degree of integrity, the individual product vendors issue tight specifications of cable assemblies in order to guarantee functional systems.

More recently the Desina specification has emerged as a de facto standard for the standardisation of pneumatic and electrical components and their interconnection relating to machine tools and manufacturing systems. **This Desina specification creates a structure for the colour of cables used for the various functions which enables cables to be readily identified when in situ.** Desina cables can be integrated by Lütze into customer-specific applications with suitable connections fitted.

Lütze in the UK has seen interest develop rapidly in customised cable assemblies, customers integrating control equipment have called on the cable and system **competence that Lütze provides**, and applications including servomotor, feedback, I/O cabling, bus connections and customised sensor-actuator cable systems have been realised. Many of the systems integrated have been designed for continuous movement in energy chains.

We see our broad knowledge as a manufacturer of electronic products and special cables as a distinct advantage to customers at the design stage, and our technically competent staff are always available to discuss new applications and provide advice.



Prewiring with APIFACE FAST AND RELIABLE

Alain Lancelle

The Afma Robotics company, which has its premises close to the city of Tours, specialises in the manufacturing of portal robots for automated production plants. The company was facing the task of realising an installation, the objectives of which have now become standard: the reduction of development and production time for automatic system switch cabinets.

In order to be able to stick to the deadline, conventional wiring of input and output lines with the S7 300 control system was rejected. Instead of this, they used Lütze's suggestion of prewiring with APIFACE.

The individual wiring of a plug-in module in the control system with 32 connections requires over one and a half hours' work. The time needed for preparing the cable, insulating the stranded wires, crimping, labelling and fastening to the control system connector and the terminal blocks in the switch cabinet is quite considerable. Over and above this, wiring mistakes are not uncommon.

With the products in the APIFACE family, Lütze offers a solution which can reduce the time spent wiring a control system with 32 connectors to just a few minutes, as well as eliminating any wiring mistakes.

In fact, Lütze supplies fully assembled leads in all required lengths which are connected at one end with a plug-in connector for the control system and an HE10 socket at the other. This is connected to the HE10 plug of the Lütze interface module (can be snapped into DIN track) under the control system in the switch cabinet.

These leads are supplied tested, and the design of the HE10 connectors means that wiring mistakes are eliminated.

Lütze supplies different modules for 8, 16 and 32 inputs, relay modules for 8 and 16 outputs (up to 10 A), as well as fully assembled leads in different lengths for connecting to all commercially available control systems.

