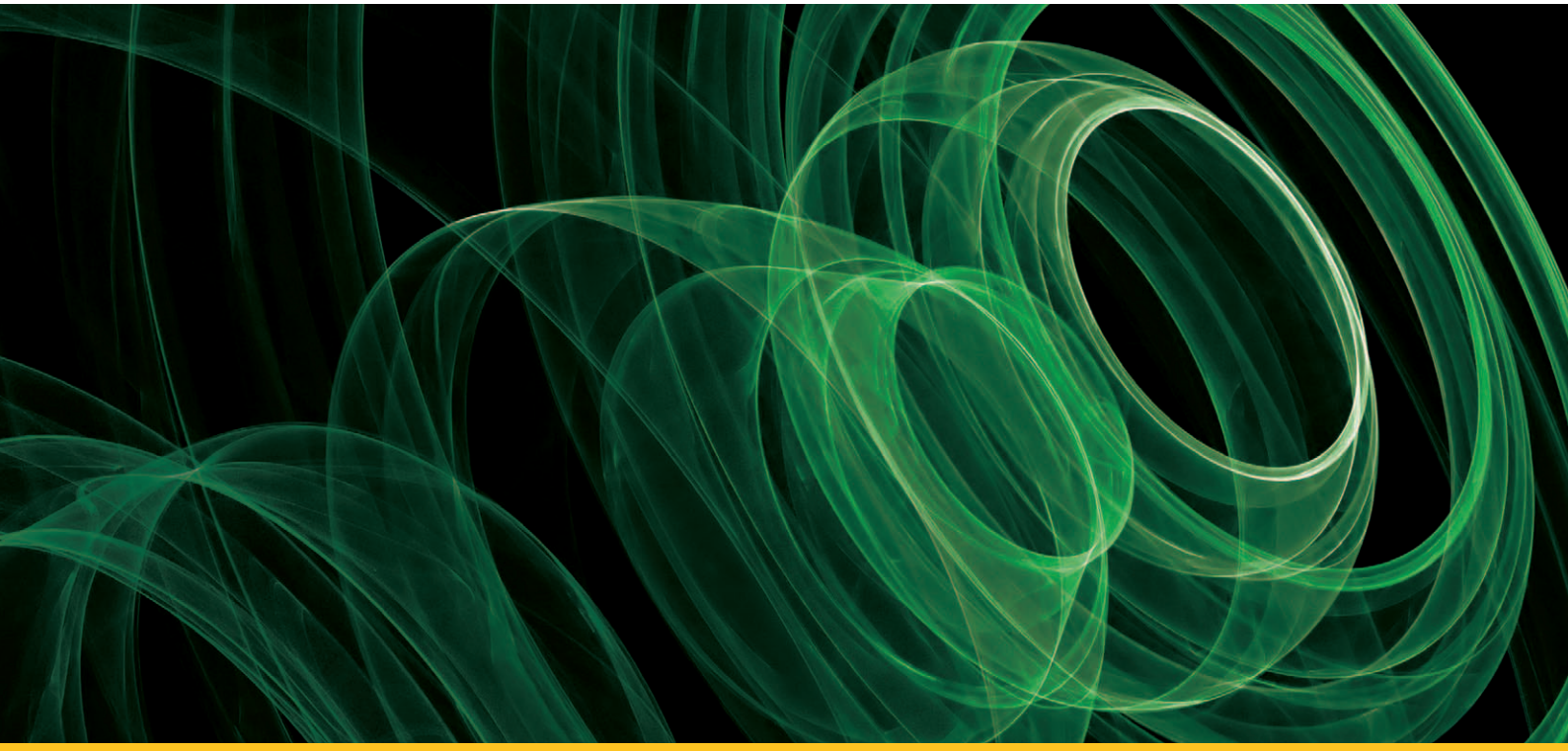
Loepfe



YARN*MASTER*® 3N1

Fitting Instruction
Schlafhorst AC0 288

46229003en

Loepfe Brothers Ltd.
Kastellstrasse 10
P. O. Box 582
8623 Wetzikon/Switzerland

Phone +41 43 488 11 11
Fax +41 43 488 11 00
E-Mail service@loepfe.com
Internet www.loepfe.com

03. 2012 / Version 1.0.0

Table of Contents

Safety Instructions

Norms and Regulations

The LOEPFE YarnMaster® 3N1 yarn clearing system is a product which has been inspected for technical safety. It complies with the following directives:

98 / 37 / EEC	Machinery Directive
2006 / 95 / EC	Low Voltage Directive
2004 / 108 / EC	Electromagnetic Compatibility

Instruction Manual

To prevent faults and operating errors, we recommend to carefully read this Instruction Manual and to carefully follow the instructions given.

! Indicates warnings which, if not properly observed, could harm your health, impair the functioning of the equipment or the security of your data.

Note: *The screen representations in this manual serve as illustration only. They should not be used as setting examples!*

A copy of this Instruction Manual must be kept easily accessible near the machine.

Liability

The manufacturer assumes no liability for damage caused by:

- Noncompliance with the safety, operating and maintenance instructions contained in this Manual.
- The use of spare parts/non-OEM parts/conversion parts not supplied by us.
- Unauthorized conversion and modification of the yarn clearer.
- Normal wear.

Operational Notes

The installation of the equipment should only be performed by qualified personnel being familiar with all safety checks, installation and service guidelines.
Improper operation of the equipment could cause hazards.

In accordance with 98 / 37 / EEC, 2006 / 95 / EC, 2004 / 108 / EC. Do not open any covers (cooling, fire protection, contamination, spark interference etc.)

Electronic components and assemblies (printed circuit boards) are endangered by electrostatic charges! Beware of touching the soldered connectors, pin contacts before they have been discharged statically. Hold the units at the periphery only.

Upgrade works must be carried out with switched off mains switch only. Failing to observe this warning may lead to death or severe injuries!

This yarn clearer system must be connected to the power supply only after installation of all front panels, plug-in boards and provided covers, in particular of the central unit.

Connect the supply input of the Q-UNIT 3N1 to a 24Vdc SELV supply, that is switched off if the machine is switched off, or if the emergency button is pushed.
Make the earth connections.

Unit specifications see last page.

Fitting 3N1

Basic situation is a machine without any clearer system.
If there is one fitted to the machine, it must be removed before installing 3N1

Time instructions (based on 240 Rotors)

Time for	Approx. man hours
Deinstallation of old system	14
Installation of 3N1 (full and basic)	28
Time for:	**Hours**
Start up	5
Time for: (only one time)	Hours
Teaching	8

Work on Informator:

Usually this should be done by the ACO responsible person in the mill.
For any case and to be sure follow the instructions for print out all settings:

1. Check if there is enough paper in the printer (approx. 1 m)
2. Esc/K/L and choose your language
3. Esc/B/G Report of parameters full

Note: After finishing installing SCU, you should make a Urstart (factory reset).
Instruction after Urstart: Esc/S/choose for Yarn Monitor: COROLAB

Note: Start up and checks in the Diagnosis

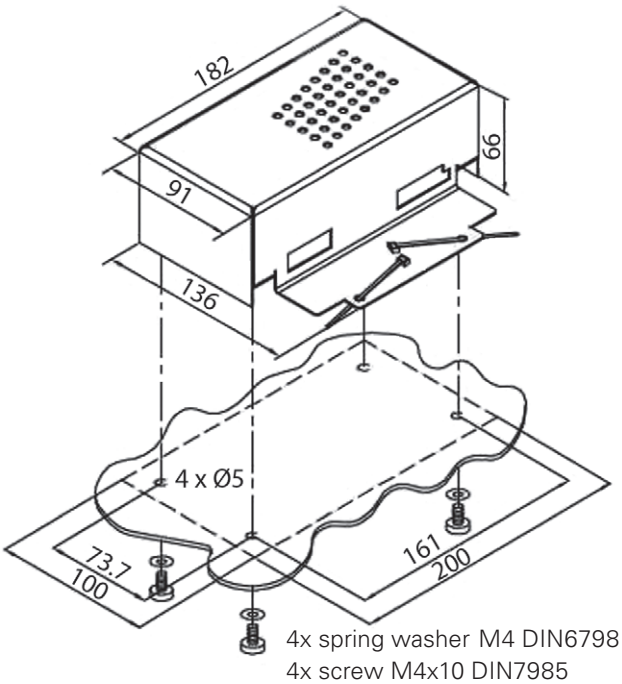
Preparation of Cabling

Cabling SCU Front

SCU Side:

Power supply 24 V
Ground
4K
LAN to Q-Board

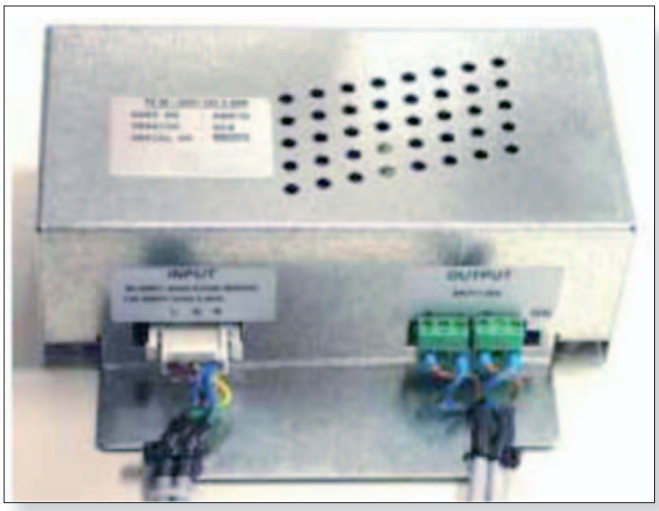
The power supply must be installed by an electrician



4x spring washer M4 DIN6798
4x screw M4x10 DIN7985

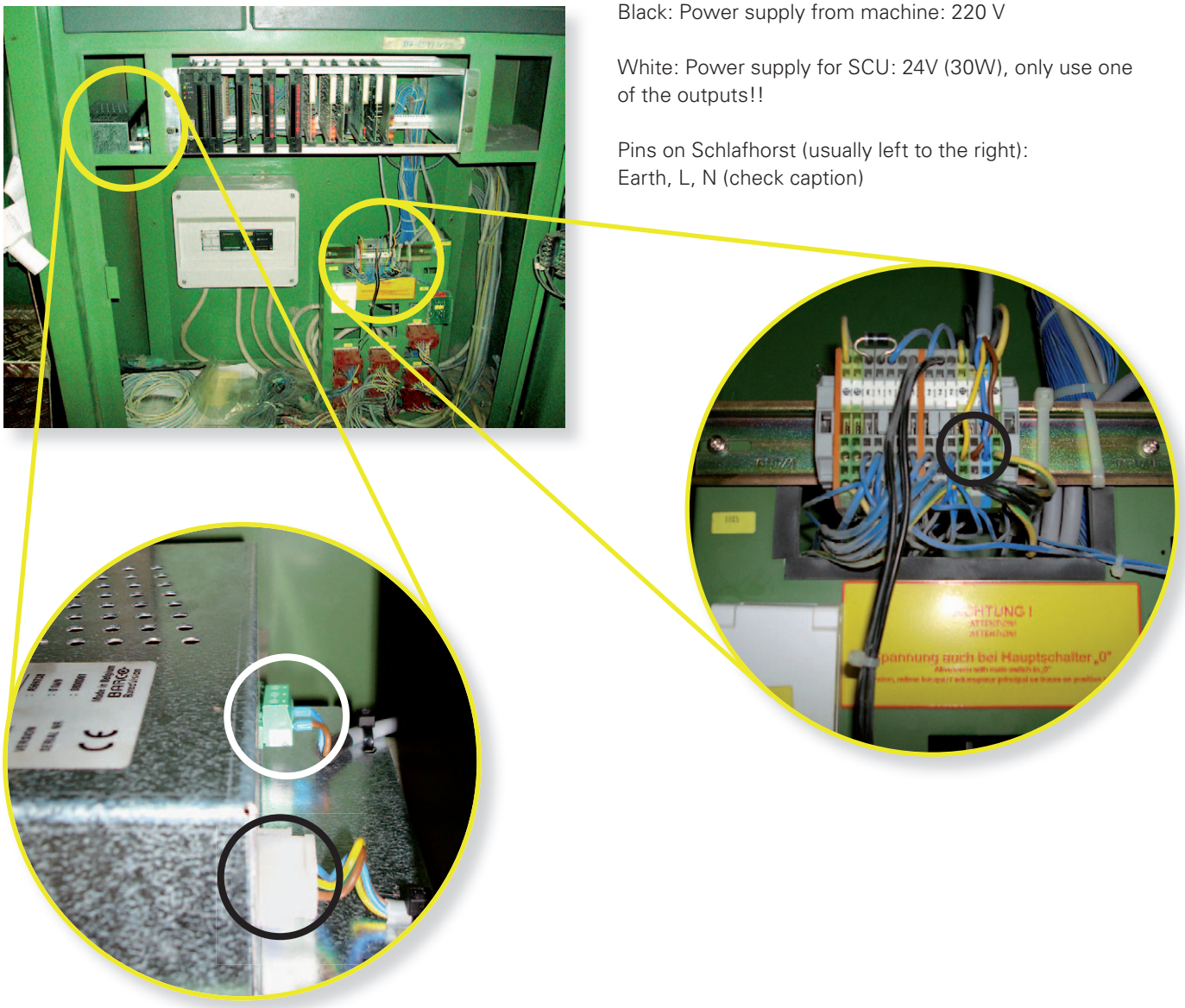
Power Supply mounting

4. Drill 4 holes Ø 5mm and deburr.
5. Install the power supply as shown. Mounting parts and cable ties are provided
6. Fix the power input and power output cables with the cable ties to the power supply, as shown.
7. Make sure that the cables are tied at the cable mantle and not at the wires.



Power Supply connections

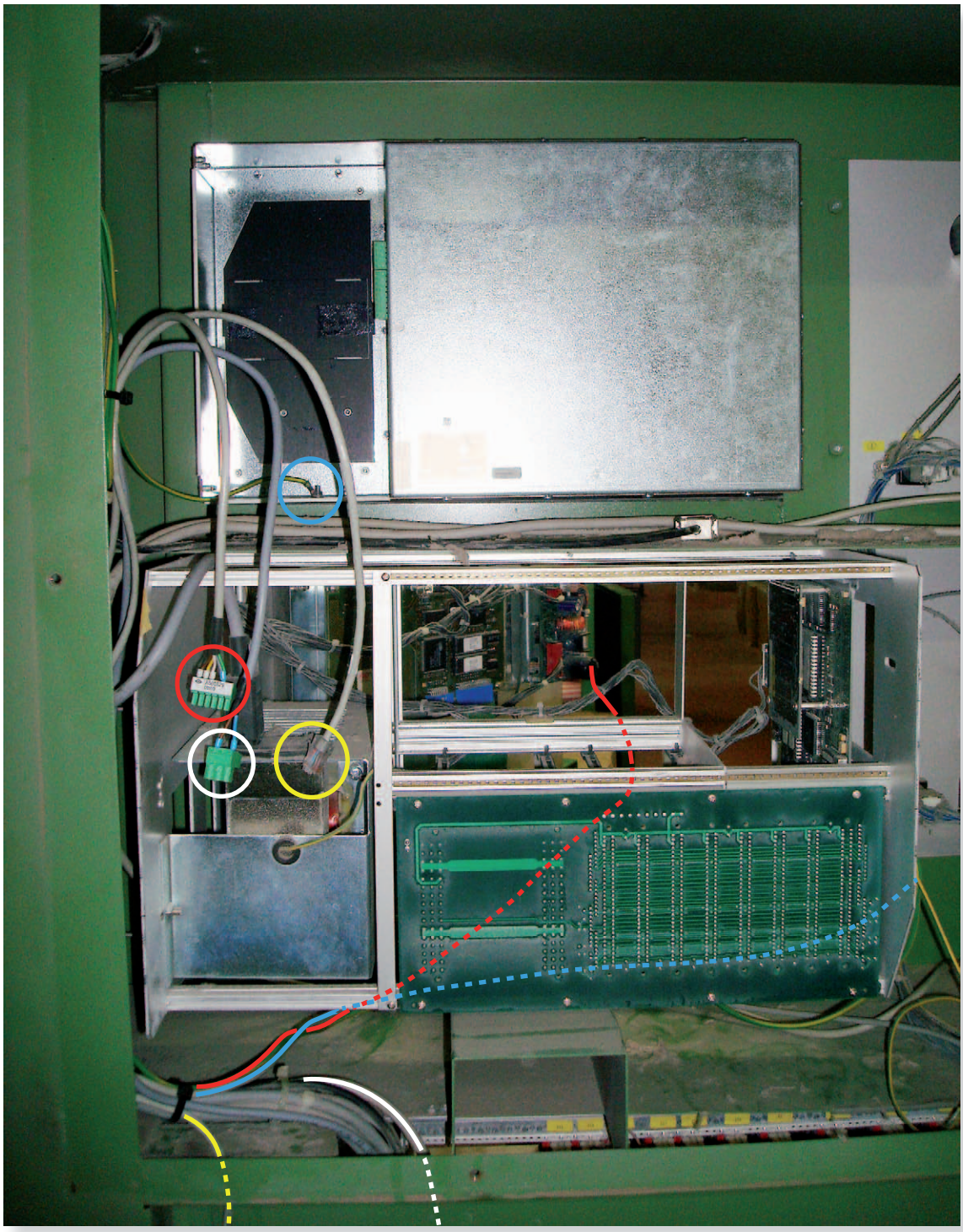
Power Supply Connection



Black: Power supply from machine: 220 V

White: Power supply for SCU: 24V (30W), only use one of the outputs!!

Pins on Schlafhorst (usually left to the right):
Earth, L, N (check caption)

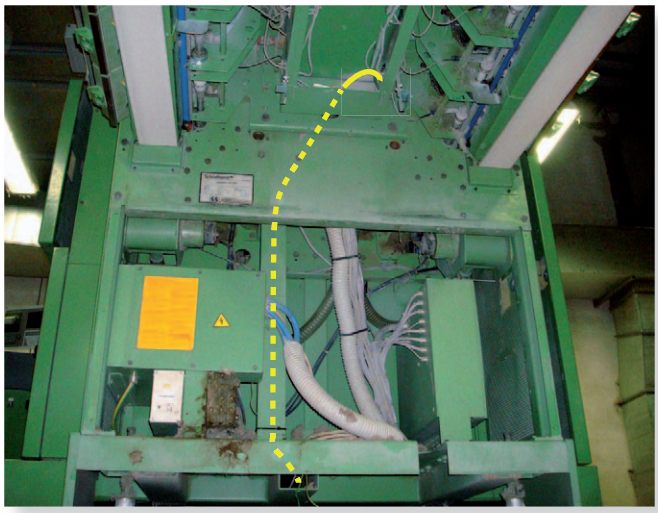


Cabling SCU Backside

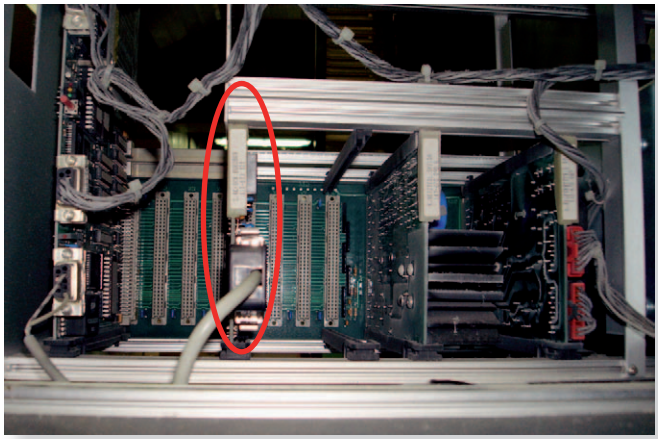
Yellow: LAN to Q- Board
Red: 4K cable to 4K card at Schlafhorst Informator
Blue: Ground: to housing (or somewhere else with an assured ground)
White: power cable for power supply, front side as installed.

LAN to Q-Board

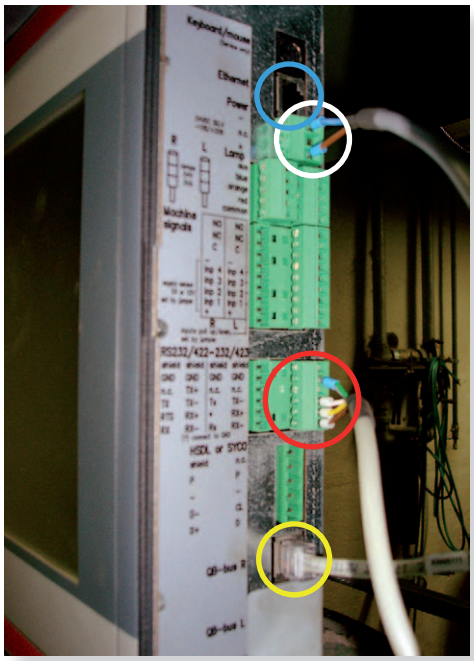
Remove the covers, use the tube for connection to the Q-Board side.



Remove the cover:
The LAN comes through the tube from the SCU side (below). Use the channel to fit the cable before you feed it into the cable channel (above). This cable goes directly to the first SE Board (long LAN cable)



4K cable to 4K card (inside of the Informator)
The card is written down.

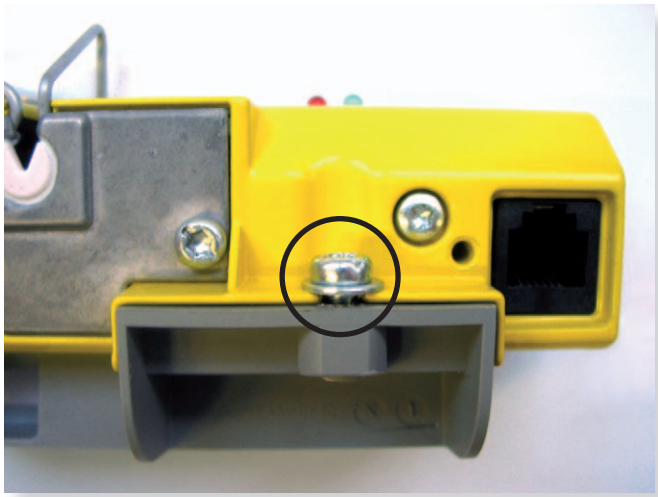


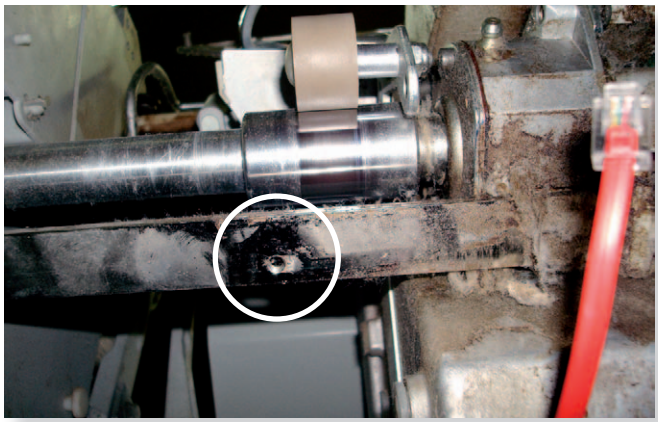
Connection to SCU

White: Power
Red: 4K
Yellow: LAN to Q-Board
Blue: company network (for remote/OE Browser)

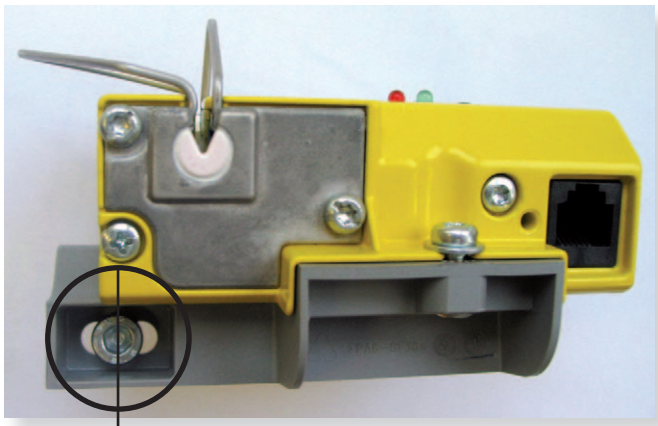
Fitting of Sensors

Prepare the sensors and screw the mounting piece to the sensor.



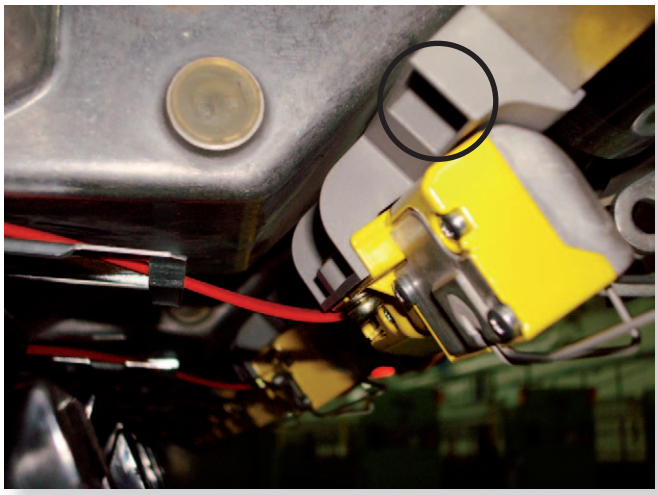


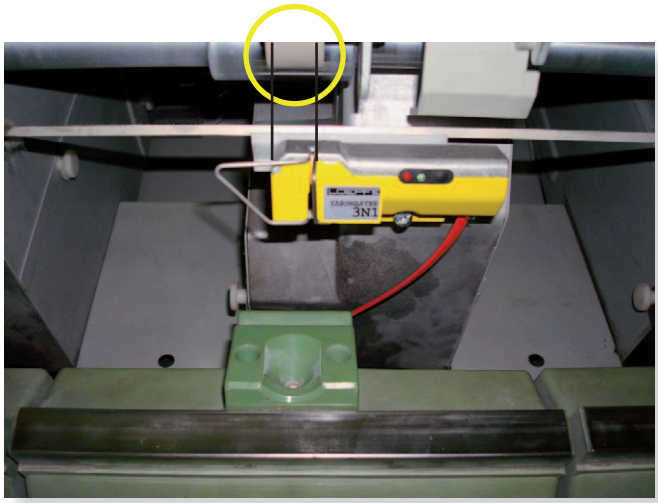
Picture 1



Picture 2

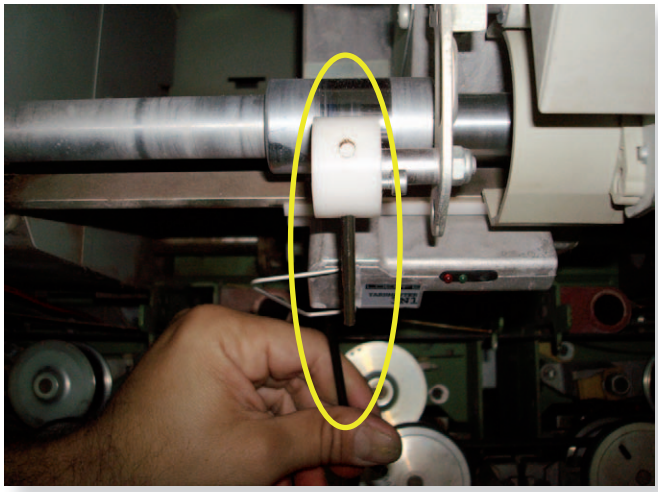
Screw the sensing head into the existing hole of the bar (Picture 1) and position it in the middle of the hole of the mounting piece (Picture 2). It is necessary to do it in this way to be able to make a readjustment.





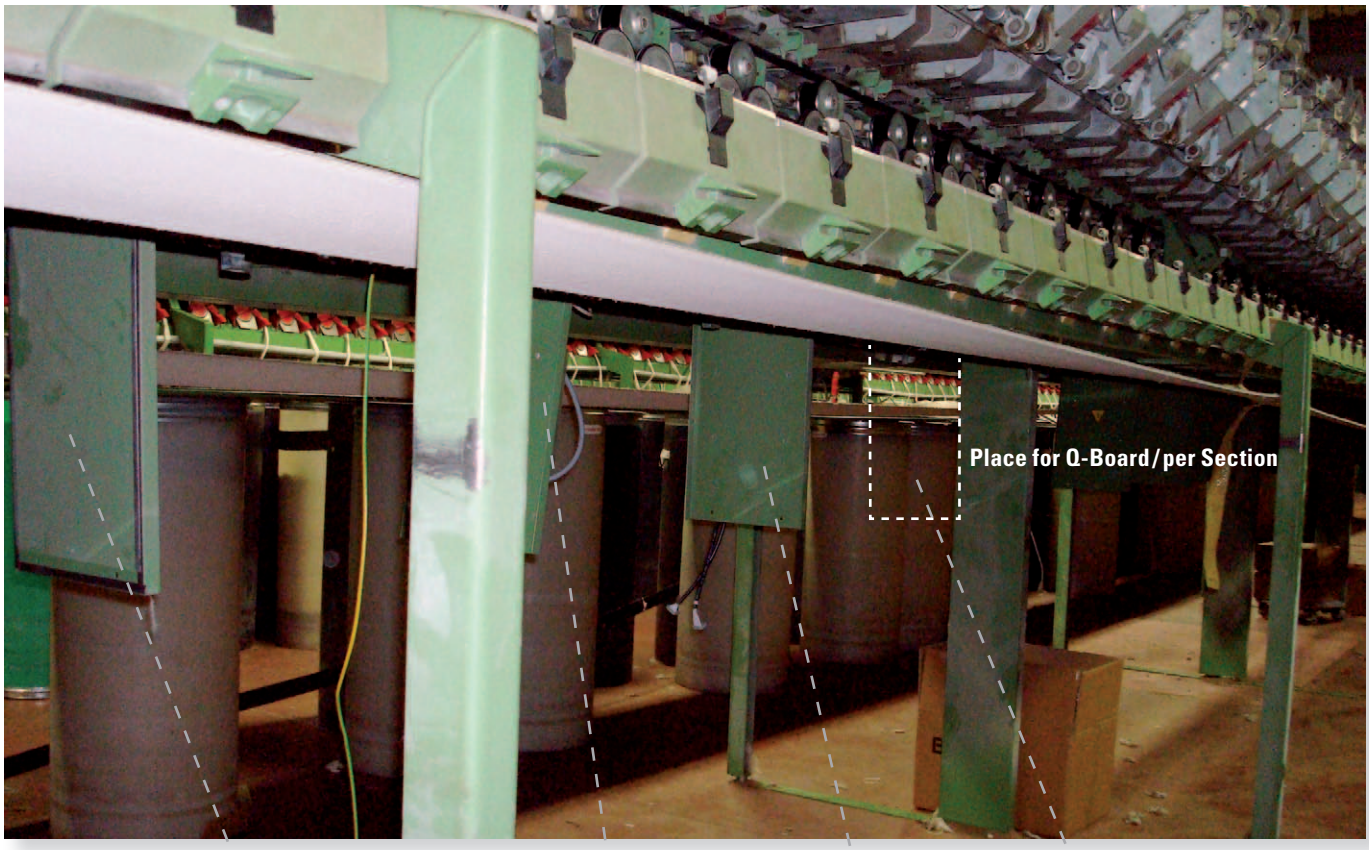
At least: the measuring slit should be in the range of the press roller. (Picture)

If this is not so, the metal bar with with screwed on sensor should be slided. This should be done by the mill mechanics. To do this the adjusting parts for the sensor should be used, if available.

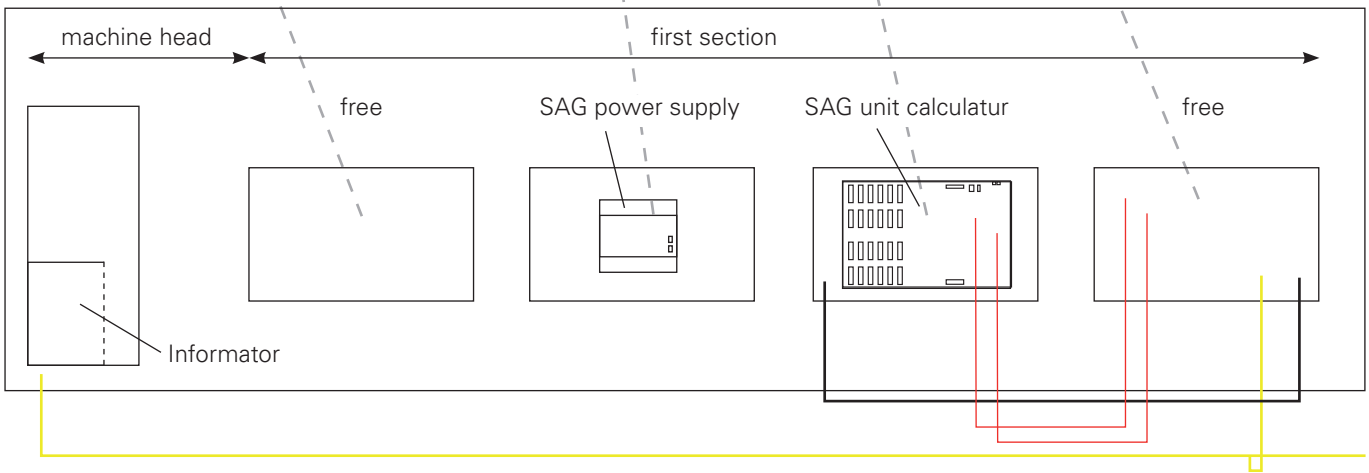


Adjustment

Cabling of the Section Electronic (SE)



View from below

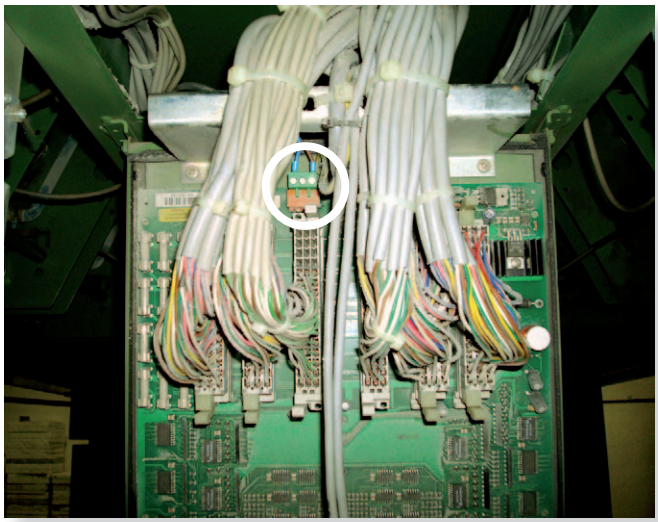


Yellow: LAN to SE-boards (splitter on each section)

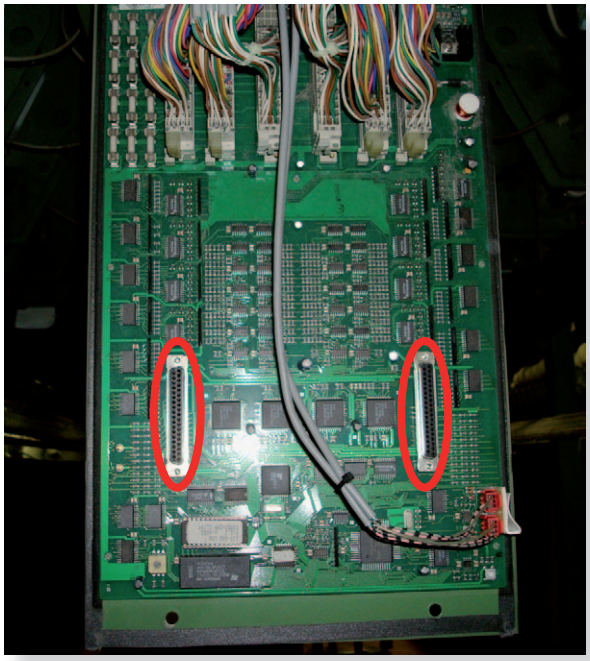
Black: Power supply (from SAG, section electronic of Schlafhorst)
Red: Start / Stop cable IF to connect the SAG)

For exact cabling see the following description. Before starting with the cabling the sensors should be fitted!

Connections to SAG



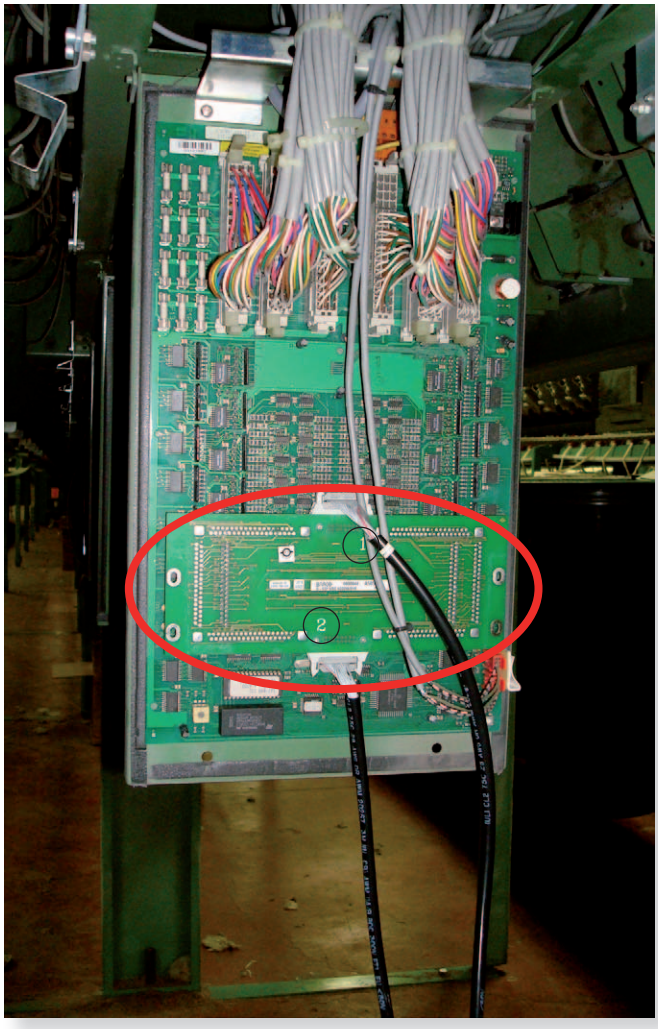
White: Power supply for Q-Board



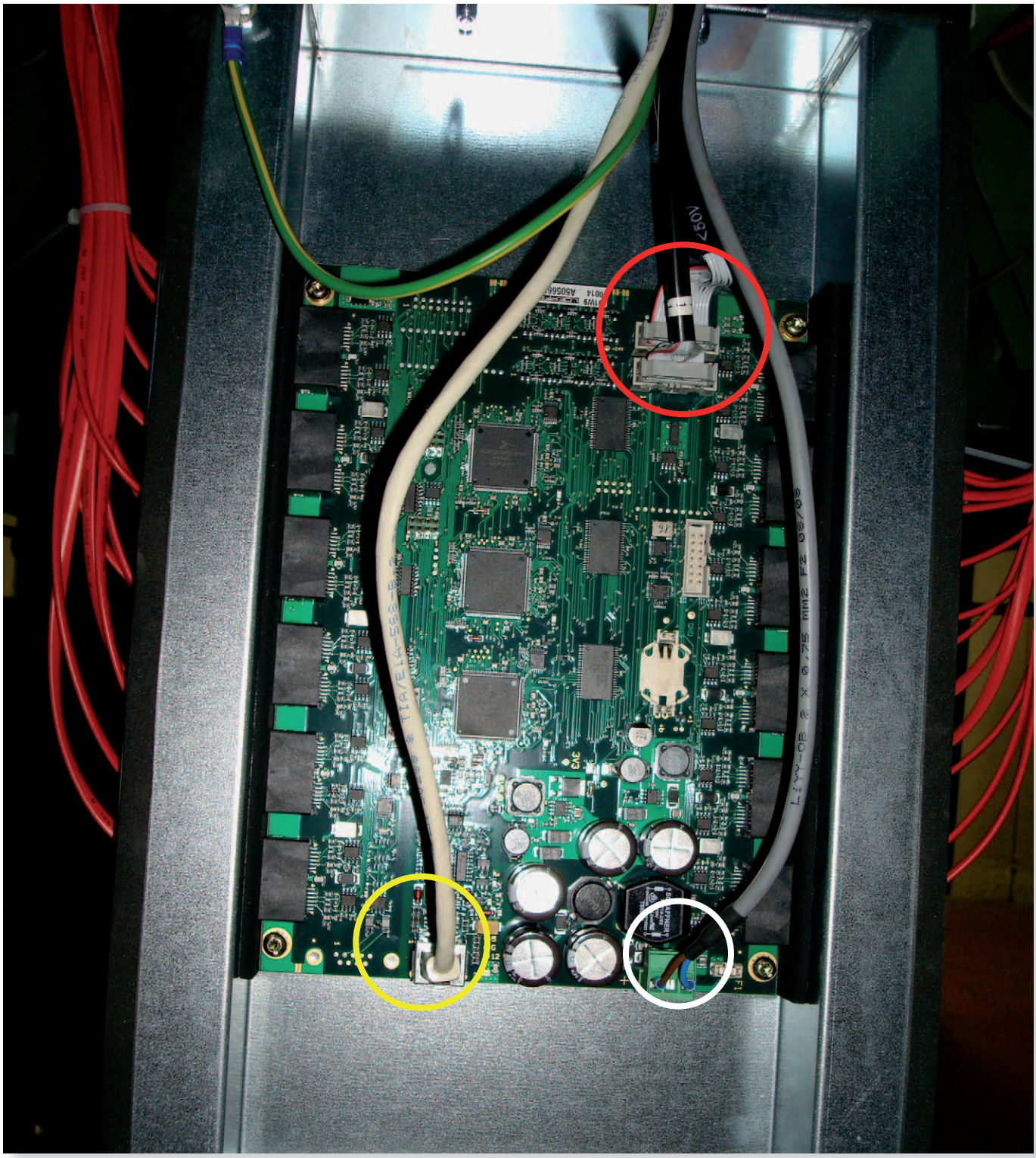
Red: Q-Stop cable, each for one side (12 rotors)

The SAG board requires an Interface print. It can be simply plugged on.

Position 1 to connector lower connector on the SE-Board
Position 2 to connector superior connector on the SE-Board (top connector)



Q-Board Connections

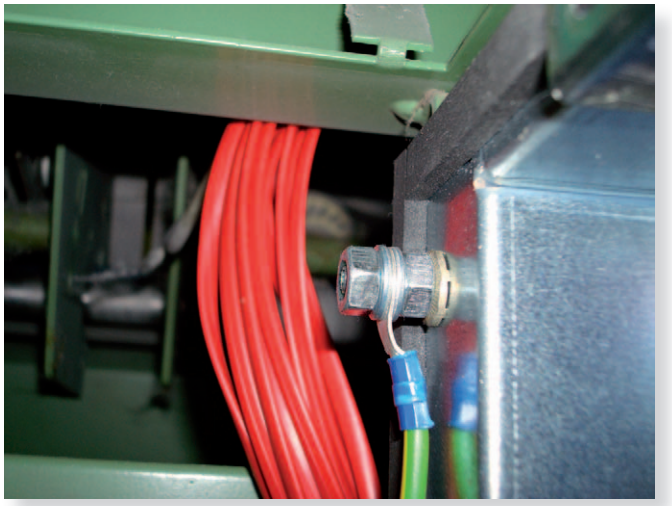


Red: Stop cable:
Lower for SAG Board IF connector number 1
Superior for SAG Board IF connector number 2

White: Power supply 24 V from SAG

Yellow: LAN to SCU, is splitted by each section see the following picture

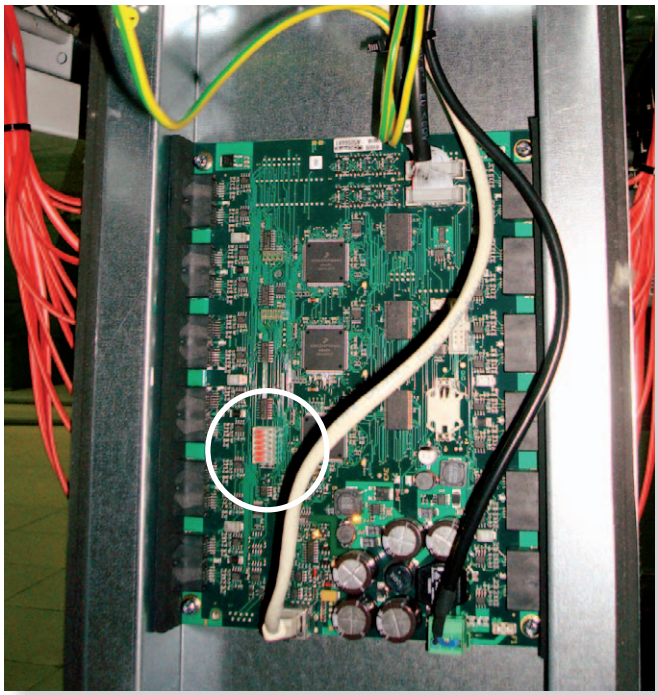
Earthing of SE-Board



The screw must be screwed onto the Q-Board at the upper left side, as illustrated.

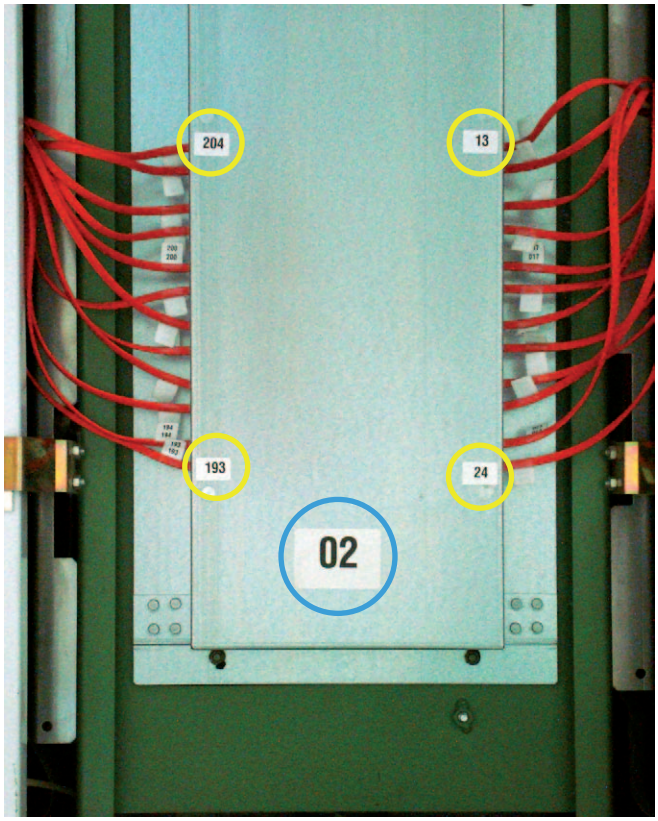
The earthing is assured by the cable channel. Above the opening at the end of the section there is a screw, which can be used for this purpose. The ground wire can simply be laid along the side panel.

SE Address



Set the right address on the switch of the SE. Address sticker is on the SE case.

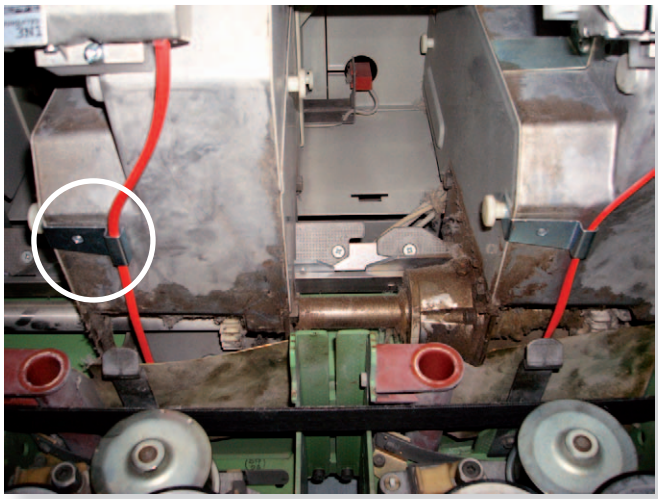
Labeling of SE-Board



The labelling is to be done by the fitter. As soon as the Q-Boards are placed the attached stickers must be fixed.
This marking serves for a correct cabling and helps in case of exchange.

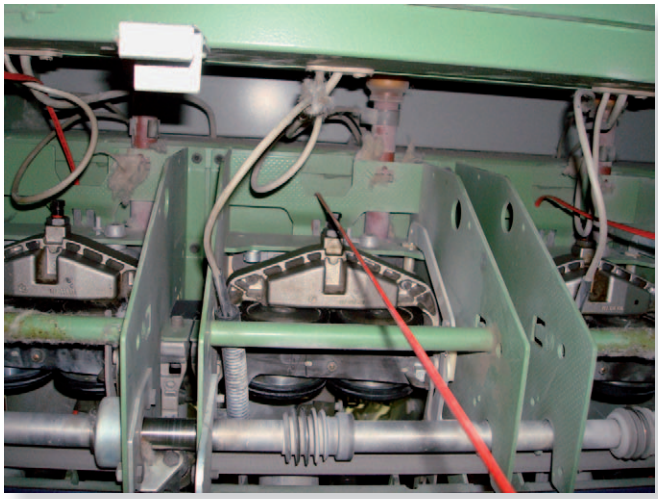
Blue: SE-Board number
Yellow: first and last rotor number on each side.

Sensor Cables



On each machine side:
6 cables, length 3 m (SCU side, longest way to Q-Board)
6 cables, length 2 m (shorter way to Q-Board)

Cable from the sensor to the inside of the machine. Use the support (different types available).

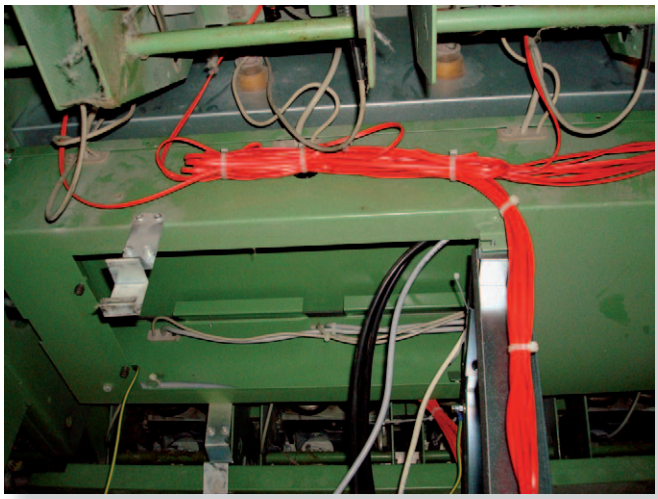


Inside (view of the backside of the rotor)

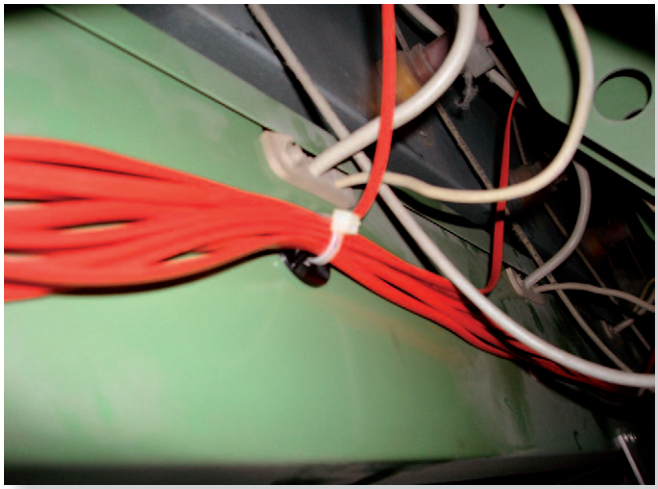
Labling of sensor cable (hanging end!!), when the cable is plugged into the sensor and led to the inside.

Use the Rotor number as a help!!!

Option 1: Tie-Wraps

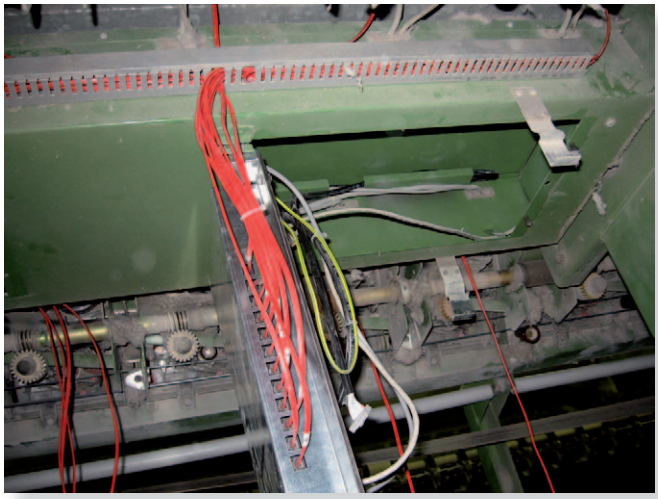


Fit the cable with tie-wraps or with cable channels (depends on the machine and on the preinstallation)
And connect to the right connector of the SE-board



Affix the tie-wraps on a mounting. Before affixing the mounting, clean the place very properly (rotor position 3 / 6 / 9 / 11, starts from the section beginning).

Option 2: Cable Channels



For both sensor cable layings an orderly laying is necessary to avoid unnecessary loops.

Specifications

(Section Electronic)

A905262: Q-UNIT 3N1 ACO FP => Full clearer

A9052621: Q-UNIT 3N1 ACO BASIC => Basic clearer

A905265: Q-UNIT 3N1 ACO240/STD FP = Full clearer

A9052651: Q-UNIT 3N1 ACO240/STD BASIC => Basic clearer

– Unit	
– supply voltage	: 24Vdc SELV
– supply voltage range	: -15% / +25% (including ripple)
– supply current	: 1.1Adc
– Fuse	: T2AL
– Temperature range	: 5 – 50°C non condensing
– Output stop signals	
– Auxilary supply stop signals	: pin10/J44 and pin10/J45
– Output voltage	: 12V +/- 5%
– Maximum output current	: 100mA / connector
– High side outputs	: J48, J49
– Type of output	: open collector
– number of outputs	: 2 x 12 outputs
– Max. output current / output	: 5mA
– Max. output voltage if output is active	: Supply voltage
– Min. output voltage if output is active	: Supply voltage - 1.5V
– Low side outputs	: J44, J45 or J53, J54
– Type of output	: open collector
– number of outputs	: 2 x 12 outputs
– Max. output current / output	: 30mA
– Max. output voltage if output is active	: 1.5V
– Min. output voltage if output is active	: 0V
– Max. ouput sustaining voltage	: Supply voltage
– Internal pull-up resistor	: 10KΩ / output to supply voltage

Loepfe

Loepfe Brothers Ltd.
8623 Wetzikon/Switzerland
Phone +41 43 488 11 11
Fax +41 43 488 11 00
info@loepfe.com
www.loepfe.com