### For the professional user

## **Operating Instructions**

### Für den professionellen Anwender

## Betriebsanleitung

Class: 124 Klasse:

Model: 12 Ausführung:

Machine number: *Maschinen-Nr.:* 

Dated: Stand:



## The sign of quality

You find the Strobel trademark on every
Strobel machine leaving our works. And with good
reason. This symbol is a guarantee of the high quality
of our products. Quality which creates trust – trust
in our technology, our service and, not least of all,
in our good name.

# Im Zeichen der Qualität

Sie finden die Strobel-Schutzmarke auf jeder Strobel-Maschine, die unser Werk verläßt.

Und das aus gutem Grund. Denn dieses Zeichen garantiert Ihnen für die hohe Qualität unserer Produkte. Qualität, die Vertrauen schafft – in unsere Technik, unseren Service und nicht zuletzt in unseren guten Namen.

## A decision with future

Strobel clients know that they can expect a particularly high standard of performance from our company and our machines. Now you have decided on one of our products. For us this is a source of encouragement and of obligation to justify your trust.

If you wish to profit for as long as possible from the performance and efficiency of your Strobel machine, exact handling and thorough care is necessary. For this reason we kindly request that you read the operating instructions exactly. It provides all the information you need for troublefree operation.

And if you do happen to need a spare part, the enclosed spare parts list gives a complete overview. It is clearly classified according to components so that you can find the required part quickly and easily. In order to avoid errors we request that you quote fully machine class, machine number and part number on your spare part order.

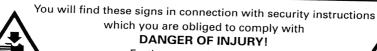
We wish you lots of success in your work with your new Strobel machine.



## General notes on safety

# Non-compliance to following security instruktions may lead to injures or damages of the machine.

- The machine must only be commissioned in full knowledge of the operation book and operated by persons with appropriate training. Before putting into service also read the safety rules and instructions of the motor supplier.
- 2. The machine must only be used for the purpose intended.
- 3. Use of the machine without the safety devices belonging to it is not permitted.
- 4. When gauge parts are exchanged (e.g. needle, looper, needle plate, transport feeds, if necessary cutters, cutter block, for cleansing purposes) during threading, when leaving the workplace and during service work, the machine must be separated from the mains by switching off the main switch or disconnecting the mains plug. On mechanically operated clutch motors without start inhibitor it is necessary to wait until the motor has stopped.
- 5. General servicing work must only be carried out by appropriately trained persons.
- 6. Repairs, conversion and special maintenance work must only be carried out by technicians or persons with appropriate training.
- 7. For service or repair work on pneumatic systems the machine must be disconnected from the compressed air supply system. Exception to this are only adjustments and function checks made by appropriately trained technicians.
- Work on the electrical equipment must only be carried out by electrical engineers or appropriately trained persons.
- 9. Work on live parts and equipment is not permitted, except as specified in regulation EN 50110.
- 10. In case of conversion or modification of the machine, all applicable safety regulations must be adhered to.
- 11. For repairs, only replacement parts approved by us must be used.
- 12. Comissioning of the sewing head is prohibited until such time as the entire sewing unit is found to comply with EC directives.



Furthermore please comply with the general security instructions.

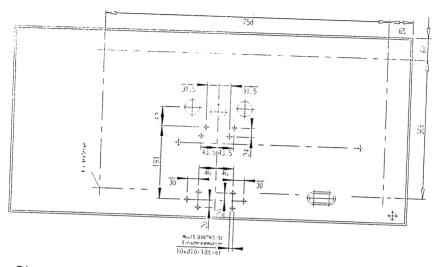
Benzstraße 11, PF 1242 D - 82178 Puchheim Tel.: 089/ 80096 - 244 Fax: 089/ 80096 - 190

# Garantiekarte/ Warranty Sheet

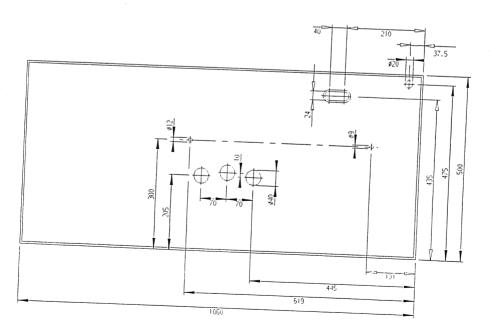
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Auftrag	s-Nr./ Order C	onfirmation No:			
Lieferda	ntum/ Delivery	Date:			
Rechnu	ngs-Nr./ Invoid				
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# Oberseite / upperside



113.01.02

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Rights of modifications for improvements reserved!

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#### Operating instructions/Parts list - STROBEL CL. 124-10 and 124-14

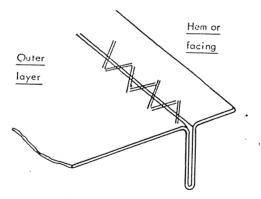
#### 1. Applications

1.01 These machines are double blindstitch sewing machines for hemming operations, switchable to prepare heavy, medium or fine fabrics.

On CI. 124-10 the stitch plate opening is reduced by  $\frac{2 \text{ mm}}{\text{medium fabrics can be sewn.}}$ 

The stitch plate opening of CI. 124-14 is reduced by  $\frac{4 \text{ mm}}{}$ , so that it is appropriate for processing heavy and fine fabrics.

1.02 As both models possess two separate cloth support arms, only one layer of material is placed on the equally separate cloth pressers, or in case of diagonal seams, two layers each. The hem is guided vertically between the two cloth support arms (Fig.). Height of passage space: 120 mm.



Due to the "hammer", placed on the left side of the stitch plate and the spring-loaded left cloth presser, <u>only</u> the uppermost layer of cloth on the outer layer is penetrated by the needle over diagonal seams. This ensures blind stitching without marks.

The irreprochable passage of diagonal seams is guaranteed by tilting feed plates with maintenance-free telescope bearings.

Stitch length: 14 mm.

Lifting of cloth support arms by means of pedal, requiring only reduced pressure, causing only reduced fatigue to the operator.

1.03 To process alternatively heavy and fine or medium cloth on these models, the switching device has been installed on the stitch plate and the right cloth support arm.

Switching executed by means of the two levers by the operator with no loss of time.

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#### 2. Construction features

#### 2.01 Installing the machine

The machine is furnished complete with stand and needle high positioning motor. After unpacking, only the linking rods must be hung and the yarn reels fixed.

#### 2.02 Speed and direction of rotation

In case of receiving the machine without motor, use a motor with a speed of 1400 st/min. and a capacity of 1/2 HP. V-belt disk on the motor: outer diameter  $69 = \text{dm } 63 \cdot \text{V-belt} = 10 \times 6$ . This motor permits immediate reaching of full speed, i.e. 2200/min.

On complete machines, before connecting to mains, check the tension specified on motor = voltage.

Direction of rotation: When looking at the hand wheel from the right, counter-clockwise. For reversing the direction of rotation, interchange two of the black cords placed within the plug. The yellow/green cord serves as protective cord.

### 2.03 Adjusting synchroniser

These models are customarily furnished with QUICK-Stop motor, execution A (one needle position).

After braking, the machine is placed into position by means of a reduced speed, whereupon it will come to the standstill.

By turning the synchroniser on the hand wheel (hexagonal keys included within the accessories), the machine is placed in a position in which the needle swings to the foremost left position.

#### 2.04 Stand

These machines are mounted horizontally on the standard table type ( $50 \times 106$  cm) and a supplementary table type  $101\,091$  with three clamps  $215\,036$ . Thereby, the operator is supplied with a supplementary work plate appropriate above all for processing large pieces.

### 3. <u>Instructions for the operator</u>

#### 3.01 Maintenance

Periodical lubrication of the machine will ensure troublefree functioning, long service life, vibration-free running. In case of intensive use, daily cleaning and lubricating of the parts placed within the heads are required.

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Lubricating spots are marked in red. Also provide lubricating spots on the lower part, i.e. at the left and the right from the two lower support arms every day with few drops of oil.

All parts placed within the cloth support arm - excepted the ball joint driving the cloth presser - are provided with maintenance-free sinterized bearings.

#### 3.02 Neddles and yarns

The choice of the most appropriate needle is of utmost importance for the quality of the seam.

Needles available: STROBEL 1671, sizes 80, 90 and 110.

Size 110 only available with rounded-off point and standard eye, therefore solely used for very heavy goods.

Sizes 80, 90 available with rounded-off point (R) and/or with one-sided point (E), bearing supplementary designation "eo" = narrow eye, e.g. for thread size 80/3.

When using extremely thin threads, we recommend these needles with very narrow eye = "v o".

For heavy and front-fused goods, needle 1671 RCH 80 is recommended.

#### 3.03 Stitch depth adjustment

Adjust stitch depth on both sides for one layer only, turning the hand wheel manually and adjusting the stitch depth with both adjustment knobs placed on the front part of the cloth support arms.

Then let the needle penetrate on the left side and turn the knurled knob placed on the left side of the stitch plate to the right towards the "hammer", until this part touches lightly the material to be sewn (resistance!).

Execute a test seam and re-adjust if need be.

#### 3.04 Thread tension adjustment

These models are equipped with two thread tensions, however, only the one placed on the front part of the machine head must be actuated by the operator. It is mounted horizontally on an angular piece. In this position, the weight of the upper thread tension disk and of the pressure spring will bear no influence on the thread, whereby it can easely be adjusted very acurately.

This second thread tension is released automatically during the sewing operations by means of a cam, after the loop has been caught. This thread tension release ensures an extremely soft seam. Changes of the thread tension do not modify the seam formation, wherefore a self-inserted hexagonal nut has been used.

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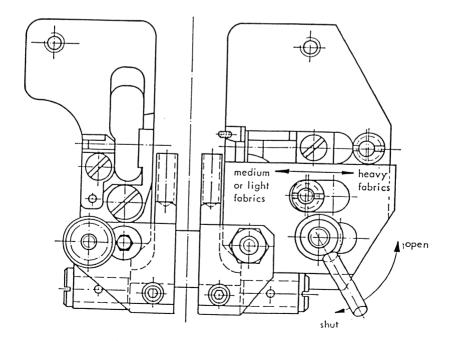
#### 3.05 Switching - Heavy and medium or fine cloth

Switching from heavy to medium or fine cloth or the reverse sequence - Very easy and can be executed as follows:

- 1. Lift cloth support arms.
- Swing lever on lower part of the machine (placed near the right support arm) towards the operator. The right cloth support arm is moving to the left = for medium cloth.
- 3. Release nut on right side of stitch plate (ill.) and move pusher to the left until it touches the stop limit = for medium or fine cloth.

Now, the cloth can be introduced and the stitch plate re-adjusted.

To prepare heavy cloth, the pusher of the stitch plate must be moved to the right until it fouches the stop. The lever of the lower part of the machine is swivelled to the rear, whereby the right cloth support arm is moved to the right.



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#### 4. Instructions for the mechanic

#### 4.01 Stitch plate adjustment (8°)

Upon assembling the machine, the stitch plate is mounted horizontally and the needle radius adjusted by means of a gauge for the following measurements:

On left needle quide = 41.33 + 0.02

Center of needle guide (Zero)

(needle glide plate) = 41,30 ± 0,01

Needle guide within the stitch plate opening (centre) only CI. 120-10 =  $41,33 \pm 0,01$ 

Right needle guide =  $41.36 \pm 0.02$ 

Mechanics taking care of the repair shops in the garment factories not disposing of gauges, above accurate tolerances can only be used as guiding data. Therefore, they should effect stitch plate adjustment by means of new needles. On the zero point the needle should lightly press on the needle glide plate. The needle guides on the needle entrance and needle exit within the needle radius should be only slightly longer. Otherwise, due to its pre-tension (about 0,03 mm), the point of the needle can easily be damaged.

#### 4.02 Stroke of loop, looper adjustment

Standard adjustment of stroke of loop: 3 mm. The looper must be perfectly polished and the loop should not jump. The long and the small fingers should oscillate uniformly at a reduced distance over the needle. As double blindstitch machines produce two loops of different lengths, the longer finger should not be too distant from the needle eye or the loop (about 0,5 mm).

#### Adjustment of stroke of loop:

Turning looper shaft to the left = Stroke of loop becomes smaller = 0,5 mm/revolution.

Turning looper shaft to the right = Stroke of loop becomes greater = 0,5 mm/revolution.

#### Adjustment of stroke of needle:

Adjust longest stroke on ball eccentric.

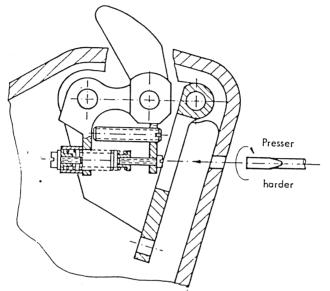
#### 4.03 Feed dog adjustment

These models possess tilting feed dog plates. Adjust feed dog so that the feed dog plates press on the stitch plate with the <u>entire</u> spring pressure when the needle is placed within the center of the stitch plate opening.

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#### 4.04 Spring-loaded cloth presser

The cloth pressers are adjusted for a spring pressure of about 3,5 kg. When processing front-fused parts, this pressure must be increased to about 4 kg by turning the lens head screws placed within both cloth support arms, which on their front part are fitted with a mounting drill hole (ill.).



Both pressers are driven by the lower shaft through eccentrics. The switching periods of the pressers are regulated by means of these eccentrics so that alternatively one presser is moving underneath the needle, coming to a standstill shortly before the needle is penetrating into the cloth. To ensure the alternative moving of the pressers underneath the needle, the lower shaft turns at half of speed of the upper shaft. Drive of the lower shaft 1100 r.p.m. Transmission to the upper shaft by means of maintenance-free dented belt.

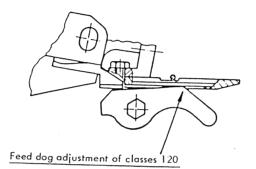
#### 4.05 <u>Lifting of cloth support arms</u>

Both cloth support arms are placed in sewing position and pressed upwards by means of levers 221 429 and 221 430, which remain in the zero position. The cloth support arm will not be springy, whereby irreprochable blindstitch sewing is ensured. In case of play existing within the zero point between the bearing on the levers and the cam, the latter can be re-adjusted after loosening both socket head screws. The levers must be pulled into the zero position by means of the traction force exerted by the traction spring.

#### 4.06 Presser plates

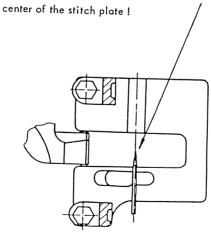
4.06 The tilting presser plates are placed to the rear about 0,5 mm in relation to the pressers. Upon swinging the cloth support arm upwards, the presser plates should be pressed against the stitch plate already 1 mm before reaching the uppermost position. To ensure irreprochable blindstitch penetration of the cloth, it must be kept about 2,5 mm in front of the needle, i.e. the surface of the presser plates

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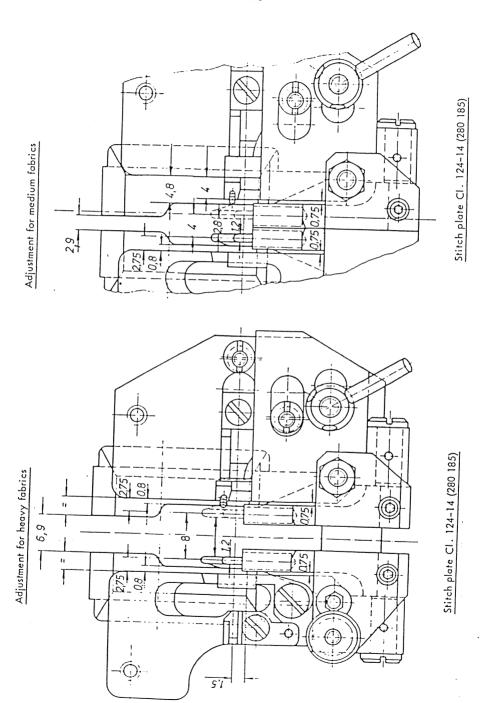


The presser plate must touch the stitch plate,

as soon as the needle point is placed within the



213.13.05



# Thread Trimmer for STROBEL One Thread Blindstitch Michines

#### 1. Instructions for the mechanic

1.01 Cutting the thread at the end of the seam avoids marks on the outside of the cloth usually caused by manual jerking off the thread, thereby increasing the quality of sewing.

All threads being marketed, are out at the end of the seam by the STROBEL thread cutter sufficiently short so that the chainstitch will not unravel. To start immediately the next seam, the needle thread length will be about 40 mm after the cutting operation.

The STROBEL thread cutter is pre-mounted and composed of two main groups:

- Thread knife group, complete
   No. 384 107 = For all classes composing series 120-10
- Turning magnet group, complete
   No. 498 059 = For all classes composing series 120-10

Please refer to the attached parts list in regard to special pieces required for mounting the thread trimmer on the different classes of the machines.

The high-mortality pieces, i.e. the turning knife No. 184 107 and the spring-loaded knife No. 184 108 are furnished with these machines.

1.02 Upon replacing the knives, loose lens head screw 172 357. It is recommended to lock this screw with a locking agent such as Loctite.

After Inserting a new turning knife, turn the driving shaft manually and check that the cutting edges of both knives are gliding reciprocally upon cutting the thread. By the reciprocal function, both cutting edges are automatically sharpened upon swivelling. Between the cutting edge of the spring-loaded knife and the hook of the thread take-up, a play of at least the size of a thread must remain. Re-adjust the hook, if necessary.

After replacing the spring-loaded knife, ensure that the nose is placed within about the middle of the drill hole within the stitch plate yoke. The spring-loaded knife must spring in smoothly, because otherwise the scisser effect would not exist, preventing the sewing thread from being cut. The nose can be readjusted.

1.03 To guarantee their correct functioning, the mechanical pieces must run smoothly.

The shaft 130 222 is set at the factory with Molykote, wherefore it is maintenance-free. The cross joints possess sufficient play and must not be lubricated. This also applies to the pieces found on the rotary magnet underneath the cover 112 164.

1.04 The microswitch 297 029 is protecting the rotary thread knife and it should operate shortly after and upon swivelling backwards the dented segment 140 124.

The operation of the microswitch should become effective soon enough so that the looper would not touch the hook of the thread take-up at the rotary knife. The contact of the microswitch will close upon its final position = starting position of the thread knife, whereby also the stop motor can be switched on.

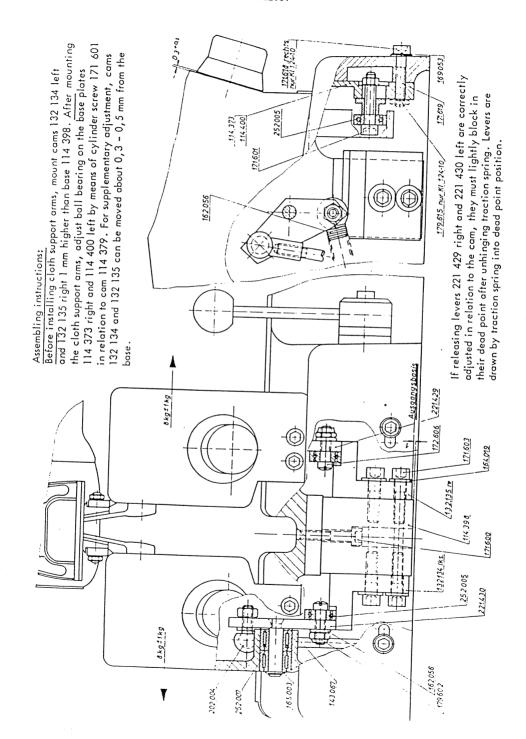
To check this switch, connect an ohmmeter on the plug 297 024 Nos. 1 and 2.

1.05 Machines equipped with thread trimmer are provided with motors EFKA and special control mechanisms are employed. The positioning speed is regulated at the factory to 180 r.p.m. In case of replacing the positioner, the positioning speed must be regulated again.

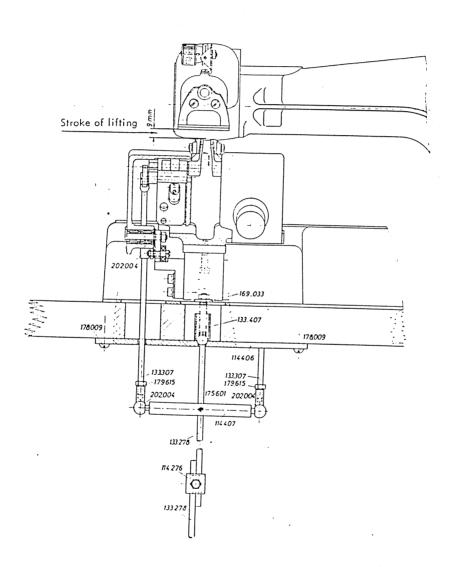
The position of the looper must be regulated so that it will be placed as close as possible to the knife. However, the motor should not exceed a maximum deviation of  $B^{\rm O}$ . Within this range, the thread take-up will still safely pull the thread from the looper.

Attention: Upon regulating the positioner, the two openings of the sheet disks within the positioner must be flush.

213.22.01



213.23.01



# **STROBEL** 213.24.01

### KI.123, KI.124

# Montageanweisung, Drückereinstellung links

1.	Regulierknopf gegen Uhrzeigersinn (+) auf Anschlag drehen. Abdeckkappe 190.0134 links außen am Stofftragarm entfernen
2.	Durch diese Öffnung (dm16) von außen mittels Schraubendreher die beiden vorderen Klemmschrauben an der Mitnehmerhülse 233.0728 zwischen Potentiometer und Regulierknopf-Welle lösen.
3.	An der Stofftragarmoberseite die Kontermutter 179.0605 (sw8) lösen.
4.	Mit Schraubendreher die Anschlagschraube 176.0628 solange verdrehen, bis der Drücker leicht an der Nadel ansteht.
5.	In dieser Position die Anschlagschraube wieder kontern.
6.	Das Potentiometer von außen durch die Öffnung dm16 am Gummiring soweit verdrehen, bis auf der Digitalanzeige der Wert "005" erscheint.
7.	Mitnehmerhülse wieder festklemmen.
8.	Kunststoffkappe einstecken.

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#### Service unit

The connection of the pneumatic constituent take place about a service unit, which is turned—in at 6 bar. The service unit will be assembly on the stand, and consist of a pressure reducer with manometer and mist oiler. It deans the compressed air as operating material from solid and liquid parts, to regulate or keep constant the set overpressure and to intersperse the air with atomized oil to lubricate cylinder and valves. Correctly unsed this device maintains the efficiency of pneumatic installations and increases the service life.

Adjustment pressure reducer: Extract the adjusting knop and turn it until obtains desired pressure. Resecure the adjusting knop by downward pressure.

Adjustment oil volume: Adjust the oil flow rate during operation by means of the metering screw, turning the screw in the ailer attachment approximately 1 turn anticlockwise. The droplets can be seen in the sight glass.

Fill in the oil volume: Unscrew the filling screw, fill oil into the tank and screw in the filling screw.

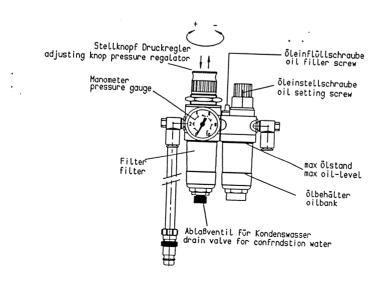
Maintenance: Regular draining of the condensation water and claning of the sinter filter, if necessary. Checking of the oil level and refilling of the suitable oil type in time.

Suitable oil types Avia Avilub RSL 10

Esso Spinesso 10 Mobil DTE 21 Viscosoty

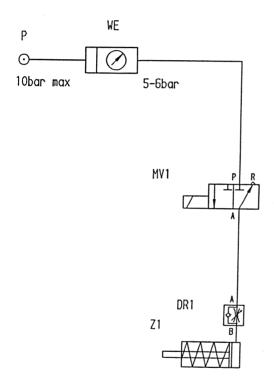
BP Energol HLP 109 to 11 cST Shell Tellus Öl C 10 at 40° Celsius

Blaser Blasol 154ISO - Class VG 10 as per ISO 3448



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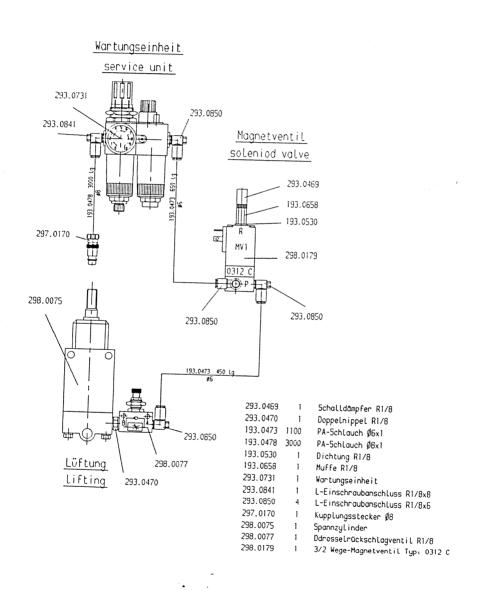
### Pneumatischer Schaltplan Kl. 120, 142 Pneumatic circuit diagram cl. 120, 142



DRI One-way flow restrictor for Lifting
MYI 3/2-soleniod-way valve
ZI Cylinders for Lifting (LŪ)
WE Service unit

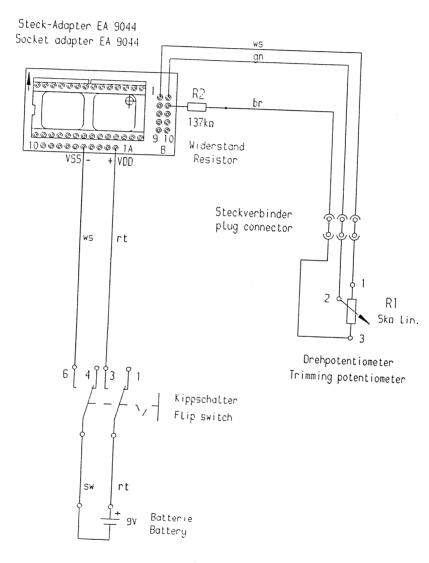
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## Pneumatischer Bauschaltplan Kl. 120, 142 Pneumatic construction circuit diagram cl. 120, 142



258.21.26

## Elektrischer Anschlußplan KI. 120 Digitalanzeige Electric connection diagram cl. 120 digital display



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Single and two thread high performance hemming machines

Bluff edge hemming machines Two thread blindstitch felling machines

Roll and flat padding machines
Automatic lapel padding
machine
and other special sewing
machines

Pressing units for underpressing and finishing

#### ■ Für die Bekleidungsindustrie:

Ein- und Zweifaden-Hochleistungs-Saummaschinen Doppelblindstich-Saummaschinen Zweifaden-Blindstich-Staffiermaschinen Roll- und Flachpikiermaschinen Pikier-Automat und weitere Spezial-Nähmaschinen

Bügelgeräte zum Zwischenbügeln und Finish

#### ■ For the shoe industry:

Single-thread overseaming machines with and without differential feed

#### ■ Für die Schuhverarbeitung:

Einfaden-Überwendlichmaschinen mit und ohne Differentialtransport

■ For the fur industry: Rapid fur sewing machines Fur padding machine Lining felling machine

■ Für Kürschnereien und Pelzkonfektion:

Pelzschnellnäher Pelzpikiermaschine Futterstaffiermaschine

■ For the home textiles industry:

Single and two thread blindstitch machines

#### Für Heimtextilien:

Ein- und Zweifaden-Blindstichmaschinen

# ■ For the upholstery industry:

Single and two thread overseaming machines Single and two thread blindstitch machines

#### ■ Für die Polsterverarbeitung:

Ein- und Zweifaden-Überwendlichmaschinen Ein- und Zweifaden-Blindstichmaschinen

# ■ For the processing of technical textiles:

Single and two thread overseaming machines

# ■ Für die Konfektion technischer Textilien:

Ein- und Zweifaden-Überwendlichmaschinen

### Any further questions?

Then phone, write or simply come and see us. You can have further information about our products at any time, or experience the Strobel machines live in our show room. We're looking forward to meeting you!

### Noch Fragen?

Dann rufen Sie uns an, schreiben Sie uns oder kommen Sie einfach bei uns vorbei.
Sie können jederzeit weitere Informationen über unsere Produkte anfordern oder die Strobel-Nähmaschinen in unserem Ausstellungsraum live erleben. Wir freuen uns auf Sie!



Spezialnähmaschinenfabrik

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