1 What is new in CKC V1.4?

Release: 10/2022

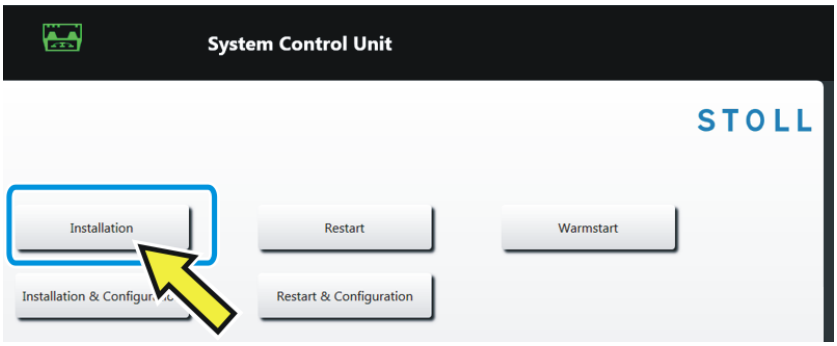
1.1 Enter feed wheel type

During the first installation of the operating system you are asked which feed wheel type the machine is equipped with.

- No Feed Wheel
- Friction Feed Wheel
- Storage Feed Wheel

Enter feed wheel type during the installation:

1. Switch the machine main switch off and then on again.
2. Tap the button "Installation".

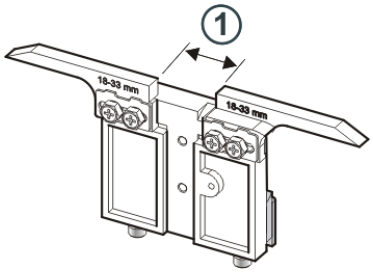


3. The installation process is interrupted in the "Optional Features" menu.
4. Select the corresponding feed wheel type for the left-hand (1) and right-hand (2) side of the machine.

5. Tap the button "Continue" (3).
6. If the "Reference Machine" menu appears, the installation of the operating system is completed.

7. Carry out a reference run.
8. The machine is ready to knit.

1.2 Yarn carrier carriage for different knitting situations



There are three yarn carrier carriages available that are used in different knitting situations:

- Knit
- Plating
- Splitting

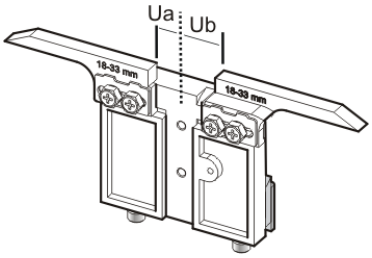
Engaging Width (1)	ID	Knit	Plating	Splitting
18 – 33 mm	281 973	E12 | E14 | E16 E6.2 | E7.2	—	E3,5.2
15 – 29 mm	282 079	E3,5.2	—	E3,5.2
34 – 47 mm	282 080	—	E12 | E14 | E16 E6.2 | E7.2 | E3,5.2	E12 | E14 | E16 E6.2 | E7.2

Yarn carrier engaging widths

We recommend the following engaging widths for the various knitting situations (Ua-b):

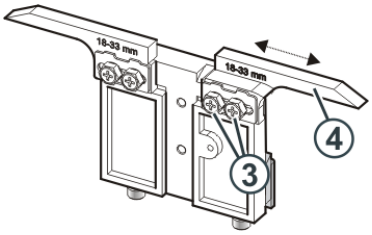
Gauge	ID	Knit	Plating	Splitting
E3,5.2	282 079	20 Ua: 10.0 Ub: 10.0	44 Ua: 22.0 Ub: 22.0	29 Ua: 14.5 Ub: 14.5
E12 E12/10	281 973	26 Ua: 13.0 Ub: 13.0	40 Ua: 20.0 Ub: 20.0	40 Ua: 20.0 Ub: 20.0
E14 E14/12	282 080	26 Ua: 13.0 Ub: 13.0	40 Ua: 20.0 Ub: 20.0	40 Ua: 20.0 Ub: 20.0
E6.2	282 080	26 Ua: 13.0 Ub: 13.0	42 Ua: 21.0 Ub: 21.0	42 Ua: 21.0 Ub: 21.0
E7.2	282 080	26 Ua: 13.0 Ub: 13.0	40 Ua: 20.0 Ub: 20.0	40 Ua: 20.0 Ub: 20.0

The entire engaging width consists of the value for the left (Ua) and the right (Ub) side.



Both values may be equal (symmetrical setting) or may differ.

Adjust engaging width:



1. Loosen both screws (3).
2. Push insert (4) into the desired position.
   A scale simplifies the adjustment.
3. Retighten both screws (3).
4. Repeat the setting process for the other side.

Plating

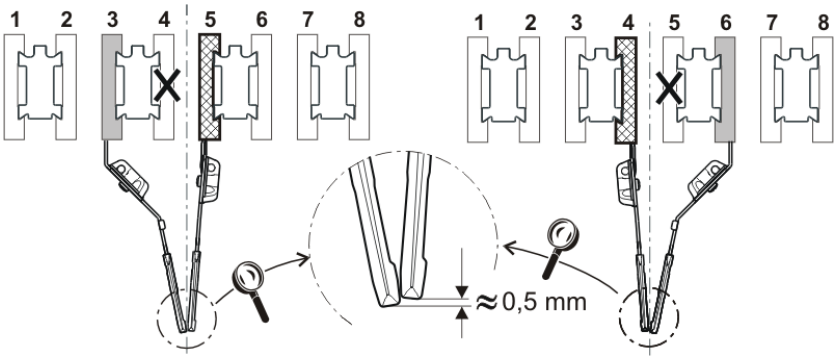
Two yarn carriers which differ depending on the engaging width are used for plating.
Example:

Gauge	Leading (Knitting)	Following (Plating)
E12	26 Ua: 13.0 Ub: 13.0	40 Ua: 20.0 Ub: 20.0

Adjust the plating yarn carrier

- Insert the plating yarn carrier into track 4 or 5.
- The two yarn carriers must be positioned exactly in the center of the needle cross.
- Adjust the eyelet of the following thread about 0.5 mm higher.

Recommendation:
Leave one yarn carrier rail unutilized to prevent the yarn carrier tips from displacing each other.

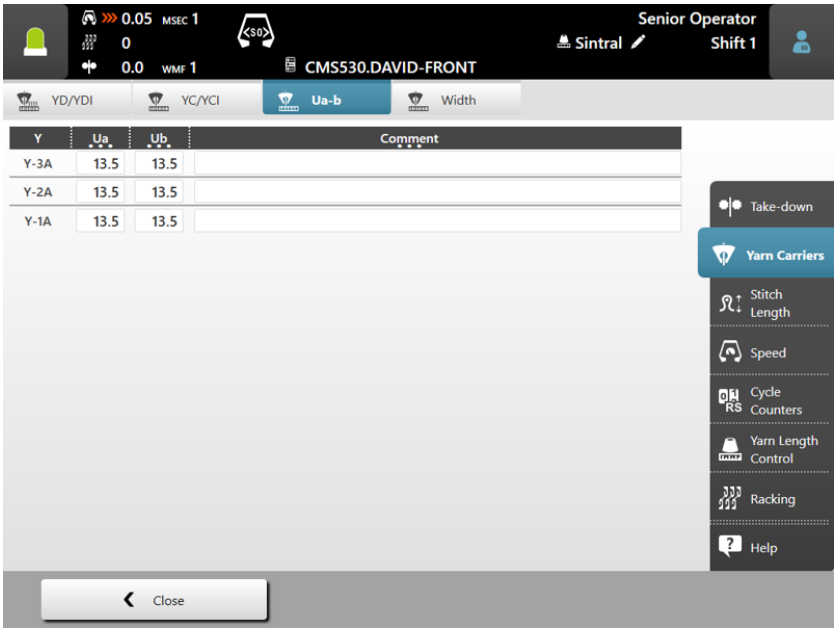


Set the engaging width on the pattern preparation unit and on the knitting machine:

The Ua and Ub values are important for parking the yarn carriers correctly:

- at the fabric selvedge
- on the collecting clamp

Path: Setup Editor -> "Yarn Carriers" menu -> "Y:Ua-b" tab



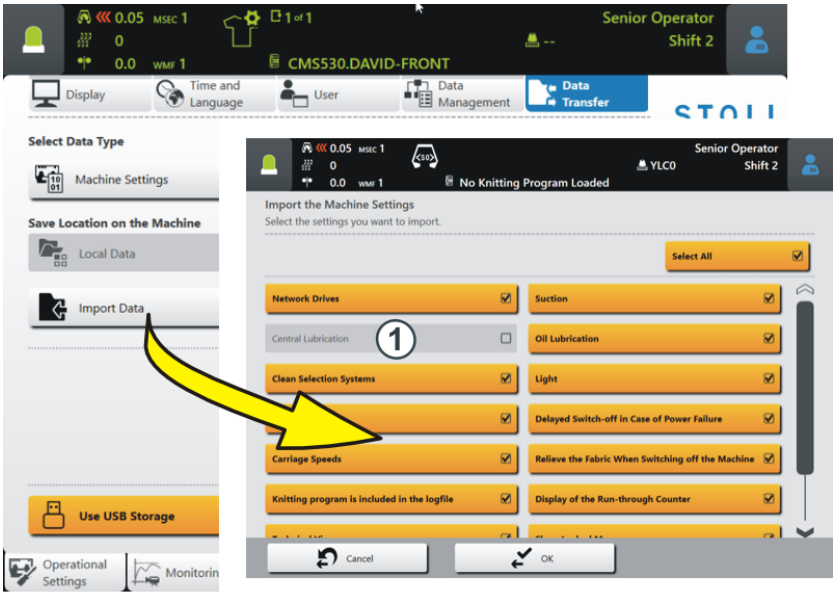
1.3 Import or export network drives and further machine settings

You can export further machine settings and import them on other machines.

Up to now	◆ Carriage speeds ◆ Various operational settings ◆ Vacuum ◆ Clean Selection Systems ◆ Manual Lubricating or Central Lubrication
New	additionally, you can select the following settings: ◆ Network Drives ◆ Knitting program is included in the logfile ◆ Display of the Run-through Counter ◆ Technical View ◆ Show Locked Menus ◆ Waiting time for the screen saver

During the import, you can choose if you want to import individual settings or all of them.

If a setting is inactive (1), it will not be imported, since this setting is not available in this machine (e.g. central lubrication).



Configure Machine -> System Settings -> Data Transfer -> Machine Settings

1.4 Edit Order - The names of the program elements are displayed

✓ The order consists of one position (knitting program)

If program elements from different knitting programs are used in one order, then the names of the program elements will be displayed in the menu "Edit Order".

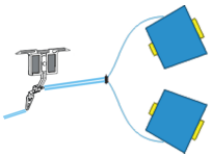
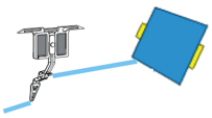
Example: Order with three different program elements

1.5 PPS - The knitting time entered in the ticket is displayed, while the first fabric is produced

Up to now	If the knitting program does not contain a cfgx file, the knitting time will only be displayed after the first fabric piece has been completed. However, if only individual parts are produced, the knitting time cannot be displayed. Background: If the knitting program is created on the M1plus or CREATE, the knitting time is displayed after loading the knitting program. The pattern preparation unit writes this information into the cfgx file.
New	If you enter the knitting time in the ticket, the knitting time will be displayed when the ticket is started. ⓘ The knitting time from the ticket is only displayed if no cfgx file is available.

1.6 Yarn table (BMS)

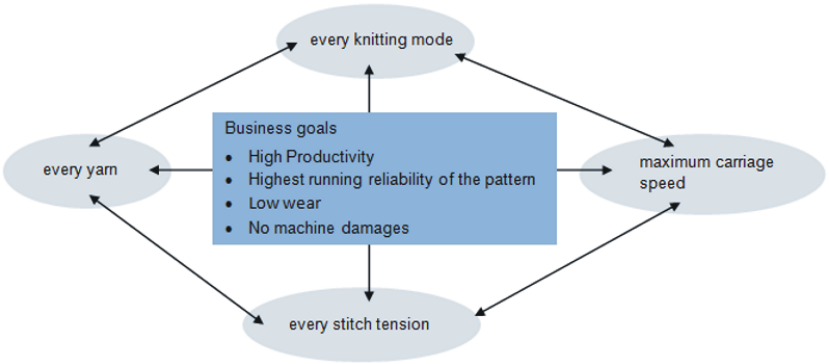
The specified values serve as a guideline. The quality and the specific weight of a yarn must also be taken into account. Instead of a simple yarn, we recommend twisted yarn. With coarser machines it is advisable to use several twisted threads.

Gauge	Processing [Nm]	Final count [Nm]
	 Several fine threads are assembled and fed as a thick yarn to the yarn carrier.	 Yarn thickness of the assembled threads Example: 2 x 44/2 44/2=22 22:2=11
12	1 x 24/2 2 x 44/2	10 - 18
12m10	2 x 36/2 1 x 24/2	8 - 12
14	1 x 28/2 2 x 40/1	14 - 20
14m12	1 x 24/2 2 x 44/2	10 - 18
3,5.2 (all needles)	2 x 28/2 3 x 28/2	4,5 - 7
3,5.2 (each 2nd needle)	3 x 14/2 7 x 28/2	1,5 - 2,5
6.2 (all needles)	2 x 44/2 1 x 28/2	10 - 16
6.2 (each 2nd needle)	2 x 28/2 3 x 28/2	4,5 - 7
7.2 (all needles)	1 x 28/2 1 x 30/2	14 - 20
7.2 (each 2nd needle)	2 x 28/2 2 x 30/2	6 - 8

Yarn table - Allocation of machine gauge and yarn thickness

1.7 Economic production and the influencing factors

The requirements for a knitting machine can be divided into two main groups: the machine related goals and the business goals.
The knitting machine is to work with maximum speed with every knitting mode, every stitch tension, regardless of the yarn. Simultaneously a high productivity is expected from the knitting machine and the pattern shall be knitted faultless.



The simultaneous achievement of all goals is seldom possible, as there is a conflict between some goals. A conflict because they cannot be accomplished all simultaneously. Between the individual goals there are rather interactions, which can have negative effects on the accomplishment of other goals. In other words, there are goals that cannot be achieved together or that exclude each other.

Example:
One conflict exists between the yarn thickness, the stitch tension and the carriage speed. If the intention is to work at the upper limit, the maximum with all of the three goals, this will lead to a reduced running reliability of the pattern, an increased wear and in some cases even to machine damages.

The influencing factors

Running reliability	◆ Structure of the pattern (knitting mode, Flexible Gauge, ...) ◆ Carriage Speed ◆ Stitch length (stitch tension) ◆ Yarn quality (friction coefficient, elasticity, twisting, moisture, hairiness, bobbin setup, tensile strength) ◆ Yarn gauge, yarn count / twisted yarn ◆ Yarn type (fancy yarn) ◆ Yarn tension, yarn feeding ◆ Fabric take-down
Wear and machine damages	The unsuitable combination of the influencing factors may lead to increased wear and to the damage of machine parts.
Conclusion	Therefore the influencing factors have to be adjusted. It's not possible to achieve any carriage speed and stitch tension with every yarn and knitting pattern. Recommendation: Start with a lower carriage speed (e.g. 0.7 m/sec) and increase it step by step. i Defective machine parts caused by disregarding our guidelines, are excluded from warranty.