AUTOMATIC BAR FEEDER

ATTACHMENTS LIST
MANUAL FOR USE AND MAINTENANCE
KEYBOARD INSTRUCTION MANUAL
SPARE PARTS BOOK
SCHEMATICS
EC CONFORMITY DECLARATION FOR MACHINE

KID 80 - IV Touch

EN **KEYBOARD INSTRUCTION MANUAL**

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S/N

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TYPE OF DOCUMENT	**KEYBOARD INSTRUCTION MANUAL**
PRODUCT	**AUTOMATIC BAR FEEDER**
MODEL	**KID 80 - IV Touch**

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INDEX

INDEX

INDEX

Iemca reserves the right to make changes to the products described herein at any time.
Thus, this document may not not exactly match the product.
The data contained herein relate to a product range and are not specific to the serial number appearing on the cover.

1.1 Control description

INFORMATION:

From the touch keyboard you can start the bar feeder in Automatic mode, even when the lathe "MAN/AUT" signal is in Manual mode.

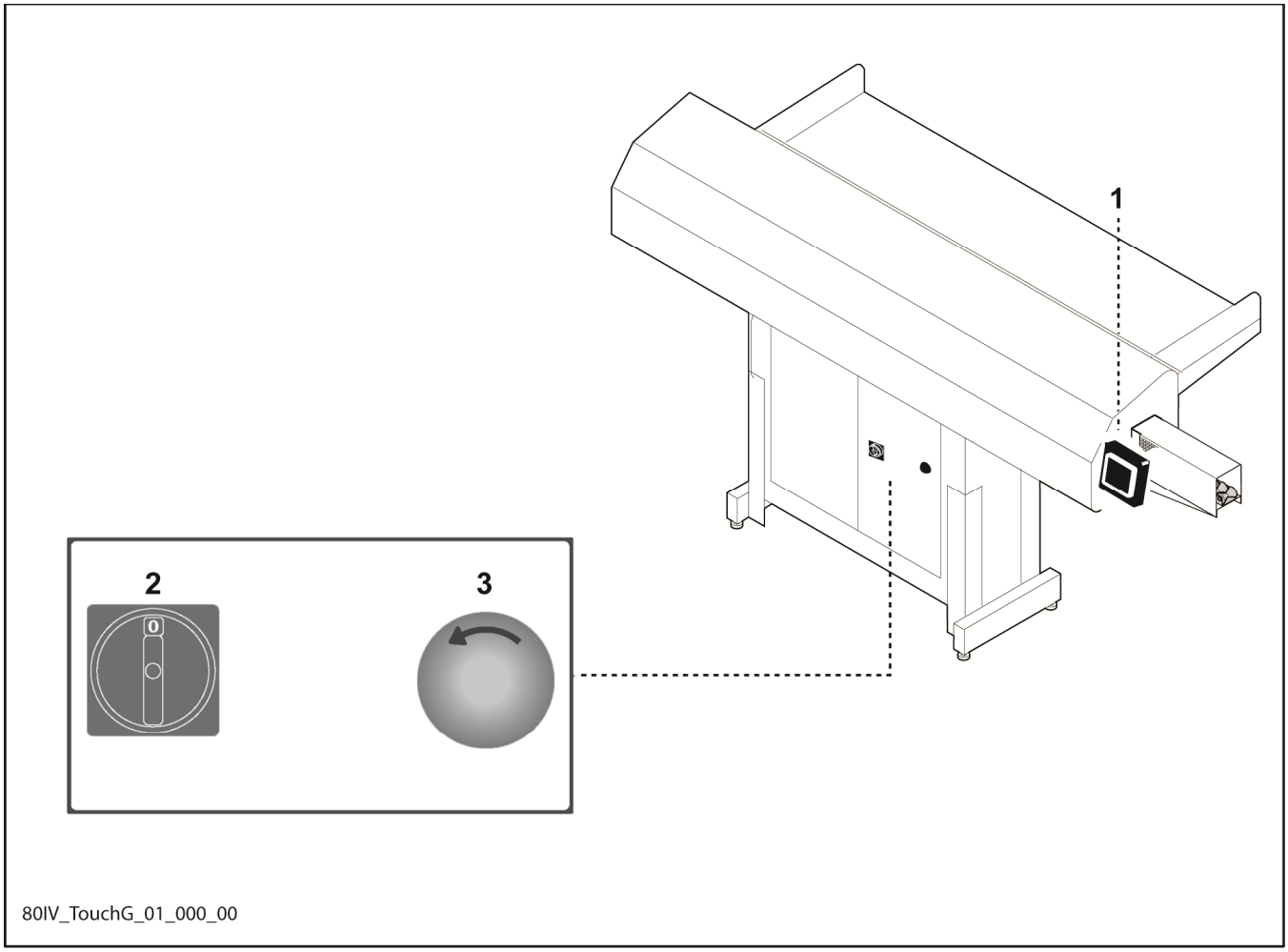
INFORMATION:

When the bar feeder is in Automatic mode, the bar feeding is possible only when the Lathe "MAN/AUT" signal is in Automatic mode.

INFORMATION:

By pressing the Manual mode button on the touch keyboard, you can prevent the lathe from starting the bar feeder in Automatic mode.

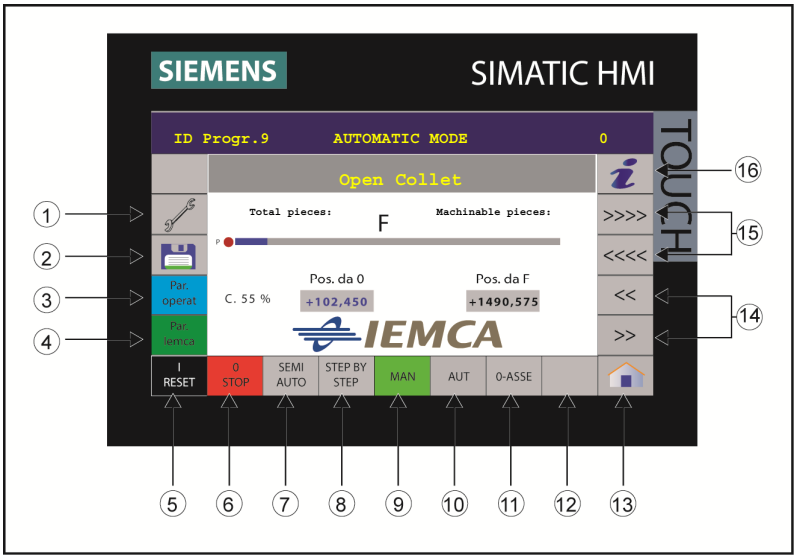
The figure represents the control position on board the machine.



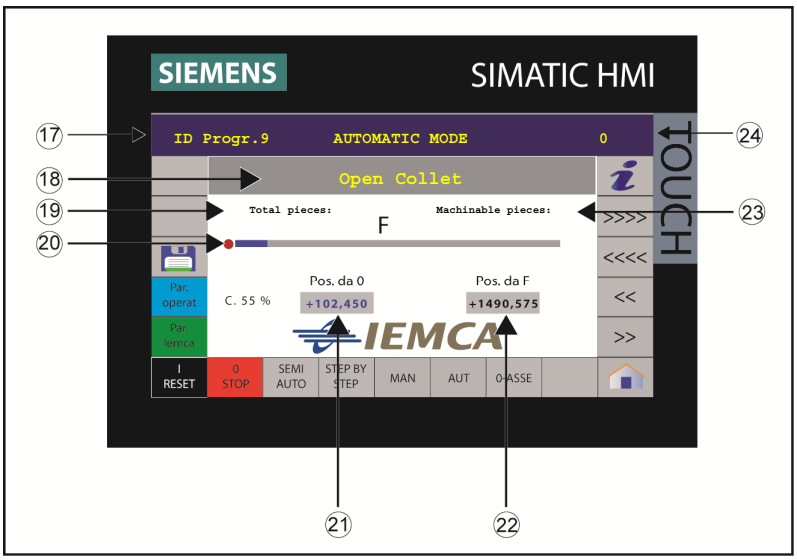
1 TOUCH-SCREEN: display and main controls
2 MAIN SWITCH: turns the power supply on and off.
   - Position 0 (OFF) the machine is not powered.
   - Position I (ON) the machine is powered.
3 EMERGENCY STOP PUSH-BUTTON: stops the bar feeder in case of emergency. For restart release the push-button manually.

1.2

Keyboard control description

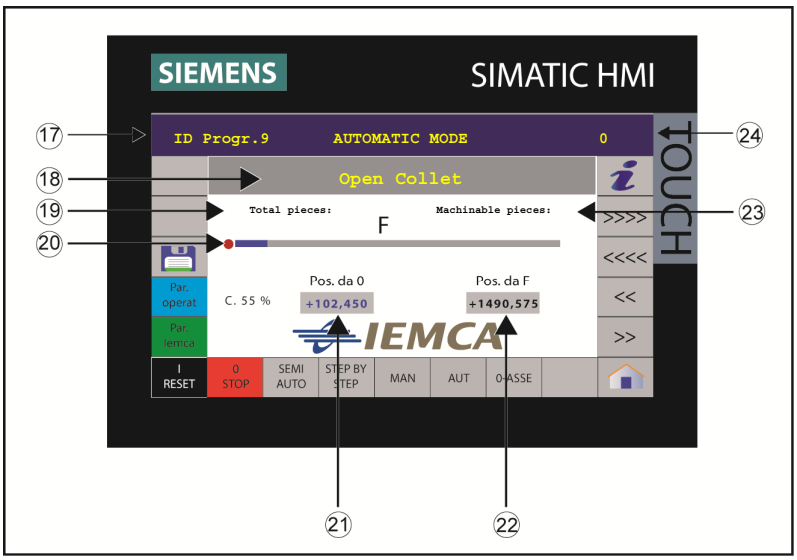


1 Function access, bar loading and new set-up (guide channel and bar pusher replacement) button.
2 Programme save or recovery management access button.
3 Selects the "Operator Parameters" mode.
4 Selects the "Iemca Parameters" mode.
5 Error reset button: to restart the bar feeder after the stop caused by an error, press the button and hold it down until the bar feeder is started.
6 Bar feeder stop button (red light): press this button to stop the bar feeder and reset the "Errors".
7 Selects the semi-automatic mode.
Press to select, press again to deselect.
8 Activates the "step by step" operating cycle: every time the button is pressed, one step is performed.
9 Selects the manual mode.
10 Selects the automatic mode.
11 It resets the "BAR FEEDER ZERO SETTING" of the carriage.
Press the 0-AXIS button and release it when the carriage starts moving towards the "BAR FEEDER ZERO SETTING" position.
12 Remnant detection disabling button
Press the button to feed a "new" bar without the detection of bar remnant in the bar pusher collet.
13 Allows to return to the main menu display.
14 Moves the bar pusher at a low speed
15 Moves the bar pusher at high speed.
16 Displays the software and the push-button panel identification data.



17 In the bar showed, warnings received from the bar feeder during machining procedures are displayed. Their function is to guide the operator for correct operation of the machine. In detail, the possible warnings are the following ones:

- K1: It is displayed at the right-hand side of the bar when the bar feeder is in the bar end position. It will not be displayed under any other operating conditions.
- FEEDING STOP
- DOOR SAFETY
- SAFETIES FROM LATHE
- BAR FEEDER ZERO SETTING MISSING
- MANUAL | AUTOMATIC SIGNAL FROM LATHE
- BAR PUSHER NOT IN POSITION!
- MOVE CARRIAGE TO BACK LIMIT STOP.
- CARRIAGE BACK
- AUTOMATIC MODE
- MANUAL MODE
- AUTOMATIC OR MANUAL MODE?
- SEMI-AUTOMATIC MODE
- CARRY OUT BAR FEEDER ZERO SETTING: the machine requires a zero setting as a reference (see manual controls).
- RESET WITH BUTTON: the machine is in alarm mode and requires zero setting by pressing I (reset)



18 The bar shows the bar feeder phase during machining, in detail:

- Bar feeder in stand-by
- Bar pusher return
- Zero axis
- Bar loading
- Bar first feeding
- Return after first feeding
- Facing phase
- Open collet

19 Displays the total number of machined pieces.

20 Graphic animation: it shows the feeding carriage and the bar pusher position (raised or lowered) with respect to the bar feeder axis, in run-time mode.

21 Position from "0": it stands for the feeding carriage position with respect to the S1015 zero axis sensor; Position from "F": it stands for the feeding carriage position with respect to the maximum feeding position of the bar feeder.

22 Allows to enter a new menu that includes other keys.

23 Displays the number of machinable pieces.

24 It displays the bar feeder phase during machining procedures.

INDEX

2.1 AUTOMATIC CYCLE START

1. Power on the lathe.

2. Power on the bar feeder, by turning the main switch to position I (ON)  .

3. Start the bar feeder: 

4. Select the manual mode: 

5. Select the "BAR FEEDER ZERO SETTING" of the carriage: 

6. Bring the bar fore end close to the cutting tool: 

7 Start the closing of the lathe collet and start working by selecting the automatic mode: 

2.2 OFFSET PROCEDURE (ADJUSTMENT)

Foreword

This procedure must be performed to optimize the bar feeder axis movements. This procedure should be performed occasionally (once a month is recommended) to compensate any wear of the mechanical feeding units that could alter the AXIS control operations.

INFORMATION:

Before performing the following procedure make sure that the mechanical parts have no clearances and that the zero axis sensor is positioned correctly (it shall not to be too retracted).

For the offset procedure perform the following operations in the given order:

1 - Set the machine to manual mode MAN.

2 - Carry out the bar feeder zero setting 0-ASSE.

3 - Bring the bar pusher carriage to the centre of the bar feeder << >>.

4 - Provide the enabling signal for operations keeping the zero position sensor active using a security block or screwdriver and check that the axis moves.

5 - If the axis does not move, go straight to point 6; if it moves, adjust the value of the machine parameter no.70, under the item "Ax. Offset Compensat." in accordance with the "displacement" movement that the axis is carrying out; if the axis moves forward decrease the set value and if the axis moves towards zero, increase the set value. When the axis is still and stays in position for at least 20 seconds, the value set can be considered correct.

6 - Carry out an absolute movement (e.g.: the first movement in step by step) and make sure, through the operator panel (OP), that the axis is positioned with a maximum error of +/- 0.1 mm; make sure also that the position does not undergo variations.

2.3 CYCLE PERFORMING MODE IN THE STEP-BY-STEP FUNCTION

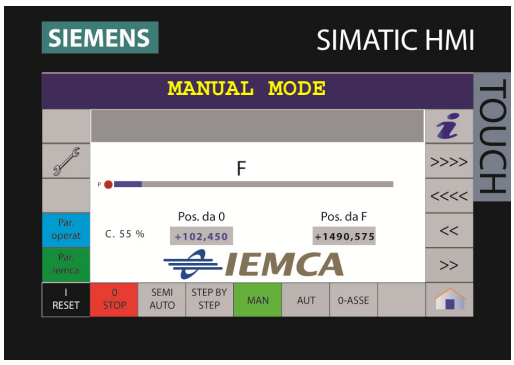
Foreword

This mode may be used for many reasons, as for instance:

- to open the guide channels;
- to check a complete bar change cycle;
- to check the bar feeder mechanics;
- to load a single bar so as to check the facing;
- etc.

Procedure

1. press [I RESET] to start the bar feeder;
- check that the guide channels of the bar feeder are closed. If not, close the guide channels in manual mode.



2. press [SEMI AUTO] and then [AUT] to select the semi-automatic mode;

3. press [STEP BY STEP], the bar feeder performs the first step (bar pusher return);

4 press [STEP BY STEP], the bar feeder performs the second step, and so on.

2.4 BAR FEEDER STOP

Bar feeder stop in emergency.

1. Press the emergency button to stop the bar feeder.

WARNING - CAUTION

If the emergency stop is activated whilst the lathe is working, before restarting the working cycle, check that no dangerous conditions have been created due to the sudden stop. For example: if the tool was removing chips, move the tool away from the work piece before restarting the lathe.

Stopping the bar feeder at the end of the machining cycle.

WARNING - CAUTION

When stopping the machine normally, do not use the emergency buttons.

1. Complete the operations of your working schedule.
2. Stop the bar feeder: 

3. Stop the lathe.
4. Turn off the electrical supply of the bar feeder by turning the main switch to the 0 (OFF) position.

2.5 0-AXIS PROCEDURE (MANUAL MODE)

List of causes requiring the 0-Axis in manual mode:

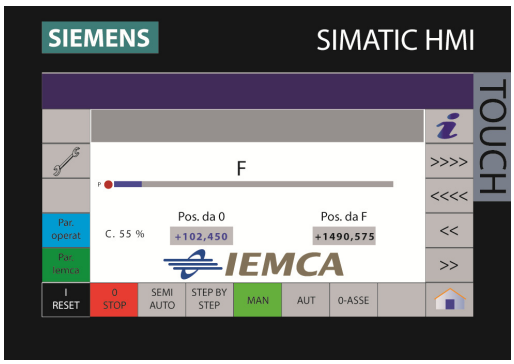
- carrying out the manual 0-Axis periodically is recommended;
- if the bar pusher axis is moved by means of the crank or the lathe headstock is moved with the bar feeder powered off (no power supply).
- if the feeding chain is tightened (by means of the mechanical chain tightener, see Operation and Maintenance Manual, "Feeding chain - Adjustment").

2.5.1 BAR LOADING CYCLE - FACING PROCEDURE

The following procedure describes the feeding of a new bar until the facing position is reached:

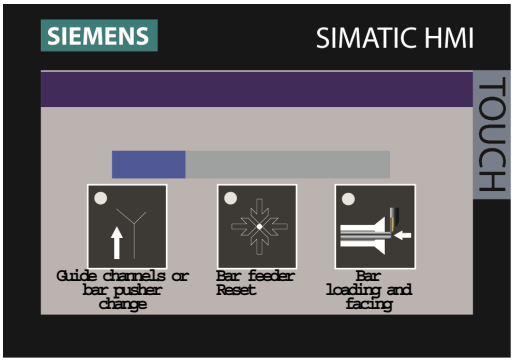
Set to manual mode 

then press the  key that allows to enter the quick bar loading function to the facing position.



Press the  key for 6 seconds

The bar feeder starts the bar loading cycle, which stops when the new bar is positioned. The loading cycle of the new bar takes into account parameter 3 (facing mode) and parameter 2 (facing position).



If the operator releases the  key, the cycle goes on until it is completed.

INFORMATION:

Without the open collet signal from lathe, the bar feeder carries out the above mentioned procedure, but the bar stops before entering the lathe collet (waiting for the open collet signal). With the open collet signal from lathe, the bar is loaded and positioned past the lathe collet according to parameters 2 and 3.

WARNING - CAUTION:

Check that the bar to be loaded in the magazine is present.

2.6 OPERATOR PARAMETERS: OPERATION MODE

These parameters are needed for the bar feeder automatic cycle programming and should be set according to the working requirements as well as to the lathe type that is connected to the bar feeder. Some parameters concern the working phase, while others are used for the bar change phase.

WARNING - CAUTION

The parameters are set to a default value (preset value): the bar feeder performs the automatic cycle according to these values. Some parameters may not be appropriate for the lathe type or the type of machining requested.

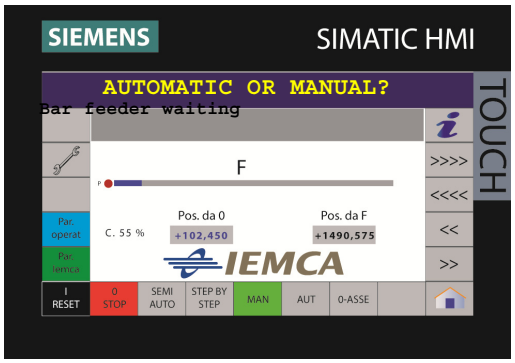
The main operation modes are listed hereunder:

- Accessing the parameters
- Parameter display
- Parameter modification
- Subparameter display
- Subparameter modification
- Exiting the parameters

2.7 PARAMETER ACCESSING AND DISPLAY

2.7.1 HOW TO ACCESS AND DISPLAY IEMCA PARAMETERS

1. When the bar feeder is switched on  the main screen appears:

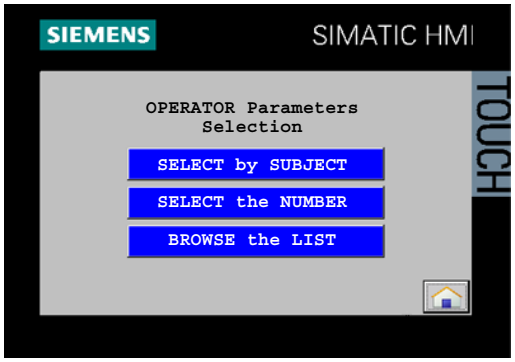


2. Enter "Main Menu" mode:

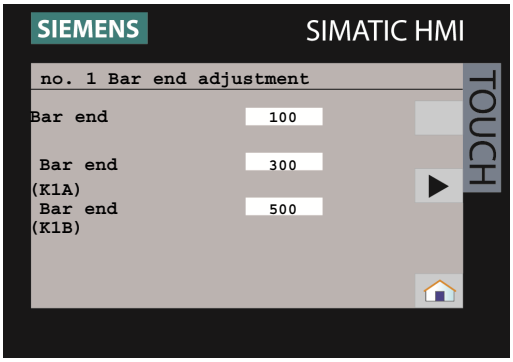
   Select "OPERATOR PARAMETERS" 

.

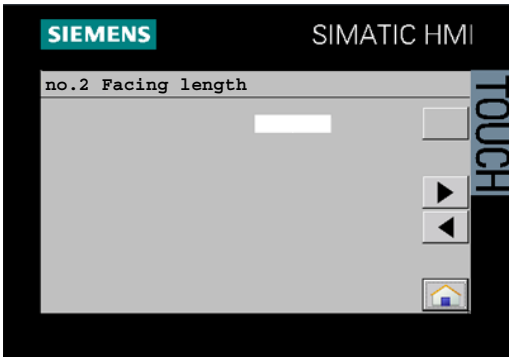
3. Select the "Select Parameter List" button



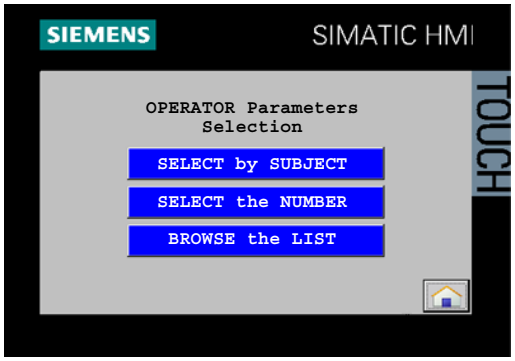
   parameter 1 is now displayed



4. Press the buttons: or
   all the other parameters will appear in sequence.



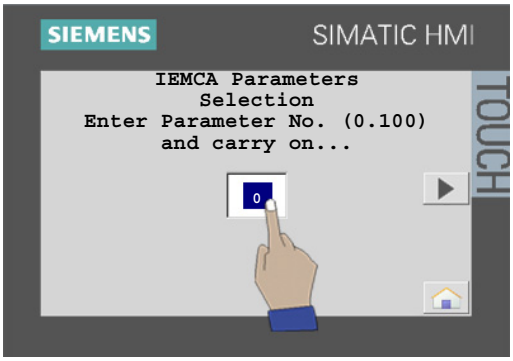
Press the "SELECT PARAMETER NUMBER" button to access the desired parameter immediately (see step 6).



To select the desired parameter, proceed as follows:

5. Enter "OPERATOR Parameters" mode
   Press "PARAMETER NUMBER"

6. "OPERATOR Parameters Selection" screen will be displayed on the screen, press:

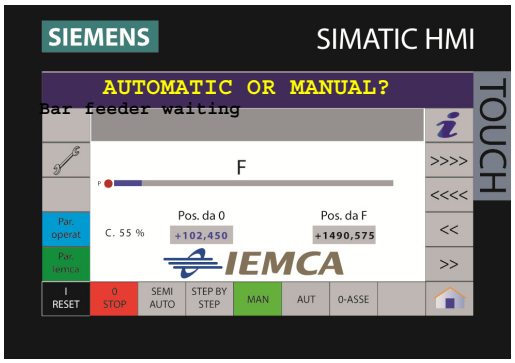


7. Enter the parameter number, for example "1"; the parameter value changes from 0 to 1; confirm:

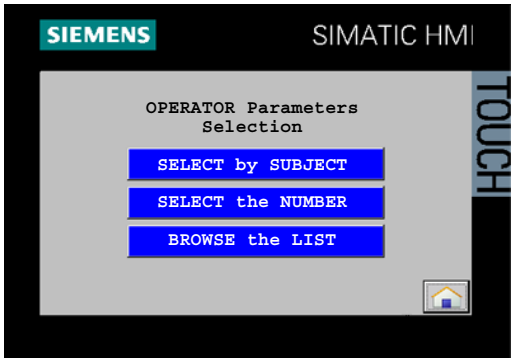
8. To return to the short Menu press and proceed as described in Section 2.6.1.

2.7.2 ACCESSING AND DISPLAYING SUBJECT MENU PARAMETERS

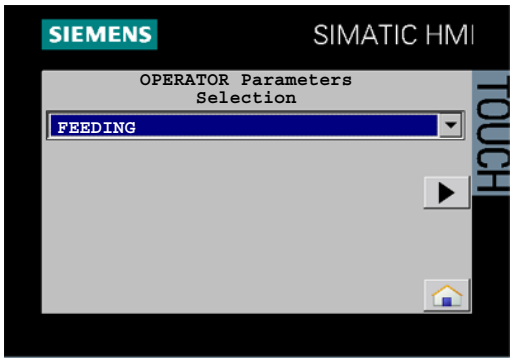
1. When the bar feeder is switched on, the entry screen is displayed:
   Select "Specialized Operators":



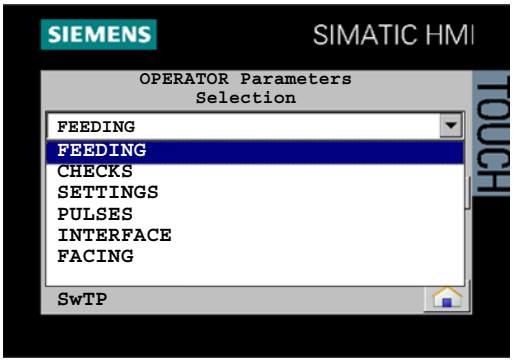
2. Enter "Main Menu" mode:
   Select "OPERATOR PARAMETERS".



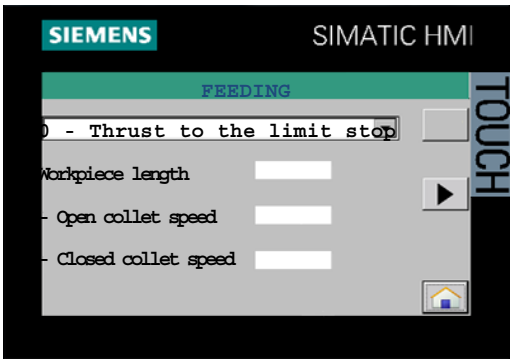
3. Select the "Select parameter subjects" button



4. "OPERATOR Parameters Selection" screen will be displayed

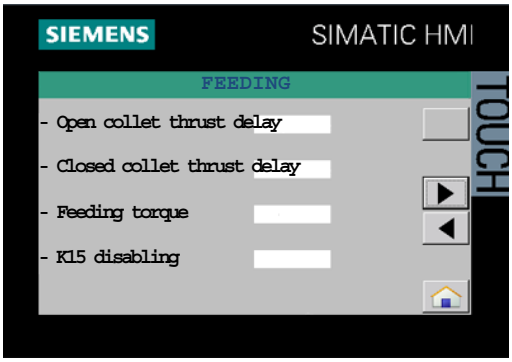


5. Select the desired subject from the drop down list.



6. Press the buttons: 
to access the parameters of the desired subject.

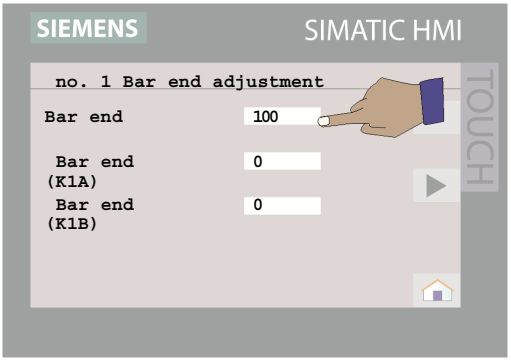
7. To return to the home page press  and proceed as described in Section 2.6.1.



2.8 PARAMETER MODIFICATION

1. The desired parameter should be displayed:

   "Parameter screen example"



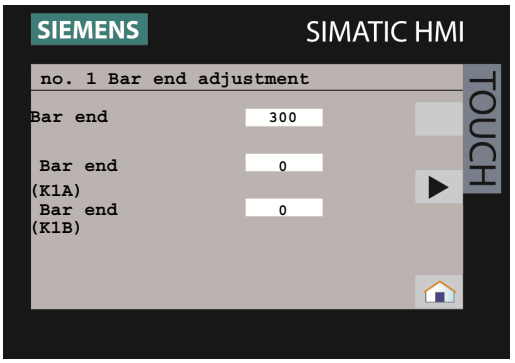
2. Select the parameter value:

   Selected value: 100 (mm)

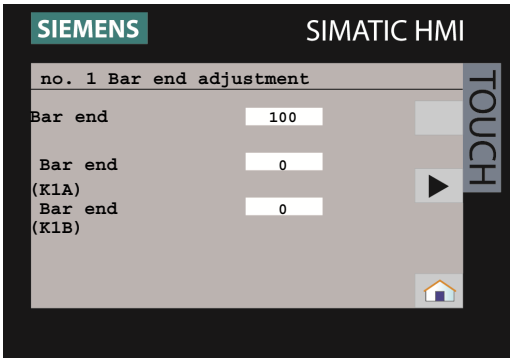
3. Enter the value to be assigned, for example "300",

   and confirm: 

   the value changes from 100 to 300



4. At this stage the value is no longer blinking. If the value is not confirmed when entered, the last value will reappear.



2.9 EXITING THE PARAMETERS

1. Exit the "parameter display" mode: 

2.10 PROGRAMME ARCHIVE ON SD MEMORY

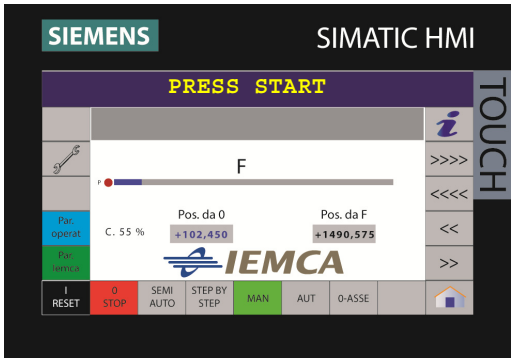
"Programmes" Download/Save mode makes it possible to download into the bar feeder PLC the complete setting programmes coming from the SD card connected to the Touch keyboard. Also an already existing programme can be directly saved from the PLC into the SD card.

DOWNLOAD A PROGRAMME FROM USB TO PLC

1. Press the manual key 

, then stop with 

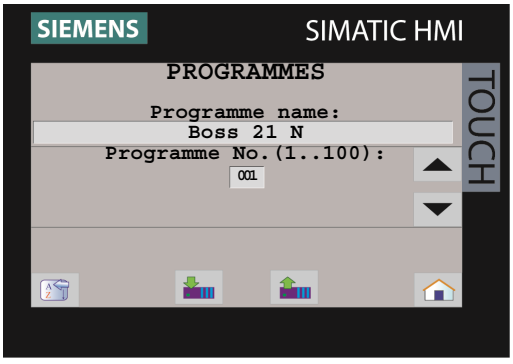
to enter the Main Menu screen



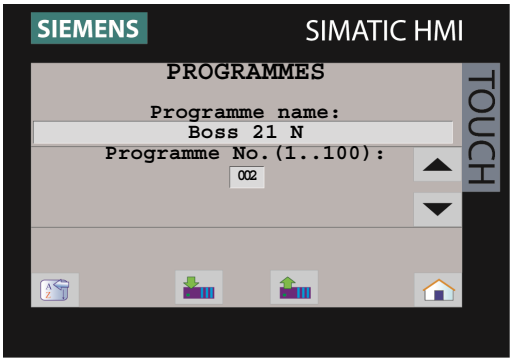
Press the  key, the display will show "PROGRAMMES"

2. Press "Programmes"; screen "choose programme" from 1 to 500 will be displayed

3. Press the  key to select the desired programme number.

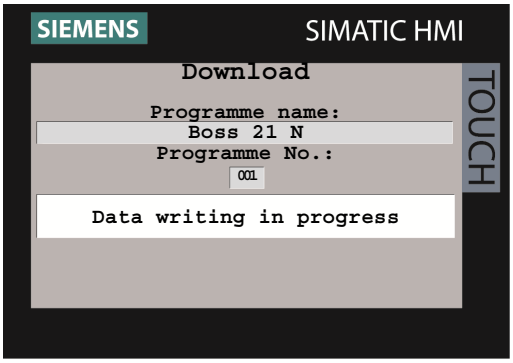


4. Press the  or the  key to enter the desired programme number. Press the  key

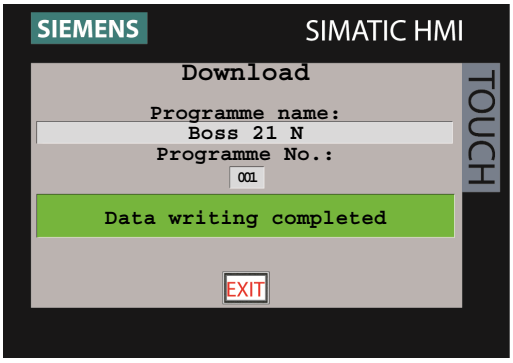


5. Press "Yes"  to continue the download procedure; otherwise, press "No"  .

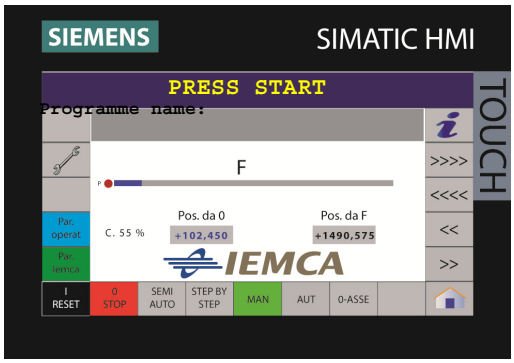
6. The "Data writing in progress" procedure is displayed for a few seconds.



7. When the procedure is complete the display shows: "Data writing completed".

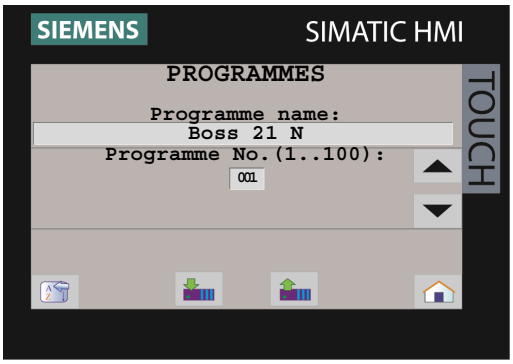


8. Press "Exit" EXIT to return to the home screen, the display will show: "Main Menu".



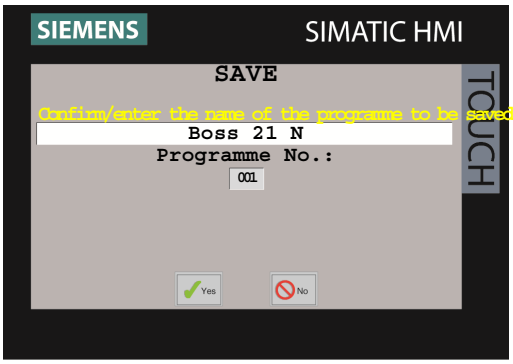
SAVE A PROGRAMME FROM PLC TO USB

Repeat the procedure explained up to step 4 in the "DOWNLOAD FROM USB TO PLC" instructions.

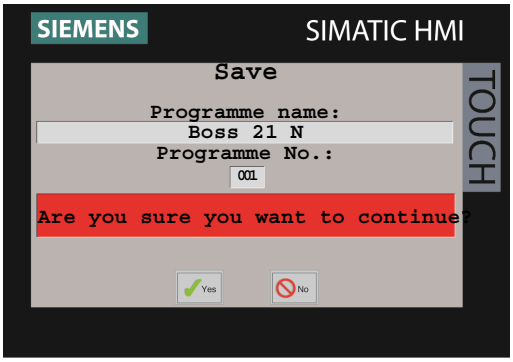


1. Press the ▲ or the ▼ key to enter the desired programme number. Press the Save key.

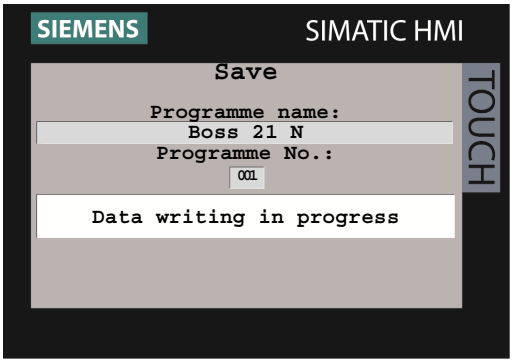
2. Enter the name that will identify the stored programmed.



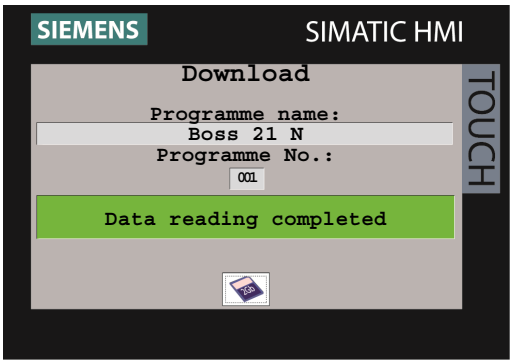
3. Press "Yes" to continue the download procedure; otherwise, press "No". The home screen "PROGRAMMES" will be displayed.



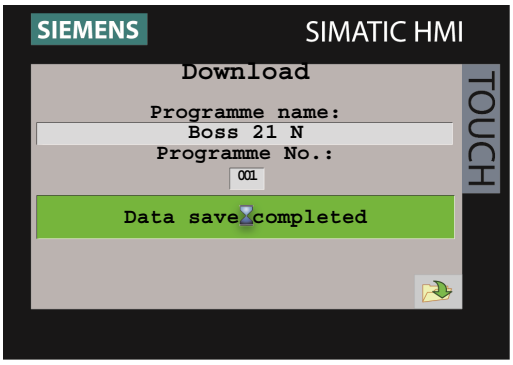
4. The "Data reading in progress" procedure is displayed for a few seconds.



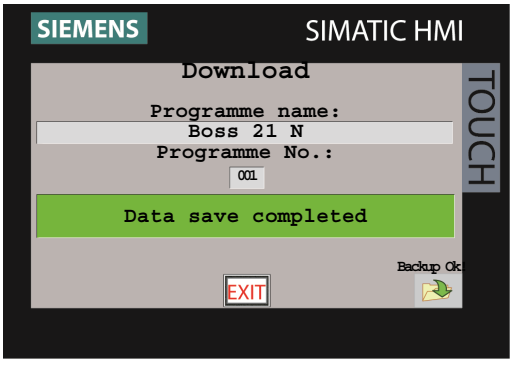
5. A screen is displayed that asks to press the  key to continue.



7. When the procedure is complete the display shows: "Data save completed", press 



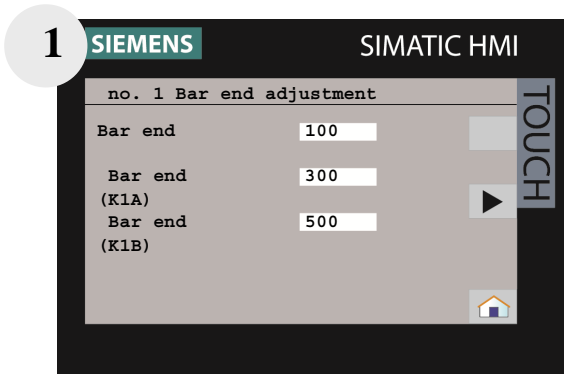
8. When the procedure is complete the display shows: "Data save completed", press EXIT



2.11 OPERATOR PARAMETERS: DESCRIPTION

no. 1 Bar end adjustment

Defines the position where the bar feeder should send the "bar end" signal to the lathe.
This value is referred to point (F) (maximum bar pusher feeding point), and corresponds to the piece length plus the cutting tool thickness.

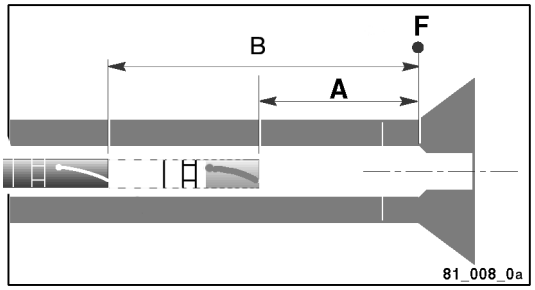


Parameter:
A - Bar end adjustment

Subparameters:

B - Bar end K1A adjustment
C - Bar end K1B adjustment

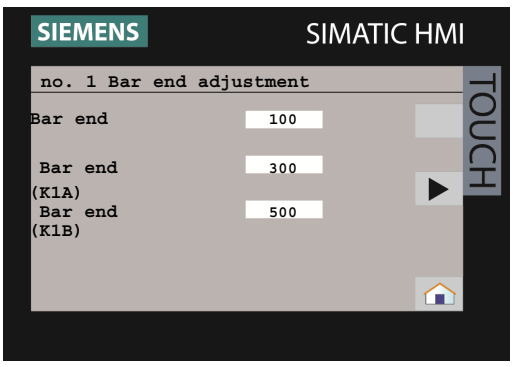
	DEFAULT VALUE	PROGRAMMABLE VALUE
	Kid 80	Kid 80
A	100	/
B	300	/
C	500	/



The "Bar end 1 adjustment" subparameter can be used for three separate functions.
1) the subparameter sends an interface signal to the bar feeder-lathe (2nd Bar end);
2) the subparameter allows opening the additional bush;
3) The subparameter sends an interface signal to the bar feeder-lathe (prevents the headstock from completing the return stroke).

INFORMATION:

Using the "Bar End 1 Adjustment" subparameter rules out the possibility for one of the the above mentioned functions of being used simultaneously with the other



1) the subparameter sends an interface signal to the bar feeder-lathe

Defines the position where the bar feeder should send the Bar End Signal 1 to the lathe.

This value refers to point (F) (maximum bar pusher feeding point), and is a higher length than value (A).
The lathe enters a subprogram corresponding to a new machining cycle, where the length of the piece to be machined is shorter than the one of the main program.

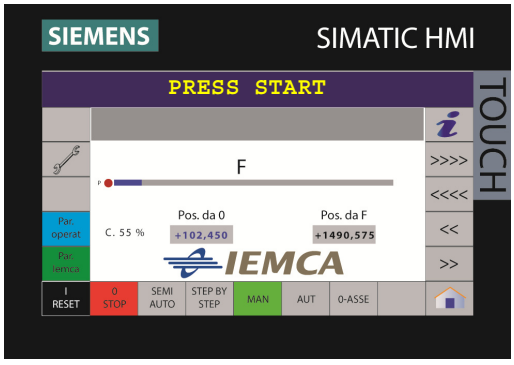
INFORMATION:

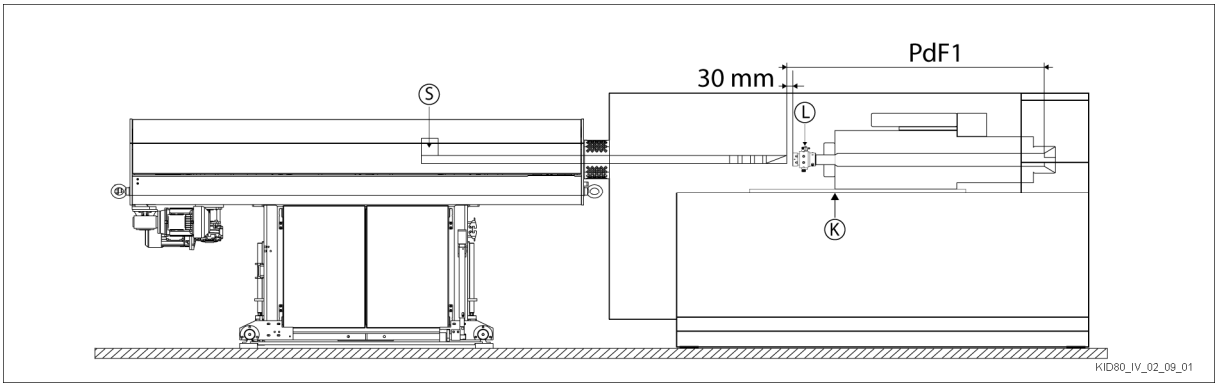
If the Bar End Adjustment subparameter 1 is used, the bar end adjustment value should be set according to the length of the piece in the 2nd working cycle.

2) the subparameter allows opening the additional bush
Procedure for setting the "Bar End 1 Adjustment" subparameter for the additional bush opening

a) Additional bush opening synchronized with the length of the machined piece

- Move the lathe headstock "K" in its completely forwards limit stop position;
- move the bar pusher "S" forwards without the bar inside the guide channel positioning the front part at about 30 mm from the additional bush "L";
- Check the value relative to the position "F" on the display (which by definition is called "PdF1")
- the measured value shall be added to the value set in the "Bar End Adjustment" parameter and inserted in "Bar End 1 Adjustment" parameter

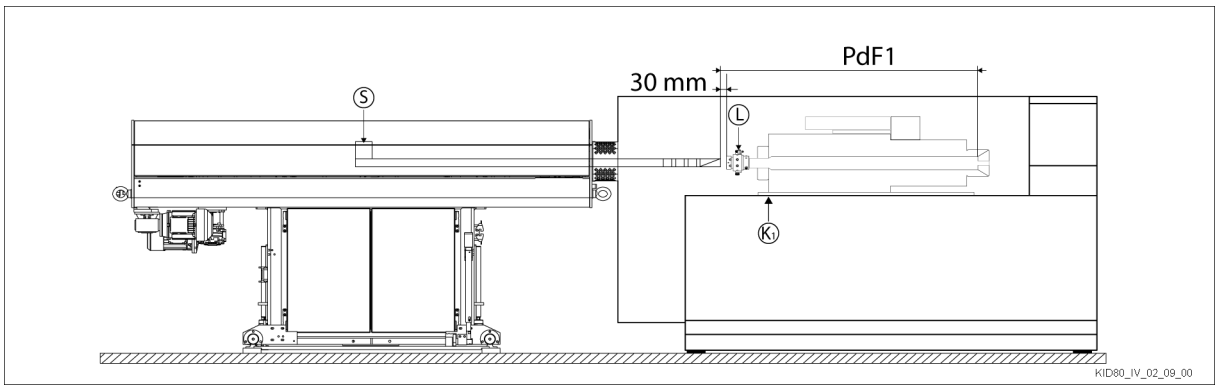




b) Additional bush opening at a fixed value

- Move the lathe headstock "K1" in its completely back limit stop position;
- move the bar pusher "S" forwards without the bar inside the guide channel positioning the front part at about 30 mm from the additional bush "L";
- Check the value relative to the position "F" on the display (which by definition is called "PdF1")

- the measured value shall be added to the value set in the "Bar End 1 Adjustment" subparameter



INFORMATION:

The additional bush accessory on the lathe is installed if applicable from the lathe-bar feeder mechanical interface or upon customer's request.

3) The subparameter sends an interface signal to the bar feeder-lathe (prevents the headstock from completing the return stroke).

There is a condition in which the length of the loaded bar plus the length of the bar pusher added to the max headstock stroke is greater than the distance between the 0-axis sensor and the lathe collet. If the headstock moves back with closed collet, the bar and the bar pusher may exceed the maximum stroke allowed (causing a mechanical collision or a bar deformation).

If a value greater than or equal to 1500 mm (value is referred to point F) is set in the subparameter (B), its function becomes that of "headstock overrun safety".

INFORMATION:

warning: with a value lower than 1500mm, subparameter "B" remains available for functions 1) and 2).

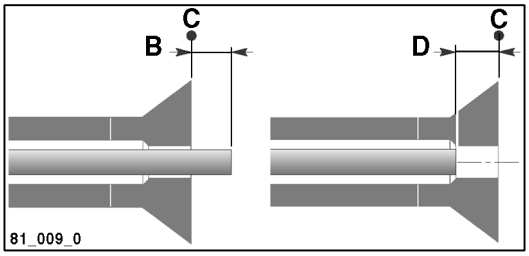
INFORMATION:

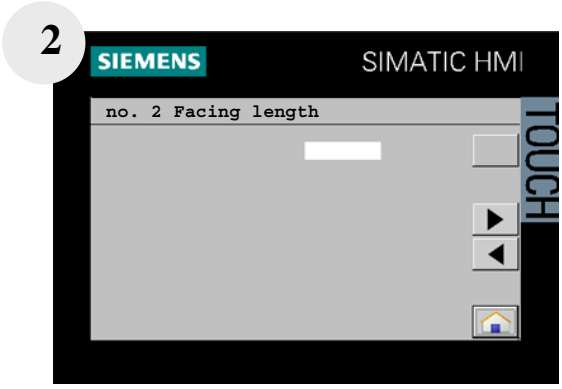
Warning: during the bar change cycle, the signal is disabled.

no. 2 Facing length

Defines the movement of the bar fore end according to point (C) (facing point).
Both positive and negative values.

B - Parameter 2 (positive value)
D - Parameter 2 (negative value)

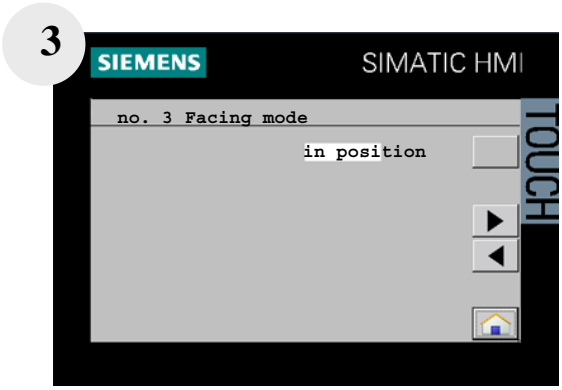




DEFAULT VALUE	PROGRAMMABLE VALUE
Kid 80	Kid 80
10	/

no. 3 Facing mode

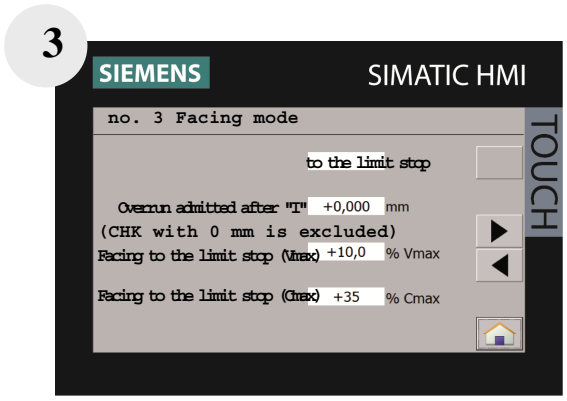
Defines the facing operation.
0 - (TO THE LIMIT STOP); once the bar has exceeded the value defined in parameter 2, it proceeds until the bar limit stop or until the tool.
1 - (IN POSITION); the bar is positioned in the point defined in parameter 2.



DEFAULT VALUE	PROGRAMMABLE VALUE
Kid 80	Kid 80
in position	/

Subparameters:

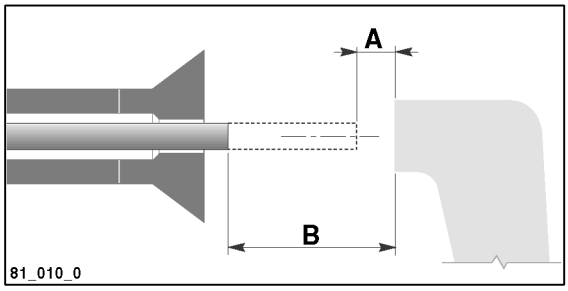
B - Overrun admitted after (CHK with 0 mm is excluded)
C - Facing to limit stop (Vmax)
D - Facing to limit stop (Cmax)

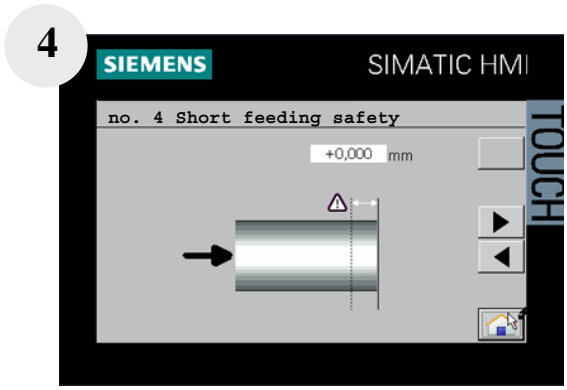


	DEFAULT VALUE	PROGRAMMABLE VALUE
	Kid 80	Kid 80
A	to the limit stop	to the limit stop/in position
B	0	0
C	10	/
D	35	/

no. 4 Short feeding safety

During every feeding stage, it checks that the bar does not go further than the value set in parameter 6 and keeps the tolerance level set in parameter 4. Should this not occur for any reason, when the lathe cuts the "FEEDING" signal, the bar feeder goes into "ALARM".
If parameter 6 is set to 0, this parameter is not active.
A - Parameter 4
B - Parameter 6





DEFAULT VALUE	PROGRAMMABLE VALUE
Kid 80	Kid 80
0	/

0 - (Not enabled for first piece); the parameter is active for all feeding operations except for the first piece.
1 - (Enabled for first piece): the parameter is active for every feeding operation (the facing phase excepted).

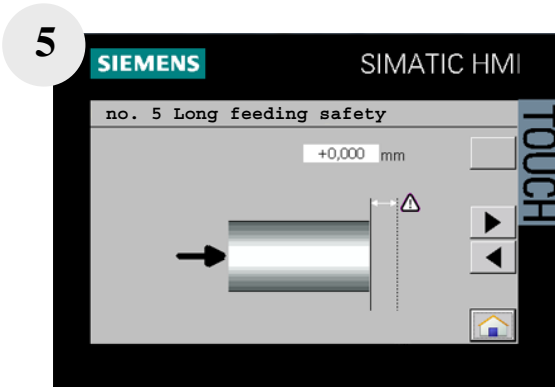
INFORMATION

The short piece control cannot be performed in sliding headstock lathes (bar feeding is carried out by the headstock).

INFORMATION:

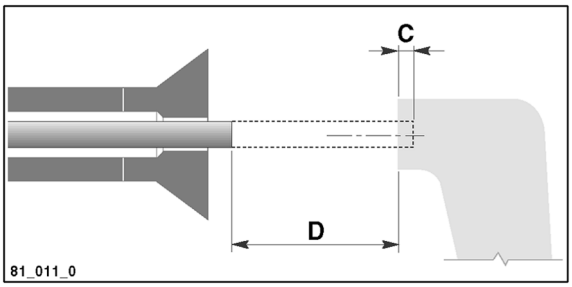
Setting the subparameter to 1 (Enabled for first piece), the "short piece" (parameter 4) checks are activated straight after the first piece.

no. 5 Long feeding safety



During every feeding stage, it checks that the bar does not go further than the value set in parameter 6 added to the value set in parameter 5. Should this not occur for any reason, the bar feeder goes into "ALARM".
If parameter 6 is set to 0, this parameter is not active.

C - Parameter 5
D - Parameter 6



DEFAULT VALUE	PROGRAMMABLE VALUE
Kid 80	Kid 80
0	/

0 - (Not enabled for first piece); the parameter is active for all feeding operations except for the first piece.
1 - (Enabled for first piece): the parameter is active for every feeding operation (the facing phase excepted).

INFORMATION

In the sliding headstock lathe, you can use this parameter to check for any tool breakages; enter a value of a few millimetres (maximum 5 mm).

INFORMATION:

Setting the subparameter to 1 (Enabled for first piece), the "short piece" (parameter 4) checks are activated straight after the first piece.

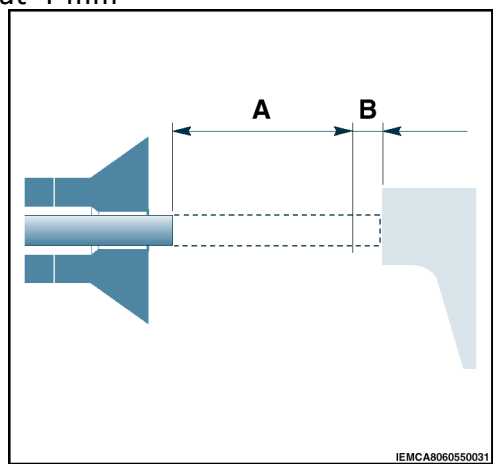
no.6 Piece length

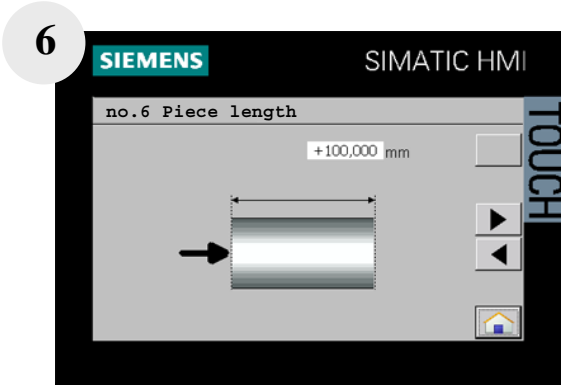
Defines the feeding value at each collet opening.

This parameter is active only if parameter 35 is set to "1" or "2".

When parameter 35 is set to "0", this parameter is not active.

A parameter 6
B about 4 mm

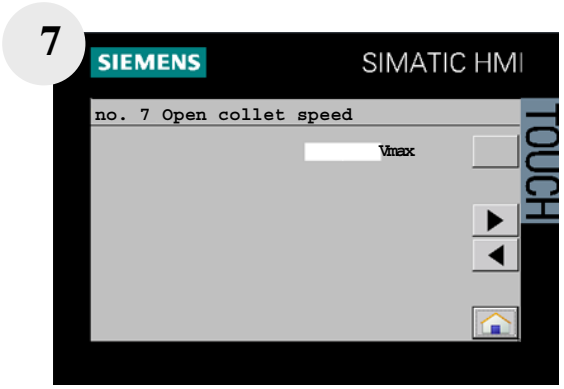




DEFAULT VALUE	PROGRAMMABLE VALUE
Kid 80	Kid 80
0	/

no. 7 Open collet speed

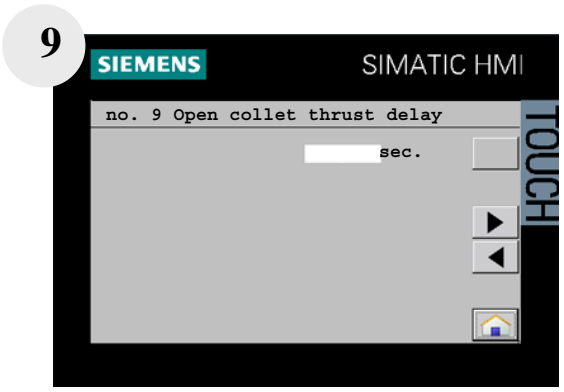
Defines the "FEEDING" speed value.



DEFAULT VALUE	PROGRAMMABLE VALUE
Kid 80	Kid 80
30	/

no. 9 Open collet thrust delay

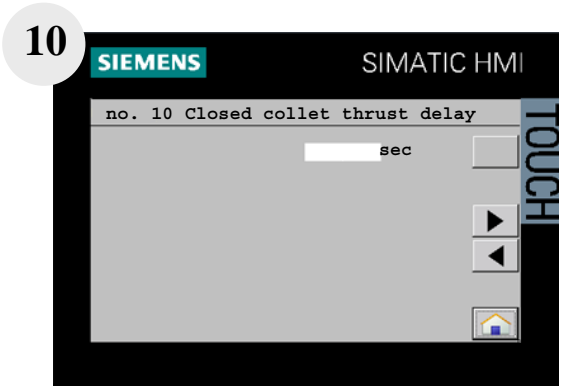
At the "FEEDING" signal from the lathe, the bar pusher delays the feeding in accordance to the set time.
Application example: it should be used when the mechanical movement of the collet opening is slow (double-cone collet).



DEFAULT VALUE	PROGRAMMABLE VALUE
Kid 80	Kid 80
0	/

no. 10 Closed collet thrust delay

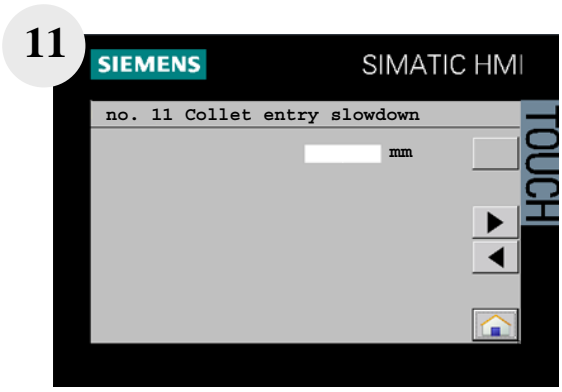
At the "closed collet" signal from the lathe, the bar pusher continues pushing in accordance to the set time.
Application example: it should be used when the mechanical movement of the collet closing is slow (double-cone collet).



DEFAULT VALUE	PROGRAMMABLE VALUE
Kid 80	Kid 80
0	/

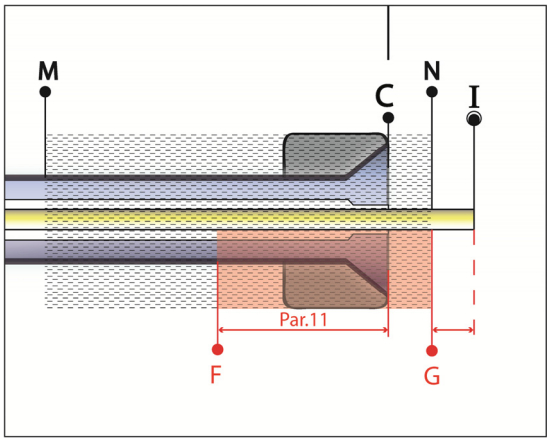
no. 11 Collet entry slowdown

Defines the length of the slowdown section from (F) to (G). Along this section the bar moves at the collet entry speed (see parameter 12).



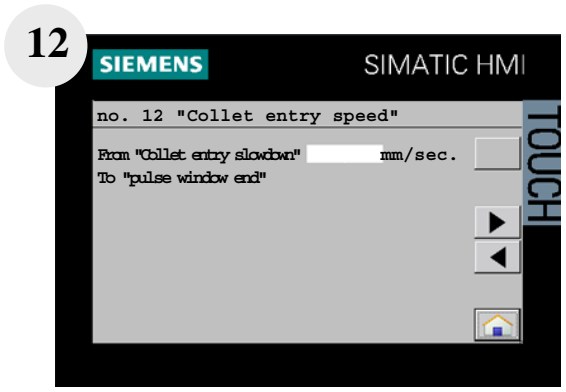
DEFAULT VALUE	PROGRAMMABLE VALUE
Kid 80	Kid 80
200	/

F = collet entry slowdown start referred to (C);
G = see subparameter (N) of Parameter 14;
C = Collet outer alignment Parameter 64;
I = Facing (Parameter 64 + Parameter 2), in the example in the picture the hypothetical value entered in Parameter 2 = 100 mm. The value can be either positive or negative, for further information see Parameter 2.



no. 12 Collet entry speed

Defines the value by which the speed is reduced in the slowdown section (see parameter 11 "A").

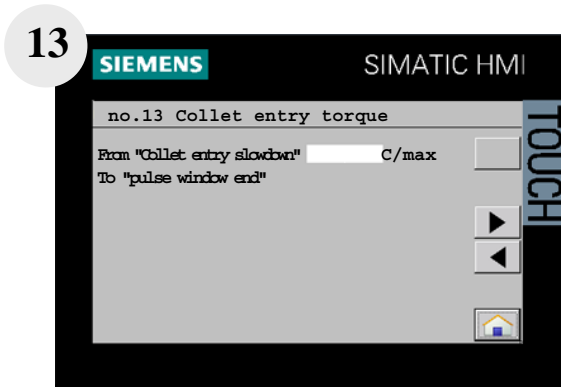


DEFAULT VALUE	PROGRAMMABLE VALUE
Kid 80	Kid 80
6	/

no. 13 Collet entry torque

Defines the thrust value that the bar receives during its feeding in the lathe collet.

It is active in the slowdown section (see parameter 11).

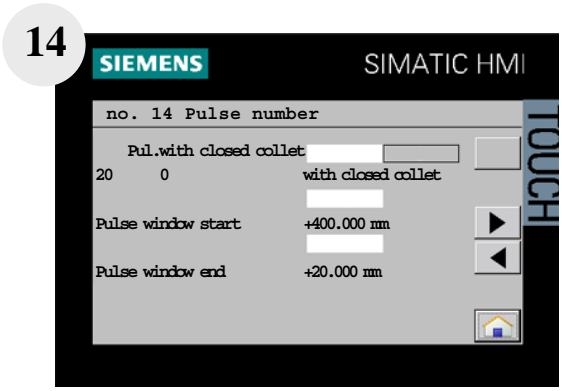


DEFAULT VALUE	PROGRAMMABLE VALUE
Kid 80	Kid 80
40	/

no. 14 Pulse number

Defines the number of pulses that the bar receives so as to simplify its feeding into the lathe collet.
It is active in any point inside the "pulse window".
Description of the phase order:

- the bar enters the pulse phase;
- the bar meets the obstacle (the collet); the pulses start;
- the bar exits the pulse phase.



Subparameters for setting the pulse window:
M - Pulse phase window start referred to (C);
N - Pulse phase window end referred to (I), the "collet entry slowdown" (G) simultaneously ends.

	DEFAULT VALUE	PROGRAMMABLE VALUE
	Kid 80	Kid 80
A	20	/
M	400	/
N	20	/

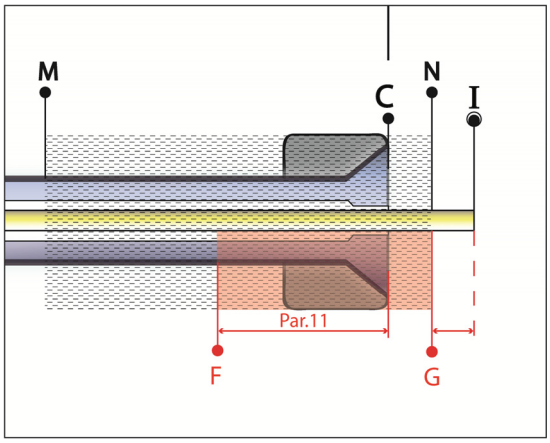
INFORMATION

To prevent unnecessary machine stops, it is recommended to enter a high value in the subparameter (M).

INFORMATION

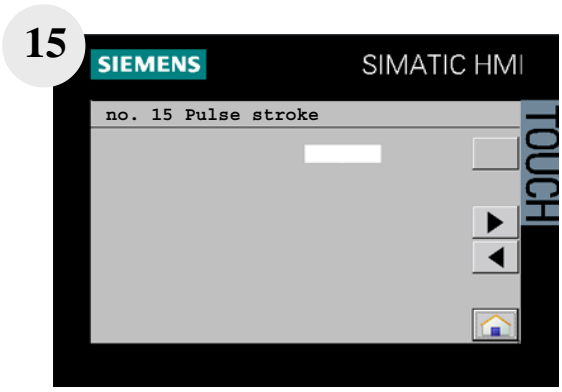
If the bar meets an obstacle before entering the pulse window section, the bar feeder goes into "ALARM" (15 Stationary position before pulses).

C = Collet outer alignment Parameter 64;
I = Facing (Parameter 64 + Parameter 2), in the example in the picture the hypothetical value entered in Parameter 2 = 100 mm. The value can be either positive or negative, for further information see Parameter 2.



no. 15 Pulse stroke

Defines the length of the forward and backward stroke of the pulses (see parameter 14).

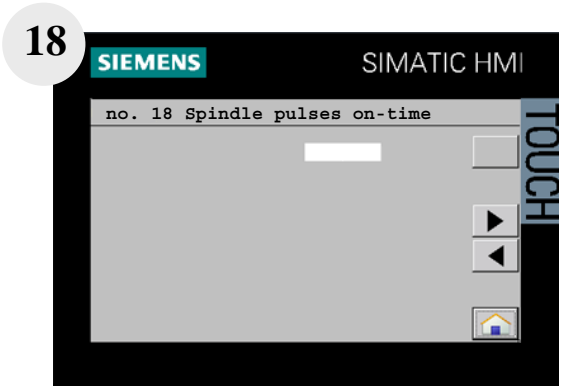


DEFAULT VALUE	PROGRAMMABLE VALUE
Kid 80	Kid 80
0.15	/

no. 18 Spindle pulses - on-time

Defines the duration of the ON pulse that the lathe receives to make the spindle turn.
This is necessary to simplify the entry of the shaped bars into the collet.
Description of the phase order:

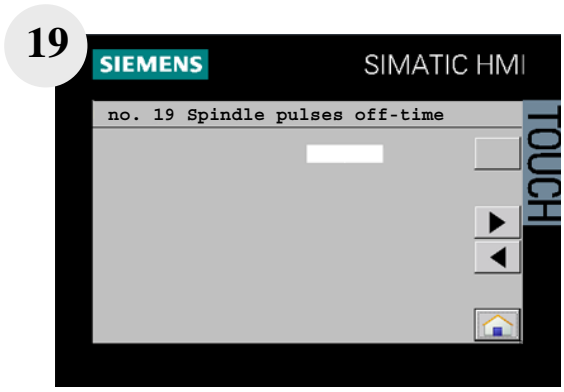
- the bar moves into the slowdown section (see parameter 11);
- the bar meets the obstacle (the collet) and the lathe receives the pulses to start turning the spindle for the set time;
- the spindle slows down and then stops (for the time defined in parameter 19);
- the bar receives the feeding pulse;
- if the bar is fed into the collet, the cycle goes on;
- if the bar does not enter into the collet, the previous phases will be repeated.



DEFAULT VALUE	PROGRAMMABLE VALUE
Kid 80	Kid 80
0.5	/

no. 19 Spindle pulses - off-time

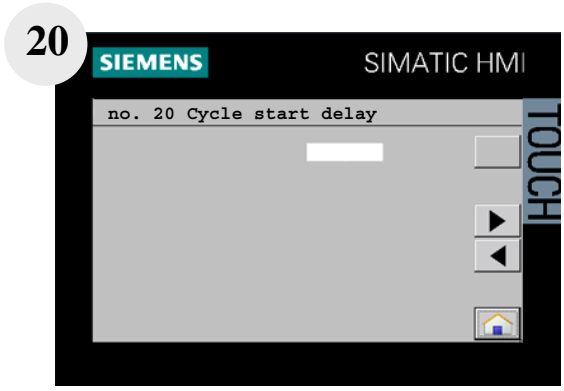
Defines the duration of the OFF pulse given to the lathe to slow down and stop the spindle, prior to the following rotation pulse (see phase description in parameter 18).



DEFAULT VALUE	PROGRAMMABLE VALUE
Kid 80	Kid 80
0.5	/

no. 20 Cycle start delay

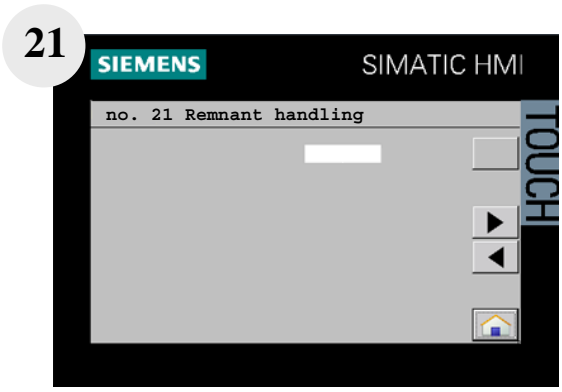
When the bar is in the facing position (see parameter 2), the "cycle start" signal of the lathe can be delayed for a preset value (K15).
Application example: it is necessary to have the "cycle start" signal delay when the spindle needs a certain time to reach the operating rotation speed.



DEFAULT VALUE	PROGRAMMABLE VALUE
Kid 80	Kid 80
0	/

no. 21 Remnant handling

0 - (Removal) (Subparameter Off)
1 - (Ejection)
2 - (Bar change advance no first feeding)
3 - (Bar change advance no facing)

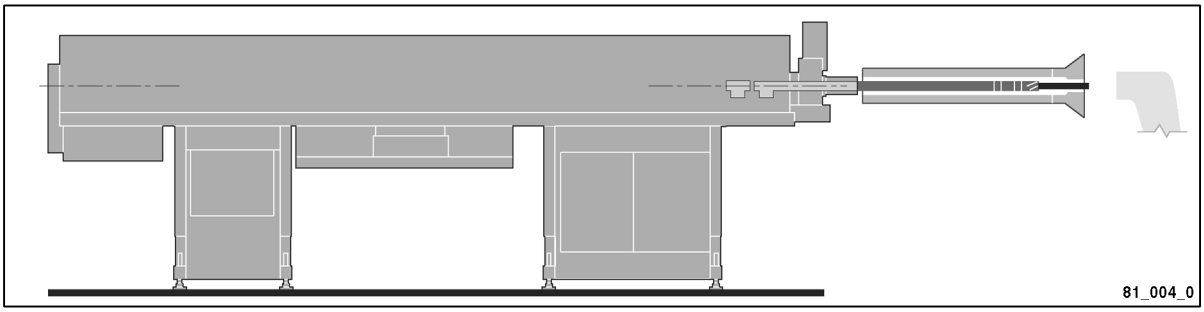


DEFAULT VALUE	PROGRAMMABLE VALUE
Kid 80	Kid 80
1	0/1/2/3

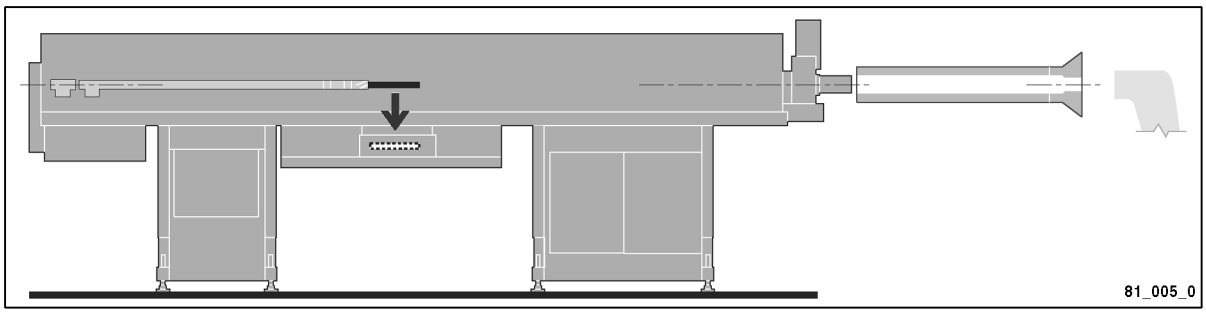
0 - (Removal) (Subparameter Off)

Description of the phase order:

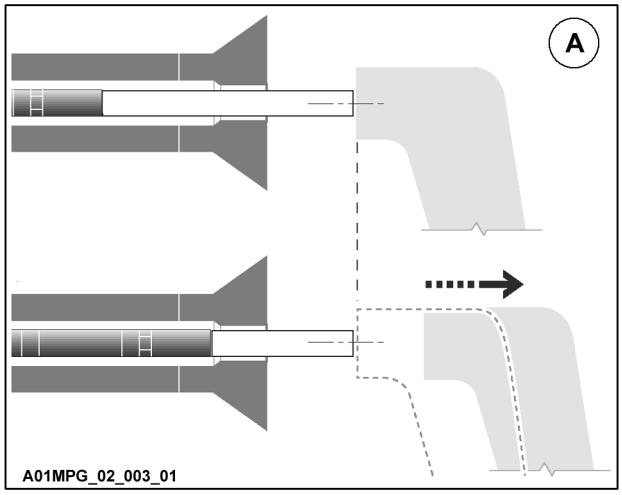
- at the bar end, the bar pusher and the remnant are in the spindle of the lathe;



- the bar pusher and the remnant reach the "completely backwards" position, the remnant is removed from the collet and falls into the remnant recovery box.



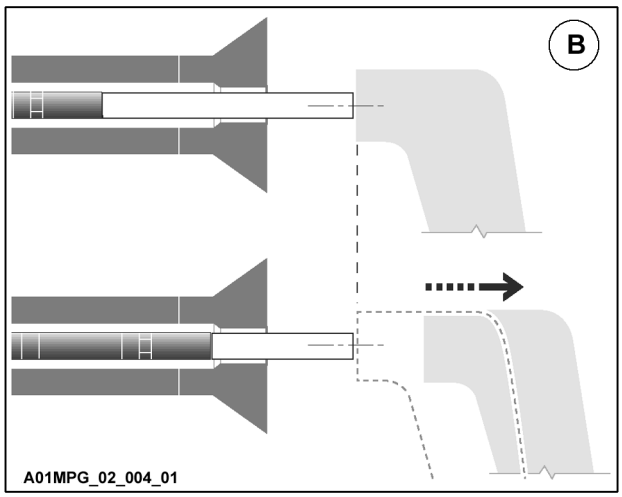
Mode 1 - (Ejection) 2 - (Bar change advance) 3 - (Bar change advance, no facing)
Foreword
To enable one of the two modes, the lathe should have a subprogramming function.
The subprogram should control the bar stop removal at the bar end signal.
The bar stop removal allows the ejection of the remnant from side (A) of the lathe.



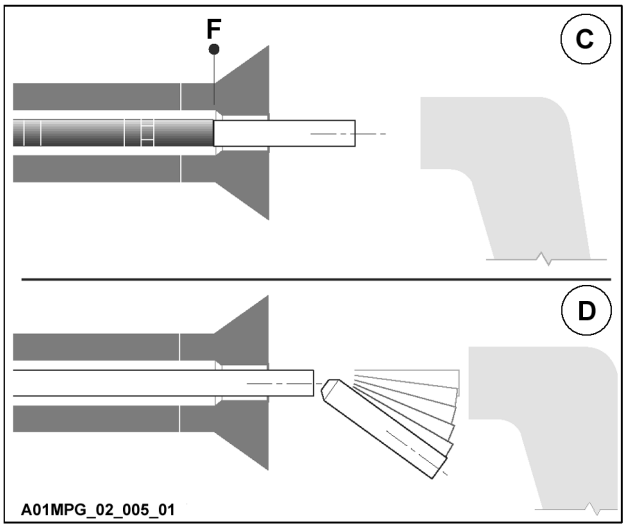
1 - (Ejection)
It is possible to choose among the two following solutions:
a) Ejection with the new bar.
b) Ejection with the bar pusher.

a) Ejection with the new bar.
Description of the phase order:

(B) - The lathe receives the "BAR END" signal from the bar feeder, finishes the machining of the last piece, then goes in the subprogram (bar stop removal) and sends the "FEEDING" and the "BAR CHANGE" signals;

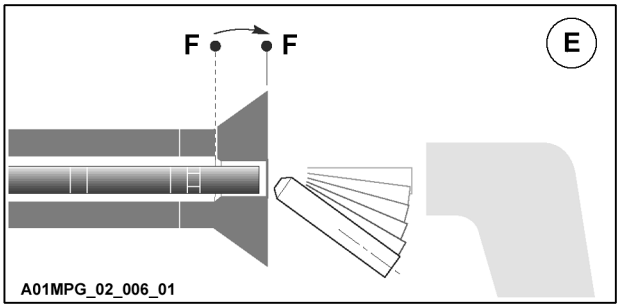


(C) - The bar pusher moves up to point F (maximum feeding point of the bar pusher) and the bar feeder carries out the bar change;
(D) – Through the feeding, the new bar ejects the remnant and moves into the facing position.



b) Ejection with the bar pusher.

Move point F (maximum bar pusher feeding point, see parameter 29) to the collet alignment.
Description of the phase order:
PHASE 1 - the lathe receives the "BAR END" signal from the bar feeder, finishes the machining of the last piece, then goes in the subprogram (bar stop removal) and sends the "FEEDING" and the "BAR CHANGE" signals;
PHASE 2B - the bar pusher moves up to point F, ejects the remnant and the bar feeder carries out the bar change.



2 - (Bar change advance no first feeding)
Allows the bar feeder to carry out the bar change while the lathe has started machining the last piece. Thus, the bar change starts in advance, i.e. before the last piece machining ends and the bar pusher attains point F. The remnant is ejected only with the new bar.

Necessary conditions.
- Set the interface signal 85 "LOADING CYCLE", in position 1 (=NC) and set parameter 21, "REMNANT HANDLING", in mode 2.
- use the "BAR CHANGE ADVANCE" lathe signal (applicable only to lathes which have this function).

Description of the phase order:
- the lathe receives the "BAR END" signal, with the above mentioned conditions;
- the bar feeder carries out the return of the bar pusher and loads a new bar in the guide channels whilst awaiting the "FEEDING" and "BAR CHANGE" signals;
- as soon as the last piece has been machined, the lathe enters the subprogram (bar stop removal) and sends both the "BAR FEEDING" and "BAR CHANGE" signals
- the new bar moves forwards, ejects so the remnant and reaches the facing position.

3 - (Bar change advance no facing)
Allows the bar feeder to carry out the bar change while the lathe has started machining the last piece. Thus, the bar change starts in advance, i.e. before the last piece machining ends and the bar pusher attains point F. The remnant is ejected only with the new bar.

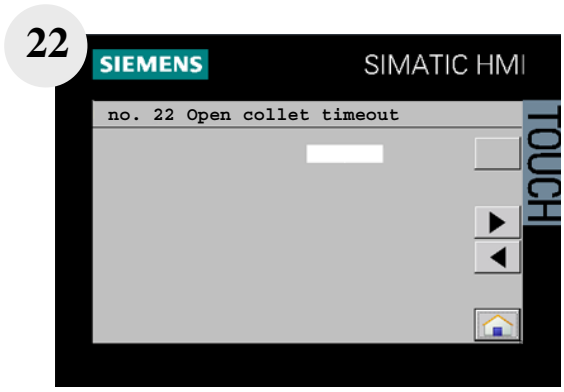
Necessary conditions.
- Set the interface signal 85 "LOADING CYCLE", in position 1 (=NC) and set parameter 21, "REMNANT HANDLING", in mode 3.
- Use the "LOADING CYCLE" lathe signal (applicable only to lathes which have this function).

Description of the phase order:

- the lathe receives the "BAR END" signal, with the above mentioned conditions;
- the bar feeder carries out the bar pusher return, loads a new bar in the guide channels, carried out first feeding and bar loading in the bar feeder collet and then awaits the "FEEDING" and "BAR CHANGE" signals;
- as soon as the last piece has been machined, the lathe enters the subprogram (bar stop removal) and sends both the "BAR FEEDING" and "BAR CHANGE" signals;
- the new bar begins the facing phase until it reaches the position indicated in parameter 2, the bar feeder sends the cycle start signal to the lathe.

no. 22 Open collet timeout

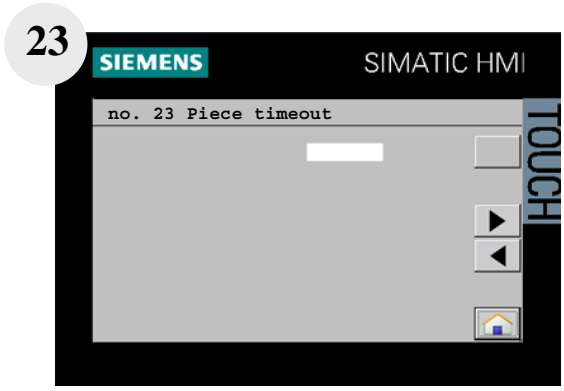
This is the maximum duration time of the FEEDING phase ("OPEN COLLET").
If for any reason the bar feeder remains with the feeding enabling signal ("FEEDING" signal from lathe) for a longer time than the set one, it goes in "ALARM".



DEFAULT VALUE	PROGRAMMABLE VALUE
Kid 80	Kid 80
0	/

no. 23 Piece timeout

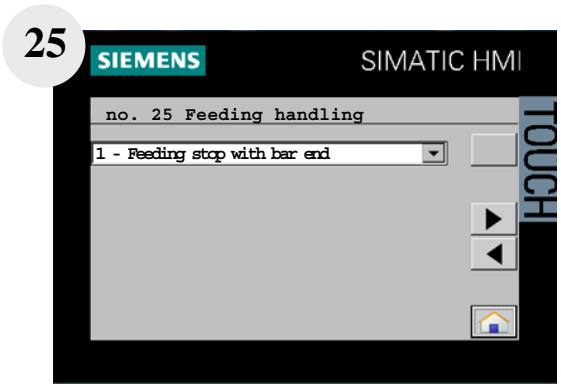
This is the maximum duration of the piece machining.
If for any reason the period for machining of a piece exceeds the set time, the bar feeder will activate the "ALARM".



DEFAULT VALUE	PROGRAMMABLE VALUE
Kid 80	Kid 80
0	/

no. 25 Bar feeding handling

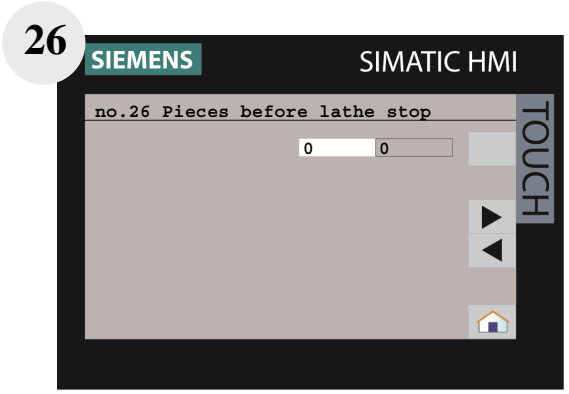
0 - (FEEDING END WITH BAR CHANGE): the bar feeder will stop feeding when the BAR CHANGE signal is received.
1 - (FEEDING END WITH K1): in the presence of the BAR END (K1) signal, the bar feeder stops the feeding.



DEFAULT VALUE	PROGRAMMABLE VALUE
Kid 80	Kid 80
1	0/1

no. 26 Pieces before the lathe stop

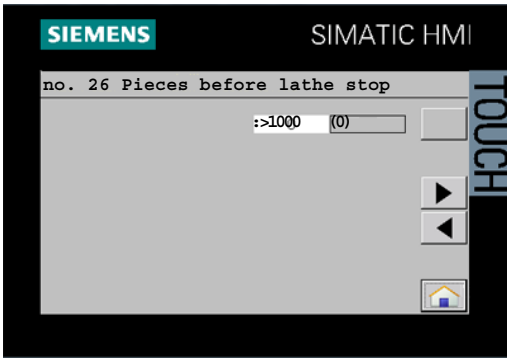
VALUE 0 - The parameter function is disabled.
VALUE >0 - When the set value of pieces machined is reached, the bar feeder calls the stop of the lathe whilst "FEEDING".



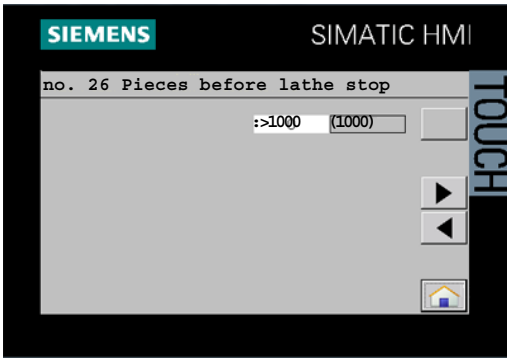
DEFAULT VALUE	PROGRAMMABLE VALUE
Kid 80	Kid 80
0	0/>0

VALUE >0 - Application example.
1.Set value at 1000:

the display shows:



2.Start machining.
After finishing 1,000 pieces, the bar feeder will command the lathe stop.

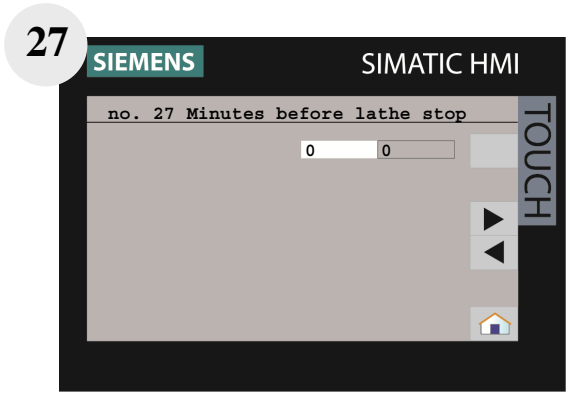


the display shows:

To restart machining, the value in brackets should be reset.

no. 27 Minutes before the lathe stop

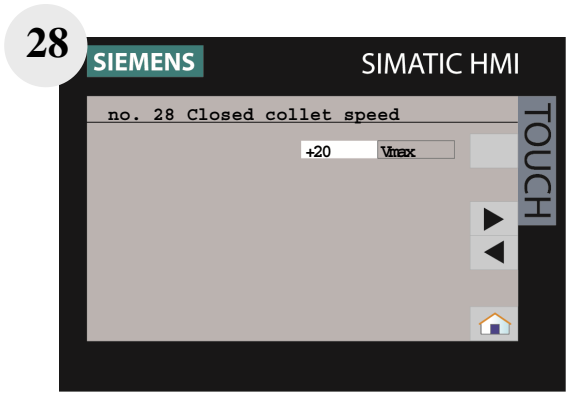
VALUE 0 - The parameter function is disabled.
VALUE >0 - When the minutes set have passed, the bar feeder signals the lathe to stop "FEEDING".



DEFAULT VALUE	PROGRAMMABLE VALUE
Kid 80	Kid 80
0	0

no. 28 Closed collet speed

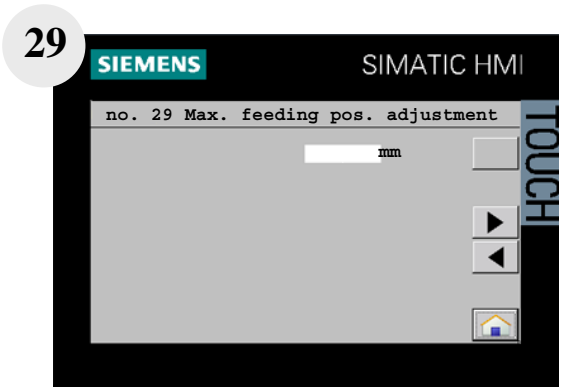
Defines the "CLOSED collet" speed value.



DEFAULT VALUE	PROGRAMMABLE VALUE
Kid 80	Kid 80
20	/

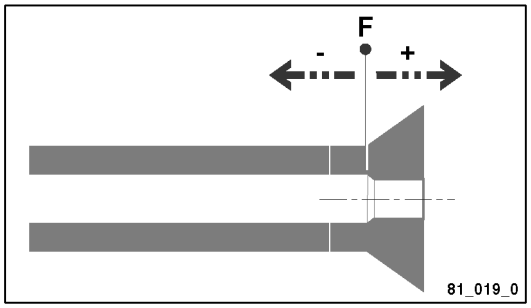
no. 29 Max. feeding pos. adjustment

Defines the adjustments (+ or -) of point F (maximum bar pusher feeding point).



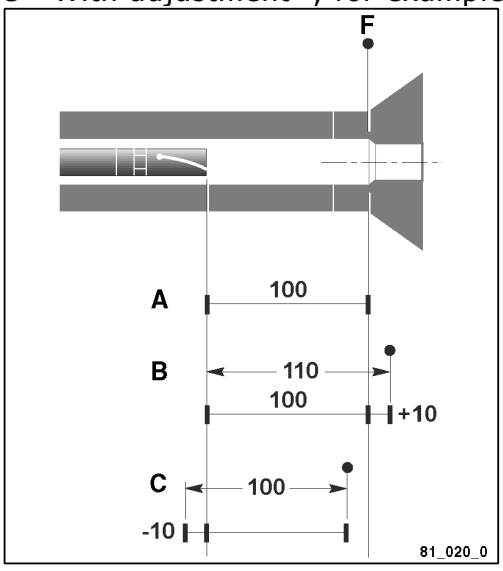
Application examples:
- necessary when working with the bar pusher ejection (see parameter 21, point b);
- necessary when the lathe collet is replaced with one of different dimension.

DEFAULT VALUE	PROGRAMMABLE VALUE
Kid 80	Kid 80
0	0



When the adjustments of point F are performed, parameter 1 is modified as shown in the figure.

A - No adjustment
B - With adjustment +, for example + 10
C - With adjustment -, for example - 10



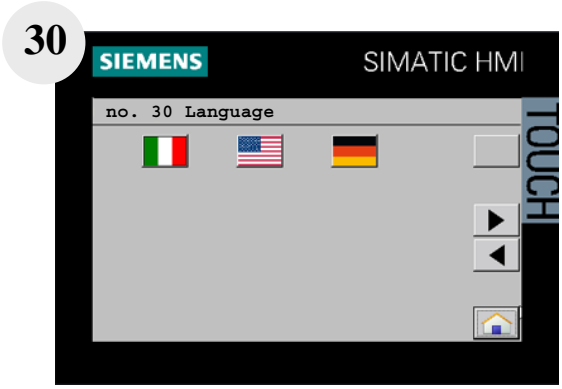
no. 30 Language 1I

Defines the language of the information that appear on the display:

1 - ITALIAN

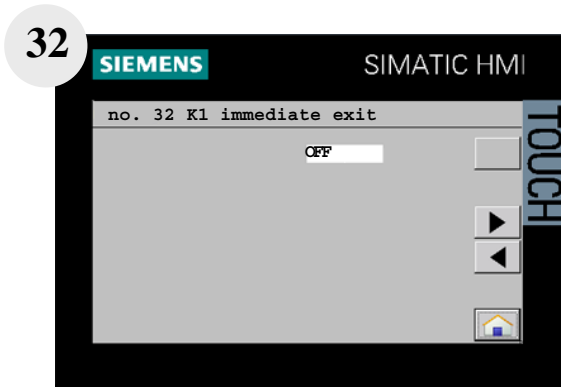
2 - ENGLISH

3 - DEUTSCH



no. 32 K1 immediate exit

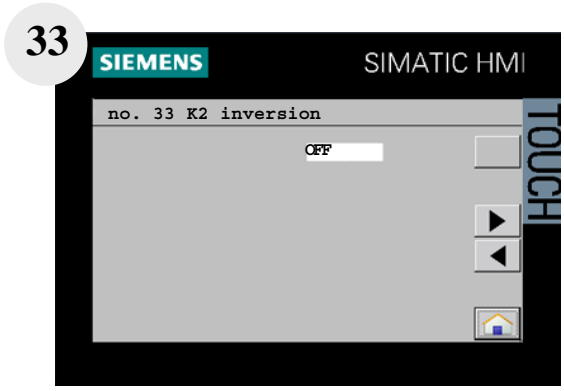
0 - (with open collet K1 is not activated). When detected, the bar end signal K1 is sent to the lathe at the "COLLET CLOSING".
1 - (with open collet K1 is activated). When detected, the bar end signal K1 is immediately sent to the lathe during the "FEEDING" signal.



DEFAULT VALUE	PROGRAMMABLE VALUE
Kid 80	Kid 80
OFF	ON/OFF

no. 33 K2 inversion

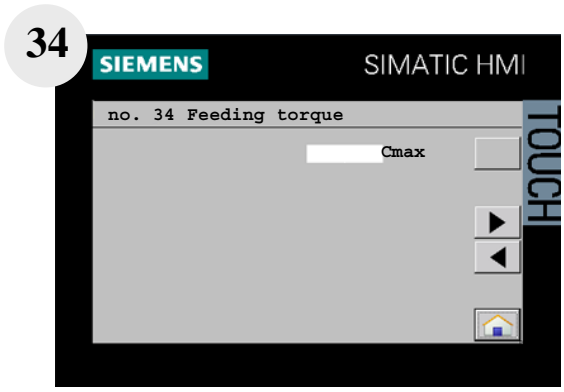
0 - (K2 is on 1 at limit stop). During the feeding signal, the K2 relay remains off during the bar feeding; it is activated when the bar arrives at the bar limit stop (encoder stop).
1 - (K2 is on 0 at limit stop). The K2 relay is active during the bar feeding and off when the bar reaches the bar limit stop (encoder stop).



DEFAULT VALUE	PROGRAMMABLE VALUE
Kid 80	Kid 80
OFF	ON/OFF

no. 34 Feeding torque

Defines the thrust value received by the bar at each "FEEDING".

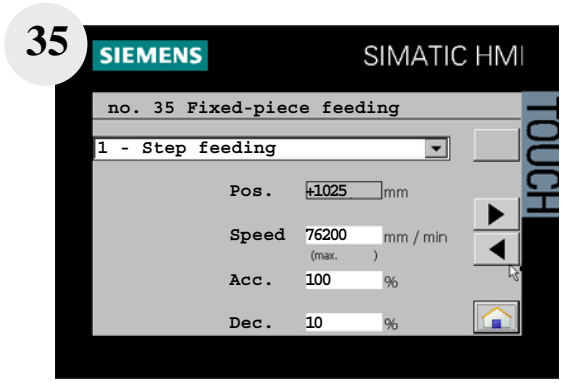


DEFAULT VALUE	PROGRAMMABLE VALUE
Kid 80	Kid 80
40	/

no. 35 Fixed-piece feeding

0 - (AT THE LIMIT STOP). Carries out the feeding to the bar limit stop.
1 - (AT FIXED VALUES). Carries out the piece feeding, in accordance to the value set in parameter 6.
2 - (AT FIXED VALUES AND THRUST TO THE LIMIT STOP). Carries out the piece feeding according to the value set in parameter 6, stops at few millimetres from the bar limit stop, and then carries out another feeding up to the bar limit stop, until the FEEDING signal is active.

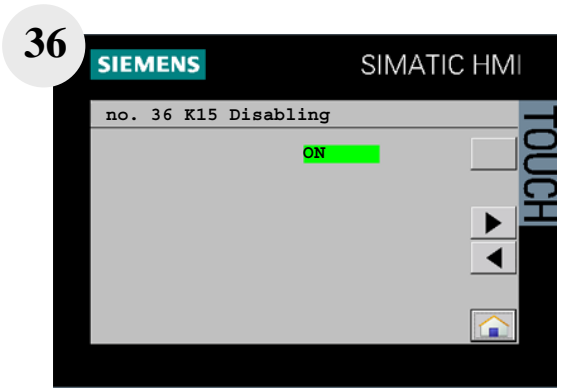
Subparameters:
B - Position
C - Speed
D - Acceleration
E - Deceleration



DEFAULT VALUE	PROGRAMMABLE VALUE
Kid 80	Kid 80
1-Step feeding	0/1/2
0	/
0	/
0	/
0	/

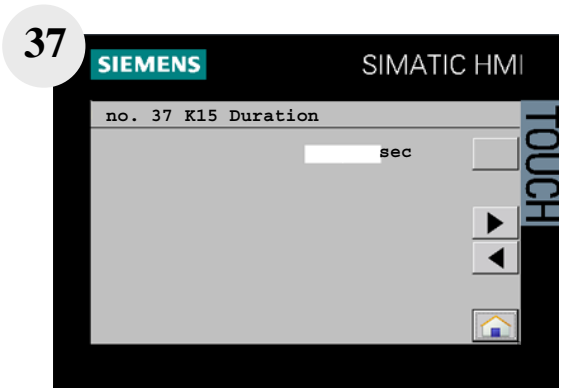
no. 36 K15 disabling

0 - (K15 ENABLED). Enables the warning at every use of parameter 35 in position 1.
1 - (K 15 DISABLED). Disables the warning at every use of parameter 35 position 1.



no. 37 K15 duration

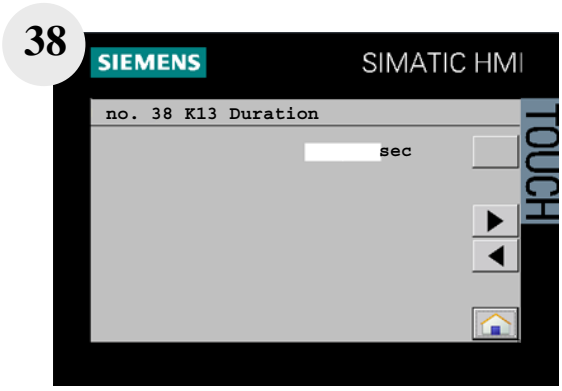
Defines the CYCLE START signal duration.



DEFAULT VALUE	PROGRAMMABLE VALUE
Kid 80	Kid 80
2	/

no. 38 K13 duration

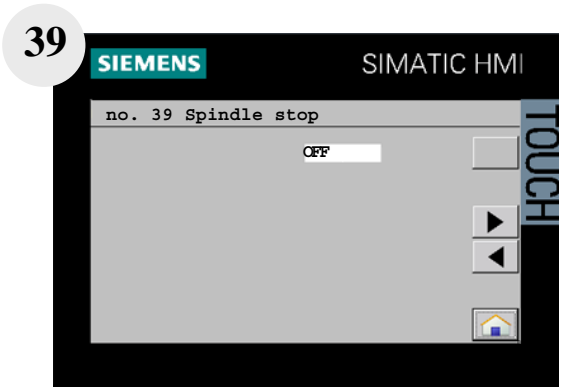
Defines the CYCLE STOP signal duration.



DEFAULT VALUE	PROGRAMMABLE VALUE
Kid 80	Kid 80
0	/

no. 39 Spindle stop

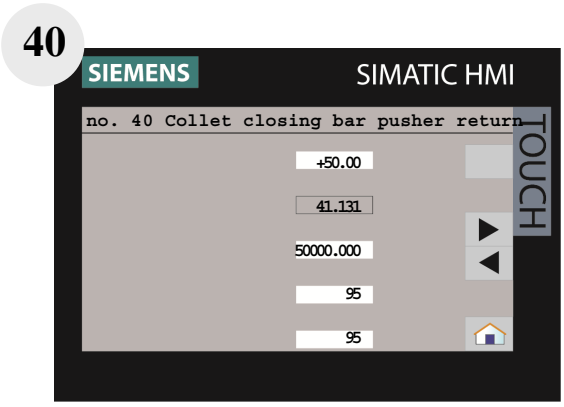
When the bar change is carried out the signal stops the spindle.
0 - (RELAY DISABLED WITH BAR CHANGE). The relay is disabled with the bar change.
1 - (RELAY ALWAYS ENABLED). The relay is always enabled.



DEFAULT VALUE	PROGRAMMABLE VALUE
Kid 80	Kid 80
OFF	OFF/ON

no. 40 Bar pusher return at collet closing

Defines the bar pusher backward displacement at each "COLLET CLOSING". This displacement prevents the bar pusher coming into contact with the bar.



Parameter:

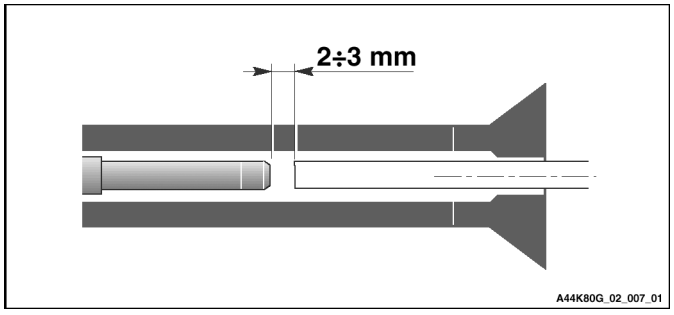
A - Position

The subparameters define the speed and acceleration/deceleration during the closed collet bar pusher movement.

B - Speed
C - Acceleration
D - Deceleration

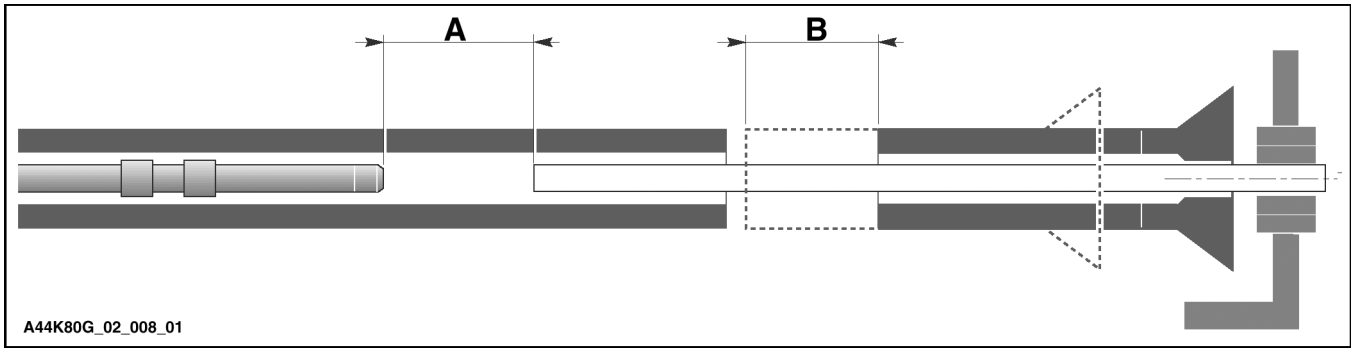
	DEFAULT VALUE	PROGRAMMABLE VALUE
	Kid 80	Kid 80
A	41.131	/
B	50000.000	/
C	95	/
D	95	/

For fixed headstock or sliding rest lathes; set a displacement of some millimetres.



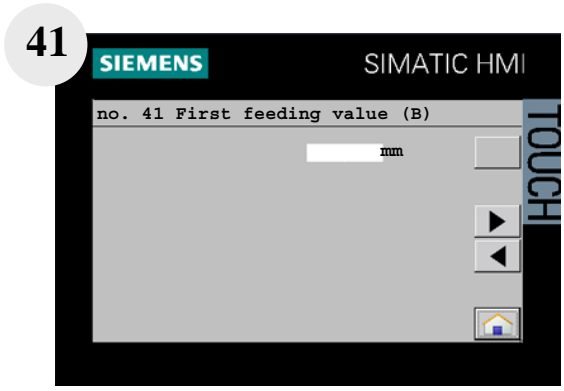
For sliding headstock lathes; set the value of the headstock stroke plus some millimetres.

A Headstock stroke +2÷3 mm
B Headstock stroke



no. 41 First feeding value (B)

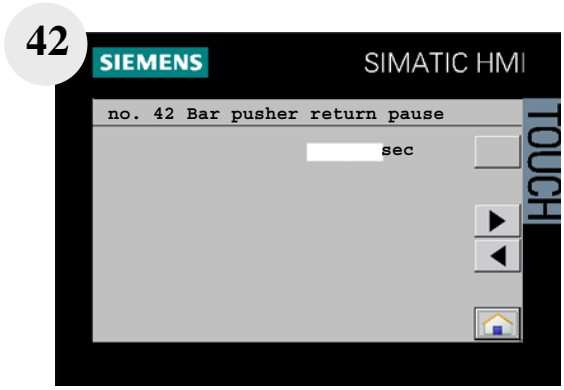
During the FIRST FEEDING phase, the carriage stops as soon as it reaches the value set in the parameter.



DEFAULT VALUE	PROGRAMMABLE VALUE
Kid 80	Kid 80
1405	N=1075 L=1405 LL=1735

no. 42 Bar pusher return pause

"BAR PUSHER RETURN" signal timing.



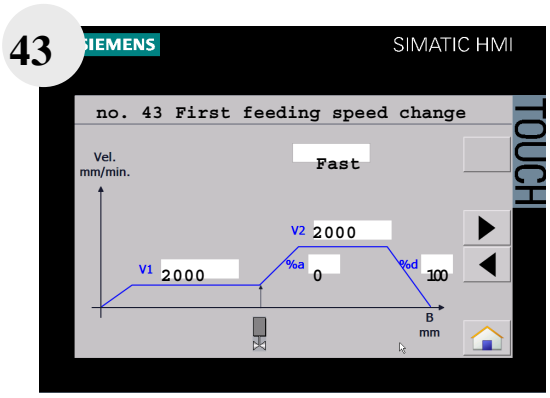
DEFAULT VALUE	PROGRAMMABLE VALUE
Kid 80	Kid 80
0.2	/

no. 43 First feeding speed change

Allows changing the "FIRST FEEDING SPEED".

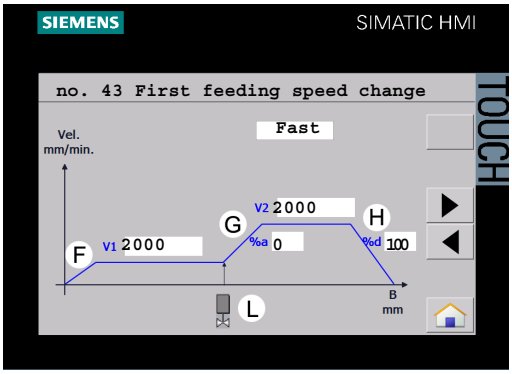
Parameter:
A - Speed type
0 - Slow
1 - Fast

Subparameters:
B - Speed 1
C - Speed 2
D - Acceleration
E - Deceleration



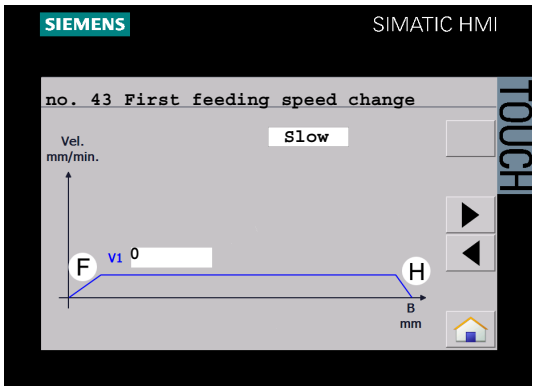
	DEFAULT VALUE	PROGRAMMABLE VALUE
	Kid 80	Kid 80
A	1	/
B	20000	/
C	60000	/
D	100	/
E	15	/

Parameter "Speed change in first feeding" 1 = Fast

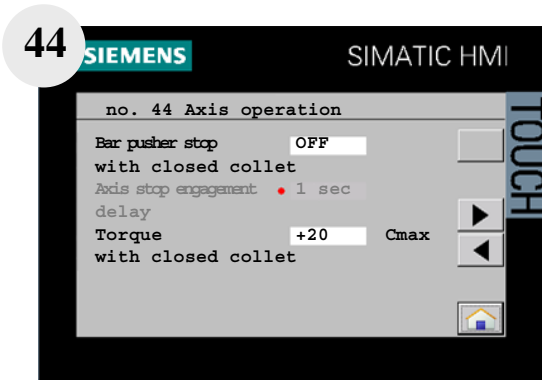


Speed - Speed mm/minute
B - Space covered mm
V1 - Speed set in slow section
V2 - Speed set in fast section
F - V1 ramp acceleration
G - V2 ramp acceleration
H - Deceleration
L - Facing flag

Parameter "Speed change in first feeding" 0 = Slow



no. 44 Axis operation



Subparameters:
A - Bar pusher stop with closed collet
B - Axis stop engagement delay
C - Closed collet torque
The subparameters of this parameter control some functions of the bar pusher movement.

DEFAULT VALUE	PROGRAMMABLE VALUE
Kid 80	Kid 80
OFF	ON/OFF
1	/
+20	/

Bar pusher stop with closed collet - Axis stop engagement delay
These two subparameters enable the feeding motor stop (axis stop) with CLOSED COLLET, so as to avoid that the bar slides off from the bar pusher collet, due to the machining vibrations.

INFORMATION

The function of these two subparameters is applicable with parameter 24 in modes 0 and 5. It is not applicable with modes 1, 2, 3 and 4.

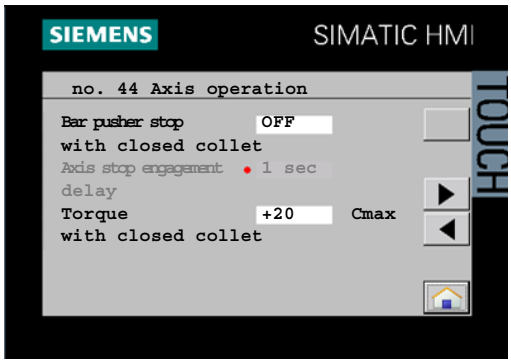
Bar pusher stop with closed collet
0 - the bar pusher stop is off
1 - the bar pusher stop is on

Axis stop engagement delay
This subparameter allows setting a delay time for the axis stop engagement at every CLOSED COLLET. This period of time allows you to "release" the bar feeder transmission devices, so as to avoid useless tensions.

Closed collet torque
This subparameter allows adjusting the thrust value with which the bar pusher moves the bar during the "CLOSED COLLET" signal.

INFORMATION:

When working with Par.24 =1 (sliding headstock with no synchronization device) the "Closed collet torque" adjusts the thrust value with which the bar pusher moves the bar during the "CLOSED COLLET" signal.



2.12 ERRORS - CAUSES - SOLUTIONS

During the bar feeder set-up or the piece machining, the display may highlight errors or messages.
Such errors or warnings may be caused by an incorrect programming, an incorrect manoeuvre, or a mechanical or electrical fault.

When the errors are detected the bar feeder stops; to restore the automatic cycle carry out the following procedure:

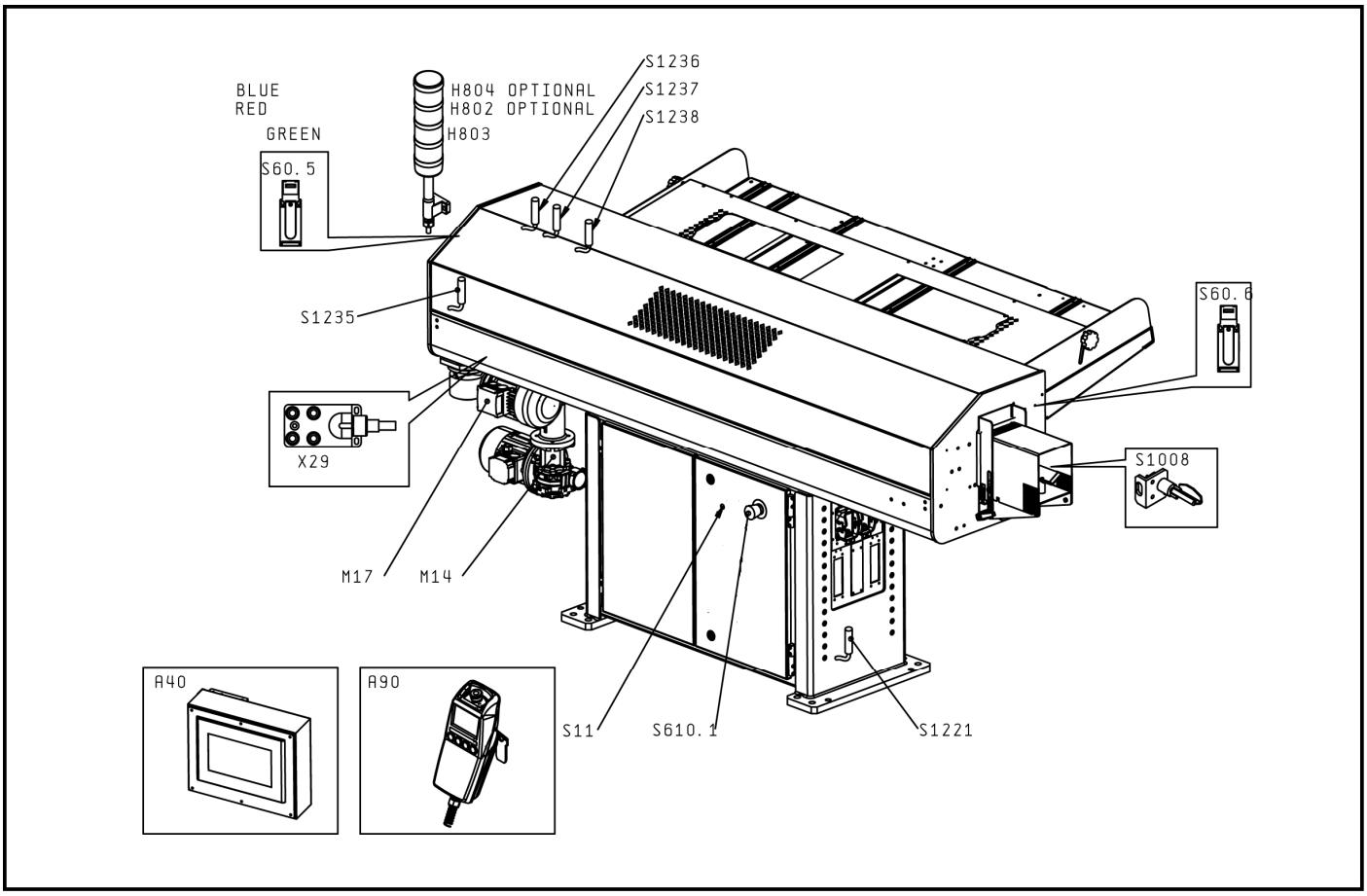
- restore the manual cycle;
- eliminate the cause of the error;
- restore the automatic cycle.

INFORMATION

All messages with "Error" must be reset by pressing 

.

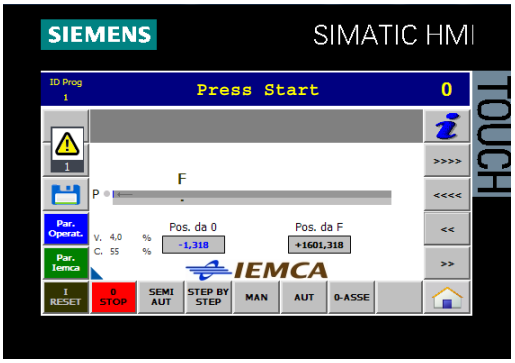
When a warning is displayed the bar feeder does not stop and it is not necessary to reset the machine.
The warnings appear when attempting to perform a manoeuvre which is not allowed by the program and provide information for the operator during the machining.



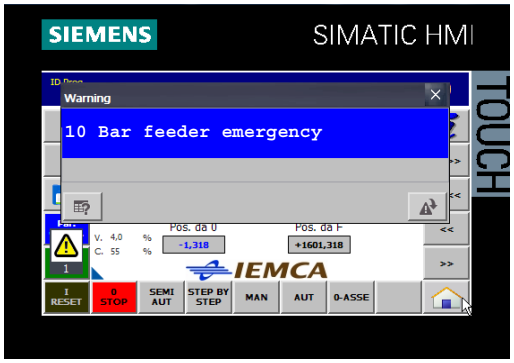
INFORMATION:

Some alarms have the same name as the sensor that triggered them (for example "10-Bar feeder emergency S610.1"). The position of the sensor or button can be located by means of the description shown on the display or by means of the label inside the magazine guard.

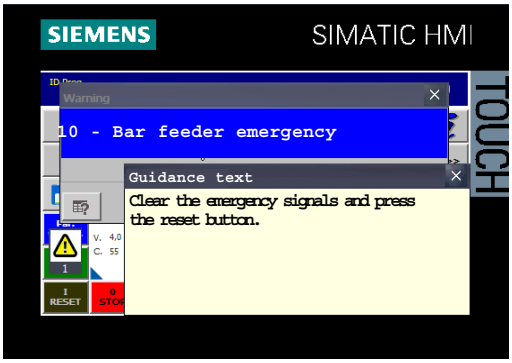
Button with the "general warning"  symbol, allows you to view the type of alarm causing the machine to stop.



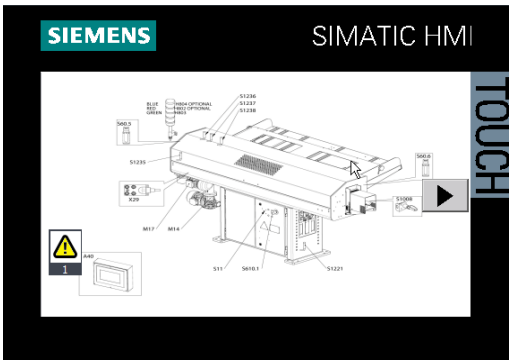
By pressing the  button



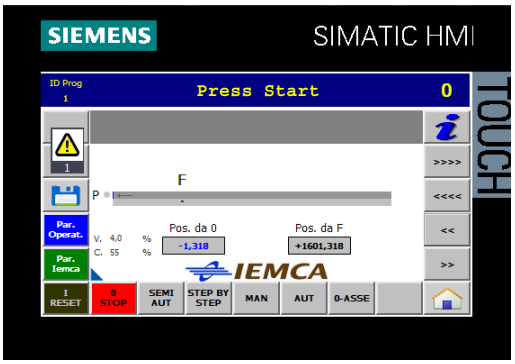
The "Guidance text" explaining how to fix the error is displayed.



Press  , the layout showing the position of the bar feeder sensors is displayed.



Press  to return to the main screen.



INFORMATION:

the alarms referring to a specific working phase are identified within the "operating cycle" (see section 3.4).

INFORMATION:

All "Alarms" must be reset by pressing 

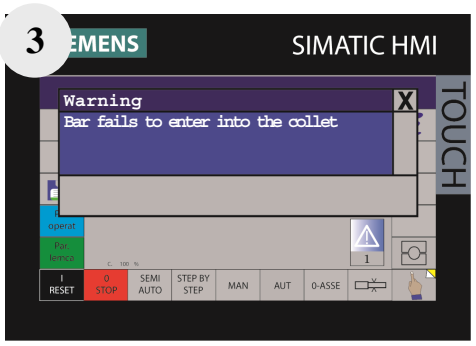
.

The alarm messages, their probable causes and related solutions are listed below.

3 - ERROR: THE BAR FAILS TO ENTER INTO THE COLLET

The bar has met the first obstacle in the pulse window as defined in parameter 14 (pulse window start - pulse window end) and has exceeded the entry attempts as defined in the same parameter (pulse number).

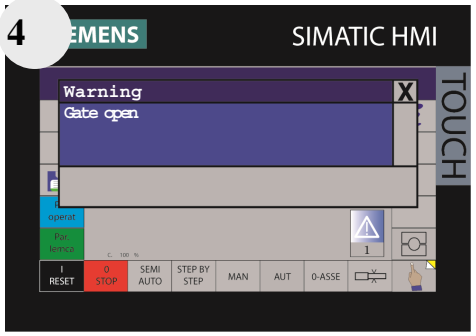
CAUSE	SOLUTION
The bar does not enter into the collet or into the lathe bush.	Check the diameter of the bush.
	If it is a shaped bar, check if the bar entry kirving is correct on the rear part of the collet.
	If it is a shaped bar, check the spindle rotation and if the pulse sequence is correct.
The feeding speed and/or torque are not suitable.	Check the speed (see parameter 12) and/or the torque (see parameter 13).



4 - ERROR: GATE OPEN (S1008 Off)

Error: AT THE FIRST FEEDING STROKE START, THE SHORT FEED GATE IS OPEN.

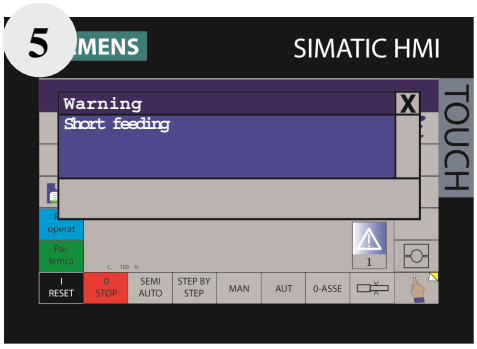
CAUSE	SOLUTION
The short feed gate is jammed and cannot be closed.	Make sure that there are no foreign bodies (chips, remnants, fragments) in the short feed gate movement area; carry out the movement manually to find any possible obstacles.
Operation failure of the solenoid valve of the short feed gate closing.	Check the electromechanical operation of the device.
Operation failure of the sensor, which detects the short feed gate closing.	Make sure that to the short feed gate movement corresponds to the sensor state change.

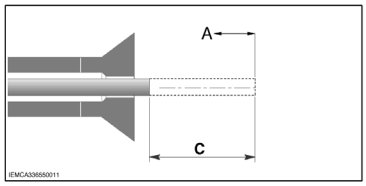


5 - ERROR: SHORT FEEDING

Error: A BAR PUSHER SHORT FEEDING MOVEMENT HAS BEEN DETECTED IN ACCORDANCE WITH THE SETTINGS OF PARAMETERS 5 and 6.

CAUSE	SOLUTION
The tolerance values of parameters 5 and 6 are too low.	Check the tolerance values with regards to the length of the piece to be machined.
The lathe collet does not open correctly.	Check the correct opening of the collet (at least 0.5 mm).
Encoder operation failure.	Check the value relative to the position of the bar pusher carriage on the display and check the effective variation of the value with regards to the real displacement of the carriage.
The thrust received by the bar is too low.	Check the values of parameters 7, 8 and 34.
The bar slides out of the collet during the headstock stroke.	Check the bar pusher collet state.



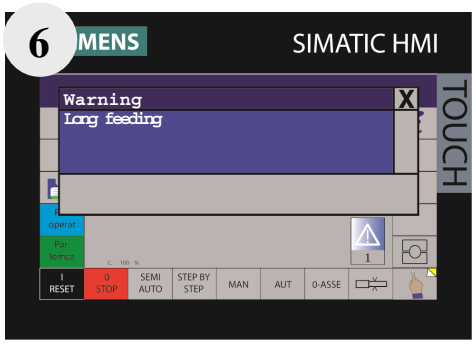


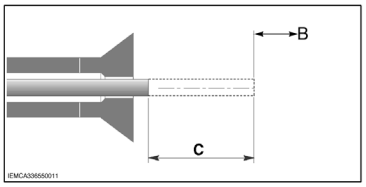
"A" - Short piece safety tolerance (subparameter Par.5), Short feeding safety (subparameter Par.6).
"C" - Headstock stroke (Parameter Par.5). Feeding (Parameter Par.6).

6 - LONG FEED

Warning: A BAR PUSHER LONG FEEDING MOVEMENT HAS BEEN DETECTED IN ACCORDANCE WITH THE SETTINGS OF PARAMETERS 5 and 6.

CAUSE	SOLUTION
The tolerance values of parameters 5 and 6 are too low.	Check the tolerance values with regards to the length of the piece to be machined.
The lathe bar limit stop is not in the correct position.	Check the position of the bar stop on the lathe.
Encoder operation failure.	Check the value relative to the position of the bar pusher carriage on the display and check the effective variation of the value with regards to the real displacement of the carriage.
Possible breakage of the cutting tool.	Check the condition of the cutting tool.
The bar slides out of the collet during the headstock stroke.	Check the bar pusher collet state.



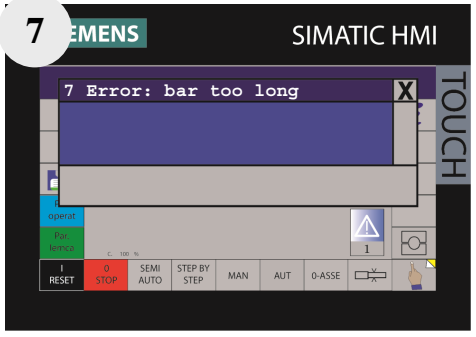


"B" - Long piece safety tolerance (subparameter Par. 5) or Long feeding (subparameter Par. 6).
"C" - Headstock stroke (Parameter "C" Par.5).
Piece feeding (Parameter "C" Par. 6).

7 - ERROR: BAR TOO LONG

Error: DURING THE FIRST FEEDING STROKE OR DURING THE BAR DETECTION STROKE IN THE "START-UP" PROCEDURE A BAR OF LONGER LENGTH THAN THAT SET IN PARAMETER 67 "MAXIMUM BAR LENGTH" IS MEASURED.

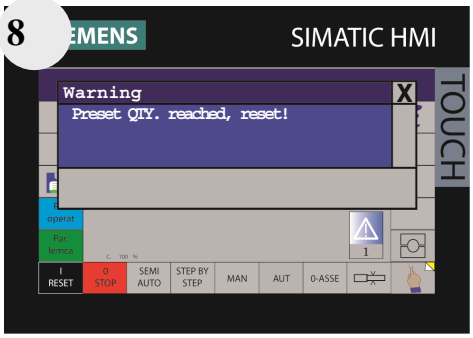
CAUSE	SOLUTION
The bar loaded is longer than the maximum value set in parameter 67.	Reduce the length of the bar loaded.
	Check the value set in parameter 67.



8 - PRESET QTY. REACHED, RESET - P26

Warning: THE BAR FEEDER HAS STOPPED AUTOMATICALLY DURING THE MACHINING PHASE.

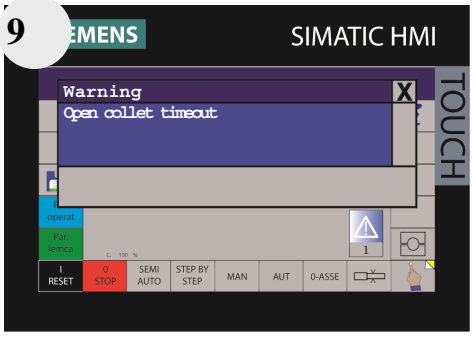
CAUSE	SOLUTION
The set quantity of pieces has been reached.	Reset the number of pieces and restart.



9 - OPEN COLLET TIMEOUT

Warning: THE BAR FEEDER HAS STOPPED WITH THE ACTIVE FEEDING SIGNAL SINCE THE OPEN COLLET "TIMEOUT" HAS ELAPSED.

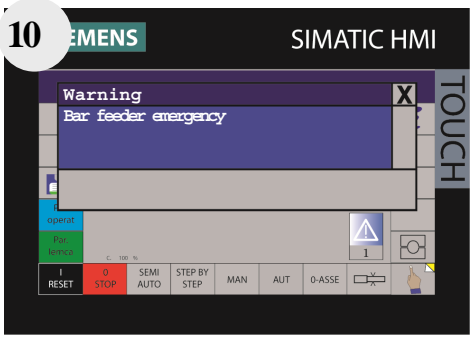
CAUSE	SOLUTION
In the AUTOMATIC mode the lathe collet remained open for a longer period than the one set in parameter 22.	Check the value of parameter 22, with regards to the real "FEEDING" time.



10 - BAR FEEDER EMERGENCY

Warning: THE GENERAL CONTROLS OF THE BAR FEEDER ARE NOT INSERTED.

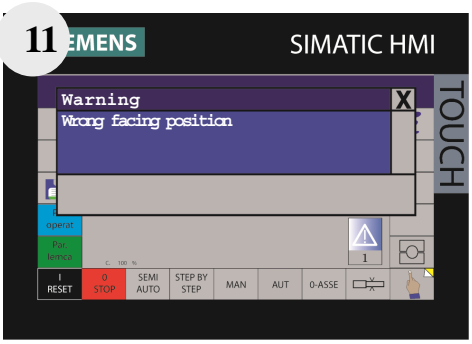
CAUSE	SOLUTION
An emergency button has been pressed.	Check the state of the emergency button.
There is an emergency signal from the lathe.	Check whether the signal sequence arriving from the lathe is continuous: the signals must be all on or all off.
There is an open guard in the lathe or in the bar feeder.	Check if the guards are closed.



11 - WRONG FACING POSITION

In automatic mode, the facing position has been reached and the overrun position, as defined in subparameter 3, has been exceeded.

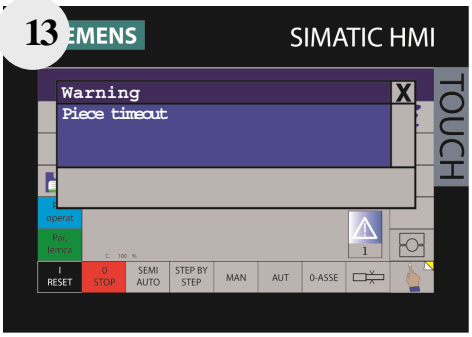
CAUSE	SOLUTION
When the bar does not stop in the facing position (parameter 65), but exceeds this point by a value higher than or equal to the set value in the "Overrun admitted after I" subparameter. This check is performed only when the "FACING IN POSITION" mode is active and if the set value in the "Overrun admitted after I" subparameter is > 0.	Make sure that the chain is correctly tensioned.
	The values for "Facing and overrun admitted after I" set by the operator are wrong.



13 - PIECE TIMEOUT

Warning: THE WORKING CYCLE FOR MACHINING A PIECE HAS TAKEN LONGER THAN THE TIME SET IN PARAMETER 23.

CAUSE	SOLUTION
The working cycle for machining a piece has taken longer than the time set in parameter 23.	Check the setting in parameter 23 with regards to the working cycle.
The working cycle for machining a piece has undergone an interruption or a slowdown.	Make sure that the actual duration of the working cycle does not face slowdowns or interruptions.



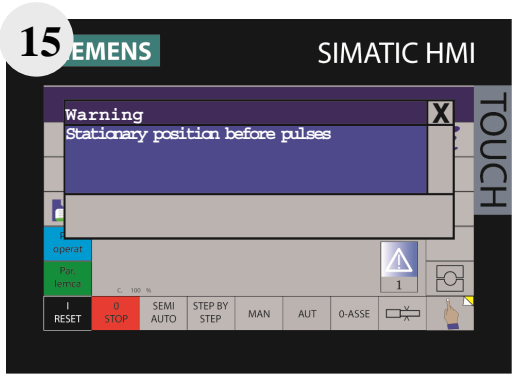
INFORMATION:

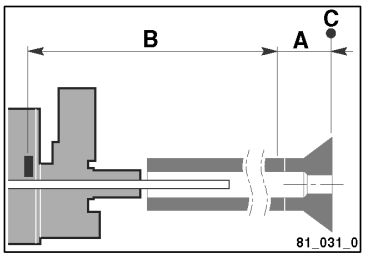
The alarm described above also appears when the following conditions are met: in automatic mode with the open collet signal for 1 hour; in automatic mode with the closed collet signal and parameter 24 Synchronization to 1 for 1 hour.

15 - STATIONARY POSITION BEFORE PULSES

In automatic mode, during the facing jog, if the flag has been knocked down and the bar pusher has stooped within the pulse window as defined in parameter 14. During the bar loading phase, the bar pusher moves but it stops before knocking down the facing flag.

CAUSE	SOLUTION
There is an obstacle inside the spindle	Make sure that there are no obstacles or diameter differences which could interfere with the bar feeding.
The pulse window defined in parameter 14 has not been set correctly.	Check the value set in parameter 14.
An inappropriate torque value has been set	Check the set torque value.



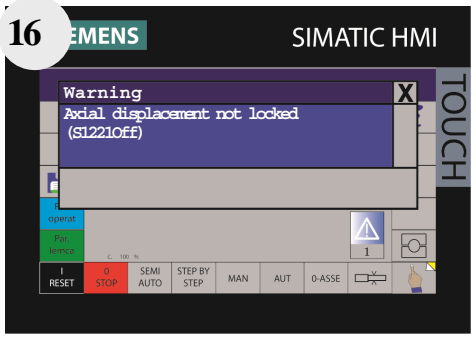


A - Parameter 11
B - Area with error 27

16 - AXIAL DISPLACEMENT NOT LOCKED (S1221 Off)

Warning: THE AXIAL DISPLACEMENT SENSOR IS NOT ACTIVE.

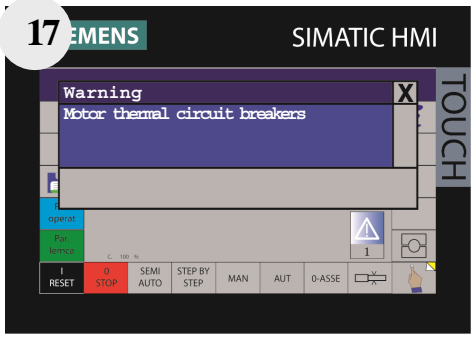
CAUSE	SOLUTION
The axial displacement device is not locked.	Lock the axial displacement device.
The sensor is faulty.	Replace the sensor.
Incorrect reading of the sensor.	Check the distance between the sensor and the relevant cam.



17 - MOTOR THERMAL CIRCUIT BREAKERS (E11.7)

A MOTOR THERMAL CIRCUIT BREAKER HAS TRIPPED.

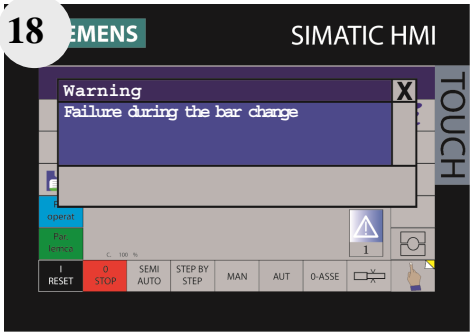
CAUSE	SOLUTION
The oil pump overheating has occurred.	Make sure that the involved motor can run freely and check the correct thermal calibration (according to the amperage).
	Check the motor input voltage.



18 - FAILURE DURING THE BAR CHANGE

Warning: THE BAR CHANGE WAS NOT COMPLETED IN THE PRESET TIME.

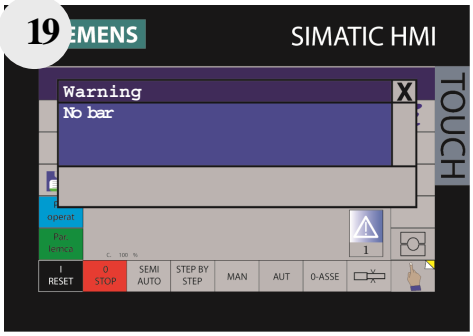
CAUSE	SOLUTION
When an unforeseen mechanical or electrical error occurs, a safety time stops the machine if the bar change cycle does not occur in the preset time.	Check the exact cause of the fault and reset the working cycle.



19 - NO BAR

IN AUTOMATIC MODE, THE MECHANICAL FEEDING IS ACTIVATED BUT ITS PROCEDURE HAS NOT BEEN COMPLETED AND THE COMPLETELY CLOSED CLAMP SENSOR IS ON.

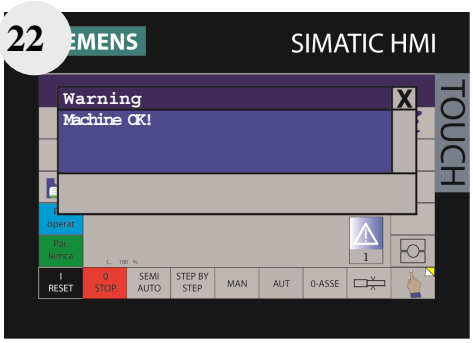
CAUSE	SOLUTION
The phase detector is not working properly.	Make sure that the phase detector on the mechanical cam works properly
There is a mechanical obstacle	



22 - MACHINE OK!

THIS IS A MESSAGE AND DOES NOT NEED A RESET. IT IS USED ONLY TO SEND AN SMS OR AN EMAIL INFORMING ON THE AUTOMATIC RESET AFTER AN ALARM.

CAUSE	SOLUTION
This message appears for a few seconds when the bar feeder is in automatic mode and the error has been eliminated.	Example: after resetting the emergency mushroom-head button.



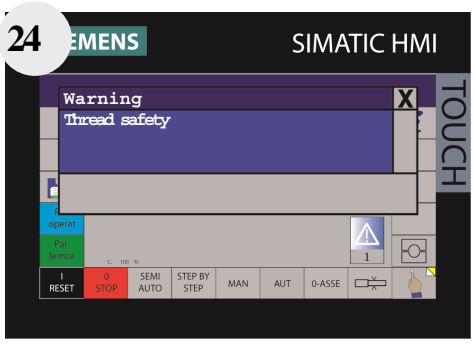
INFORMATION:

This message is used to send an sms or an email informing on the automatic reset after an alarm. It can only be used by customers with IT infrastructures that allow the connection of IEMCA bar feeder to the corporate network.

24 - THREAD SAFETY

Warning: THE LATHE HAS NOT CARRIED OUT THE THREADING OPERATION ON THE PIECE TO BE MACHINED.

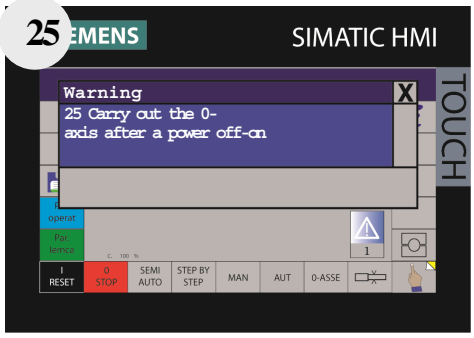
CAUSE	SOLUTION
Threading device failure.	Check the effective functioning of the lathe device.
Threading controlling device failure.	Check the microswitch placed on the cam box of the thread safety.
The bar did not move to the last "COLLET OPENING".	Make sure that the lathe collet opens correctly and check the bar feeder thrust (parameter 34).



25 - CARRY OUT THE 0-AXIS AFTER A POWER OFF-ON

THE ENCODER VALUE PRESET OPERATION WAS NOT CARRIED OUT CORRECTLY IN THE PRESET TIME.

CAUSE	SOLUTION
The PLC and drive connection cable is broken.	Contact Iemca service department.
The drive is faulty.	

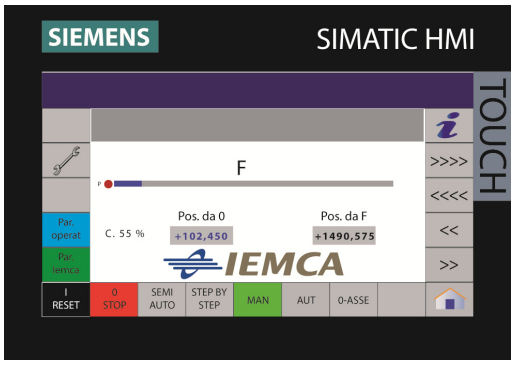


2.13 PROGRAM IDENTIFICATION DATA: DISPLAY MODE

The two following programs have been installed in the bar feeder:
- Push-button panel software;
- PLC/NC Software.

For many reasons (for example the request of assistance) it could be useful to display and understand the program identification data of these programs using the following procedure.

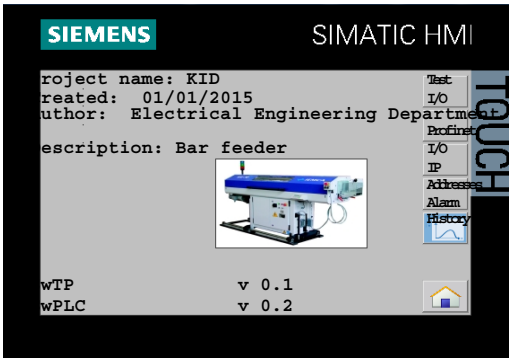
1. Enter the main screen:



To display the identification data of the "Push-button panel software" of the "PLC/NC Software".

2. Select  mode to

3. Display the screen where it is displayed:



identification data of the push-button panel software: [barra] SwOP:xxxxx [barra]
PLC/NC software identification data: [barra] SwCNC:xxxxx [barra]

INDEX

3.1 PROTECTED PARAMETERS: DISPLAY

These parameters refer to the bar feeder configuration and the bar feeder-lathe interfacing. The modification procedure is mainly necessary during the installation of the bar feeder by an authorized technician.
Data entering or modifying in these parameters is possible only by using the special data entering mode.
To access this mode, it is necessary to follow the procedure given in Section 4.2. The pages of this section are only supplied to the technician authorized by the manufacturer.

WARNING - CAUTION

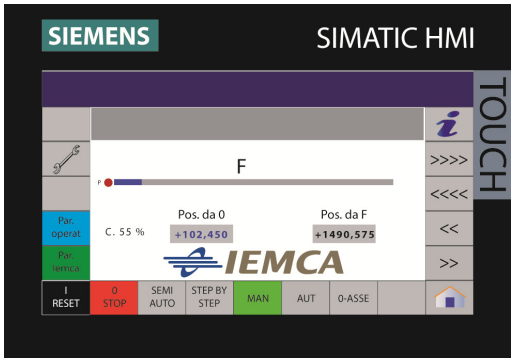
The parameters are set to a default value (preset value): the bar feeder performs the automatic cycle according to these values.

The main display modes are the following:

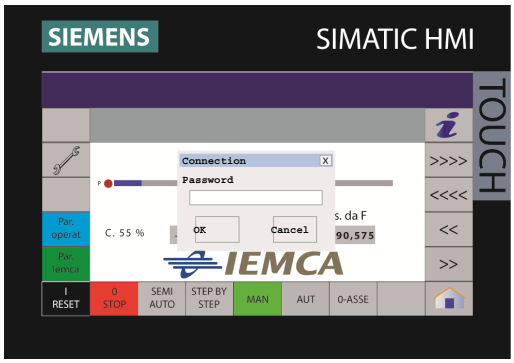
- Access the protected parameters
- Display the protected parameters
- Display the protected subparameters
- Exit the protected parameters

3.2 HOW TO ACCESS AND DISPLAY THE PROTECTED PARAMETERS

1. Enter the "main screen"
2. Select "Iemca parameters" 



"Connection" mode is displayed

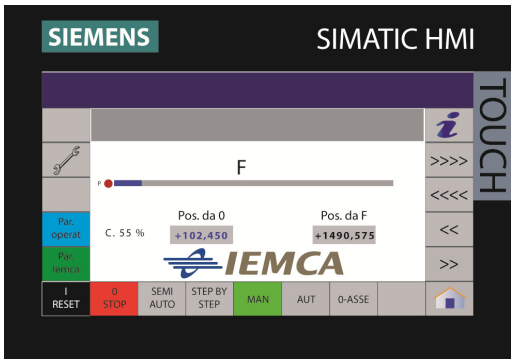


3. Enter "Password" number, then 

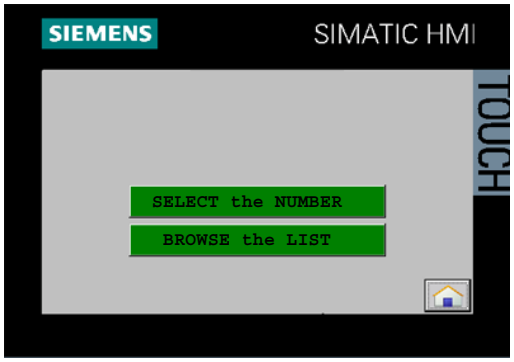
INFORMATION:

Should you need to check and modify parameters between 46 and 100, please contact Iemca Service Department

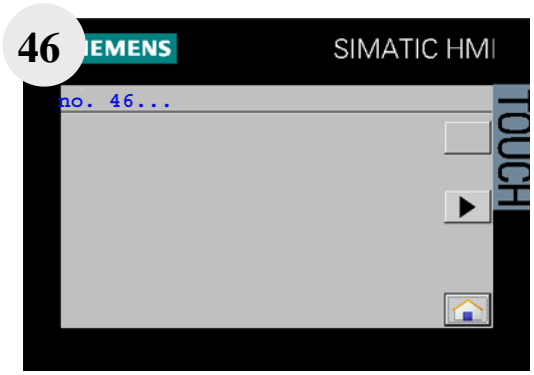
4. Select "Iemca parameters" 

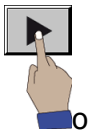
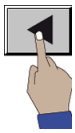


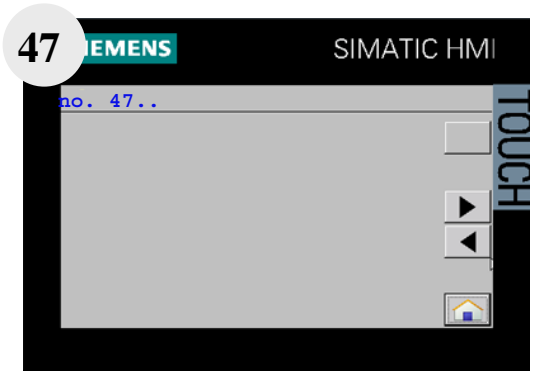
7. Select "BROWSE THE LIST"



8. If the code is correct, the display will show the first protected parameter:

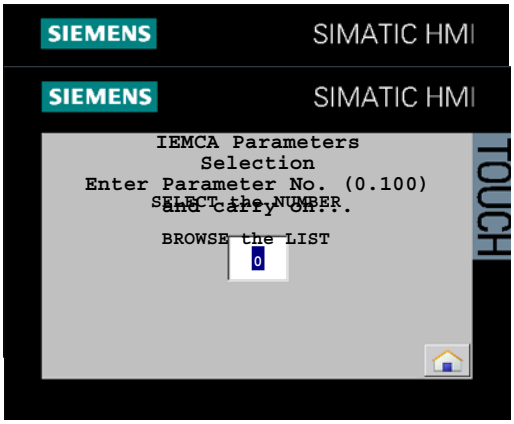


9. To display the protected parameters press:  or  the display shows, for example:



10. Or, to display the desired parameter, start from step 6 and select "SELECT the NUMBER"

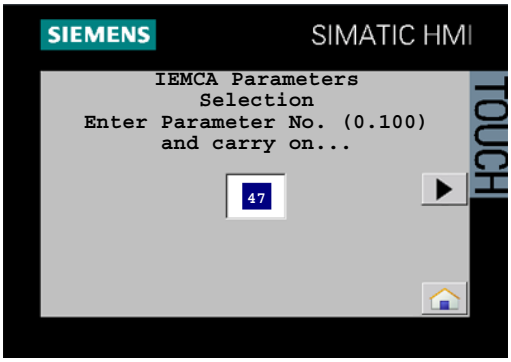
11. "OPERATOR Parameters Selection" screen will be displayed on the screen, press:



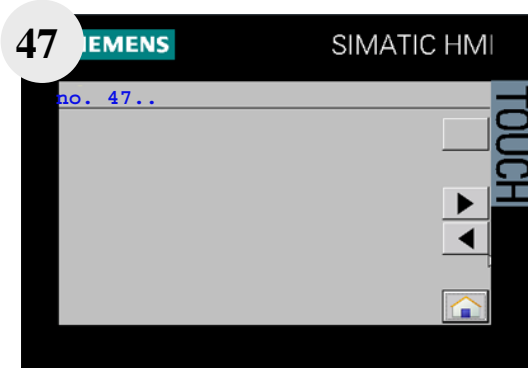
11. Enter the parameter number, for example "47"; the parameter value changes from 0 to 47;

confirm: 

a screen appears, then press 



13. The display will show parameter 47:

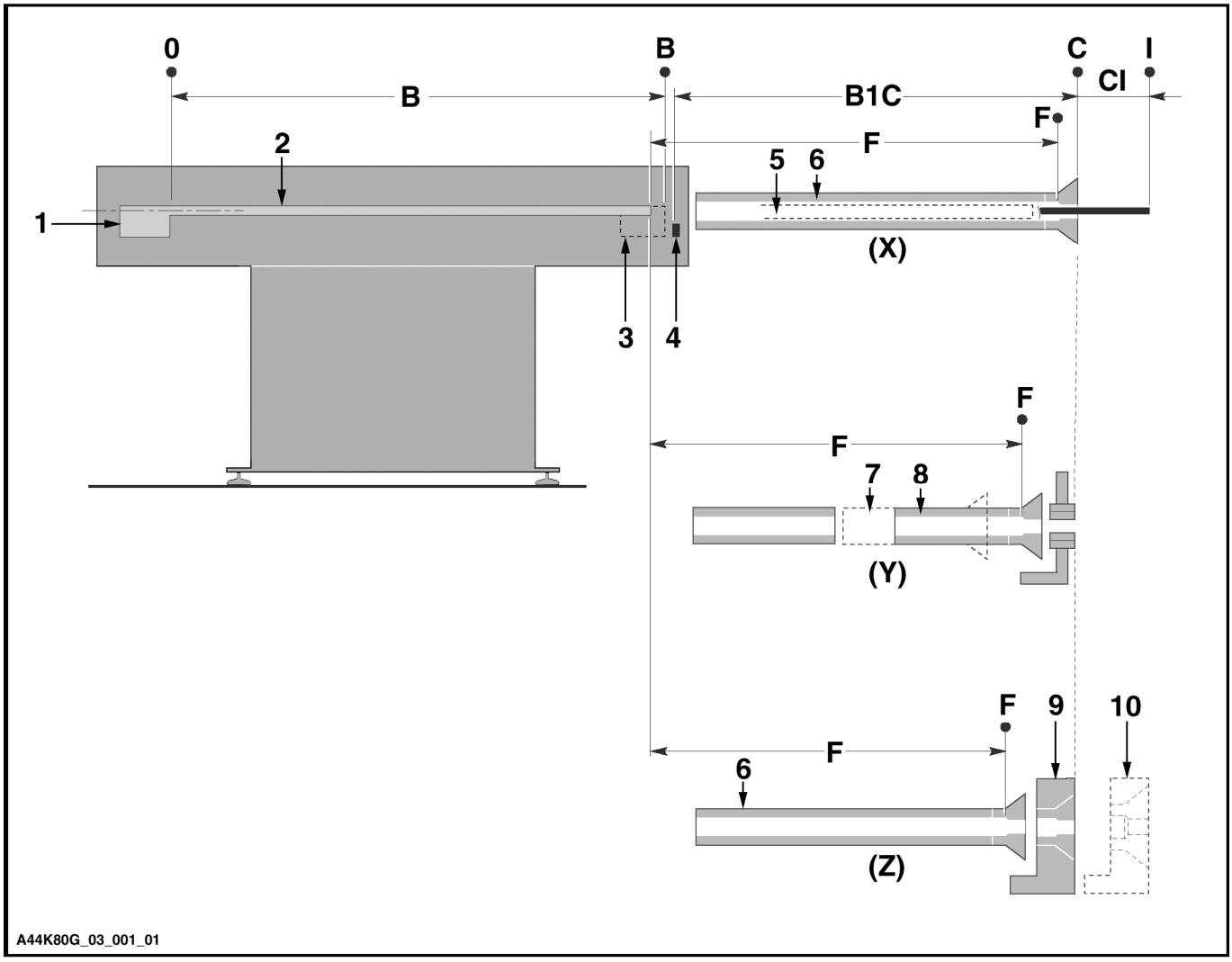


3.3 PROTECTED PARAMETERS: DESCRIPTION

Protected parameters are divided into the following sections:

- Parameters for the reference values (§ 3.4)
- Parameters for the axis functions (§ 3.5)
- Interface parameters (§ 3.6)
- General parameters (§ 3.7)

3.4 PARAMETERS FOR REFERENCE VALUES: DESCRIPTION

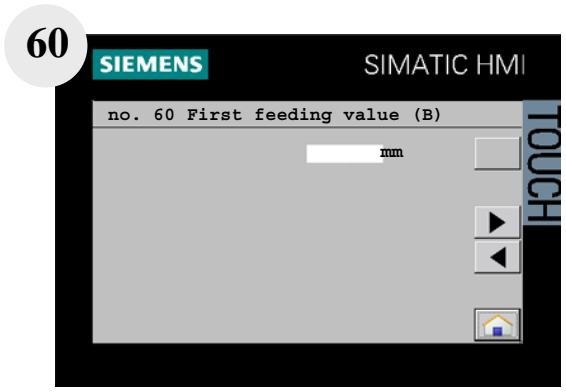


0) BAR FEEDER ZERO SETTING
1) Carriage in its "completely backwards position"
2) Bar pusher in its "completely backwards position"
3) Carriage in "completely forwards position"
4) Short feed gate (flag)
5) Bar pusher in its "completely forwards position"
6) Spindle
7) Headstock in its "completely backwards position"
8) Headstock in its "completely forwards position"
9) Rest in its "completely backwards position"
10) Rest in its "completely forwards position"

(X)Fixed headstock lathe
(Y)Sliding headstock lathe
(Z)Sliding rest lathe

no. 60 First feeding value (B)

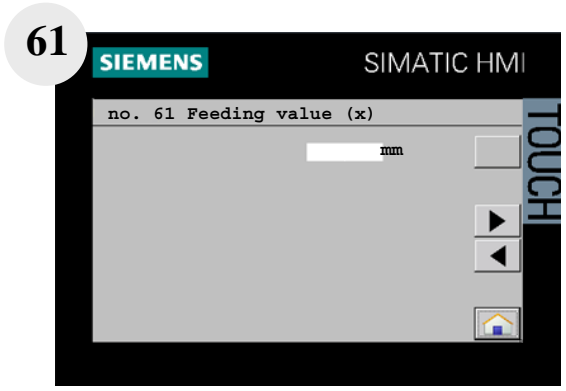
This parameter value should be entered.
This is the value of the first feeding stroke, that is the distance between the front edges of the first feeding carriage in "After removal movement" and "first feeding limit switch" position (point B).



DEFAULT VALUE	PROGRAMMABLE VALUE
Kid 80	Kid 80
1720	/

no. 61 Feeding value (x)

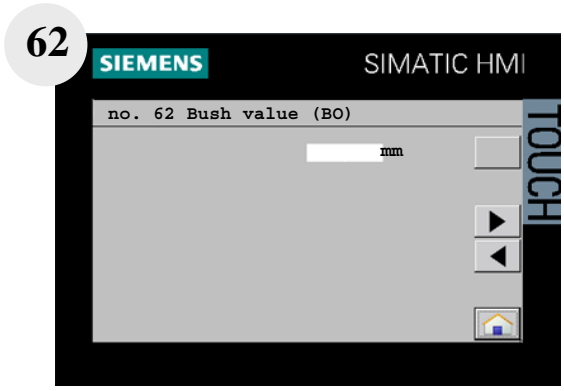
This is the stroke value for the bar loading into the bar pusher collet.



DEFAULT VALUE	PROGRAMMABLE VALUE
Kid 80	Kid 80
/	/

no. 62 Bush value (BO) (Parameter Off)

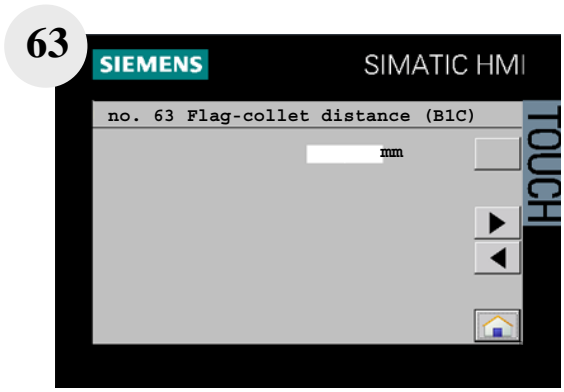
This parameter value should be entered.
This is the position of the bar pusher carriage where the half-bushes are opened; it can be modified with parameter 16.



DEFAULT VALUE	PROGRAMMABLE VALUE
Kid 80	Kid 80
2270	32 N=2390 L=2060 LL=1730
	37 N=2930 L=2600 LL=2270
	44 N=3590 L=3260 LL=2930

no. 63 Flag-collet distance (B1C)

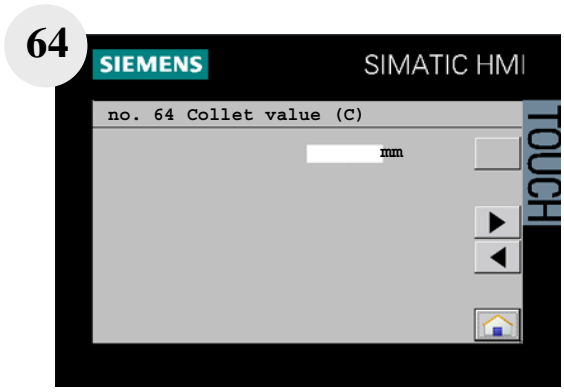
This parameter value should be entered.
This is the value of point C (facing point), that is the distance from the short feed gate 12 (of the bar feeder) and the front edge of the lathe collet.



DEFAULT VALUE	PROGRAMMABLE VALUE
Kid 80	Kid 80
1400	/

no. 64 Collet value (C)

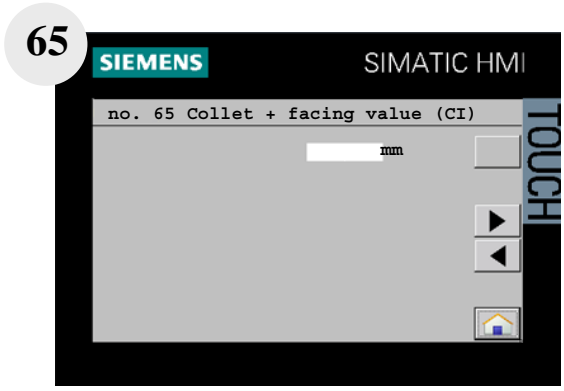
The value of this parameter is predefined by the program.
Distance (mm) that the bar pusher has to travel to reach point C after the bar first feeding.



DEFAULT VALUE	PROGRAMMABLE VALUE
Kid 80	Kid 80
/	preset value

no. 65 Collet + facing value (C1)

The value of this parameter is predefined by the program.
The number is given by the value of point C in addition to the value of parameter 2.

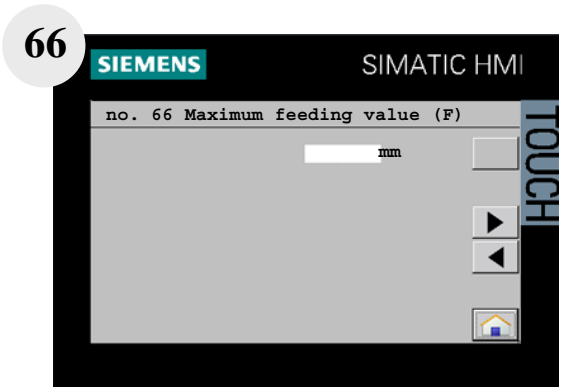


DEFAULT VALUE	PROGRAMMABLE VALUE
Kid 80	Kid 80
/	preset value

no. 66 Maximum feeding value (F)

The F point is the maximum bar pusher feeding point: this value corresponds to the bar pusher stroke from its completely backwards position to point F.

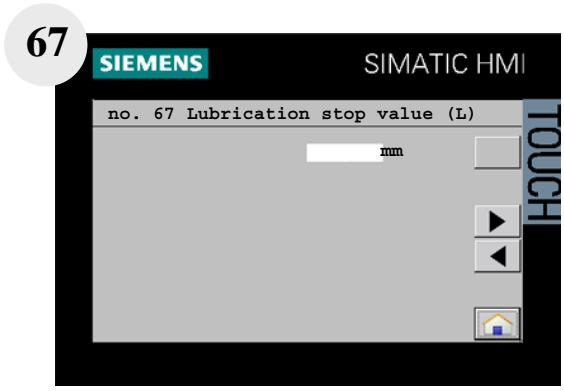
This value changes according to the different applications and should be entered by the Installation Technician (see default value on the side).



DEFAULT VALUE	PROGRAMMABLE VALUE
Kid 80	Kid 80
1400	/

no. 67 Lubrication stop value (L) (Parameter Off)

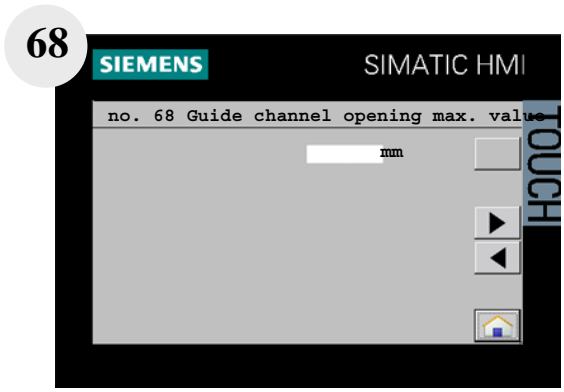
This parameter value should be entered.
Value where the oil pump motor for the lubrication of the guide channels stops.



DEFAULT VALUE	PROGRAMMABLE VALUE
Kid 80	Kid 80
2380	32 N=2710 L=2380 LL=2050
	37 N=3250 L=2920 LL=2590
	44 N=3910 L=3580 LL=3250

no. 68 Guide channel opening max. value

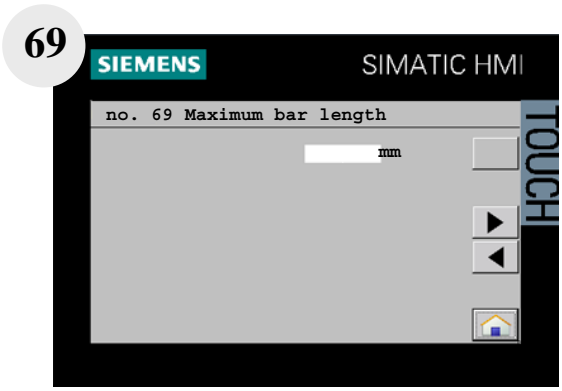
The value of this parameter is predefined by the program.
Position of the feeding carriage when the guide channels open.



DEFAULT VALUE	PROGRAMMABLE VALUE
Kid 80	Kid 80
/	/

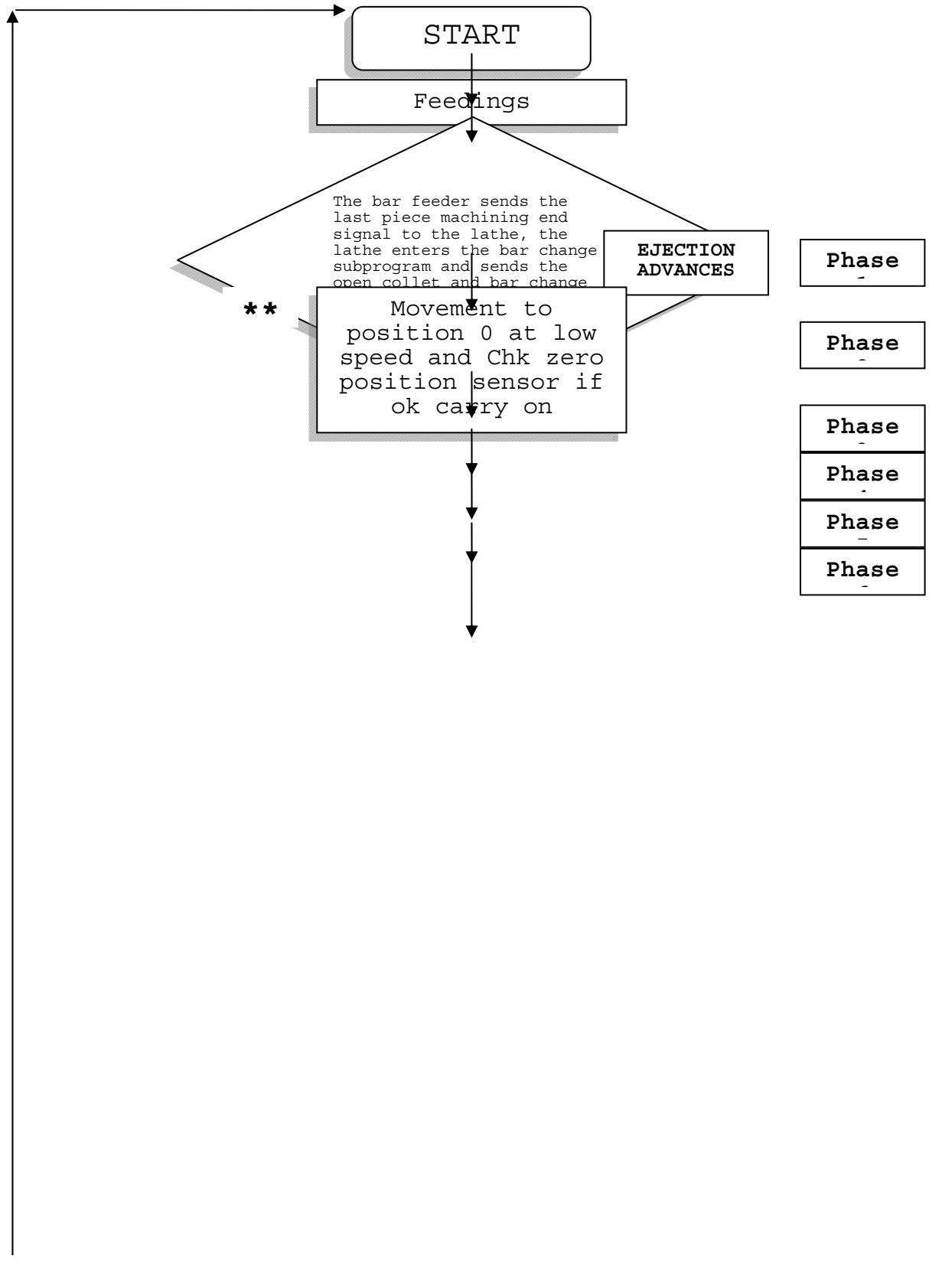
no. 69 Maximum bar length

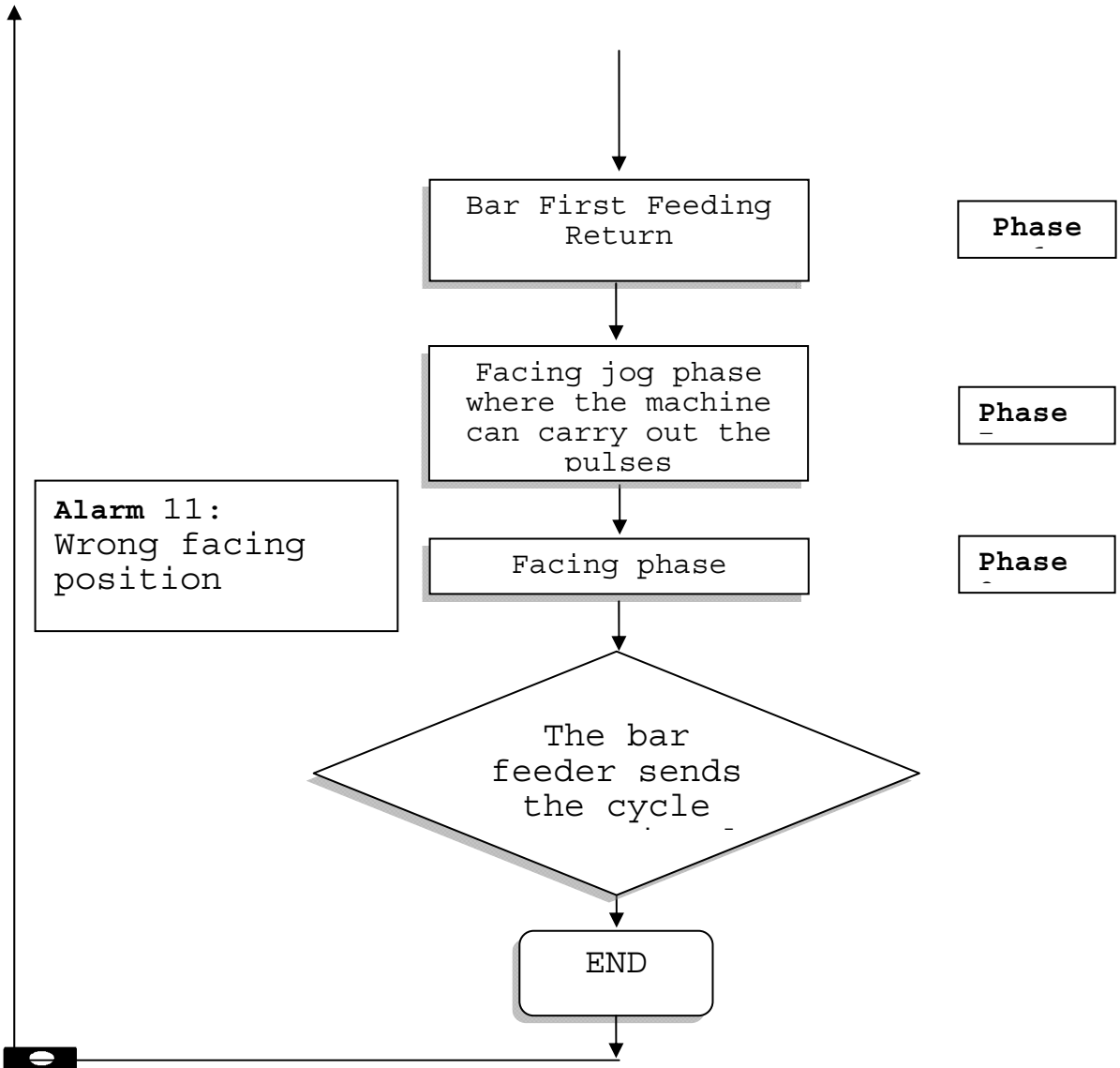
This parameter value should be entered. Set the max. length of bars that are to be loaded.



DEFAULT VALUE	PROGRAMMABLE VALUE
Kid 80	Kid 80
1220	max 1615

OPERATING CYCLE - DESCRIPTION





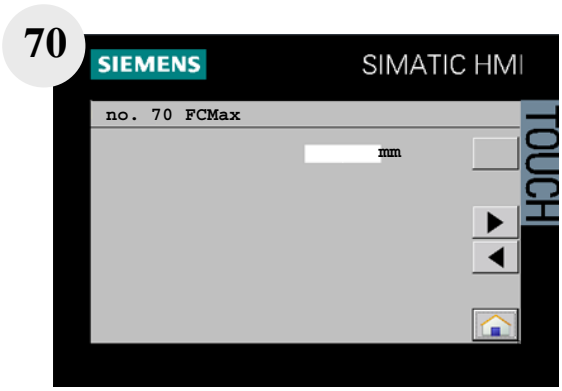
INFORMATION:

*****after powering the machine on or off, the first bar change cycle involves PHASE 3, consisting in a slow movement to "0 position" in order to check that the "0 position" coincides with the 0-Axis sensor (S1235) activation.***

3.5 AXIS FUNCTION PARAMETERS: DESCRIPTION

no. 70 FCMax

Defines the moving axis parameterization.



INFORMATION

Once the values for parameter 70 have been set, turn off the power supply and then turn it on again, if you want the preset values to be self-learned. We recommend not to modify these parameters. However, if a modification is necessary, contact IEMCA service department.

DEFAULT VALUE	PROGRAMMABLE VALUE
Kid 80	Kid 80
/	/

INFORMATION:

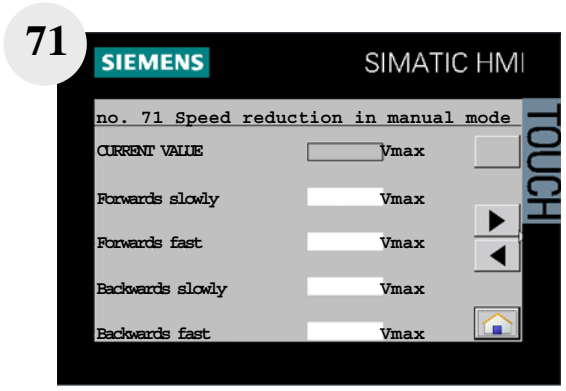
The "FCMax" subparameter is the maximum value the bar pusher can reach during feeding. Therefore, these values have to be considered in all the parameters where a speed value may be set.

no.71 Speed reduction in manual mode

Defines the speed value by which the bar pusher moves in manual mode. This value is expressed as a percentage of the maximum speed.

Parameters:
A - Speed reduction in manual mode

Subparameters:
B - Forwards slowly
C - Forwards fast
D - Backwards slowly
E - Backwards fast

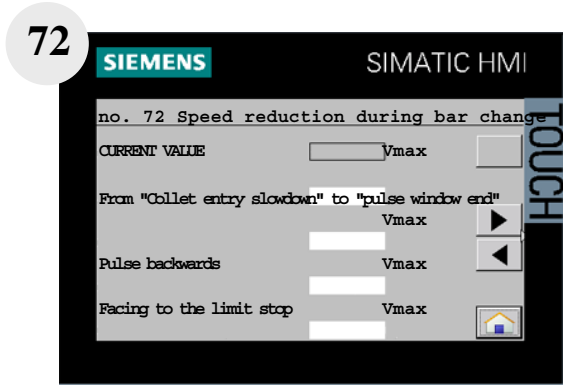


	DEFAULT VALUE	PROGRAMMABLE VALUE
	Kid 80	Kid 80
A	/	/
B	15	/
C	50	/
D	20	/
E	50	/

no. 72 Speed reduction during bar change

Defines the speed value by which the bar pusher moves during the bar change cycle in the phases described by B, C, D, E subparameters. This value is expressed as a percentage of the maximum speed.
Parameters:
A - Speed reduction during bar change

Subparameters:
B - From collet entry slowdown to pulse window end
C - Pulse backwards
D - Facing to limit stop
E - Facing jog

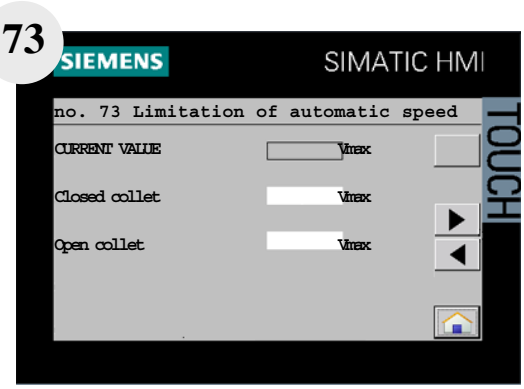


	DEFAULT VALUE	PROGRAMMABLE VALUE
	Kid 80	Kid 80
A	/	/
B	6	/
C	20	/
D	10	/
E	28	/

no. 73 Limitation of automatic speed

Defines the speed value by which the bar pusher moves in automatic mode. This value is expressed as a percentage of the maximum speed.
Parameters:
A - Limitation of automatic speed

Subparameters:
B - Collet closed
C - Collet open

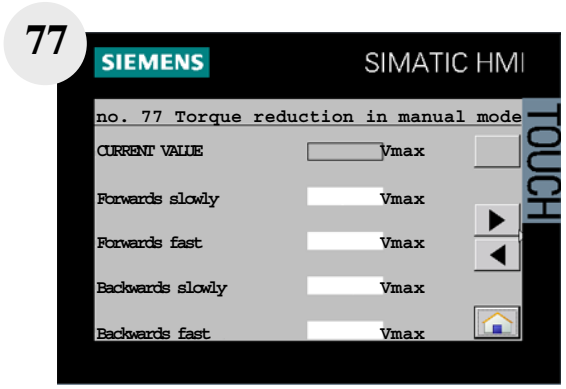


	DEFAULT VALUE	PROGRAMMABLE VALUE
	Kid 80	Kid 80
A	/	/
B	20	/
C	30	/

no.77 Torque reduction in manual mode

Defines the torque value by which the bar pusher moves in manual mode. This value is expressed as a percentage of the maximum torque.
Parameters:
A - Torque reduction in manual mode

Subparameters:
B - Forwards slowly
C - Forwards fast
D - Backwards slowly
E - Backwards fast



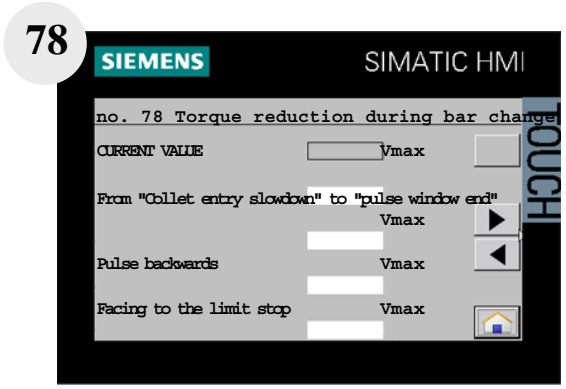
	DEFAULT VALUE	PROGRAMMABLE VALUE
	Kid 80	Kid 80
A	/	/
B	40	/
C	70	/
D	70	/
E	70	/

no. 78 Toque reduction during bar change

Defines the torque value by which the bar pusher moves during the bar change cycle in the phases described by B, C, D, E subparameters. This value is expressed as a percentage of the maximum torque.

Parameter:
A - Torque reduction during bar change

Subparameters:
B - From collet entry slowdown to pulse window end
C - Pulse backwards
D - Facing to limit stop
E - Facing jog



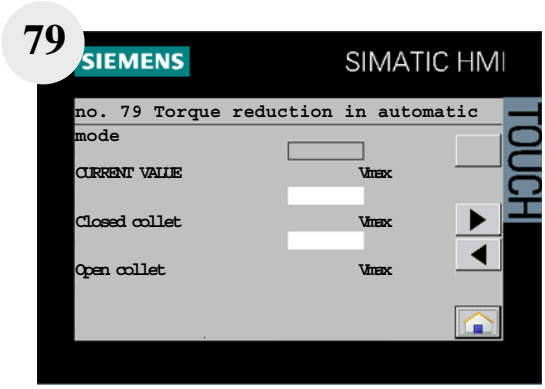
	DEFAULT VALUE	PROGRAMMABLE VALUE
	Kid 80	Kid 80
A	/	/
B	40	/
C	100	/
D	35	/
E	50	/

no. 79 Torque reduction in automatic mode

Defines the torque value of the bar pusher in automatic mode. This value is expressed as a percentage of the maximum torque.

Parameters:
A - Limitation of automatic speed

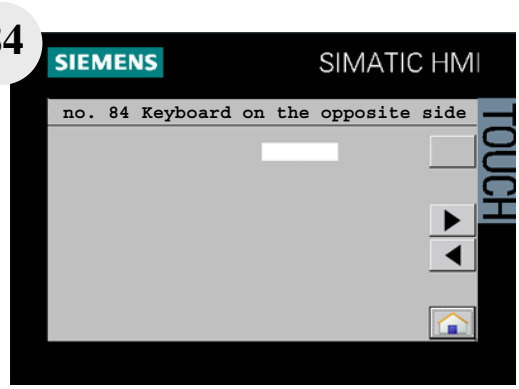
Subparameters:
B - Collet closed
C - Collet open



	DEFAULT VALUE	PROGRAMMABLE VALUE
	Kid 80	Kid 80
A	/	/
B	10	/
C	40	/

no. 84 Keyboard on the opposite side

Allows setting the direction of the controls for the bar pusher movements.
The setting of this parameter should be done with regards to the position of the keyboard i.e.: if it is on one side or on the opposite side.
0 - Defines the movements, forwards and backwards, in both directions.
1 - Defines the movements, forwards and backwards, of the opposite directions with regards to 0.

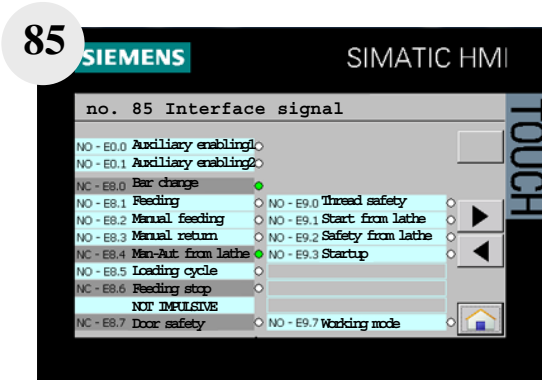


DEFAULT VALUE	PROGRAMMABLE VALUE
Kid 80	Kid 80
1	0/1

3.6 INTERFACE PARAMETERS: DESCRIPTION

no. 85 Interface signals

Defines how to manage the interface signals from the lathe to the bar feeder.



Subparameters:

A - NO-E0.0Auxiliary enabling1
B - NO-E0.1Auxiliary enabling2
C - NO-E8.0Bar change
D - NO-E8.1Feeding
E - NO-E8.2Manual feeding
F - NO-E8.3Manual return
G - NO-E8.4Man-Aut from lathe
H - NO-E8.5Loading cycle
I - NO-E8.6Feeding stop
NOT IMPULSIVE
L - NO-E8.7Door safety
M - NO-E9.0Thread safety
N - NO-E9.1Start from lathe
O - NO-E9.2Safety from lathe
P - NO-E9.3Startup
Q - NO-E9.7Working mode

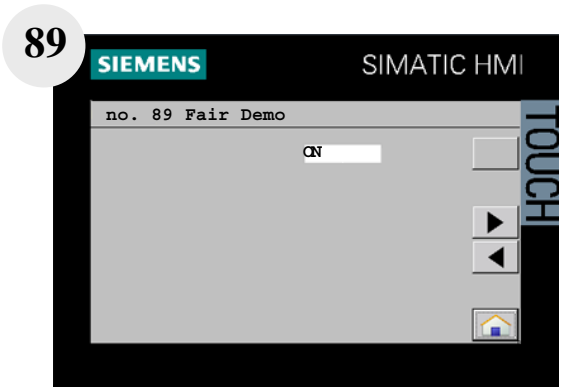
	DEFAULT VALUE	PROGRAMMABLE VALUE
	Kid 80	Kid 80
A	o	/
B	o	/
C	●	/
D	●	/
E	o	/
F	o	/
G	●	/
H	o	/
I	o	/
L	o	/
M	o	/
N	o	/
O	●	/

3.7 GENERAL PARAMETERS: DESCRIPTION

no. 89 Fair demo

0 - off
1 - on
To activate this mode, it is necessary to set parameter 35 at 1, parameter 6 (for example) at 200 mm, and parameter 85 "Bar Change" at 1.

To activate this mode, it is necessary to set parameter 35 at 1, parameter 6 (for example) at 200 mm, and parameter 85 "Bar Change" at 1.

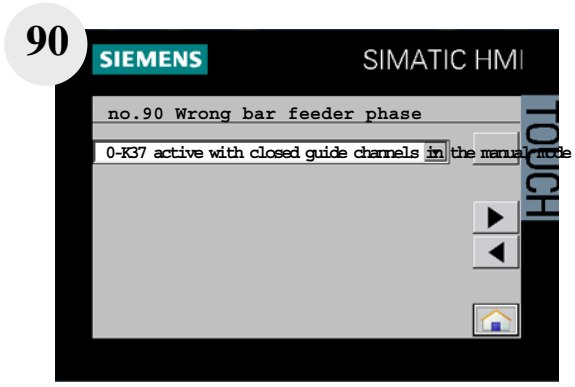


DEFAULT VALUE	PROGRAMMABLE VALUE
Kid 80	Kid 80
ON	ON/OFF

no. 90 Wrong bar feeder phase

0 - (K37 active with closed guide channels in manual mode).
During the "MANUAL" cycle, the bar feeder goes into "ALARM" when performing movements (for example "guide channel opening"). The bar feeder "WORKING" phase is lost and must be re-established; the "BAR FEEDER WAITING" message will be displayed.

1 - (Bar feeder in manual mode and lathe in automatic mode).
At the first bar feeding signal, the bar feeder goes into "ALARM" mode if it is in manual mode.



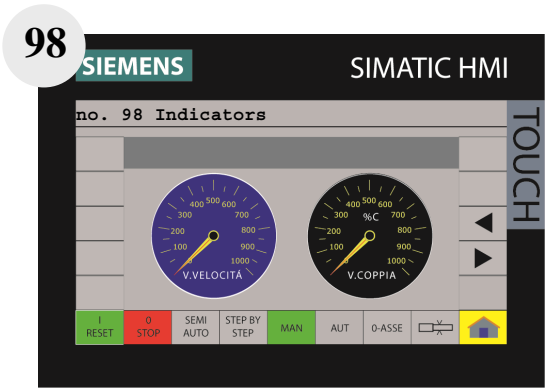
DEFAULT VALUE	PROGRAMMABLE VALUE
Kid 80	Kid 80
0	0/1

WARNING - CAUTION

After the "MANUAL/AUTOMATIC" lathe signal is given, this safety is not activated if the bar feeder is working in "MANUAL" mode from the lathe.

no. 98 Indicators

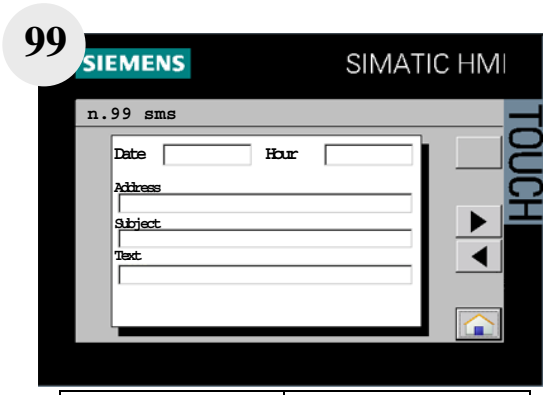
The parameter describes "Speed" and "Torque" instant values during the bar feeder working phase. It is not possible to interact with or to modify the values displayed, which are only given as an indication.



no. 99 SMS

SMS address where to deliver messages.

A Address
B Subject
C Text

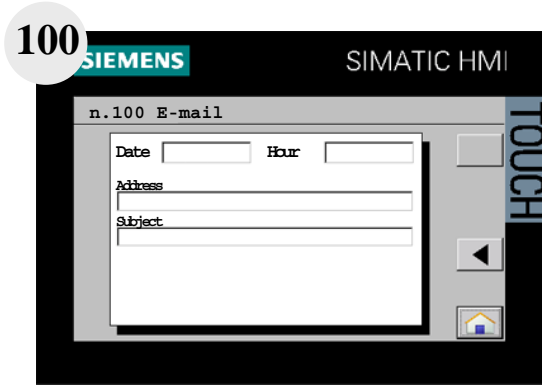


	DEFAULT VALUE	PROGRAMMABLE VALUE
	Kid 80	Kid 80
A	reference domain name.it	/
B	bar feeder component	/
C	message	/

no.100 E-mail

The e-mail address where the e-mail should be sent in case of bar feeder alarm can be set directly from the touch screen.

A Address
B Subject



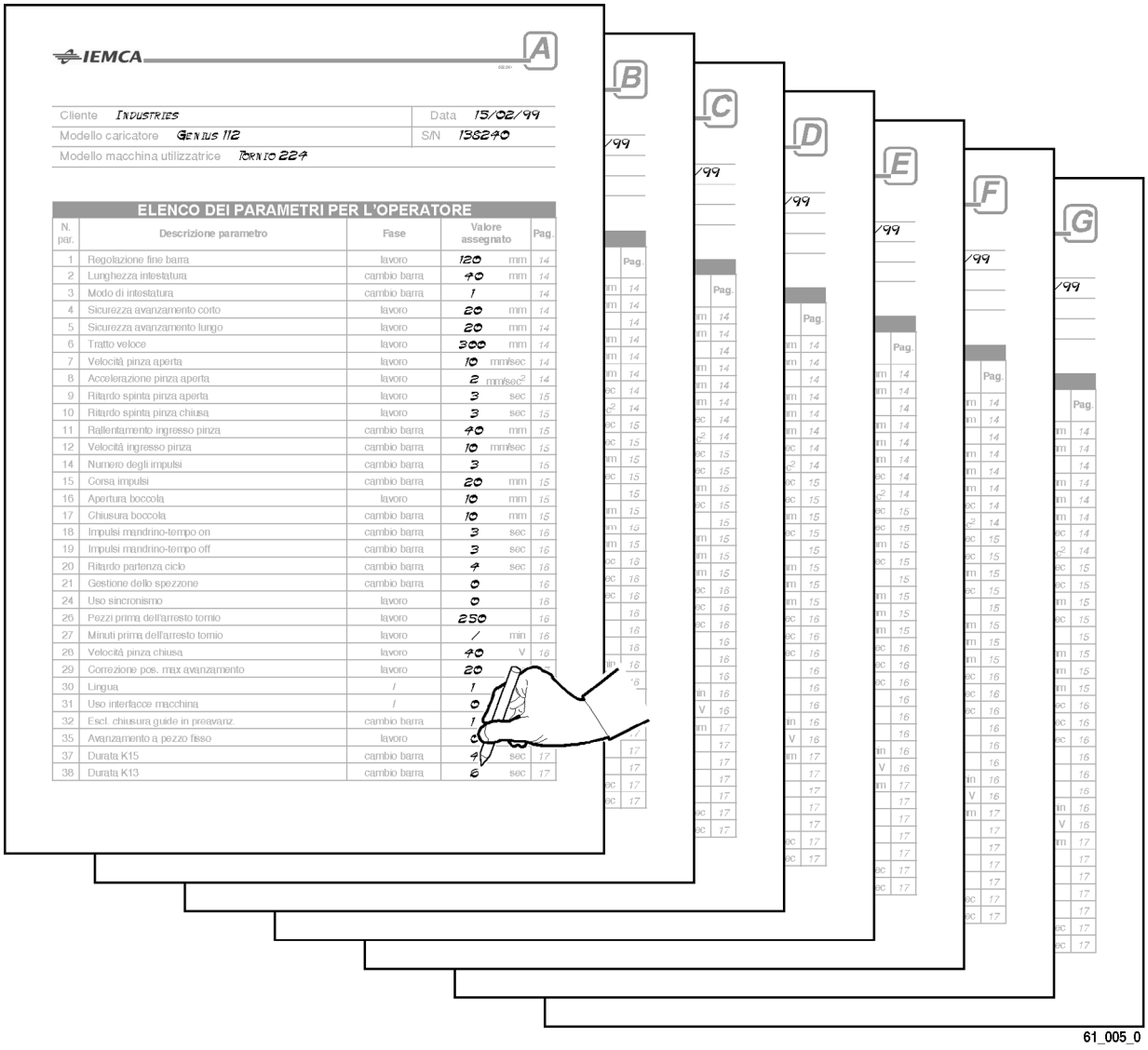
	DEFAULT VALUE	PROGRAMMABLE VALUE
	Kid 80	Kid 80
A	reference[at]domain name.it	/
B	ALARM	/

INDEX

5.1 ASSISTANCE REQUEST

For assistance request, send the list of parameters with the assigned values (attachments B, C, D, E, F, G) to IEMCA service department.
In addition, it is necessary to transmit the identification data of the HARDWARE installed in the bar feeder (attachment A).

EXAMPLE OF FILLING IN



A HARDWARE AND PROGRAM IDENTIFICATION DATA

Customer	Date
Bar feeder model	Y/N
Machine tool model	

HARDWARE IDENTIFICATION DATA	
"CPU" CARD	Model:
	Serial number
ENABLING CARD (motor drive)	Model:
	Serial number

Above data can be found in the "CPU" and "motor enabling" cards, which are located in electric board.

PROGRAM IDENTIFICATION DATA	
PUSH-BUTTON PANEL FIRMWARE	Number:
PUSH-BUTTON PANEL SOFTWARE	Number:
PLC/CN SOFTWARE	Number:
PLC/CN FIRMWARE	Number:

To trace these data, see section 2.12

B PARAMETER LIST FOR THE OPERATOR

Customer	Date
Bar feeder model	S/N
Using machine model	

OPERATOR PARAMETER LIST				
Par.No.	Parameter description	Default value KID IV	Allocated value	Unit of measurement
1	**Bar end adjustment**			mm-inches
	Bar end adjustment	100		mm-inches
	Bar end adjustment (K1A)	300		mm-inches
	Bar end adjustment (K1B)	500		mm-inches
2	**Facing length**	0		mm-inches
3	**Facing mode** 0= at limit stop 1= in position	1		
	Overrun admitted after "I"	0		mm-inches
	Facing to the limit stop	10		%Vmax
	Facing to the limit stop	35		%Cmax
4	**Short feeding safety**	0		mm-inches
5	**Long feeding safety**	0		mm-inches
6	**Piece length**	0		mm-inches
7	**Open collet speed**	30		%Vmax
9	**Open collet thrust delay**	0		Sec
10	**Closed collet thrust delay**	0		Sec
11	**Collet entry slowdown**	200		mm-inches
12	**Collet entry speed**	6		%Vmax
13	**Collet entry torque**	40		%Cmax
14	**Pulse number**	20		
	Pulse window start	400		mm-inches
	Pulse window end	20		mm-inches
15	**Pulse stroke**	0.15		Sec

Customer	Date
Bar feeder model	S/N
Using machine model	

OPERATOR PARAMETER LIST				
Par.No.	Parameter description	Default value KID IV	Allocated value	Unit of measurement
18	**Spindle pulses – on time**	0,5	0,5	Sec
19	**Spindle pulses – off time**	0,5	0,5	Sec
20	**Cycle start delay**	0	0	Sec
21	**Remnant handling** 0= safety 1= ejection 2= bar change advance (no first feeding) 3= bar change advance (no facing)	0	0	
22	**Open collet timeout**	0	0	Sec
23	**Piece timeout**	0	0	Sec
25	**Bar feeding handling** 0=end of feeding with bar change 1=end of feeding with K1	1	1	
26	**Pieces before lathe stop**	0	0	(0)
27	**Minutes before lathe stop**	0	0	Min.

Customer	Date
Bar feeder model	S/N
Using machine model	

OPERATOR PARAMETER LIST				
Par.No.	Parameter description	Default value KID IV	Allocated value	Unit of measurement
28	**Closed collet speed**			%Vmax
29	**Max feeding pos. adjustment**	0		mm-inches
30	**Language 1I-2GB–3D–4F–5E–6S–7DK-8P-9NL-10FIN-11CS-12RU**	1		
32	**K1 immediate exit** 0=with open collet K1 not activated 1=with open collet K1 activated	0		
33	**K2 Inversion** 0=K2 is on 1 at limit stop 1=K2 is on 0 at limit stop	0		
34	**Feeding torque**	40		%Cmax
35	**Fixed-piece feeding** 0=at the limit stop 1=at fixed values 2=fixed values + thr. at limit stop	0		
	Position	/		
	Speed	76200		
	Acceleration	100		
	Deceleration	100		
36	**K15 disabling** 0= K15 included 1=K15 excluded	1		
37	**K15 duration**	2		sec.
38	**K13 duration**	2		sec.
39	**Spindle stop** 0=relay disabled during bar change 1=relay always enabled	0		
40	**Closed collet bar pusher return**	10		mm-inches
41	**First feeding value (B)**	1720		mm-inches
42	**Bar pusher return pause**	0.2		sec.

Customer	Date
Bar feeder model	S/N
Using machine model	

OPERATOR PARAMETER LIST				
Par.No.	**Parameter description**	**Default value**	**Allocated value**	**Unit of measurement**
		KID IV		
43	**Speed change in first feeding** 0=slow 1=fast	1		
	Speed 1	9144		Mm/m
	Speed 2	48000		
	Acceleration	100		
	Deceleration	10		
44	**Axis operation**			
	Bar pusher stop with closed collet 0=the bar pusher stop is off 1=the bar pusher stop is on	0		
	Axis stop engagement delay	1		sec.
	Closed collet torque	10		%Cmax

D PARAMETER LIST FOR THE REFERENCE VALUES

Customer	Date
Bar feeder model	S/N
Using machine model	

PARAMETER LIST FOR THE REFERENCE VALUES				
Par. No.	Parameter description	Default value	Allocated value	Unit of measurement
		KID IV		
60	**First feeding value (B)**	1720		mm-inches
61	**Feeding value (x)**	/		mm-inches
62	**Bush value (BO)**	2270		mm-inches
63	**Flag-collet distance (B1C)**	1400		mm-inches
64	**Collet value (C)**	##		mm-inches
65	**Collet + facing value (CI)**	##		mm-inches
66	**Maximum feeding value (F)**	3740		mm-inches
67	**Lubrication stop value (L)**	2590		mm-inches
68	**Guide channel opening max. value**	##		mm-inches
69	**Maximum bar length**	##		mm-inches

E PARAMETER LIST FOR THE AXIS FUNCTIONS

Customer	Date
Bar feeder model	S/N
Using machine model	

PARAMETER LIST FOR THE AXIS FUNCTIONS				
Par. No.	Parameter description	Default value	Allocated value	Unit of measurement
		KID IV		
70	**FCMax**	0		
71	**Speed reduction in manual mode**			
	Forwards slowly	15,0		%Vmax
	Forwards fast	50,0		%Vmax
	Backwards slowly	20,0		%Vmax
	Backwards fast	50,0		%Vmax
72	**Speed reduction during bar change**			
	From "collet entry slowdown" to "pulse window end"	6,0		%Vmax
	Pulse backwards	20,0		%Vmax
	Facing to the limit stop	10,0		%Vmax
	Facing jog	28,0		%Vmax
73	**Speed reduction in automatic mode**			
	Clamp closed	20		%Vmax
	Open collet	30		%Vmax
77	**Torque reduction in manual mode**	##		%Cmax
	Forwards slowly	40		%Cmax
	Forwards fast	70		%Cmax
	Backwards slowly	70		%Cmax
	Backwards fast	70		%Cmax
78	**Torque reduction during bar change**	##		%Cmax
	From "collet entry slowdown" to "pulse window end"	40		%Cmax
	Pulse backwards	100		%Cmax
	Facing to the limit stop	35		%Cmax
	Facing jog	50		%Cmax
79	**Torque reduction in automatic mode**	##		%Cmax
	Clamp closed	10		%Cmax
	Open collet	40		%Cmax

PARAMETER LIST FOR THE AXIS FUNCTIONS				
Par. No.	Parameter description	Default value	Allocated value	Unit of measurement
		KID IV		
84	**Keyboard on the opposite side**	0		

F PARAMETER LIST FOR THE INTERFACE

Customer	Date
Bar feeder model	S/N
Using machine model	

PARAMETER LIST FOR THE INTERFACE				
Par.No.	**Parameter description**	**Default value**	**Allocated value**	**Unit of measurement**
		KID IV		
85	**Interface signals**			
	Bar change (0=NO/1=NC)	0		
	Feeding (0=NO/1=NC)	0		
	Man. feeding (0=NO/1=NC)	0		
	Man. return (0=NO/1=NC)	0		
	Man/aut from lathe (0=NO/1=NC)	0		
	Feeding cycle (0=NO/1=NC)	0		
	Feeding stop (0=NO/1=NC)	0 (0)		
	Door safety devices (0=NO/1=NC)	1		
	Threading safety device (0=NO/1=NC)	0		
	Start from lathe (0=NO/1=NC)	0		
	Safety devices from lathe (0=NO/1=NC)	1		
	Sturtup (0=NO/1=NC)	0		
	Working mode (0=NO/1=NC)	0		

G GENERAL PARAMETER LIST

Customer	Date
Bar feeder model	S/N
Using machine model	

GENERAL PARAMETER LIST				
Par.No.	**Parameter description**	**Default value**	**Allocated value**	**Unit of measure ment**
		KID IV		
89	**Fair Demo** 0= turned off 1= turned on	0		
90	**Wrong bar feeder phase** 0= K37 active with closed guide channels in manual mode 1= Bar feeder in manual mode and lathe in automatic mode	0		
98	**Indicators (only on touch)**	/		
99	**SMS service (only on touch)**	/		
100	**E-MAIL service (only on touch)**	/		