

How to use in manual mode

1. Push the button "Control ON"



2. Press "manual" for manual mode



3. Click on one of the light green bars to enter an adjustment order



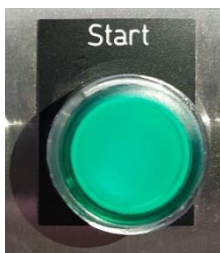
Enter the first bolt and the last bolt of the adjustment

Select "open" or "close"

Enter the adjustment value

Select "one", "part" or "all" bolts

4. Press one of the buttons "Start"



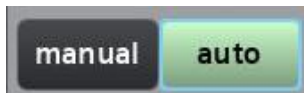
5. When the lip gap is ok go ahead with "How to use in auto mode"

How to use in auto mode

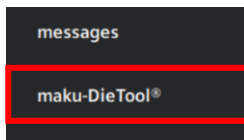
1. Push the button "Control ON"



2. Press "auto" for auto mode



3. Open menu and go back to "maku-DieTool®"



4. Go to process data, check if it's still in flattening mode

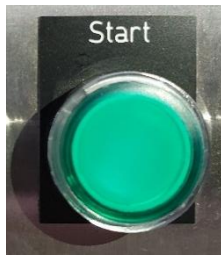
	-	+	Total
no. of die bolt invalid			0
no. of die bolt in tolerance	0	0	0
no. of die bolt in finest	0	0	0
no. of die bolt in fine	0	0	0
no. of die bolt in coarse	0	0	0

→ if 0 µm is entered in "nominal value product thickness" it's running in flattening mode

process data			
die bolt no. thickest location:	83		455 µm
die bolt no. thinnest location:	13		453 µm
nominal value product thickness			0 µm
flattening mode			454 µm
	-	+	Total
no. of die bolt invalid			0
no. of die bolt in tolerance	40	33	73
no. of die bolt in finest	2	0	2
no. of die bolt in fine	0	0	0
no. of die bolt in coarse	0	0	0

→ here you can see the target value (average, calculated from measured values)

5. Press one of the buttons “Start”

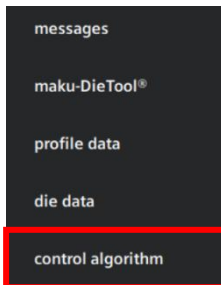


How to use the deckling in manual mode

1. Press one of the buttons “Stop”

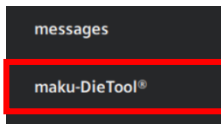


2. Open menu, go to “control algorithm” and select “product list”



→ choose the new product

3. Open menu and go back to “maku-DieTool®”



4. Push the button “Control ON”



5. Press “manual” for manual mode



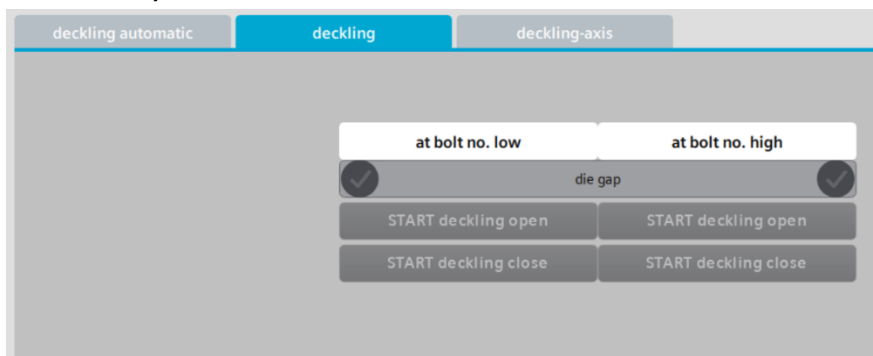
6. Press one of the buttons “Start”



7. Press “deckling”



8. Go to the tab “deckling” and click on “START deckling open” (only one side)



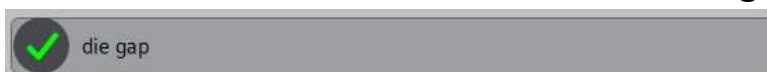
→ enter the login (User: “User” / password :”useruser”)

→ enter the value of the new deckling blade in “deckling gap”



→ click on “START deckling open” again

→ wait until the checkmark has turned to green



9. Go to the tab “deckling axis”

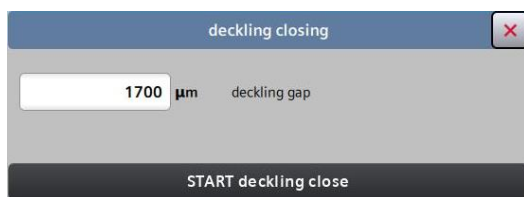


→ Press “move in X.X mm” and wait until deckling is in position

10. Go to the tab “deckling” and click on “START deckling close”



→ enter the actual value of the deckling blade in “deckling gap”



→ click on “START deckling close” again

→ wait until the adjustments are done

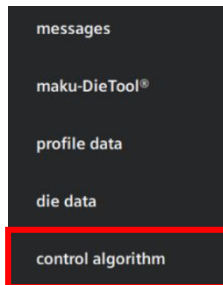
11. Repeat from step 8 to 10 for the other side
12. Go ahead with “How to use in manual mode”

How to use the deckling in auto mode

1. Press one of the buttons “Stop”

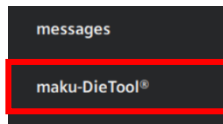


2. Open menu, go to “control algorithm” and select “product list”



→ choose the new product

3. Open menu and go back to “maku-DieTool®”



4. Push the button “Control ON”



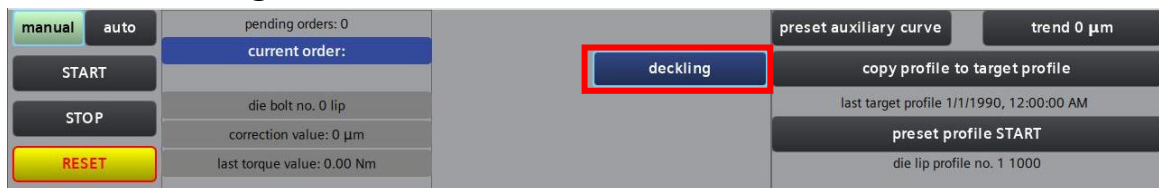
5. Press “manual” for manual mode



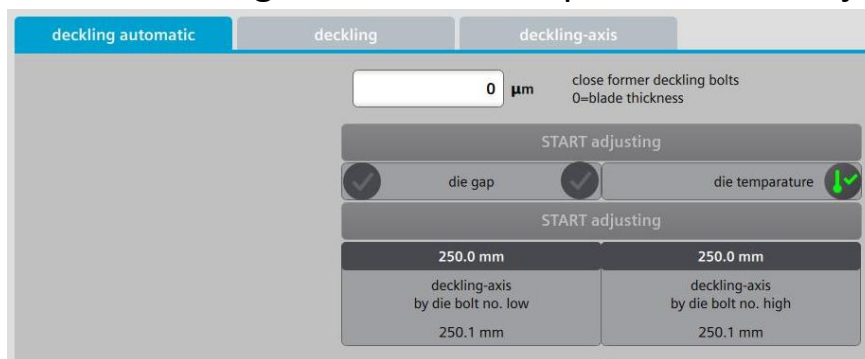
6. Press one of the buttons “Start”



7. Press “deckling”



8. Go to “deckling automatic” and press “START adjusting”



→ enter the login (User: “User” / password: “useruser”)

→ click on “START adjusting” again

→ the actuator is first going to open up all the necessary bolts on one side, afterwards it’s going to move the deckling blade in or out (depends on the chosen product) and at the end it closes all the deckling bolts

→ this step is repeated for the other side automatically

9. Go ahead with “How to use in manual mode”

How to create a new product recipe

1. Go to menu → “control algorithm” → “product list”



→ select an existing recipe → click on button “copy”, select a blank recipe and enter a product name (e.g., film thickness & die width)

2. Go to the tab “deckling”

3. First calculate the required deckling position

→ maximum die width minus required die width divided with 2

→ enter the login (user: “User” / password: “useruser”)

4. Enter how many deckled bolts you need

→ The tool calculates how many bolts must be entered at least to not damage the deckling blades in manual/auto mode

deckling

<input type="text" value="10"/>	<input type="text" value="10"/>	no. of deckling die bolt low
<input type="text" value="10"/>	<input type="text" value="10"/>	no. of deckling die bolt high

→ all deckling bolts can't be adjusted in manual or auto mode

5. Enter the thickness of the deckling blade

μm deckling gap

6. Optional additional bolts

<input type="text" value="0"/>	no. of die bolts in addition
<input type="text" value="0"/>	no. of deckling die bolts in manual mode

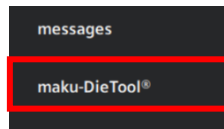
→ you can enter “no. of die bolts in addition” to declare more bolts as deckling bolts

→ you can enter “no. of deckling die bolts in manual mode”

→ those bolts can be adjusted only in manual mode

How to save an actual profile

1. Go to menu → “maku-DieTool®”



2. Press “copy profile to target profile”



→ enter the login (user: “User” / password: “useruser”)

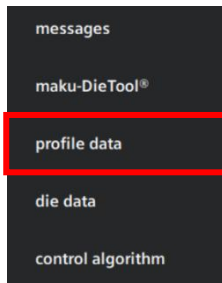
→ choose a blank profile recipe → enter a profile name and confirm

How to create a new target profile

1. Press one of the buttons “Stop”



2. Open menu and go to “profile data”



3. Go to “target value table”



4. Enter the desired value for bolt no. 1

→ you can enter a different value for every bolt

OR

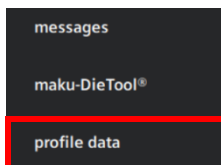
→ press “preset” to overwrite the same value for each bolt

How to load a saved profile

1. Press one of the “Stop” buttons



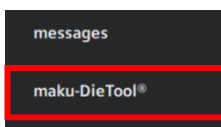
2. Go to menu → “profile data”



→ select the required profile

profile list	target value table
no. 1	1000
[no. 1] 1000	
[no. 2] Test 2	
[no. 3] Test 3	
[no. 4] --	

3. Go to menu → “maku-DieTool®”



4. Press “manual” for manual mode



5. Press “preset profile START”



→ enter the login (user: “User” / password: “useruser”)

6. Press one of the “Start” buttons

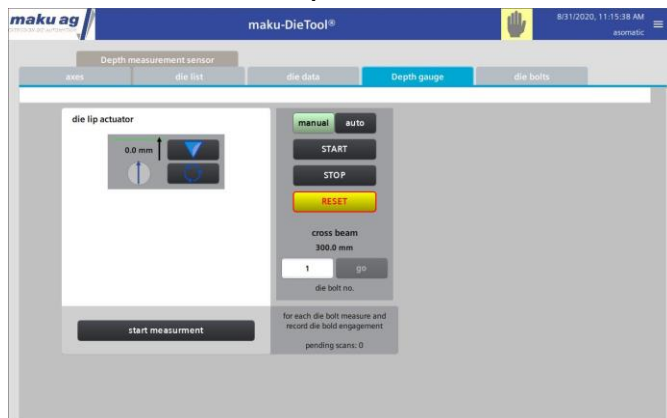


Measure the bolt height

1. Press one of the “Stop” buttons, choose manual mode and press one of the “Start” buttons



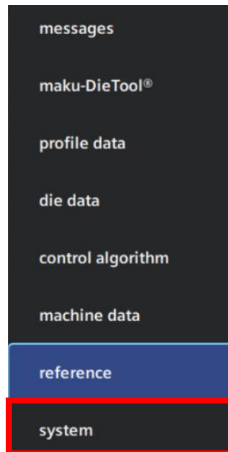
2. Go to the menu → “reference”
3. Go to the tab “depth measurement sensor”



4. Press the button “start measurement”
5. enter the login (user: “User” / password: “useruser”)
 - the actuator is going to tap on every bolt head with an offset of about 5mm to save the new bolt height

How to export data to USB flash drive

1. Put the USB flash drive into port X61
2. Go to menu → system → filesystem



3. Click on the “USB 1” (port X61)
4. Press one of the buttons “export” and wait until it turns green



5. Go ahead with the other “export” buttons

Logins

For operators:

User: User
Password: useruser

For responsible:

User: A
Password: makumaku

Error messages and troubleshooting

524 emergency stop (push button control on)

Release the emergency stop button and press "Control ON"

562 cross beam in soft end position negative

563 cross beam in soft end position positive

Move the carriage 15 cm/6 inch away from the side plate of the tool and press "Control ON"

86 failure SERVO cross beam out of working area

Move the carriage 15 cm/6 inch away from the side plate of the tool, click the reset button on the screen and press "Control ON"