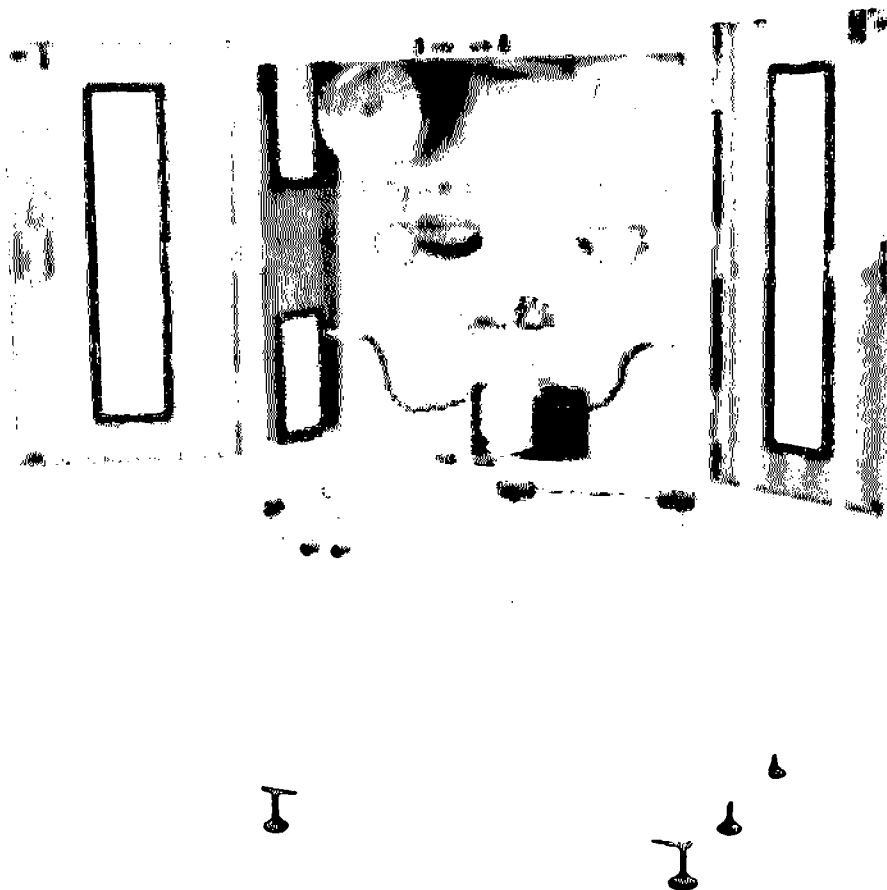


WSD-K2

Operation Manual

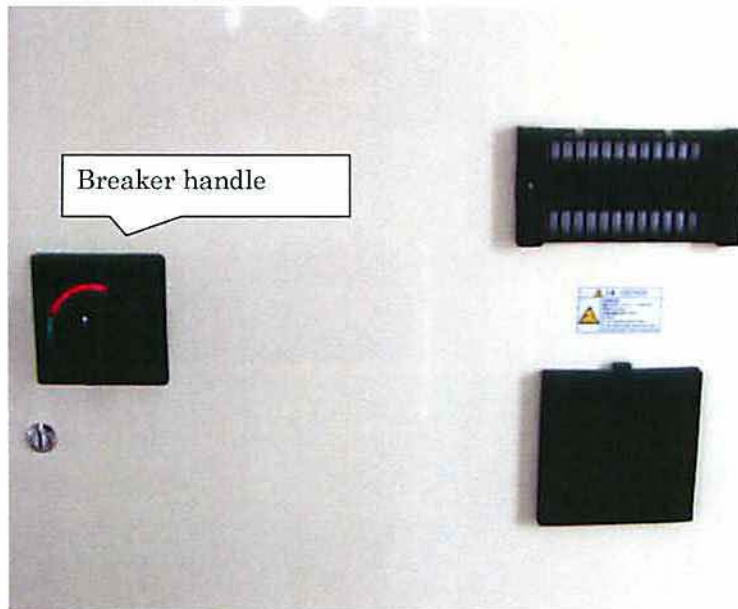


Contents

Operation (Turn on)	1
Operation (Winding wire)	4
Operation (Winding wire II)	7
Operation (Winding wire III)	12
Operation (Mounting)	17
Operation (Stage setting)	21
Operation (Shot down)	25

Operation (Turn on)

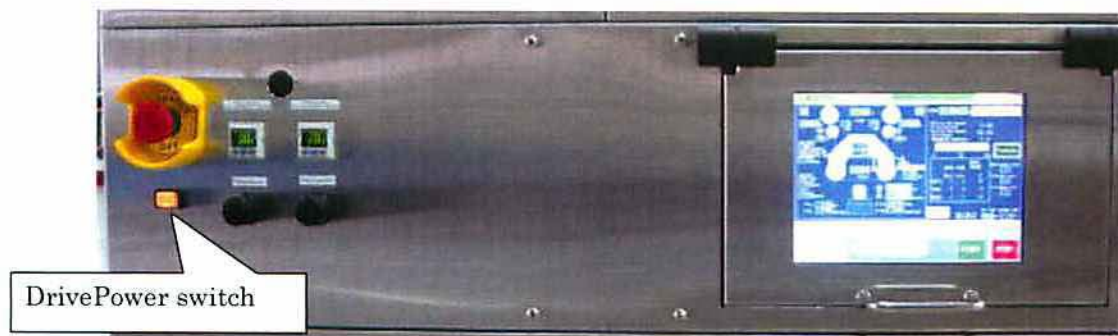
1. Turn the breaker handle on the center of the left door of the control box to start main power supply.



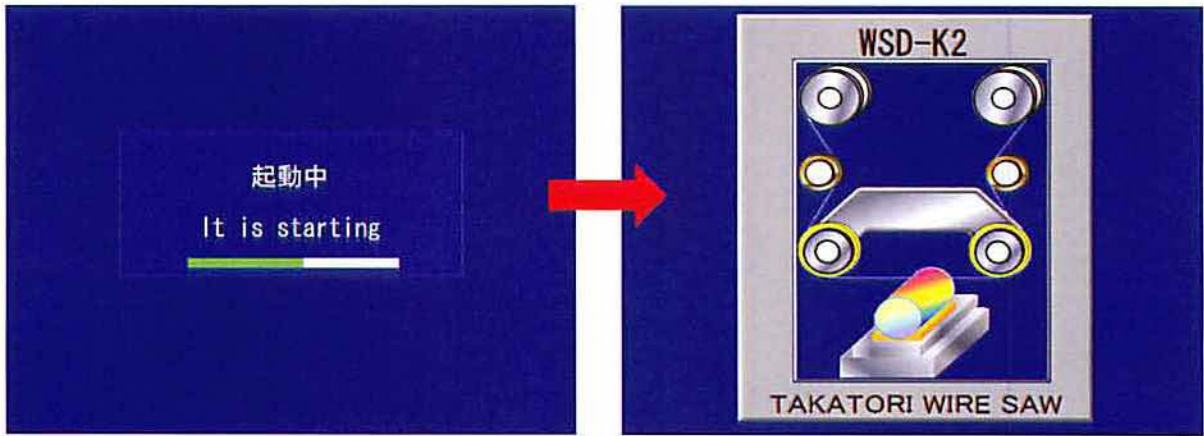
2. Confirm that air pressure of the main regulator is 0.5Mpa



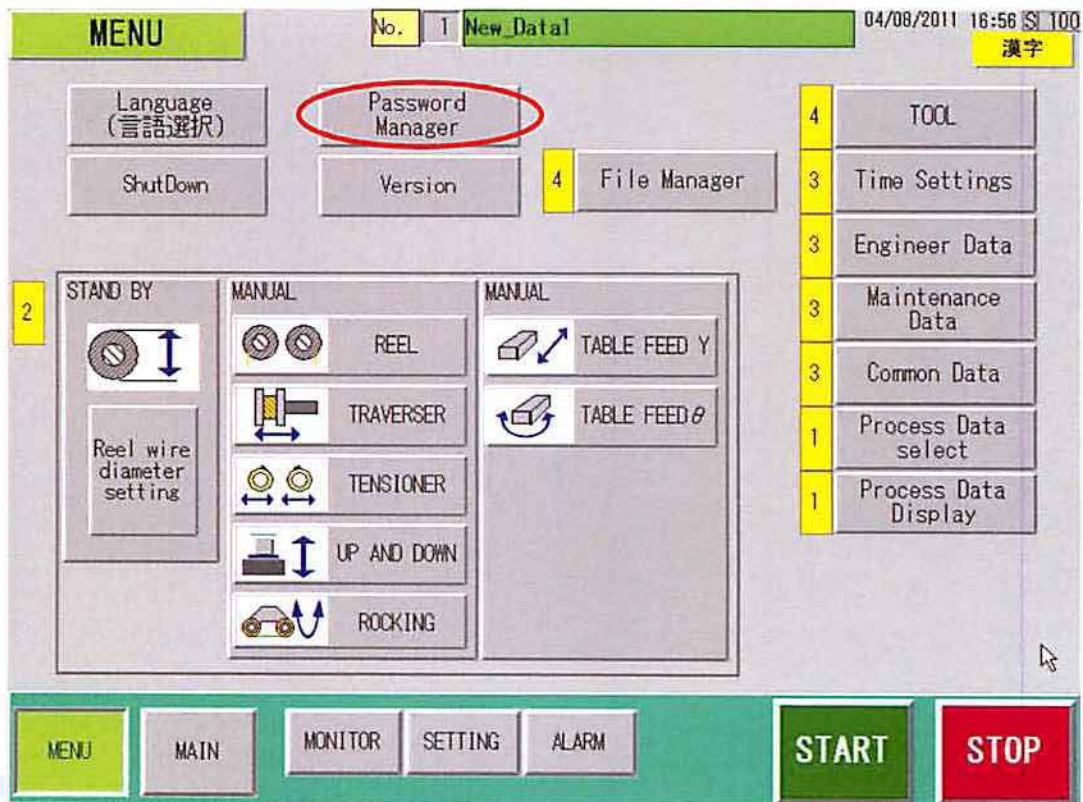
3. Turn Drive power on.



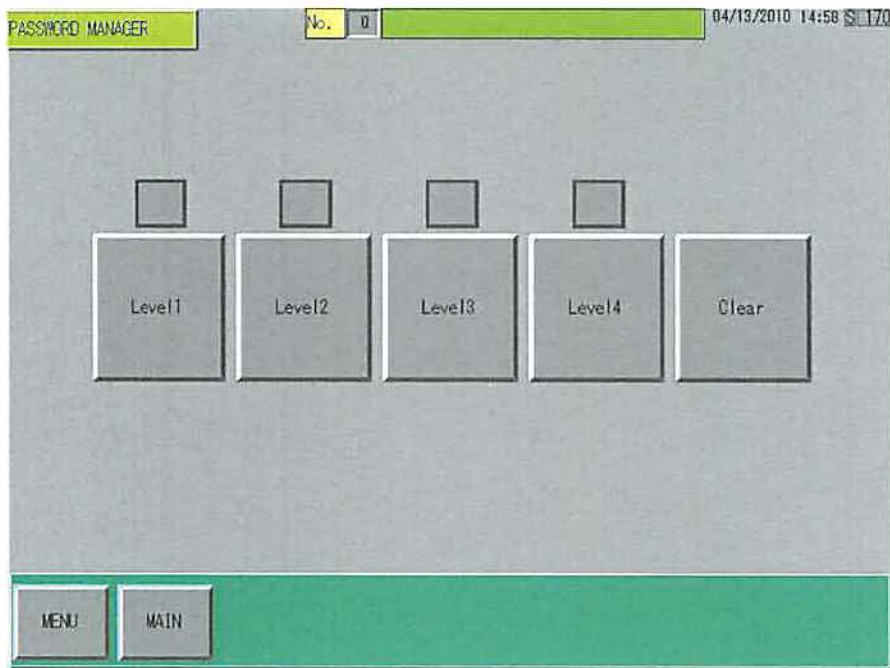
4. Push in the middle of the button when screen shows the figure of WSD-K2 and the screen switches into Contents screen.



5. Push the Password Manager button



5. In Password Manager Display, authentication for password from level 1 to 4, password change and initialization are available. Set password level for operation authorization



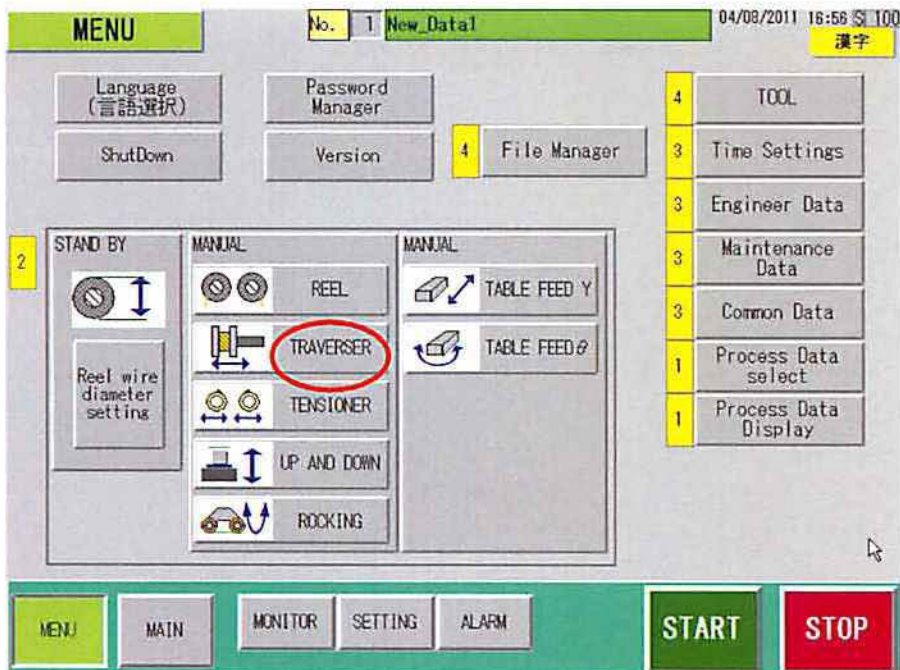
Operation (Winding wire)

1. Fix the Reel L (Supply side), Reel R (Collect side)

(Caution) There is a pin on both of the L, R reel. Slot the pin into the hole of the reels.

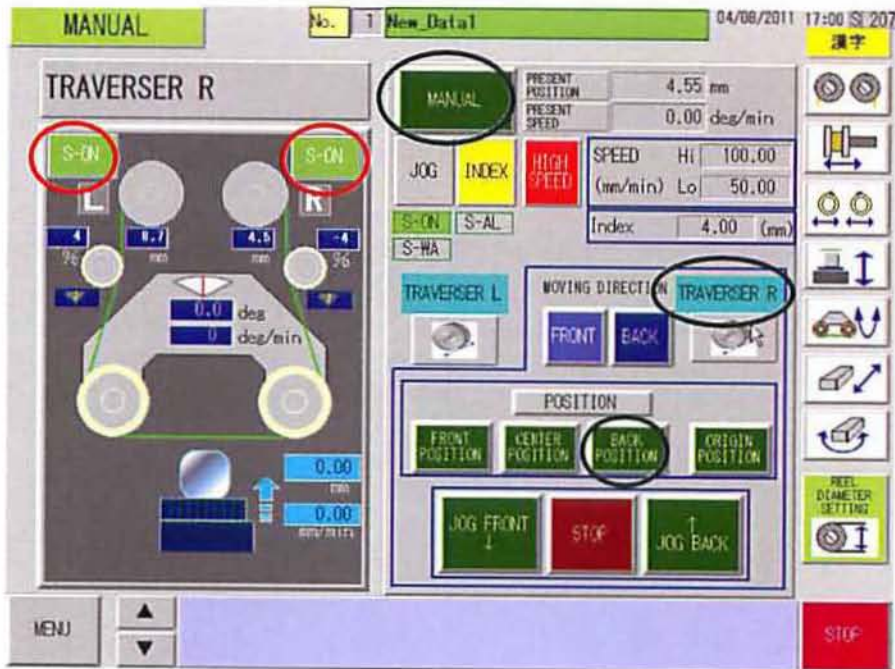
2. Set a cupped spring washer + a M8 bolt and clench the bolt with torque wrench.

3. Push the TRAVERSER button.

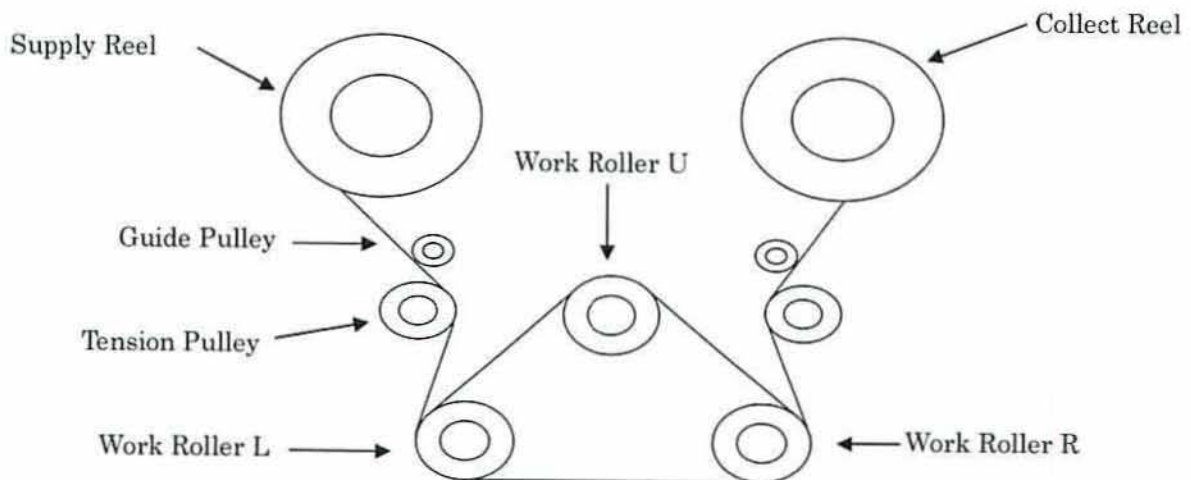


4. Turn L and R motors off from the Manual Traverser. ⇒ S-OFF

Touch the buttons as follow⇒ MANUAL→TRAVERSER R→BACK POSITION



4. Wire winding way



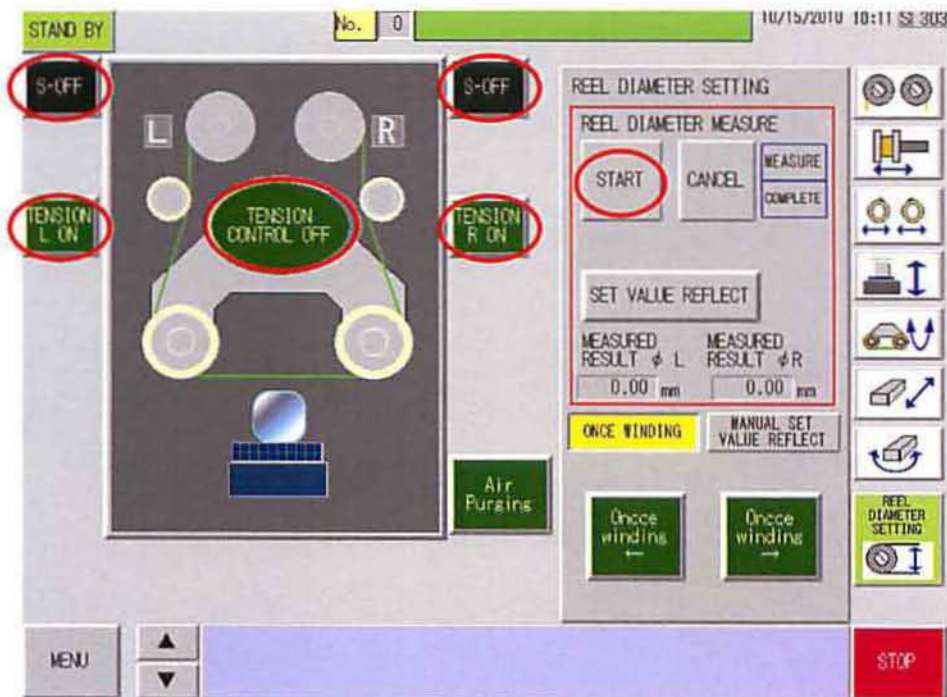
5. After winding wire until collect reel, fix the wire by M4 bolt.

6. Rotate Collect Reel with wire 3 times by hand.

7. Adjust Traverser L position to make wire and Traverser L straight.

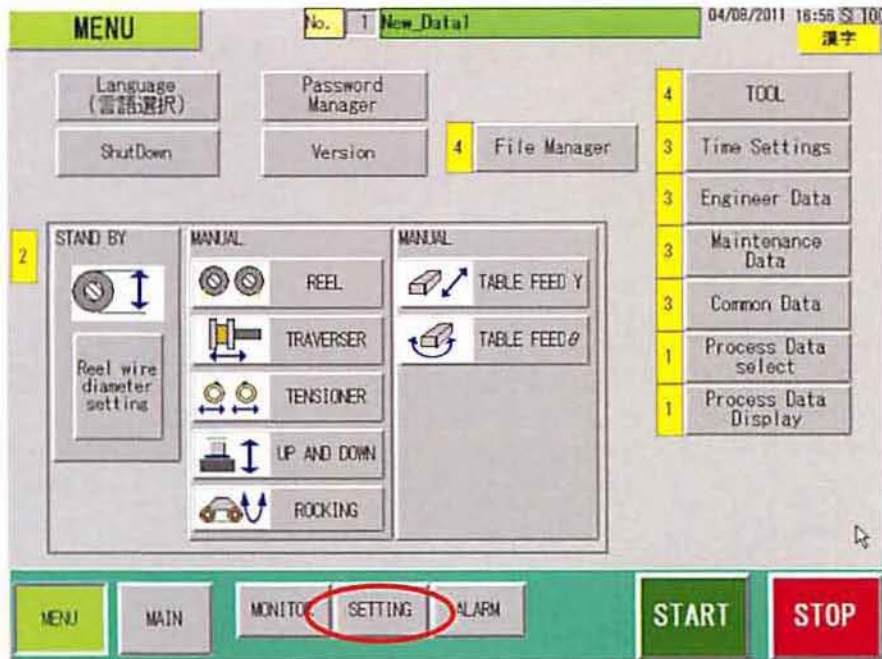
8. To measure Reel Diameter, please follow as below

S-ON → TENSION L & R ON → TENSION CONTROL ON → REEL DIMETER
MESUARE START



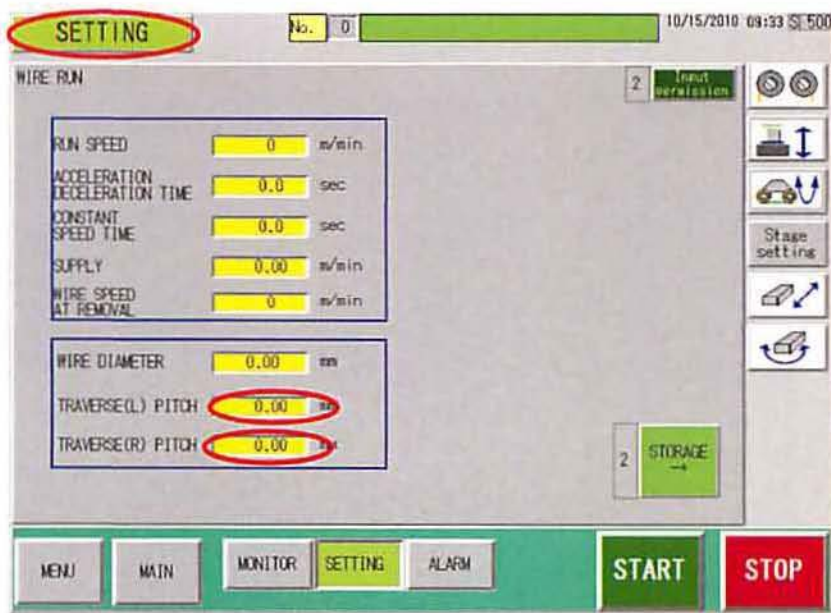
Operation (Winding wire II)

1. Push the SETTING button

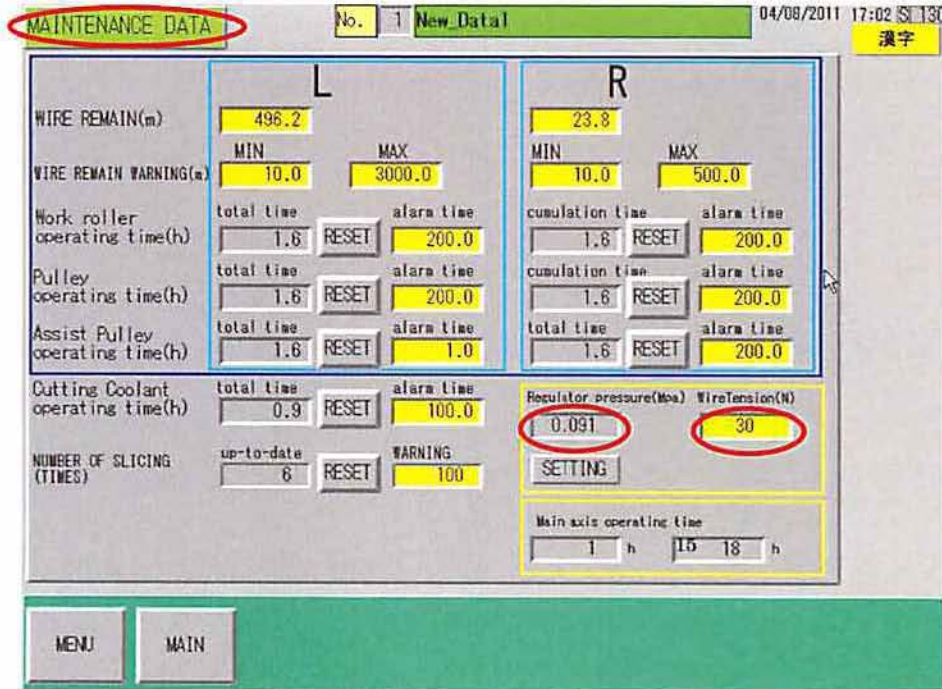
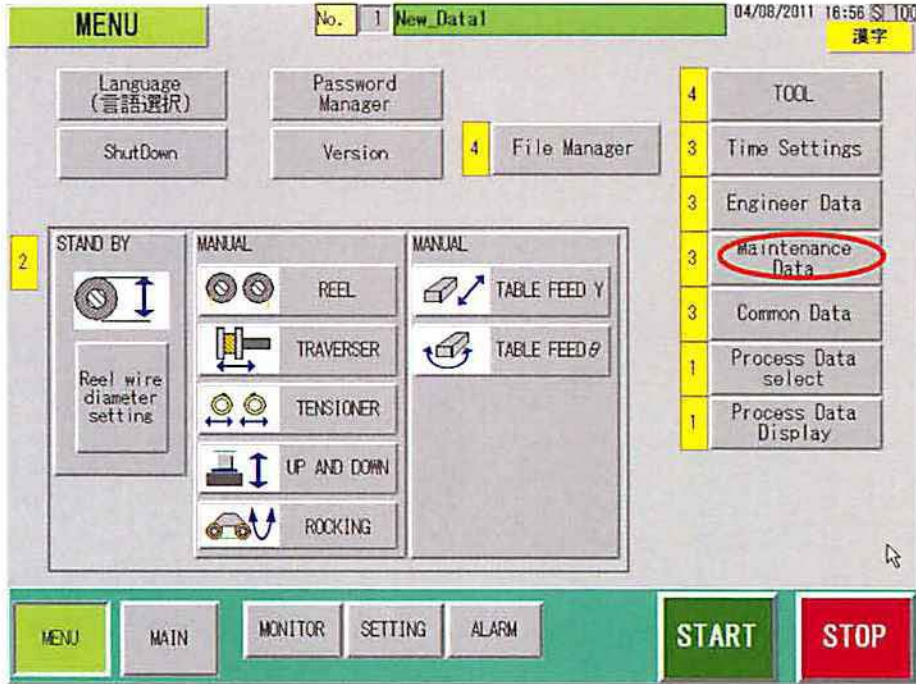


2. Check the wire pitch on the reel through the test chart from a wire maker.

3. Confirm the Traverser pitch as follow. SETTING → → TRAVERSER (L and R) PITCH



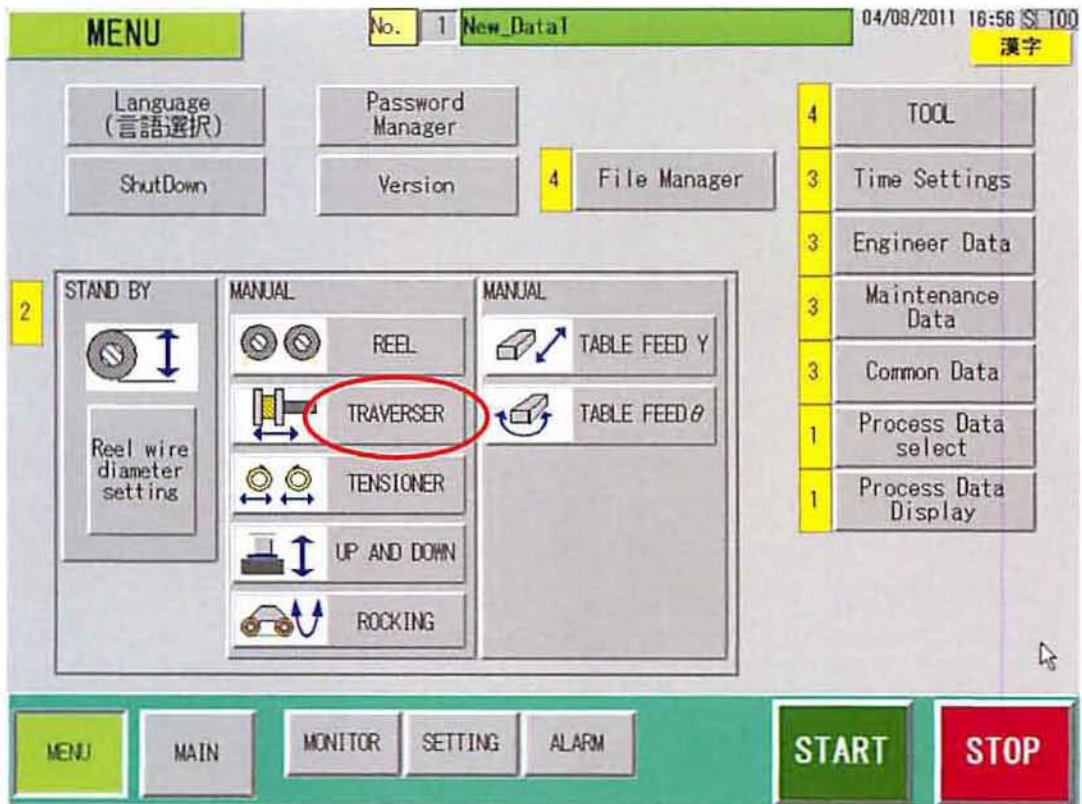
3. Set wire tension 15N as follow. MAINTENANCE DATA → Wire Tension
 Type in tension in WIRE TENSION blank and REGULATOR PRESSURE number is displayed.



4. Put in the Regulator pressure number in Tension regulator, on the front of the device.



5. Please select the buttons as follow. TRAVESER → MANUAL → INDEX → Type in 5m in DISTANCE and 50m/min in SPEED.





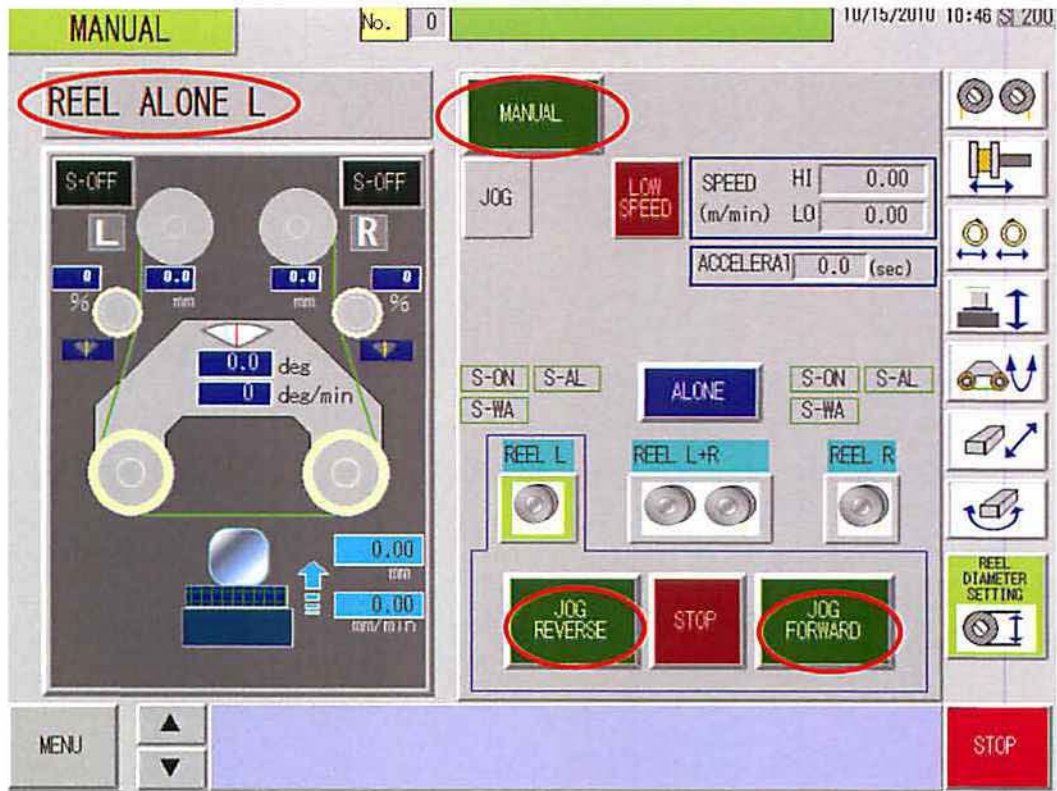
6. Touch the JOGFOWARD button and please check by the left side window that the wire is straight line between Supply traverser and Guide pulley.

7. (1) If the wire is straight line between Supply traverser and Guide pulley. ⇒ OK

7. (2) If the wire is NOT straight line between Supply traverser and Guide pulley ⇒NG
Make the wire straight line between Supply traverser and Guide pulley.by adjusting Supply Traverser

7. (3) If the Supply Traverser moves opposite way of the wire way ⇒NG

Change the way of Traverser as follow. TRAVERSER L → MANUAL → JOG REVERSE or JOG FORWARD



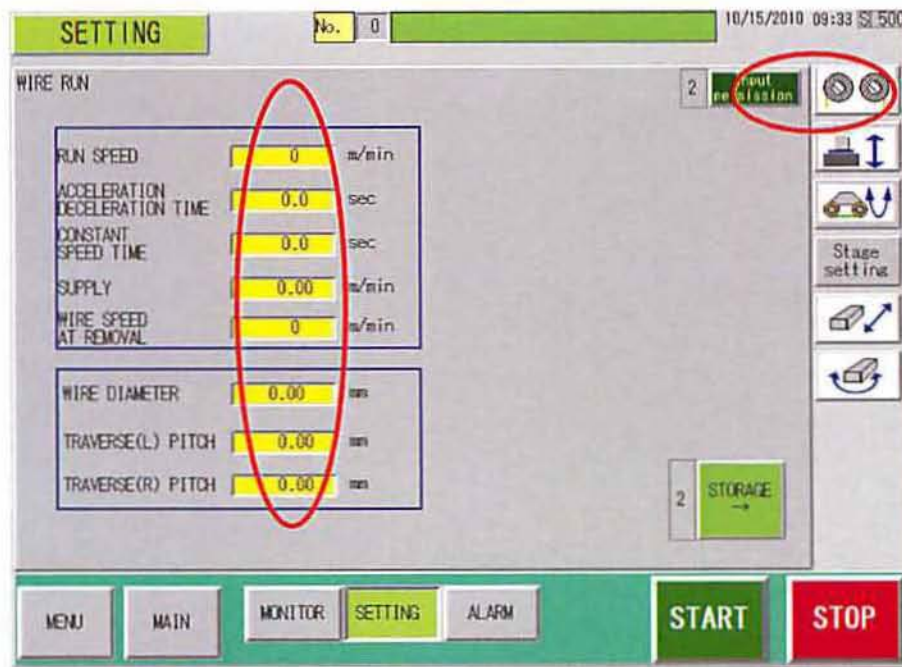
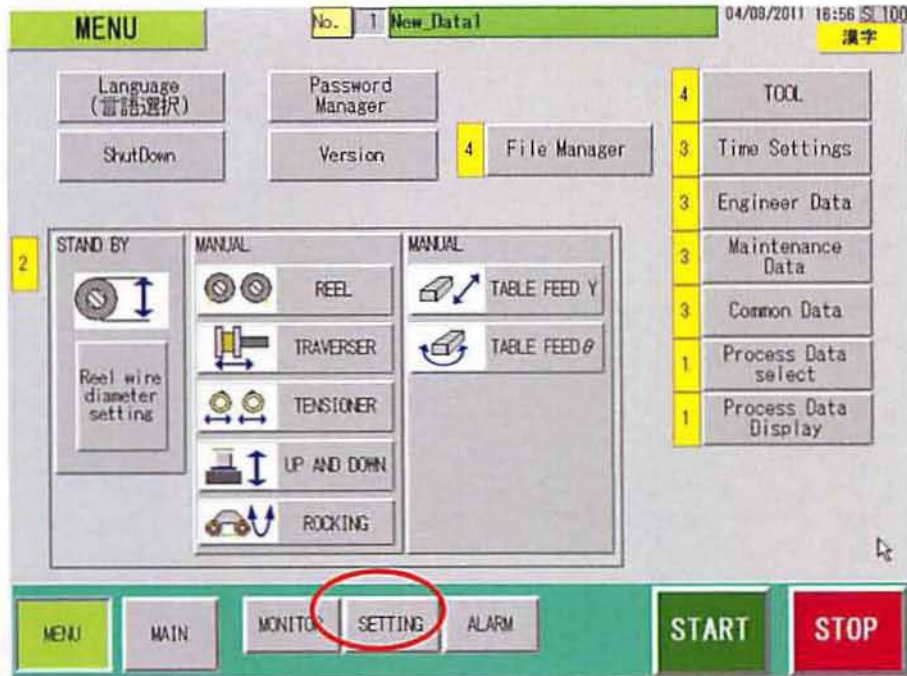
Wire is straight to pulley (O)



Wire is not straight to pulley (X)

Operation (Winding wireⅢ)

1. Confirm the every parameter and condition.
2. Confirm the parameter on SETTING



SETTING No. 0 10/15/2010 10:06 503

ROCKING

ROCKING ANGLE SPEED 0 deg/min

ROCKING STANDARD ANGLE 0.0 deg

2 Input permission

Stage setting

2 STORAGE

MENU MAIN MONITOR **SETTING** ALARM **START** **STOP**

SETTING No. 0 10/15/2010 10:04 502

UP & DOWN

START OFFSET 0.00 mm ①

CONTACT POSITION 0.00 mm ②

CUT LENGTH 0.00 mm ③

REMOVAL POSITION 0.00 mm ④

SLICE START POSITION 0.00 mm ⑤

SLICE END POSITION 0.00 mm ⑥

UP & DOWN STANDARD SPEED 0.00 mm/min

REMOVAL SPEED 0.00 mm/min

WAIT TIME OF BEND RESTORE 0 sec

2 Input permission

Stage setting

2 STORAGE

Origin ② ④

① ③

⑤ ⑥

START **STOP**

3. PROCESSING TIME and WIRE USAGE is displayed.



※ Wire Usage

Wire running distance (Wire Speed) + Wire usage for slicing
e.g.) wire speed: 400m/min,

Acceleration and Deceleration Speed: 3sec

Constant Speed: 24sec

400m/min=6.6m/sec

$6.6\text{m/s} \times (24\text{sec} + 3\text{sec}) = 179.9\text{m}$

179.9m + The Number displayed on the MONITOR screen= Amount of all Wire Usage

4. Set tension 15N

5. Reel → MANUAL → INDEX

Set the amount of wire usage you use(+ α) and wire speed should be 50m/min.

6. Push the JOG FORWARD button and check by the left side window that the wire is straight line between Supply traverser and Guide pulley.

It could be happened that the wire from Supply traverser is out of the Guide pulley, so please see sending wire until finished.



7. 1. If the wire runs off, please push the button.

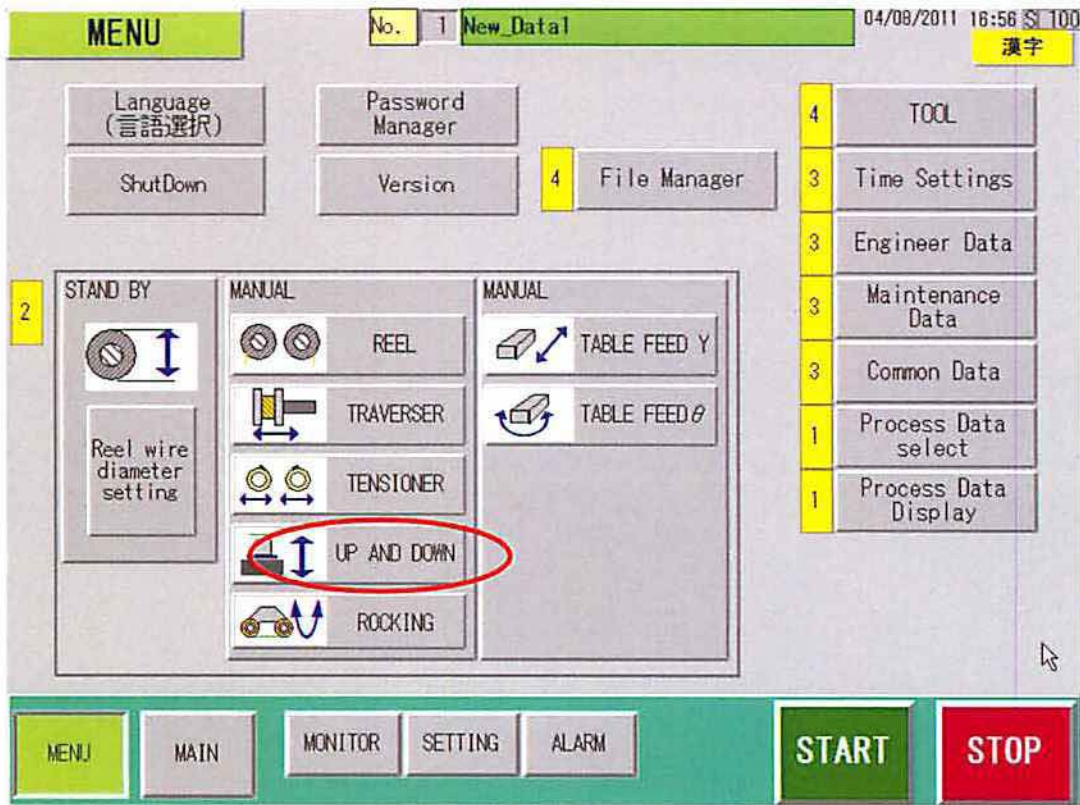
7. 2. Adjust TRAVERSER L that the wire goes straight from TRAVERSER L to GUIDE PULLEY. MANUAL → TRAVERSER L → JOG FRONT or BACK



7. 3. If you stop sending wire and fix the way of wire, check the amount of wire you send and calculate how much more wire you should send. And send the remain amount of wire.

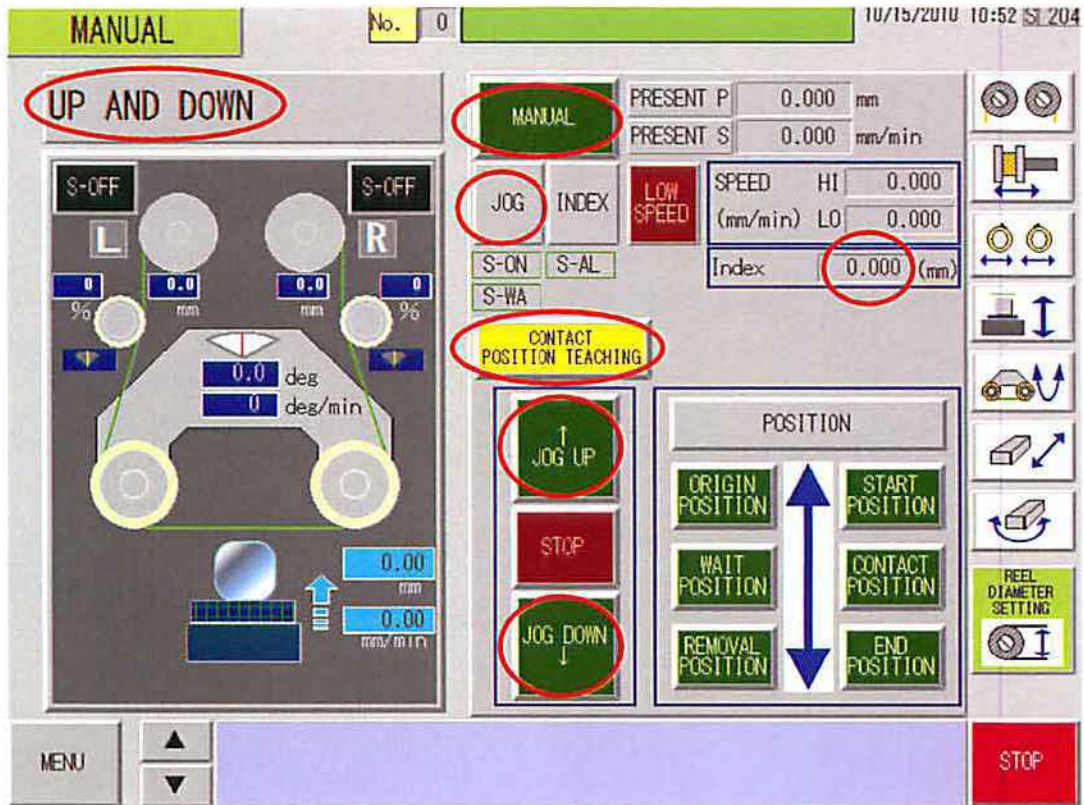
8. After finishing sending wire, send all amounts of wire back to TRAVERSER L by the JOG REVERSE button.

Operation (Mounting)

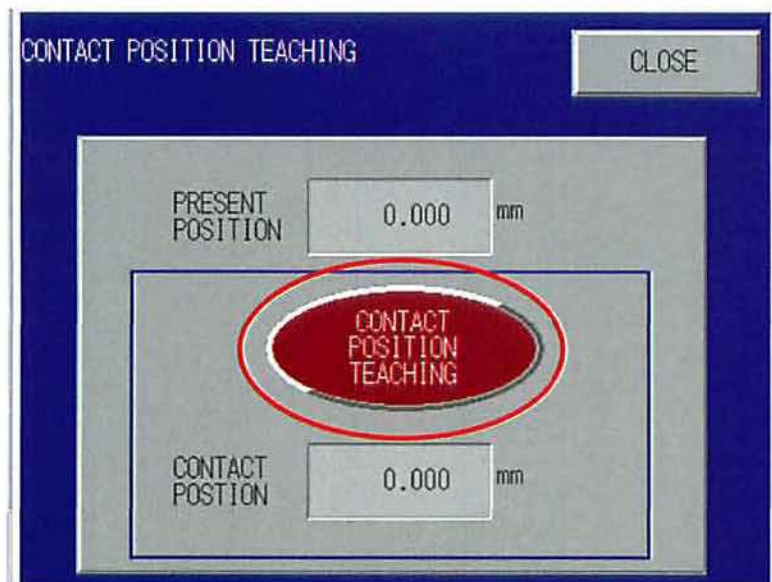


1. Attach work to the Attachment plate by glue and set on the Table.
2. Adjust the distance between work and table, 2mm.
UP AND DOWN → MANUAL → JOG → JOG UP or JOG DOWN
3. Set INDEX, 0.5-0.1mm, and find the contact position of wire and the work.
※When you use rocking, you should push the ROCKING button and make sure work is not contacted the wire.

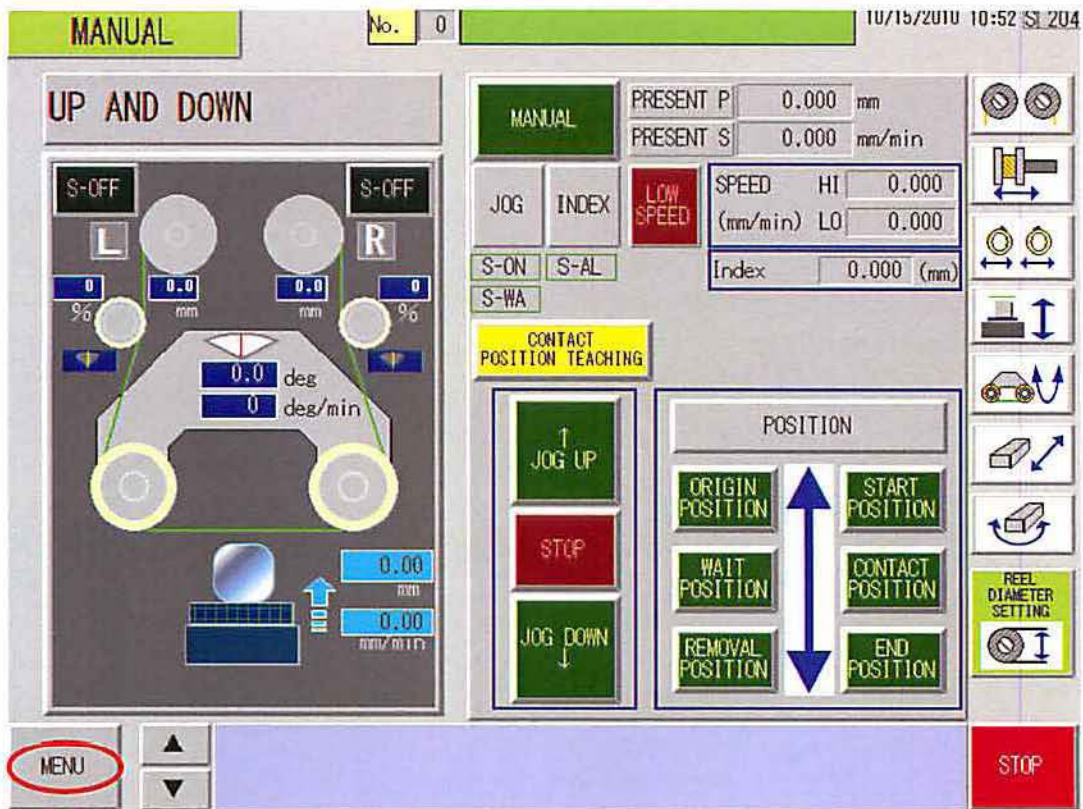
4. Push the CONTACT POSITION TEACHING button.



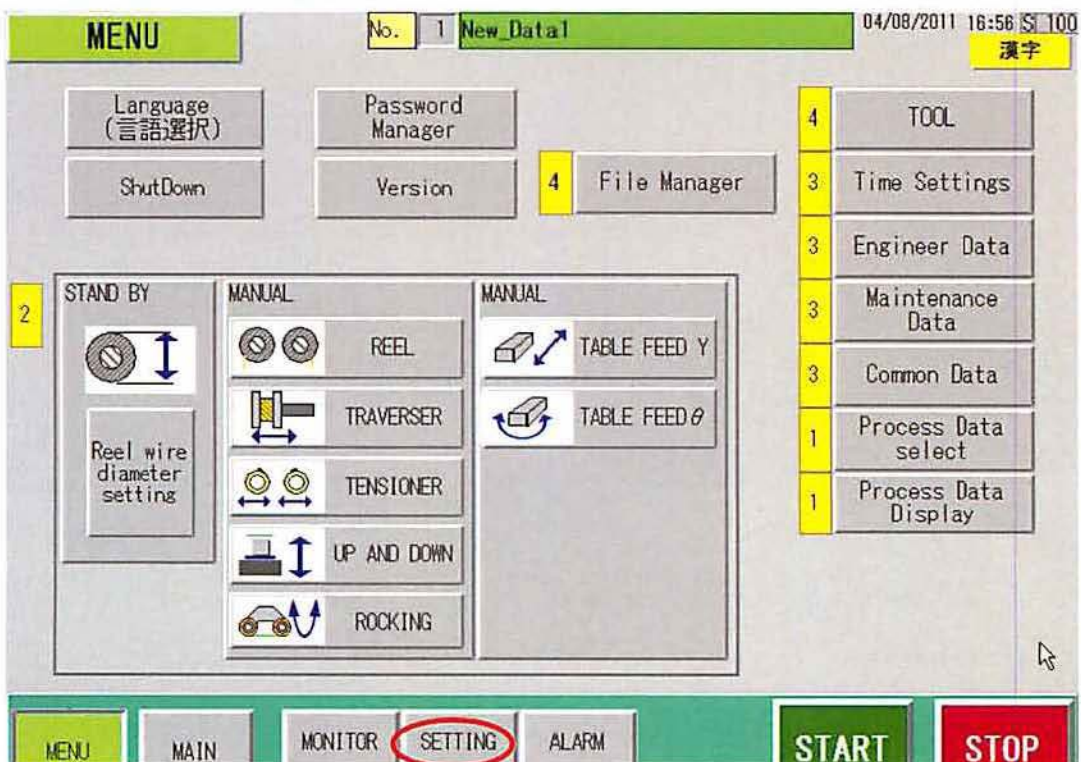
5. The CONTACT POSITION is automatically transferred to the SETTING part after pushing the CONTACT POSITION TEACHING button.



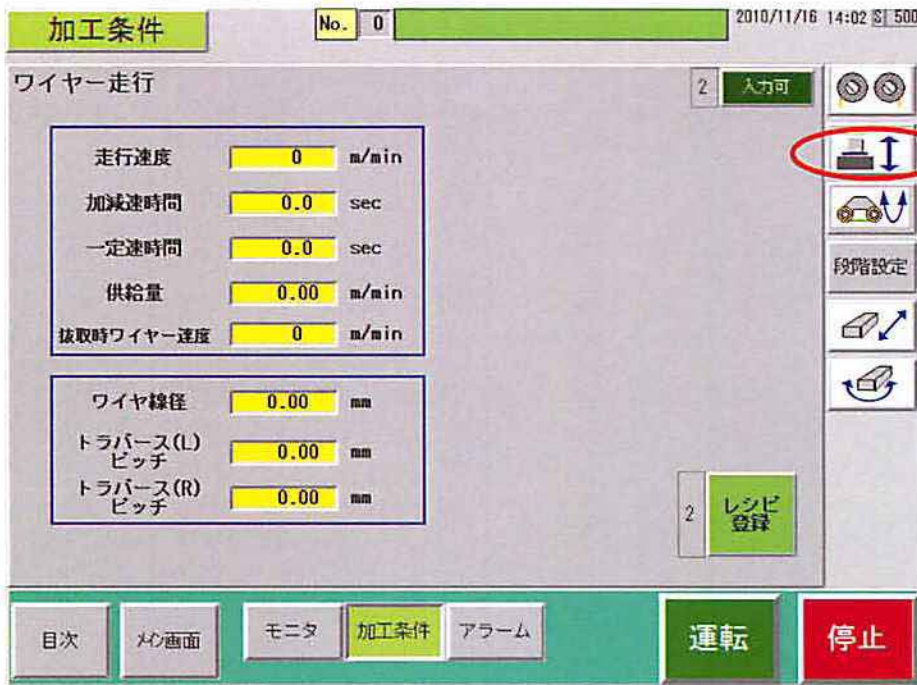
6. Push the MENU button.



7. Push the SETTING button.



8. Push the  button.



加工条件 No. 0 2010/11/16 14:02 500

ワイヤー走行 2 入力可

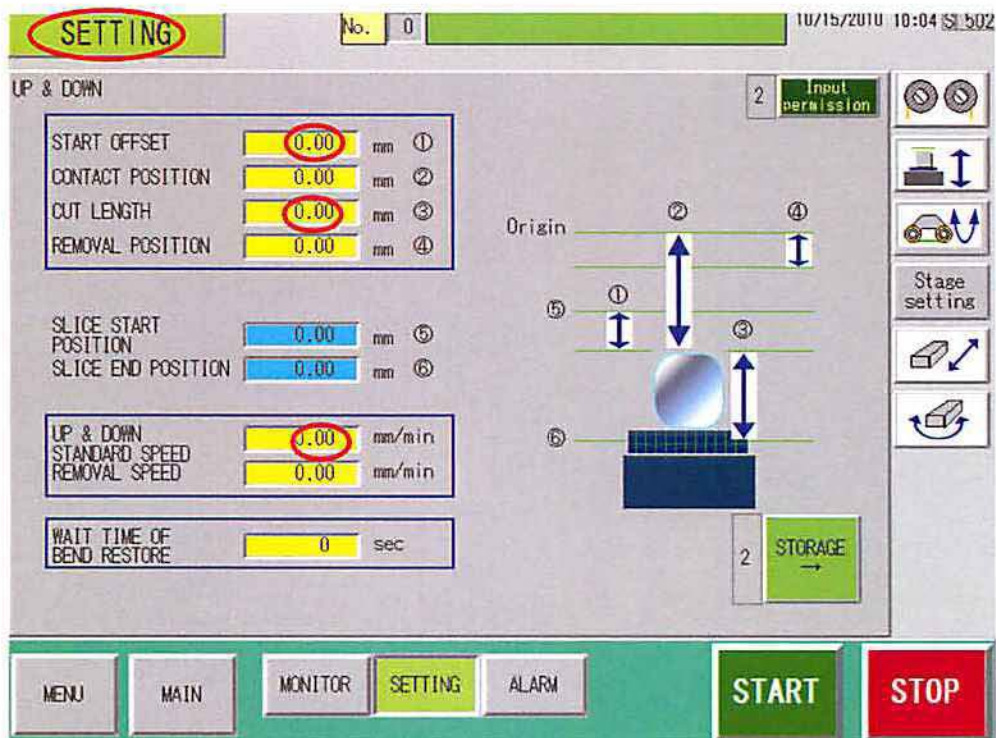
走行速度	0	m/min
加減速時間	0.0	sec
一定速時間	0.0	sec
供給量	0.00	m/min
抜取時ワイヤー速度	0	m/min

ワイヤ線径	0.00	mm
トラバース(L)ピッチ	0.00	mm
トラバース(R)ピッチ	0.00	mm

2 レジビ登録

目次 メン画面 モニタ 加工条件 アラーム 運転 停止

6. Set the parameter of START OFFSET, CUT LENGTH, and UP&DOWN STANDARD SPEED SETTING → 



SETTING No. 0 10/15/2010 10:04 502

UP & DOWN 2 Input permission

START OFFSET	0.00	mm	①
CONTACT POSITION	0.00	mm	②
CUT LENGTH	0.00	mm	③
REMOVAL POSITION	0.00	mm	④

SLICE START POSITION	0.00	mm	⑤
SLICE END POSITION	0.00	mm	⑥

UP & DOWN STANDARD SPEED	0.00	mm/min
REMOVAL SPEED	0.00	mm/min

WAIT TIME OF BEND RESTORE	0	sec
---------------------------	---	-----

2 STORAGE →

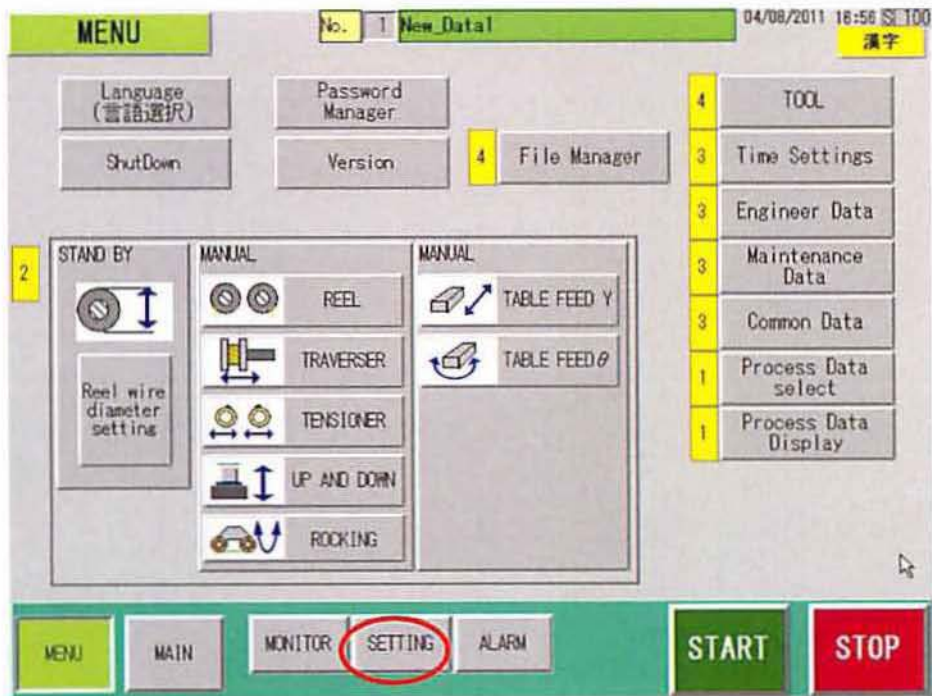
Origin ② ④ ① ③ ⑤ ⑥

Stage setting

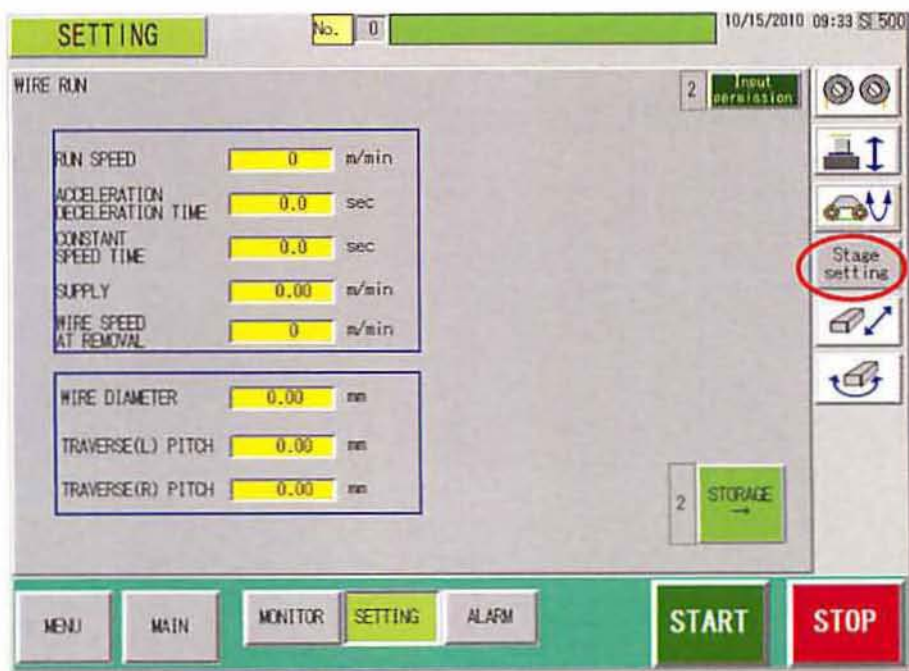
MENU MAIN MONITOR SETTING ALARM START STOP

Operation (Stage setting)

1. Push the SETTING button



2. Push the Stage setting button



3. Select the range of stages 1-25. After pushing the stage NO, push the Execute Split button.

STAGE SETTING → INPUT

SETTING No. 0 10/15/2010 10:08 S 520

Stage settings INPUT

0	UP & DOWN POSITION [mm]	UP & DOWN SPEED [mm/min]	ROCKING ANGLE [deg]	ROCKING ANGLE SPEED [deg/min]	→
1	0.00	0.00	0.0	0	
2	0.00	0.00	0.0	0	
3	0.00	0.00	0.0	0	
4	0.00	0.00	0.0	0	
5	0.00	0.00	0.0	0	
6	0.00	0.00	0.0	0	
7	0.00	0.00	0.0	0	
8	0.00	0.00	0.0	0	
9	0.00	0.00	0.0	0	
10	0.00	0.00	0.0	0	
11	0.00	0.00	0.0	0	
12	0.00	0.00	0.0	0	
13	0.00	0.00	0.0	0	
14	0.00	0.00	0.0	0	
15	0.00	0.00	0.0	0	

2 Input permission

2 STORAGE →

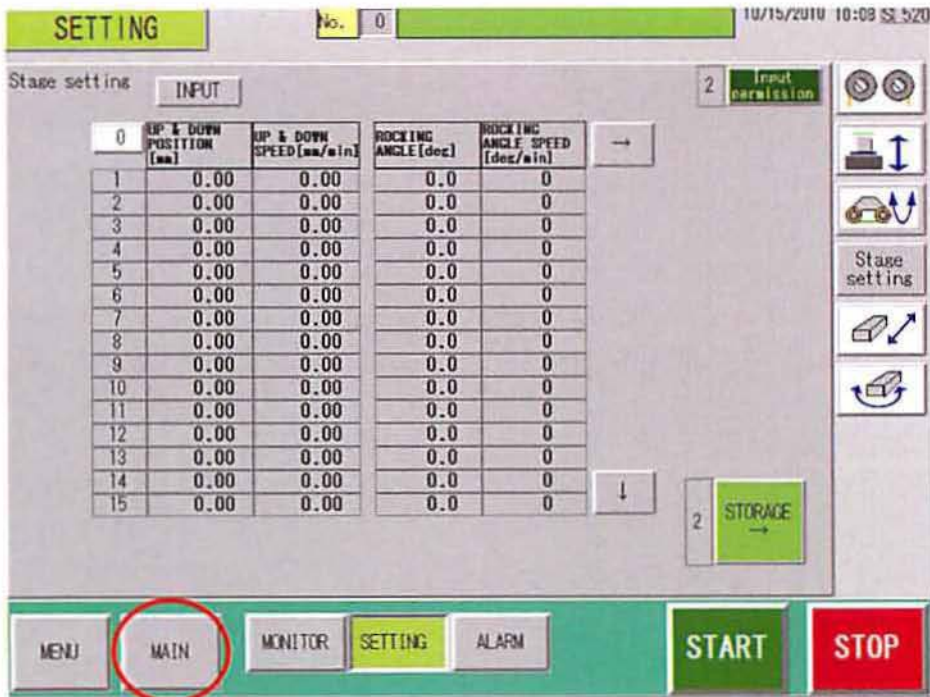
MENU MAIN MONITOR SETTING ALARM START STOP

INPUT STAGE POSITION CLOSE

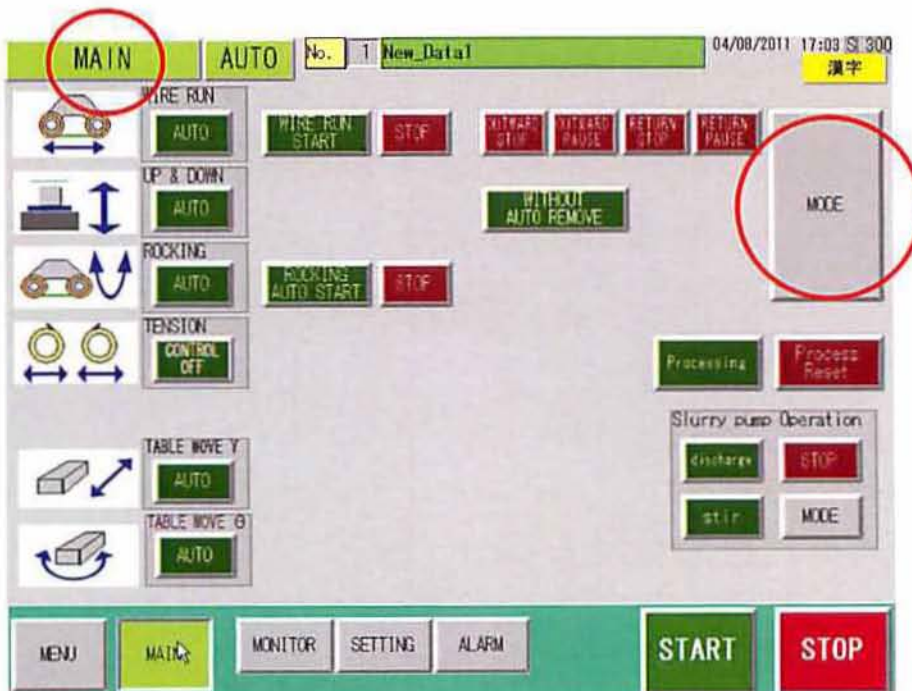
value	pitch[mm]	0	UP & DOWN POSITION [mm]	UP & DOWN POSITION [mm]	
0	0.00	1	0.00	16	0.00
		2	0.00	17	0.00
		3	0.00	18	0.00
		4	0.00	19	0.00
		5	0.00	20	0.00
		6	0.00	21	0.00
		7	0.00	22	0.00
		8	0.00	23	0.00
		9	0.00	24	0.00
		10	0.00	25	0.00
		11	0.00		
		12	0.00		
		13	0.00		
		14	0.00		
		15	0.00		

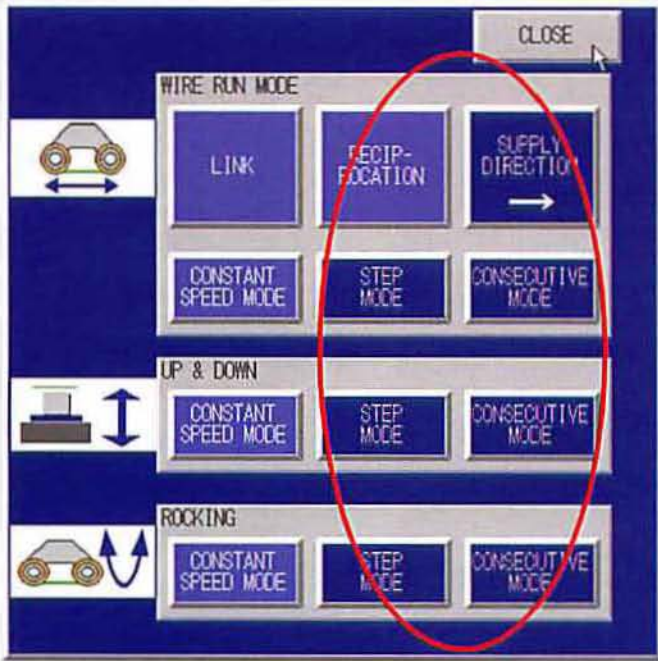
Execute Split

4. Push the MAIN button



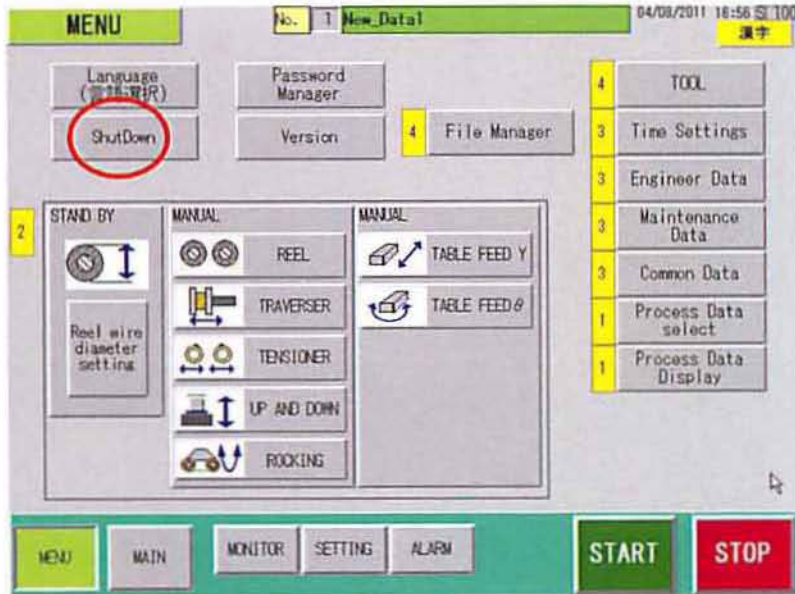
5. Select STEP MODE or CONSECUTIVE MODE to set the stage mode.
 MAIN → MODE → STEP MODE or CONSECUTIVE MODE



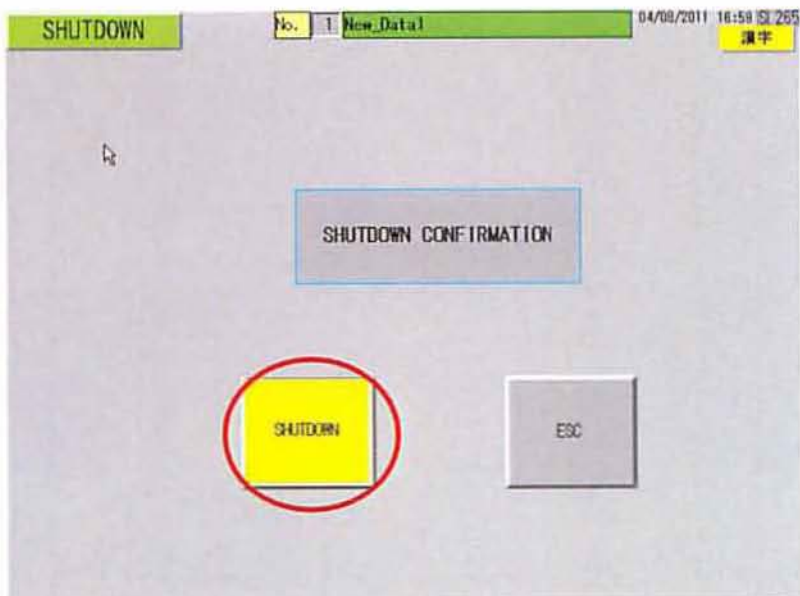


Operation (Shut down)

1. Select the **ShutDown** button on Menu screen.



2. Touch the **ShutDown** button for 3 seconds.



3. Touch the ShutDown button one more time.

4. After Screen gets dark, put the main breaker off.

