

E-PHTM

Instructions for using HMI Panel



TOPFIBRA
EFFECTIVE FILAMENT WINDING® PIONEERS

E-PHTM

Instructions for using HMI Panel

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1. COMMANDS DESCRIPTION

1.1. Home page

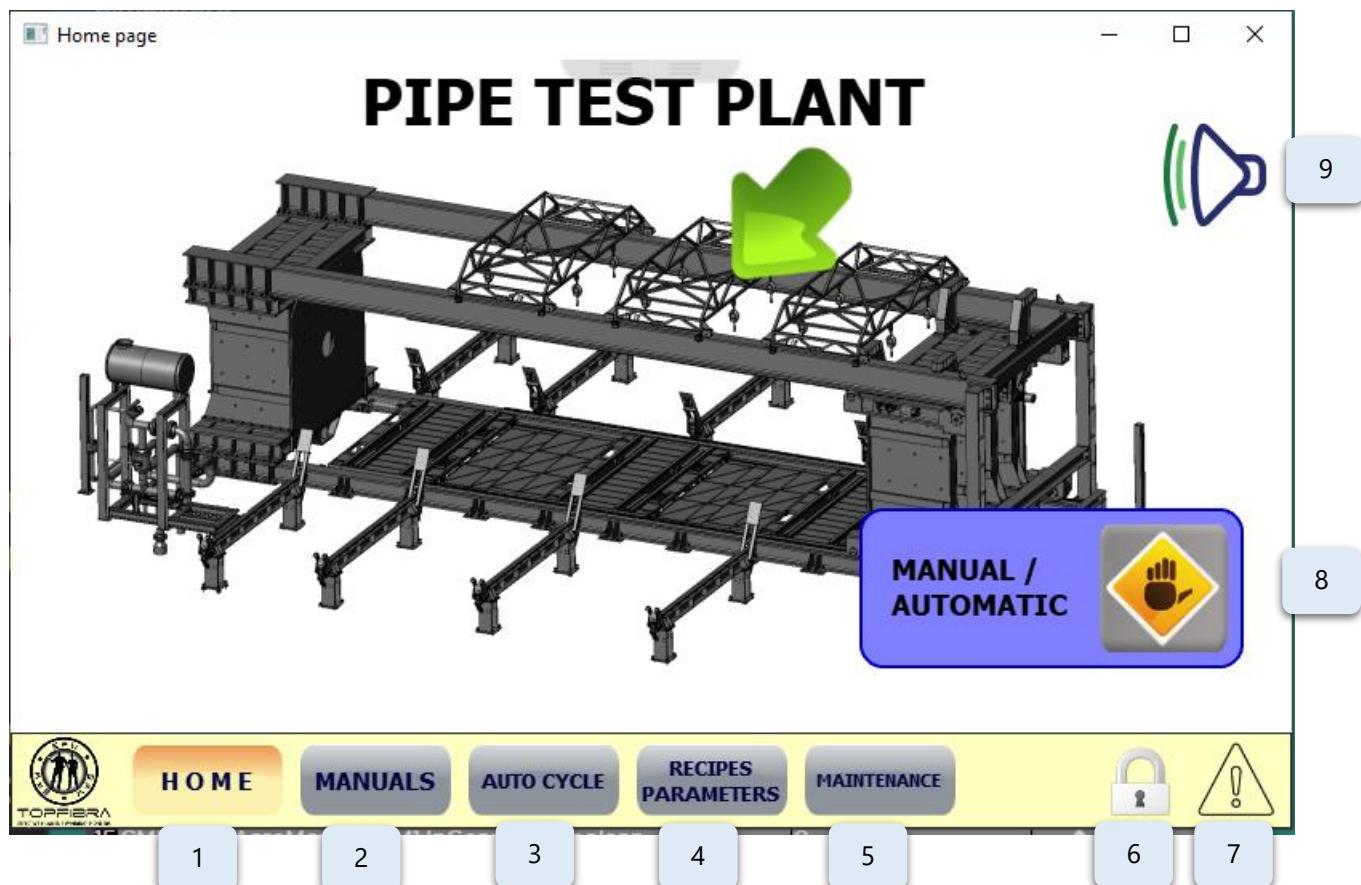


Figure 1

Ref.	Description
1	Activate the page Home
2	Activate the manuals page
3	Activate the automatic cycle's management page
4	Activate the recipe selection page
5	Activate the maintenance parameters page
6	Activate the reserved pages
7	Turn on the alarms display
8	Operating mode selection Manual << Automatic
9	Silencing of the acoustic signal



1.2. Plug controls description

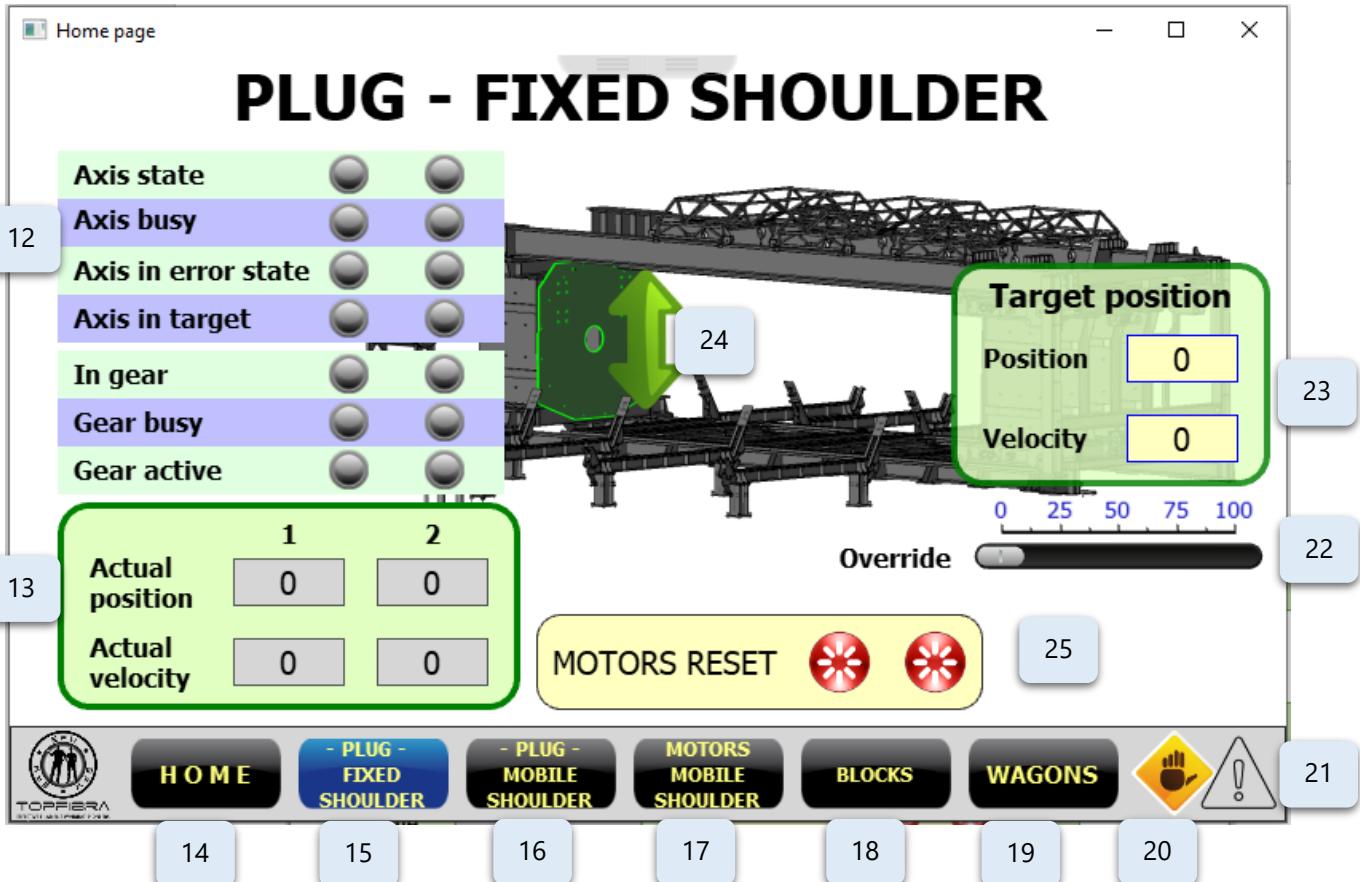


Figure 2

Ref.	Description
12	Axis status display: Green = Ok, Red = Fault, Gray = Standby
13	Display of current position and current velocity
14	Activate the HOME page
15	Current page selection
16	Activate the mobile shoulder plug page
17	Activate the motors mobile shoulder's page
18	Activate the locking block control page
19	Activate the mobile wagon control page
20	Machine status display
21	Turn on the alarms display
22	Override display
23	Position and velocity display
24	Activate the manual commands of the plug
25	Reset the motor's abnormalities

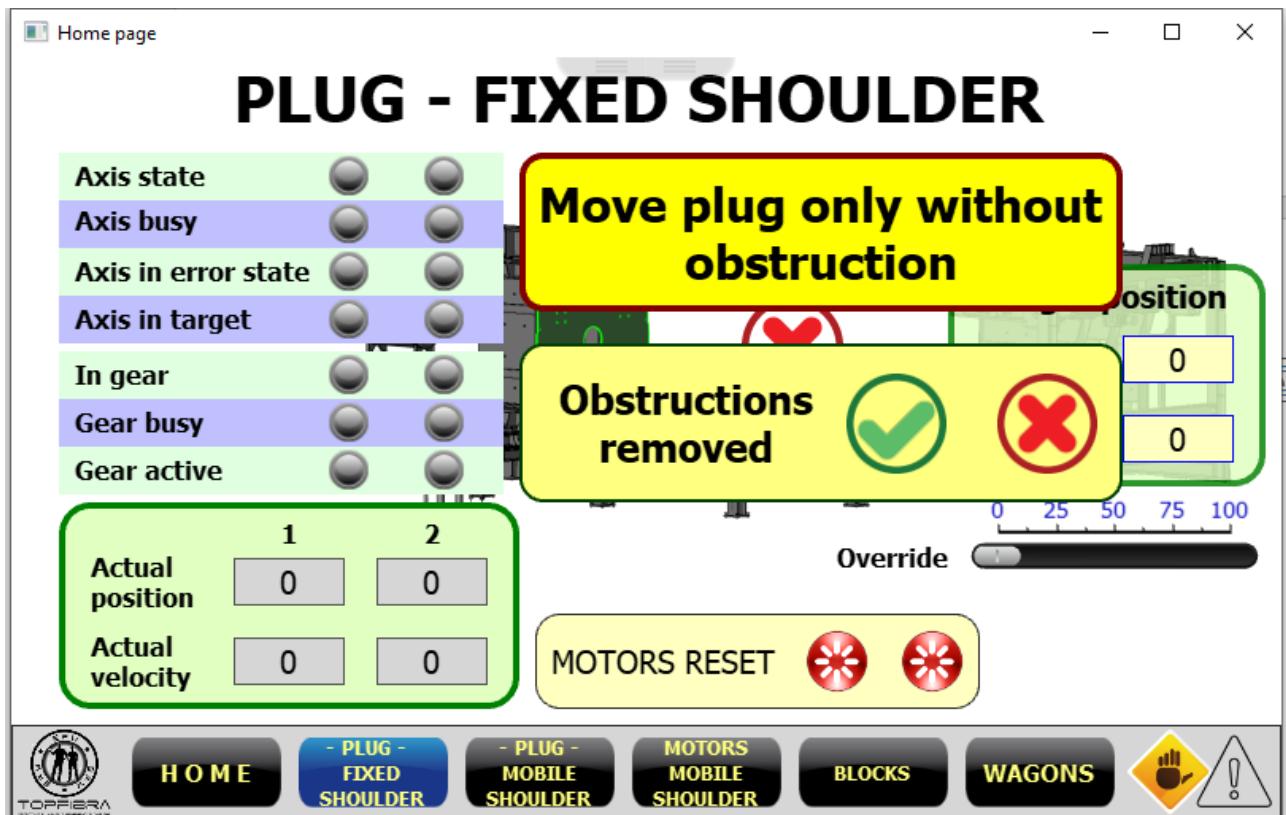


Figure 3

With the selection of button 24, a pop-up window appears that requires that one moves all things that may interfere with the stroke of the plugs; for example, moving or removing the wagons.

By confirming that you have removed all obstacles, you enable the manual commands of the plug.



1.3. Mobile shoulder controls description

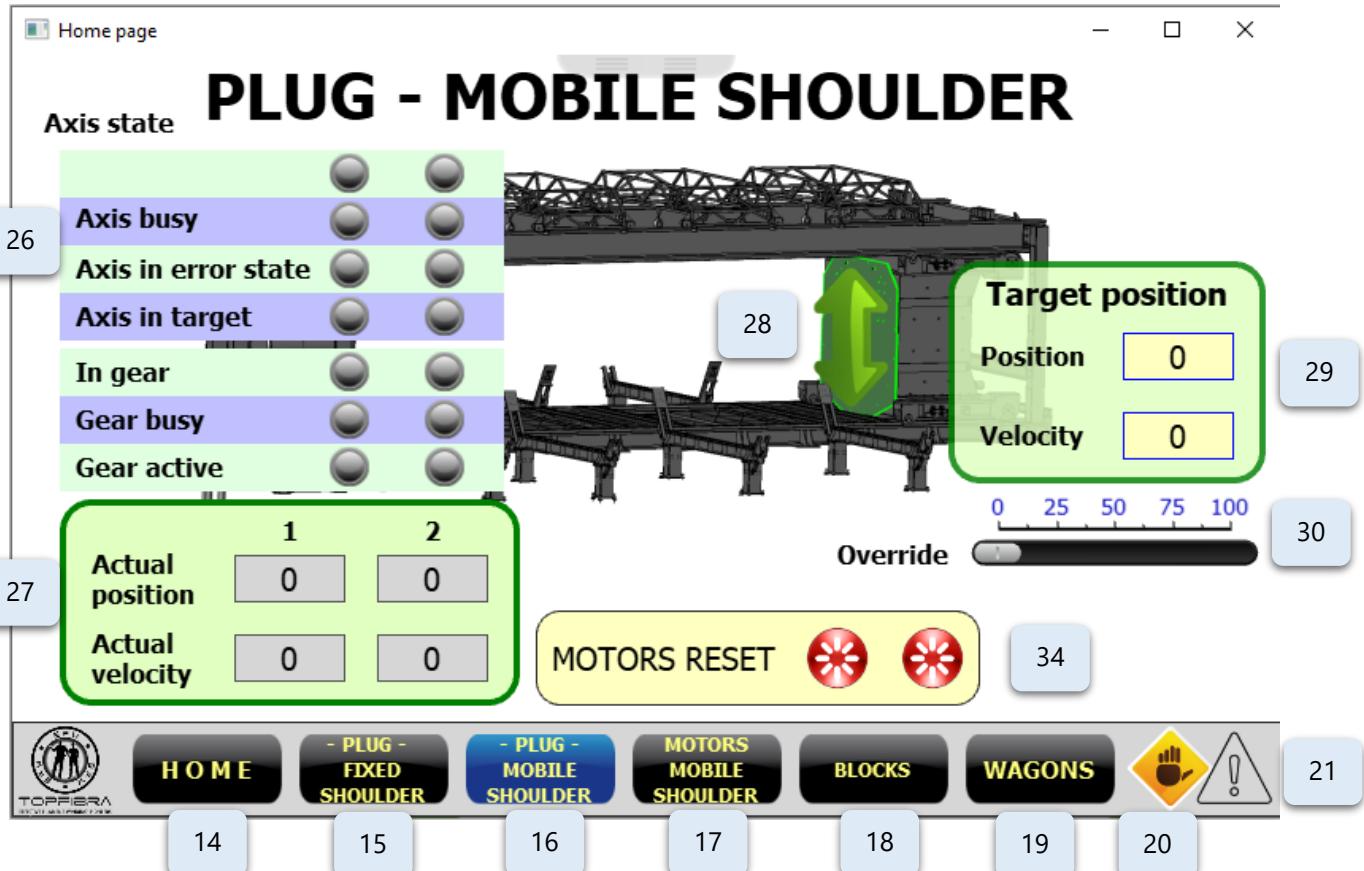


Figure 4

Ref.	Description
14	Activate the HOME page
15	Activate the fixed shoulder plug page
16	Current page selection
17	Activate the motors mobile shoulder's page
18	Activate the locking block control page
19	Activate the mobile wagon control page
20	Machine status display
21	Turn on the alarms display
26	Axis status display: Green = Ok, Red = Fault, Grey = Standby
27	Display of current position and current velocity
28	Activate the manual commands of the plug
29	Position and velocity display
30	Override display
34	Reset the motor's abnormalities

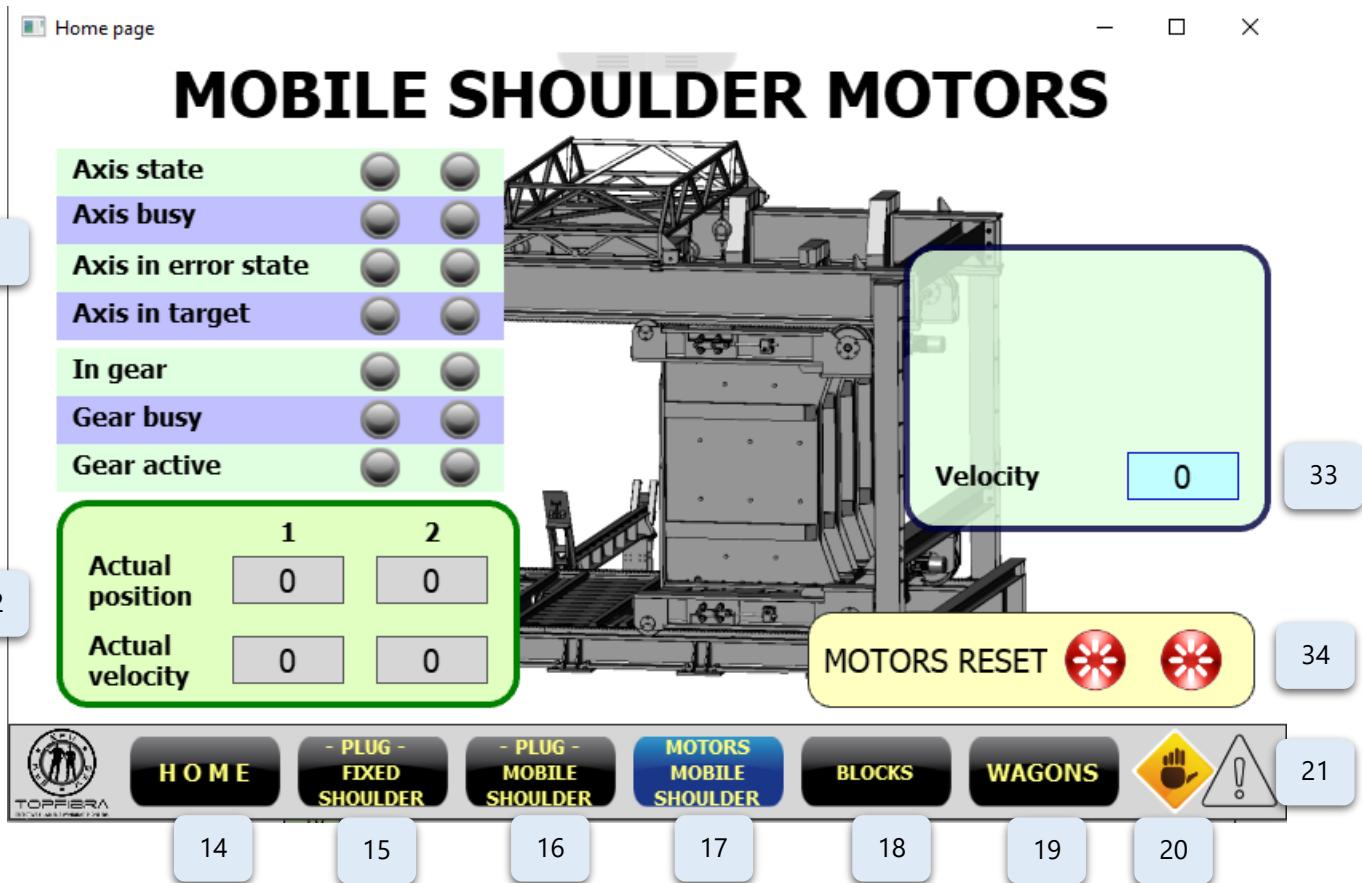


Figure 5

Ref.	Description
14	Activate the HOME page
15	Activate the fixed shoulder plug page
16	Activate the mobile shoulder plug page
17	Current page selection
18	Activate the locking block control page
19	Activate the mobile wagon control page
20	Machine status display
21	Turn on the alarms display
31	Axis status display: Green = Ok, Red = Fault, Grey = Standby
32	Displays current velocity and position
33	Mobile shoulder velocity movement selection box
34	Reset the abnormalities of the mobile shoulder's motor



1.4. Locking controls description

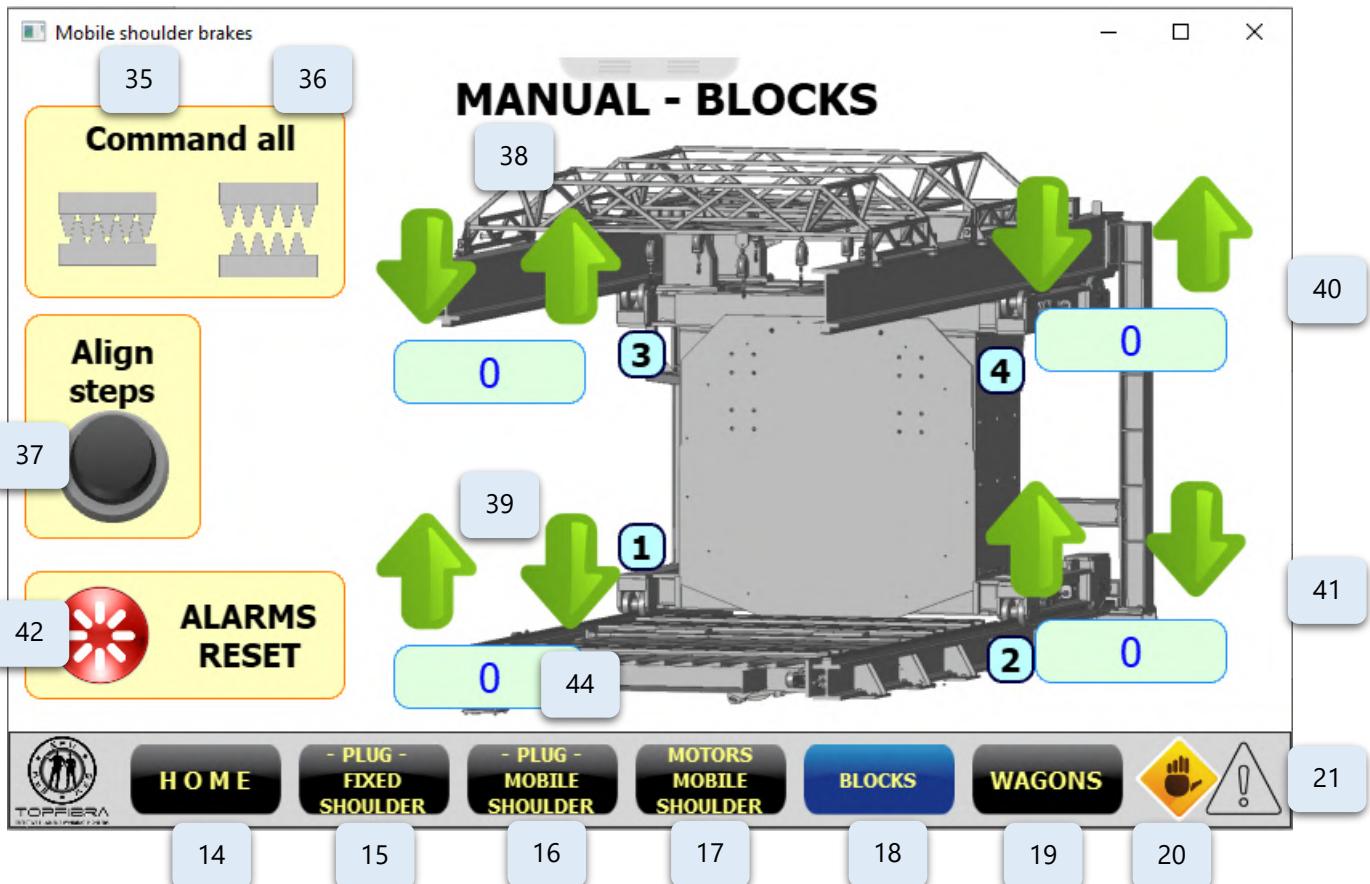


Figure 6

Ref.	Description
14	Activate the HOME page
15	Activate the fixed shoulder plug page
16	Activate the mobile shoulder plug page
17	Activate the motors mobile shoulder's page
18	Current page selection
19	Activate the mobile wagon control page
20	Machine status display
21	Turn on the alarms display
35	Engages the mobile shoulder's locks
36	Disengages the mobile shoulder's locks
37	Before engaging the locks, this button will align the mobile head with the rack
38	Manual Jog movement of block 3
39	Manual Jog movement of block 1
40	Manual Jog movement of block 4

41	Manual Jog movement of block 1
42	Reset/abort locking movement
44	Current position of the lock

1.5. Wagon controls description

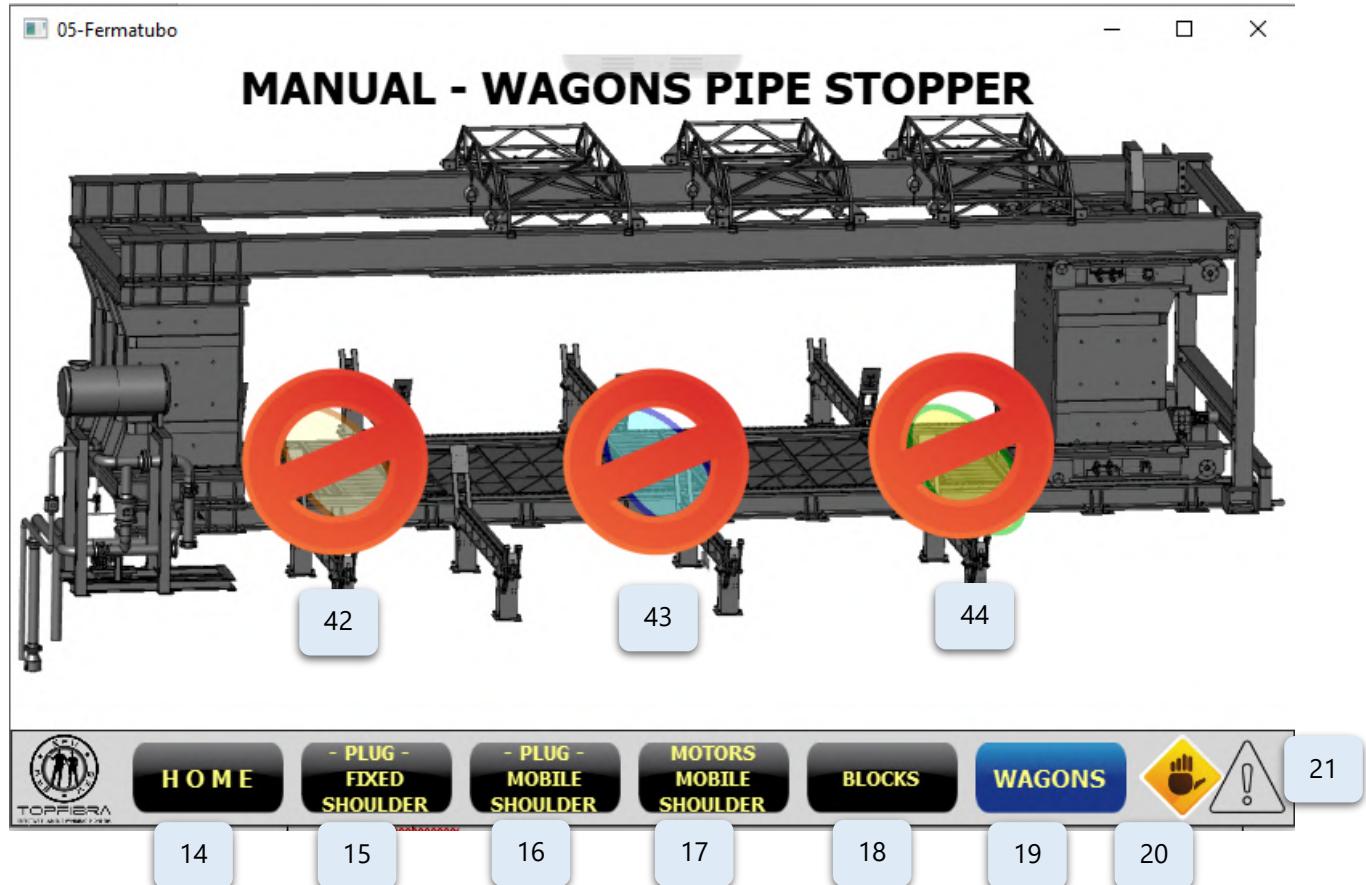


Figure 7

Ref.	Description
14	Activate the HOME page
15	Activate the fixed shoulder plug page
16	Activate the mobile shoulder plug page
17	Activate the motors mobile shoulder's page
18	Activate the locking control page
19	Current page selection
20	Machine status display
21	Turn on the alarms display
42	Wagon 1 disconnected or excluded from the software



43	Wagon 2 disconnected or excluded from the software
44	Wagon 3 disconnected or excluded from the software

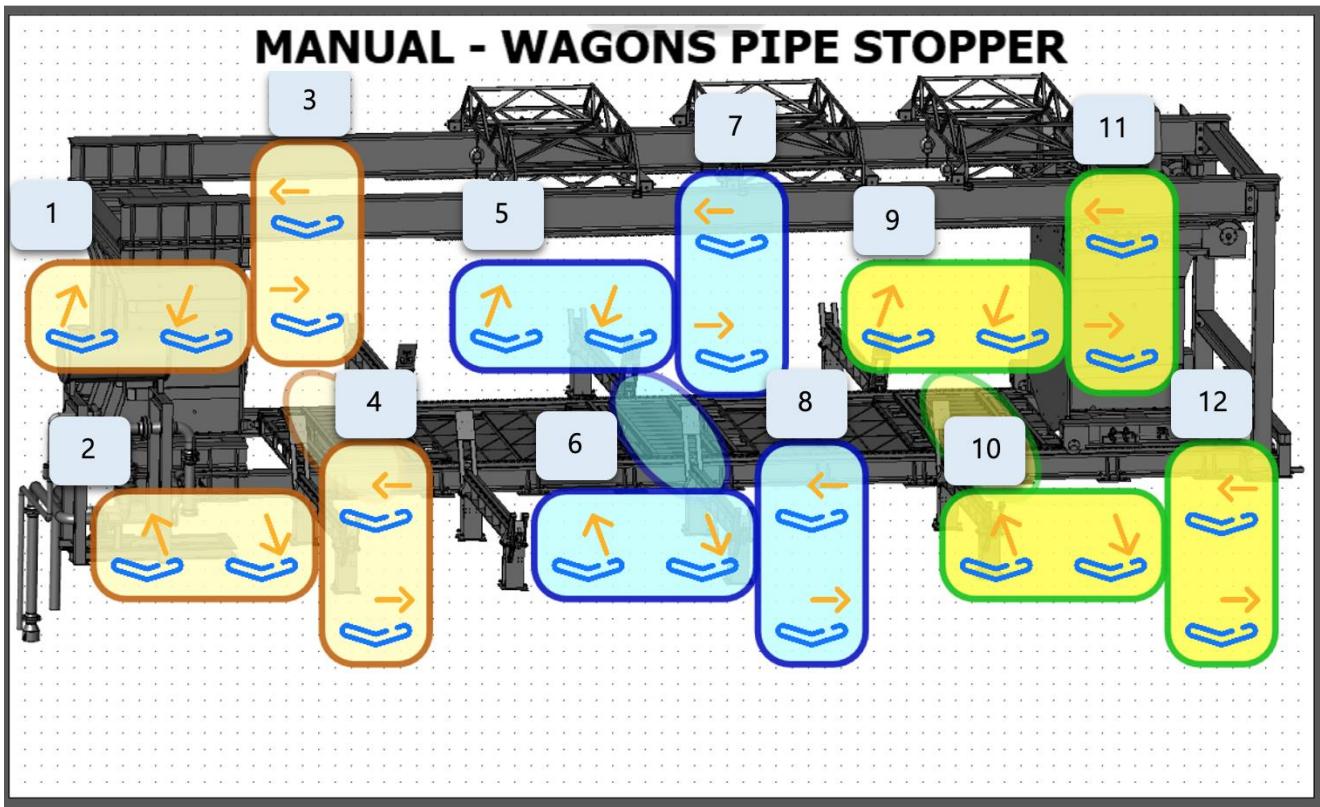


Figure 8

Ref.	Description
1	Lifting the wagon pipe stop 1 inlet side
2	Lifting the wagon pipe stop 1 exit side
3	Movement of the pipe stops wagon 1 in closing and opening the inlet side
4	Movement of pipe stops in wagon 1 closing and opening exit side
5	Lifting the wagon pipe stop 2 inlet side
6	Lifting the wagon pipe stop 2 exit side
7	Movement of the pipe stops wagon 2 in closing and opening the side entrance
8	Movement of pipe stops in wagon 2 closing and opening exit side
9	Lifting the wagon pipe stop 3 inlet side
10	Lifting the wagon pipe stop 3 exit side
11	Movement of pipe stops wagon 3 in closing and opening the side entrance
12	Movement of pipe stops in wagon 3 in closing and opening exit side

1.6. Alarms page description

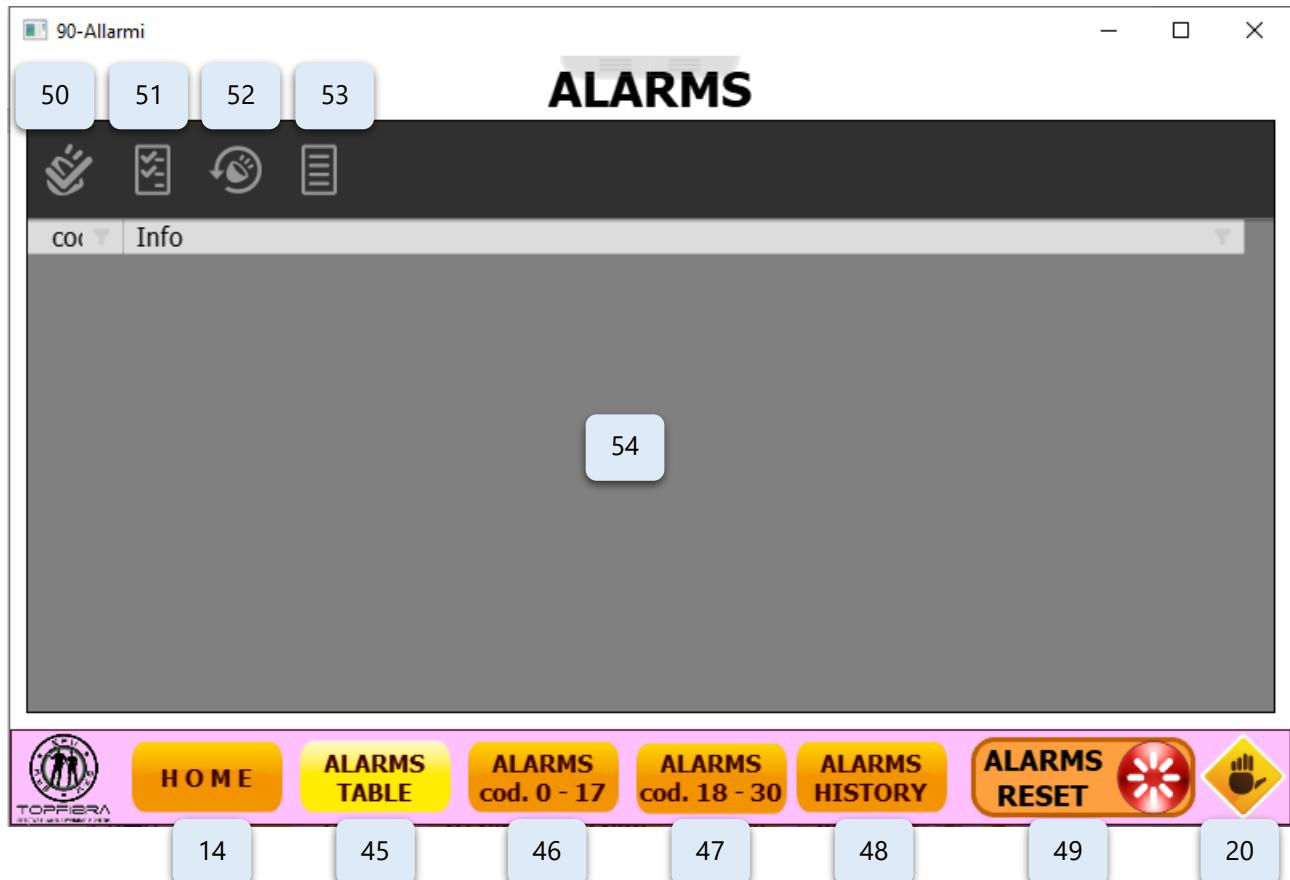


Figure 9

Ref.	Description
14	Activate the HOME page
20	Machine Status (if manual or automatic)
45	Alarms table
46	Displays the alarm detail from 0 >> 17
47	Displays the alarm detail from 18 >> 30
48	Alarm history
49	Silencing of alarms
50	Alarm confirmation
51	Update alarms
52	Alarm history
53	View details
54	Display of the alarm messages

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ALARMS DETAILS (cod. 0 - 17)

55



Figure 10

Ref.	Description
14	Activate the HOME page
20	Machine Status (if manual or automatic)
45	Alarm table
46	Alarm description from 0 >> 17
47	Alarm description from 18 >> 30
48	Alarm history
49	Reset signalling alarm
55	View details

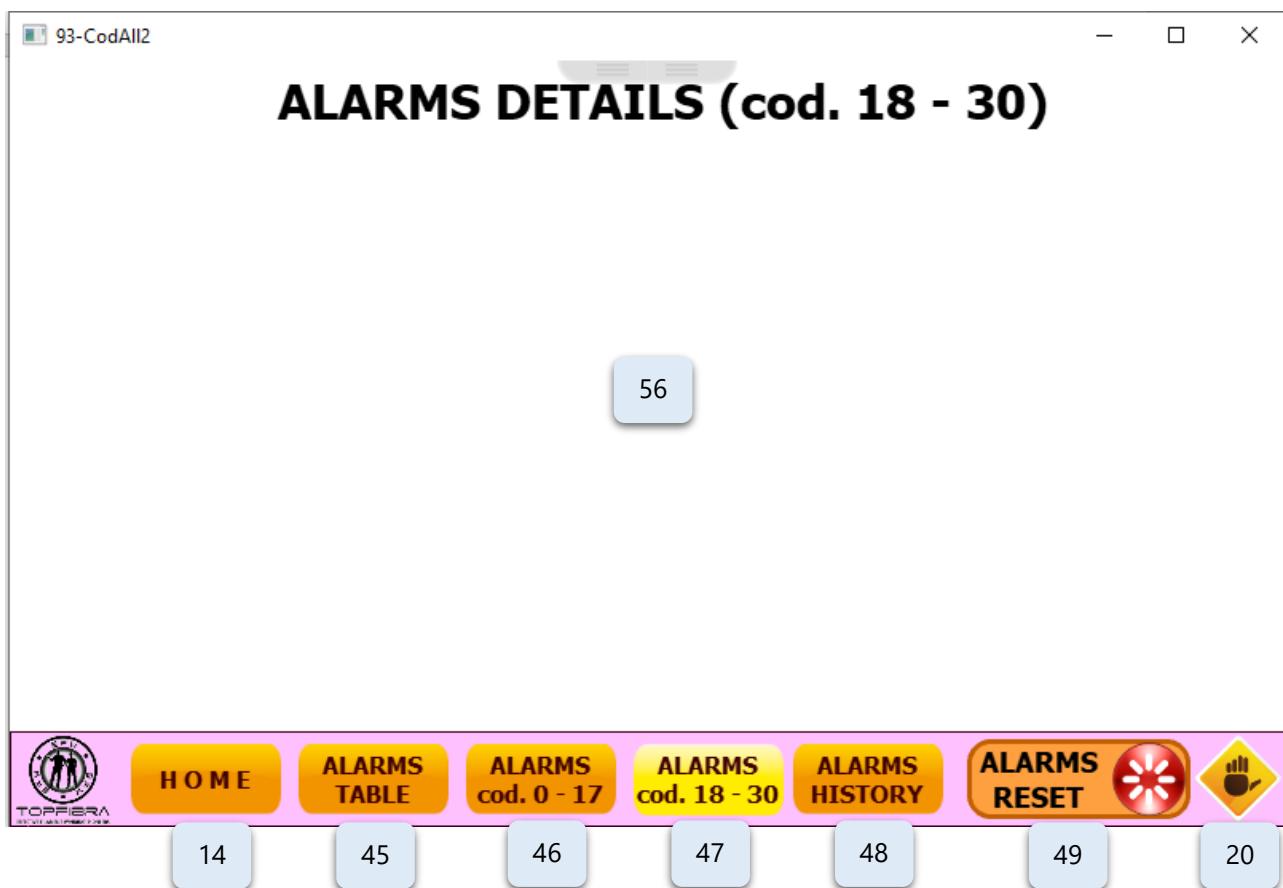


Figure 11

Ref.	Description
14	Activate the HOME page
20	Machine Status (if manual or automatic)
45	Alarm table
46	Alarm description from 0 >> 17
47	Alarm description from 18 >> 30
48	Alarm history
49	Reset signalling alarm
56	View details

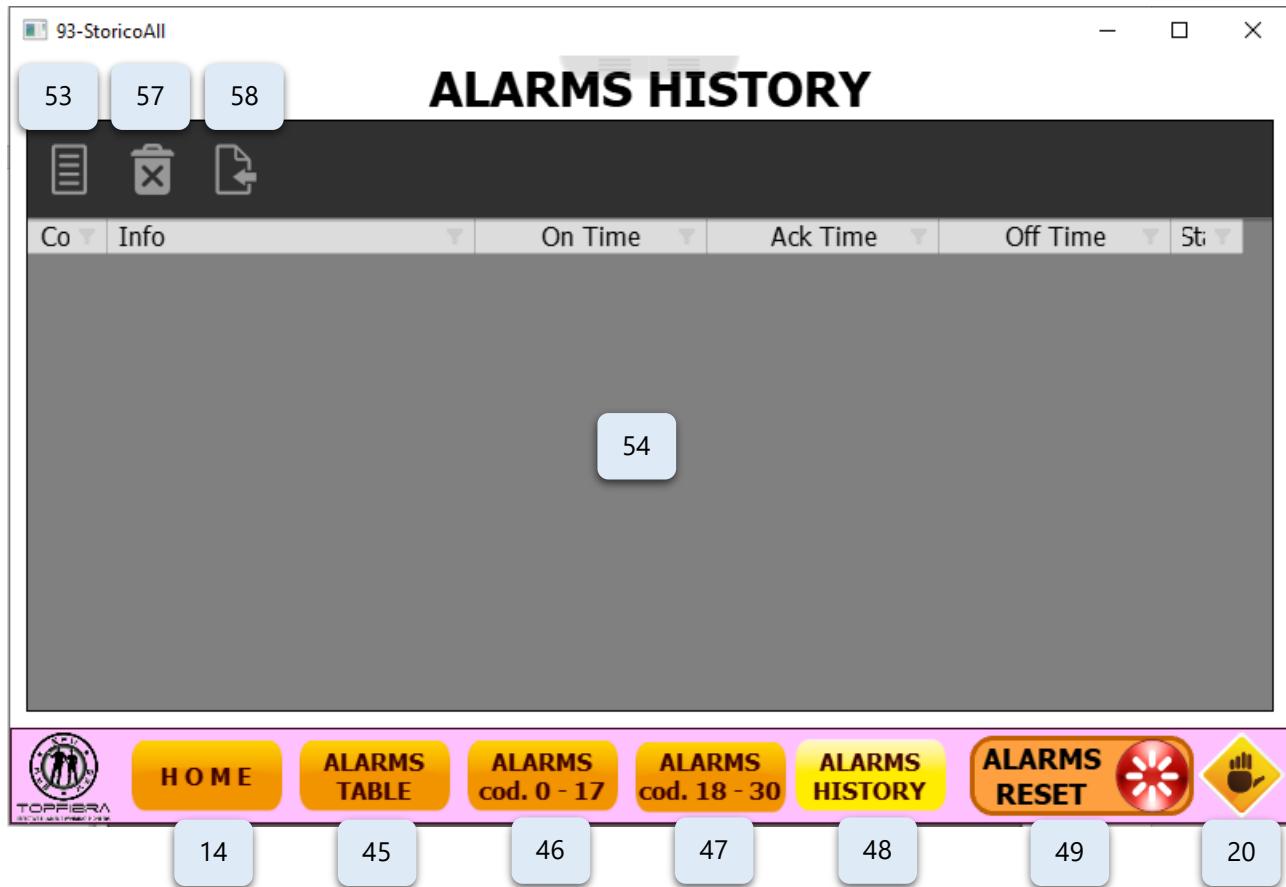


Figure 12

Ref.	Description
14	Activate the HOME page
20	Machine Status (if manual or automatic)
45	Alarm table
46	Alarm description from 0 >> 17
47	Alarm description from 18 >> 30
48	Alarm history
49	Reset signalling alarm
53	View details
54	Alarm table
57	Eliminates the present alarms
58	Export alarms

1.7. Format change description

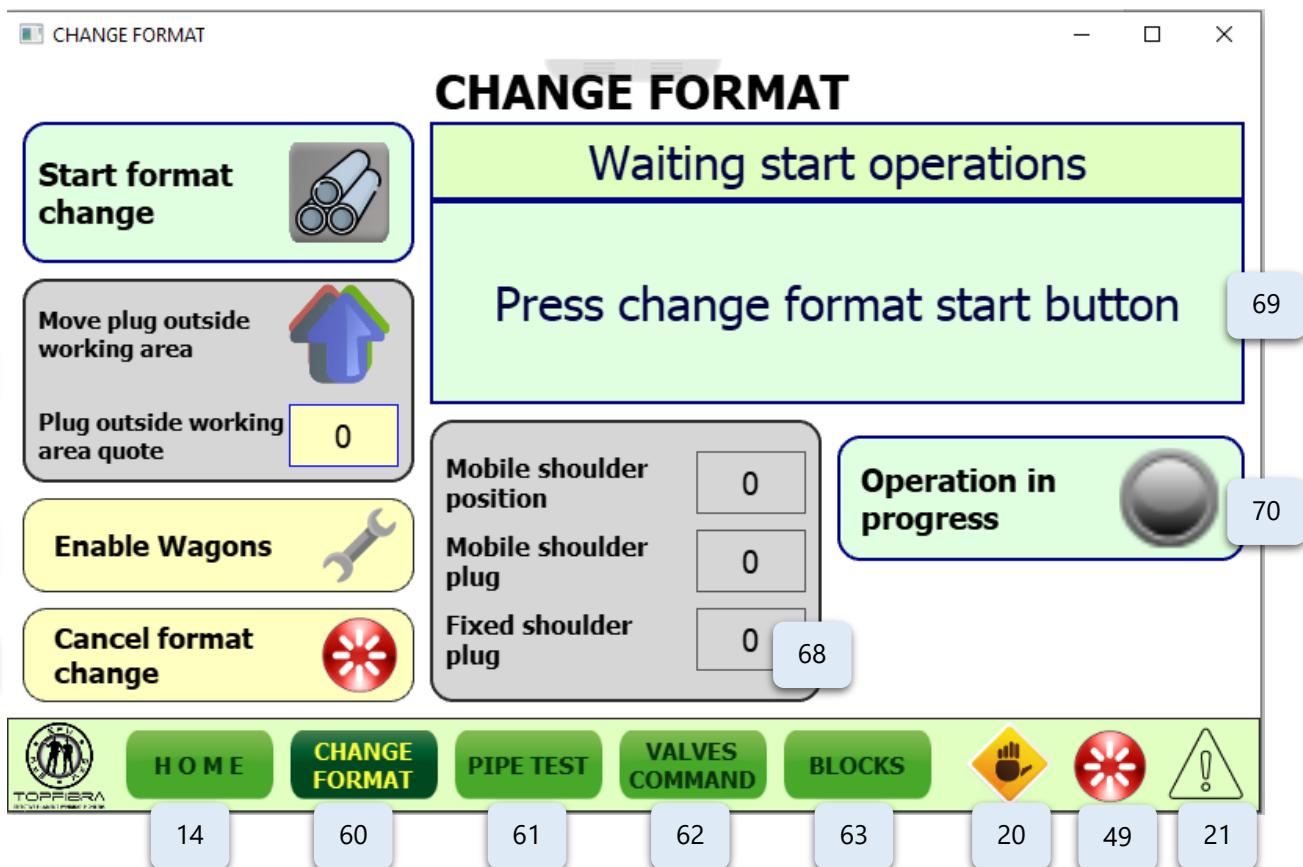


Figure 13

Ref.	Description
14	Activate the HOME page
20	Machine Status (if manual or automatic)
21	Alarm alert present and activate the alarm page
49	Alarm reset
60	Activate the current page format change
61	Activate the pipe testing page
62	Activate the valve command page
63	Activate the blocks page
64	Start the format change
65	Move the mobile shoulder plug to a position that allows the removal of the wagons
66	Rating / exclude wagons
67	Abort Format change, format change cancellation
68	Mobile head and plug position display
69	The dynamic field suggests the steps and the operations to be carried out
70	State of operations

1.8. Automatic cycle description

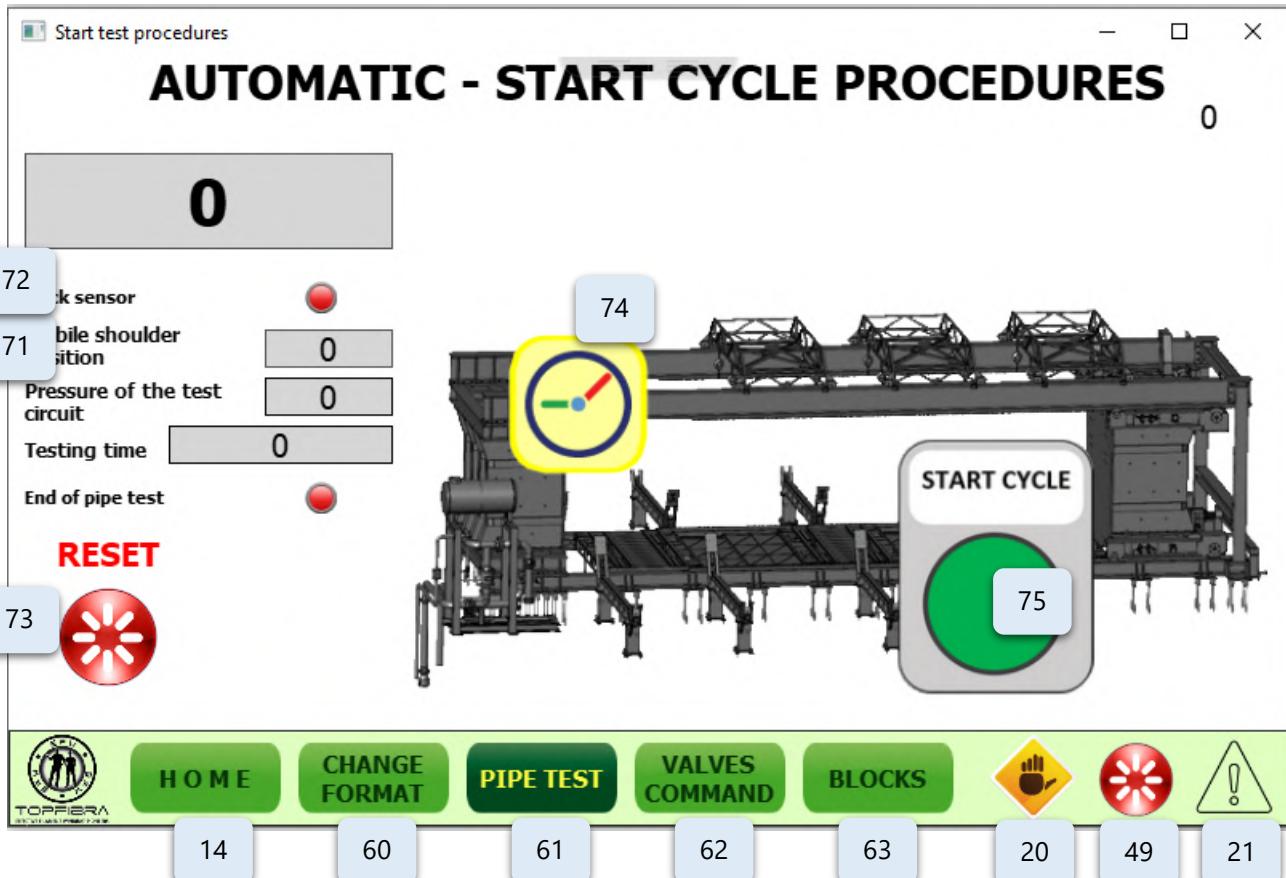


Figure 14

Ref.	Description
14	Activate the HOME page
20	Displays the status of the machine
21	Alarm alert present and activate the alarm page
49	Alarm reset
60	Activate the current page format change
61	Activate the pipe testing page
62	Activate the valve command page
63	Activate the blocks page
71	Mobile shoulder position
72	Control sensor of rack tooth
73	Reset/abort cycles
74	The dynamic image indicates the operations to be performed
75	The dynamic image indicates the operations to be performed

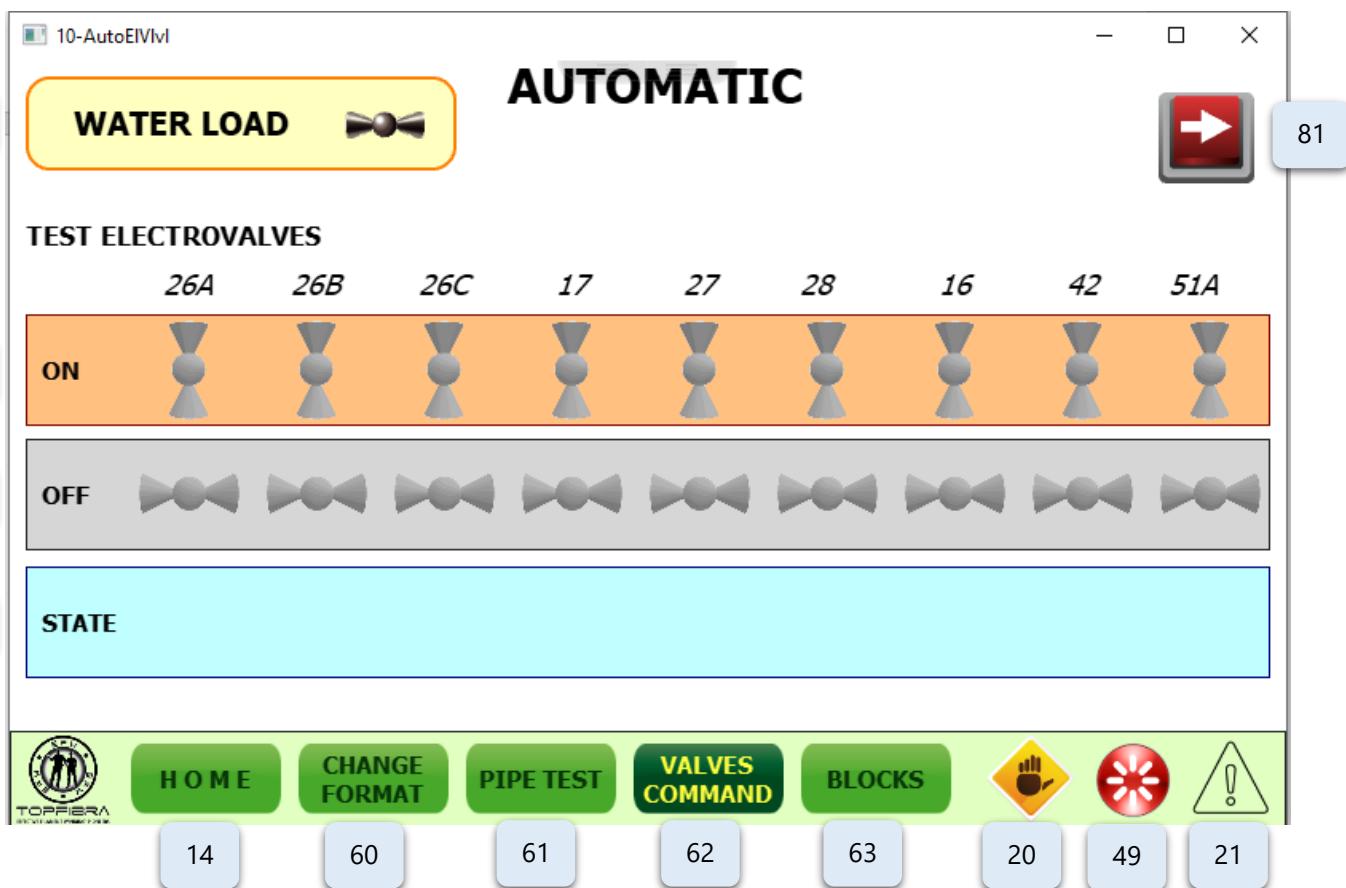


Figure 15

Ref.	Description
14	Activate the HOME page
20	Displays the status of the machine
21	Alarm alert present and activate the alarm page
49	Alarm reset
60	Activate the current format change page
61	Activate the test page
62	Activate the valve command page
63	Activate the blocks page
77	Enable the tank water load in manual
78	ON control for valve opening
79	OFF control for closing valve
80	Displays the status of the valve
81	Switch to the display of the pumps control page

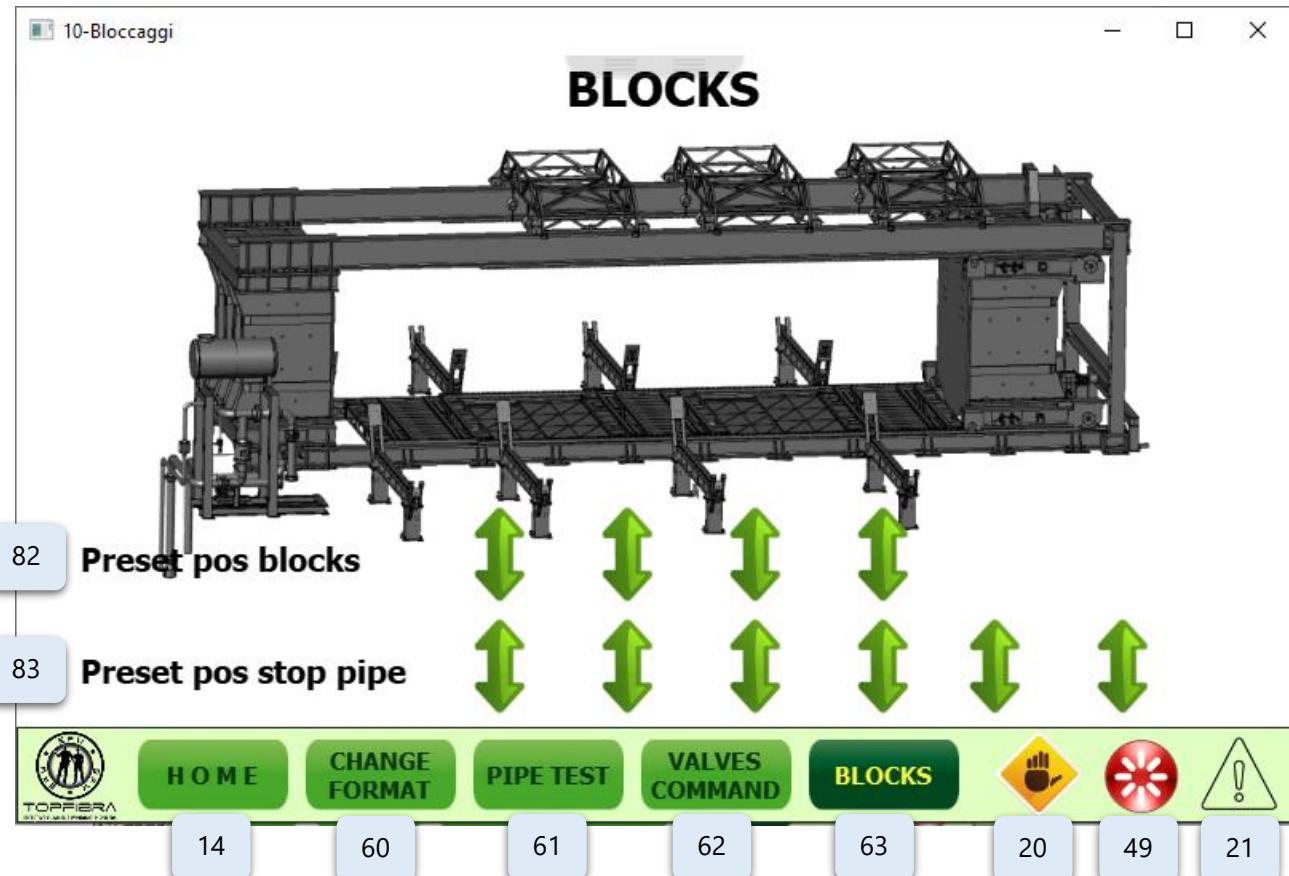


Figure 16

Ref.	Description
14	Activate the HOME page
20	Displays the status of the machine
21	Alarm alert present and activate the alarm page
49	Alarm reset
60	Activate the format and change the current page
61	Activate the test page
62	Activate the valve command page
63	Activate the block page
82	Pre-set of locking position
83	Pre-set of the stop workpiece position

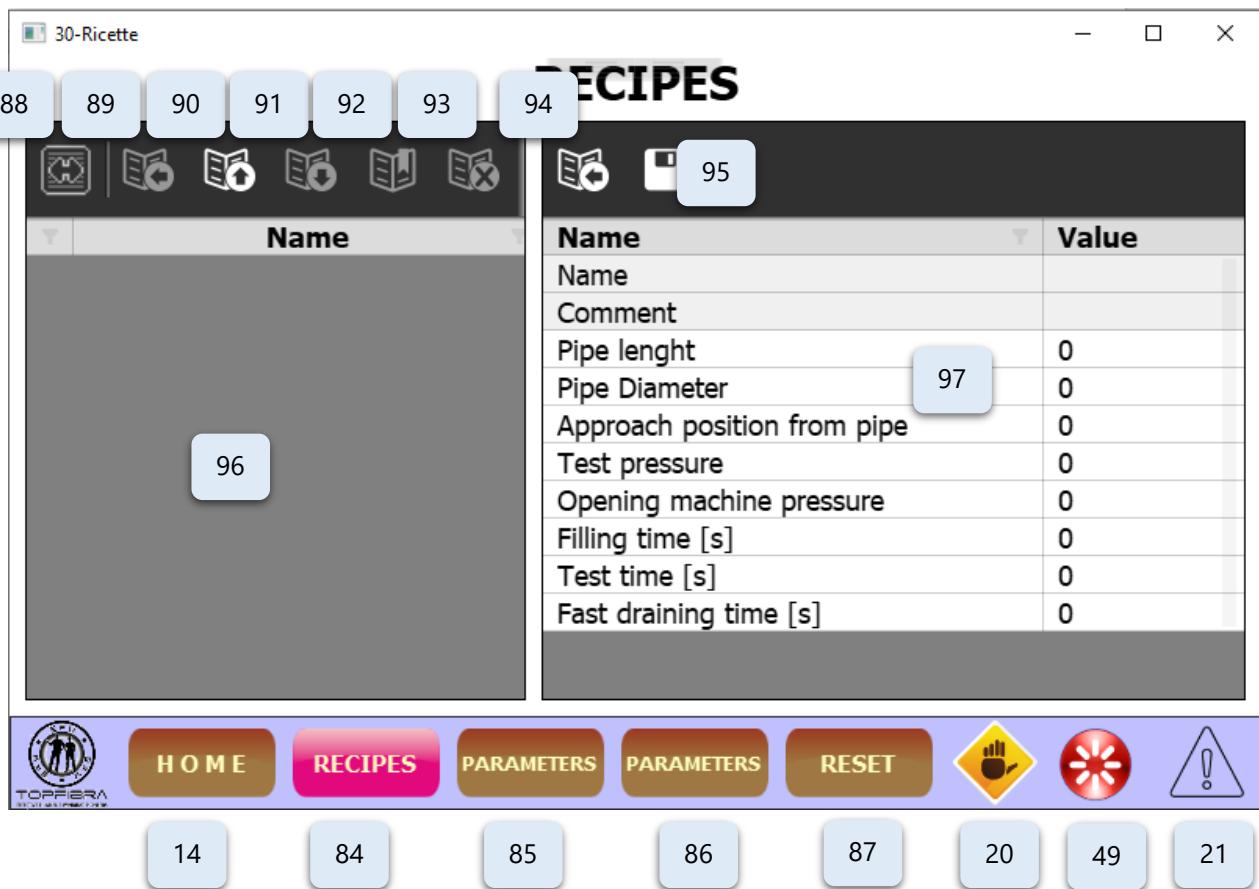


Figure 17

Ref.	Description
14	Activate the HOME page
20	Displays machine status: manual or automatic mode
21	Activate the alarm page and view the alarms
49	Alarm reset
84	Activate the current recipes page
85	Activate the parameters on page 1
86	Activate the parameters on page 2
87	Activate the reset page
88	Inactive button
89	View the contents of the recipe
90	Load the recipe from PLC
91	Send the recipe to the PLC
92	Rename Recipe
93	Delete recipe
94	Transfer recipe to 96 viewing window
95	Save the recipe
96	View the list of recipes
97	View the contents of the recipe

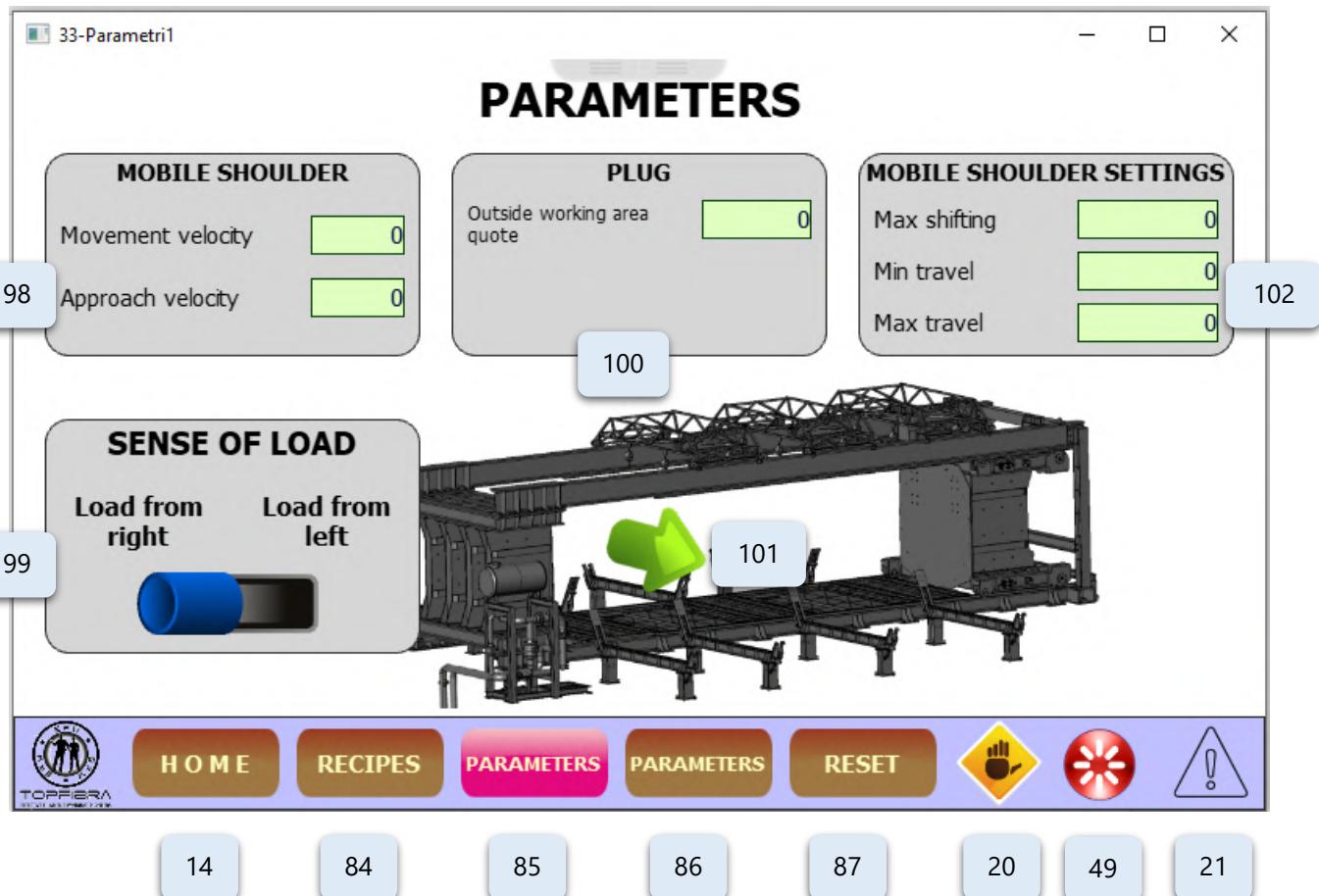


Figure 18

Ref.	Description
14	Activate the HOME page
20	Displays machine status: manual or automatic mode
21	Activate the alarm page and view the alarms
49	Alarm reset
84	Activate the current recipes page
85	Activate the parameters on page 1
86	Activate the parameters on page 2
87	Activate the reset page
98	Set movement speed and feed speed
99	Reverses the sense of load
100	Set the outside the of working area position of the mobile shoulder plug
101	Machine visualization
102	Set up of mobile shoulder parameters

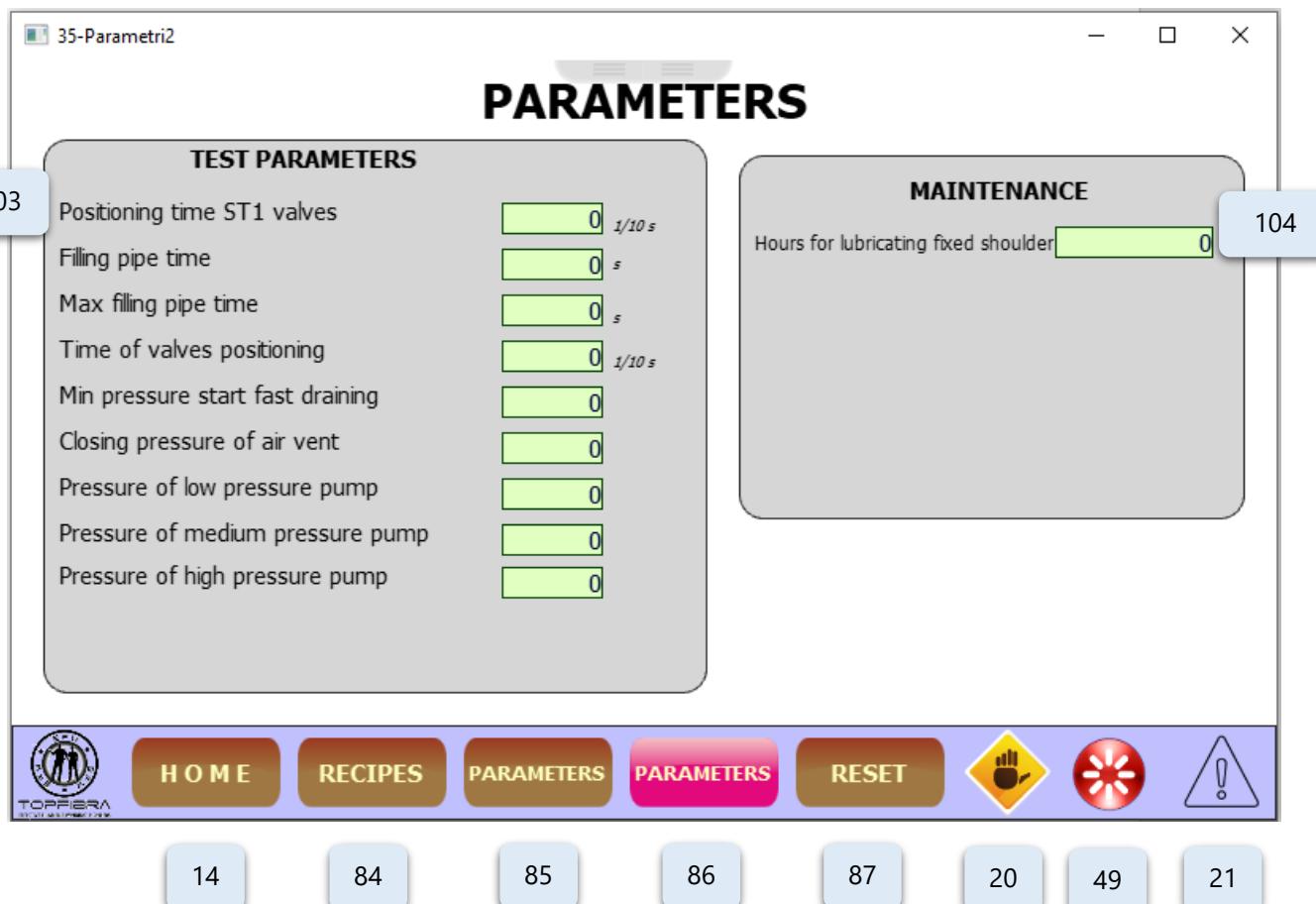


Figure 19

Ref.	Description
14	Activate the HOME page
20	Displays machine status: manual or automatic mode
21	Activate the alarm page and view the alarms
49	Alarm reset
84	Activate the current recipes page
85	Activate the parameters on page 1
86	Activate the parameters on page 2
87	Activate the reset page
103	Set the test parameters
104	Set the parameters of maintenance

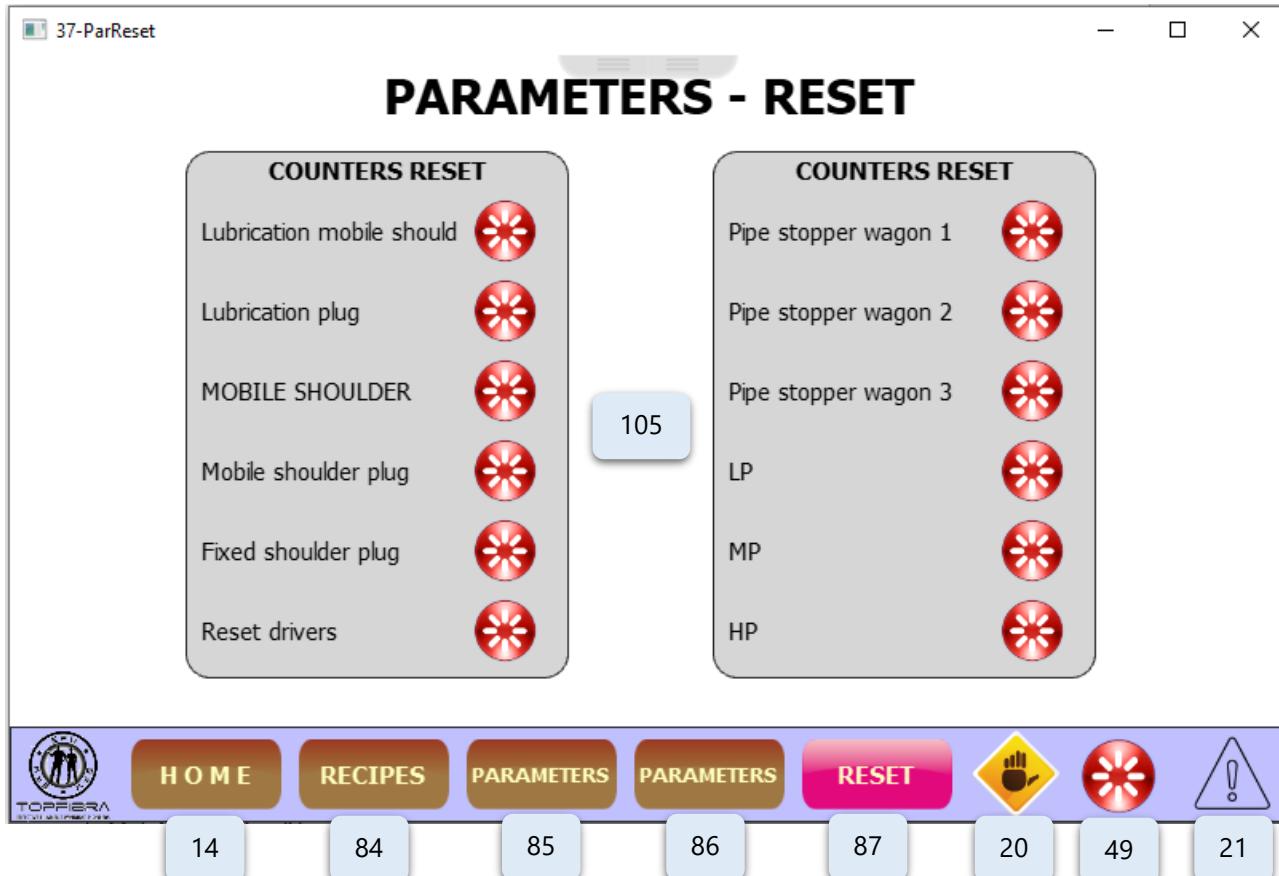


Figure 20

Ref.	Description
14	Activate the HOME page
20	Displays machine status: manual or automatic mode
21	Activate the alarm page and view the alarms
49	Alarm reset
84	Activate the current recipes page
85	Activate the parameters on page 1
86	Activate the parameters on page 2
87	Activate the reset page
105	Reset buttons errors or cycles

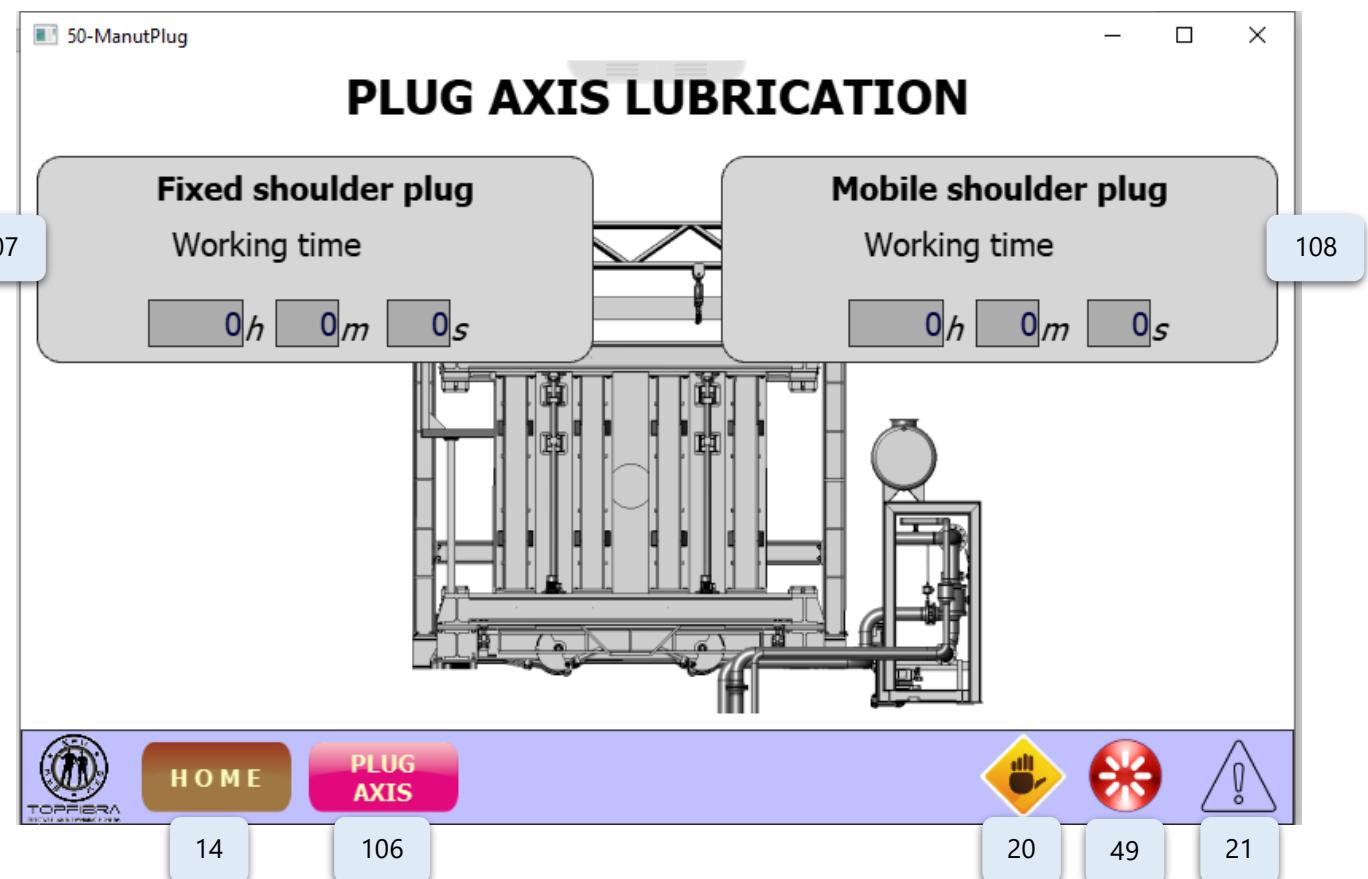


Figure 21

Ref.	Description
14	Activate the HOME page
20	Displays machine status: manual or automatic mode
21	Displays alarms and activates the alarms display page
49	Alarm reset
106	Active plug page
107	Set guide lubrication frequency for plug table of fixed shoulder, based on hours of work
108	Set guide lubrication frequency for the plug table of the mobile shoulder, based on hours of work

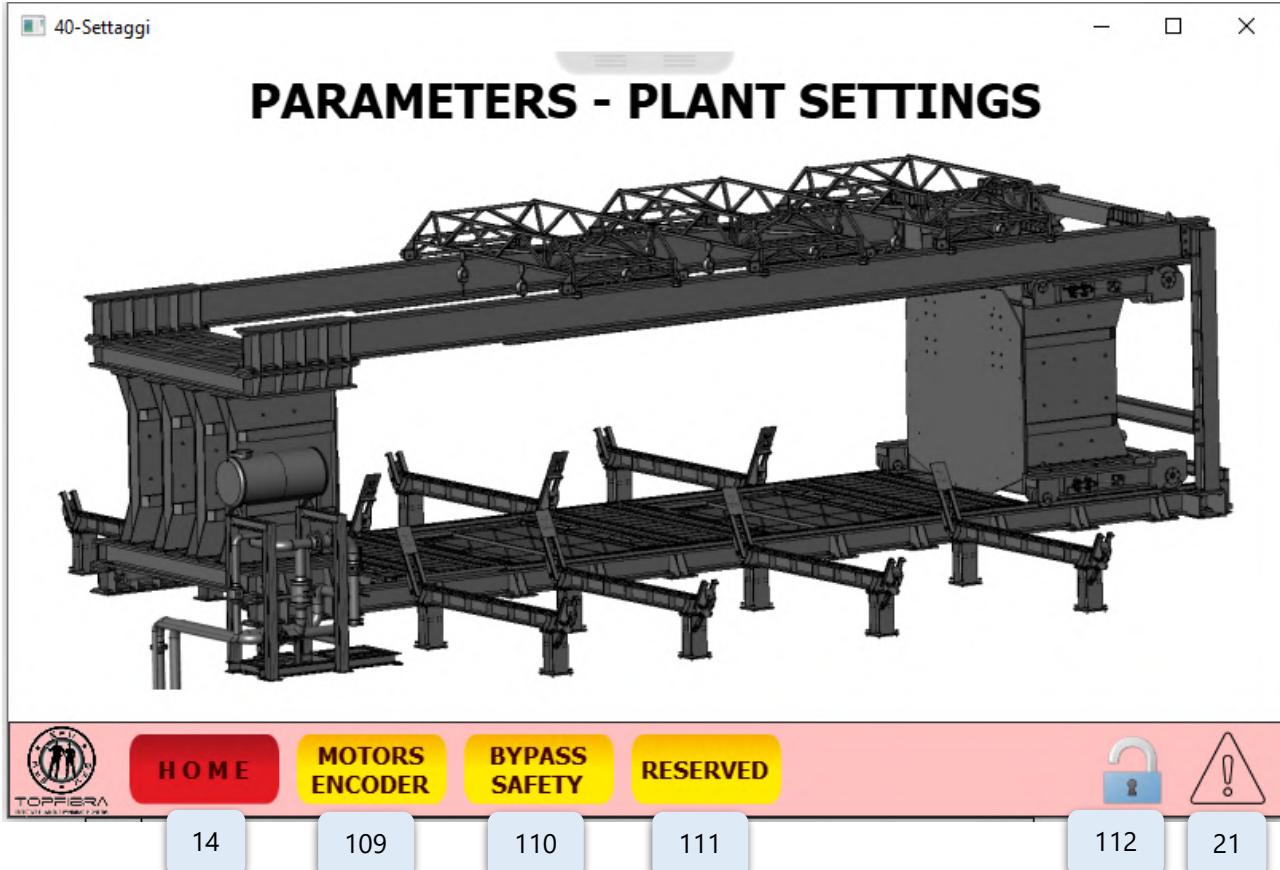


Figure 22

Ref.	Description
14	Activate the HOME page
21	Activate the alarm page and view the alarms
109	Activate the encoder page
110	Activate the safeties exclusion page
111	Activate the page reserved for the technician
112	Unlock the protected pages

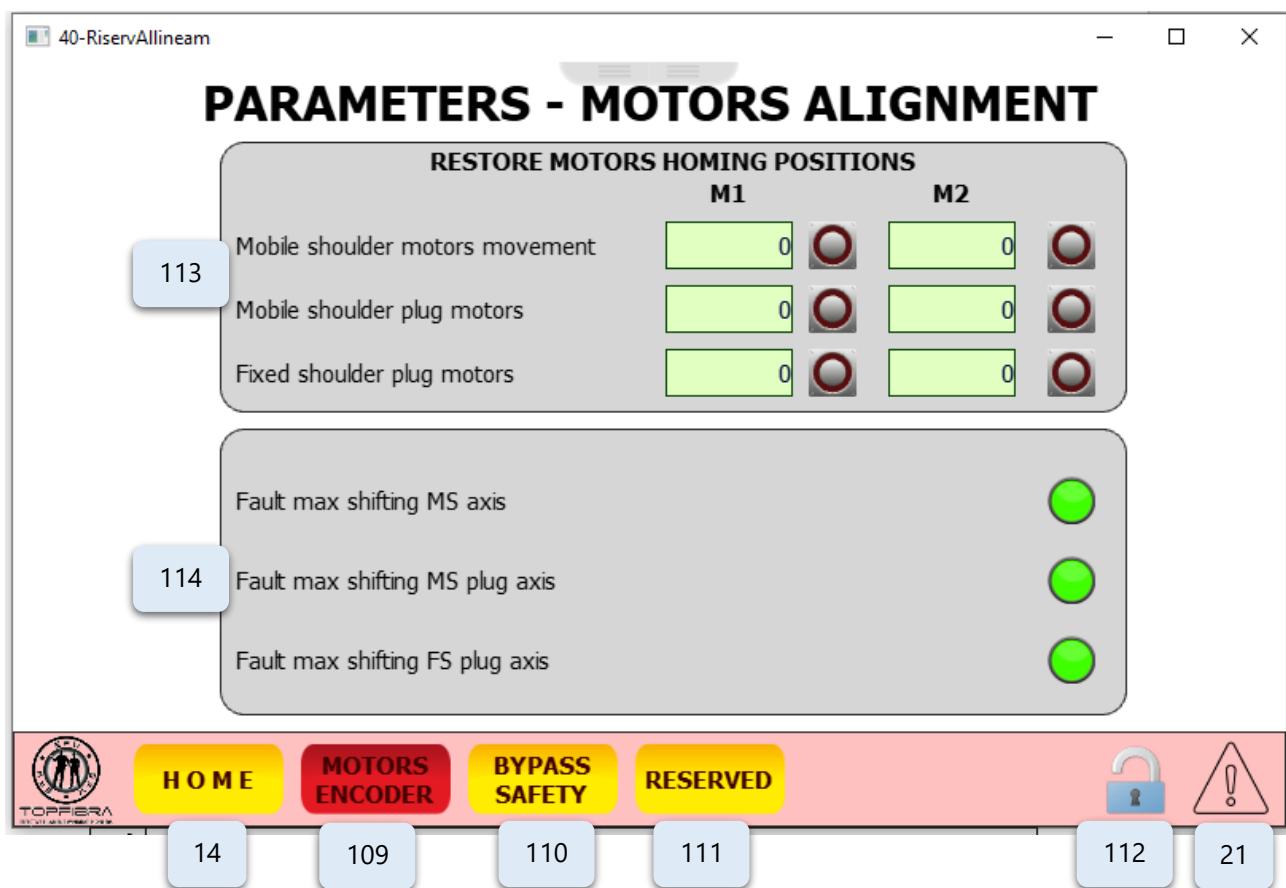


Figure 23

Ref.	Description
14	Activate the HOME page
21	Activate the alarm page and view the alarms
109	Activate the encoder page
110	Activate the safeties exclusion page
111	Activate the page reserved for the technician
112	Unlock the protected pages
113	Displays the position of the individual axes
114	Displays offset alarm status between motors

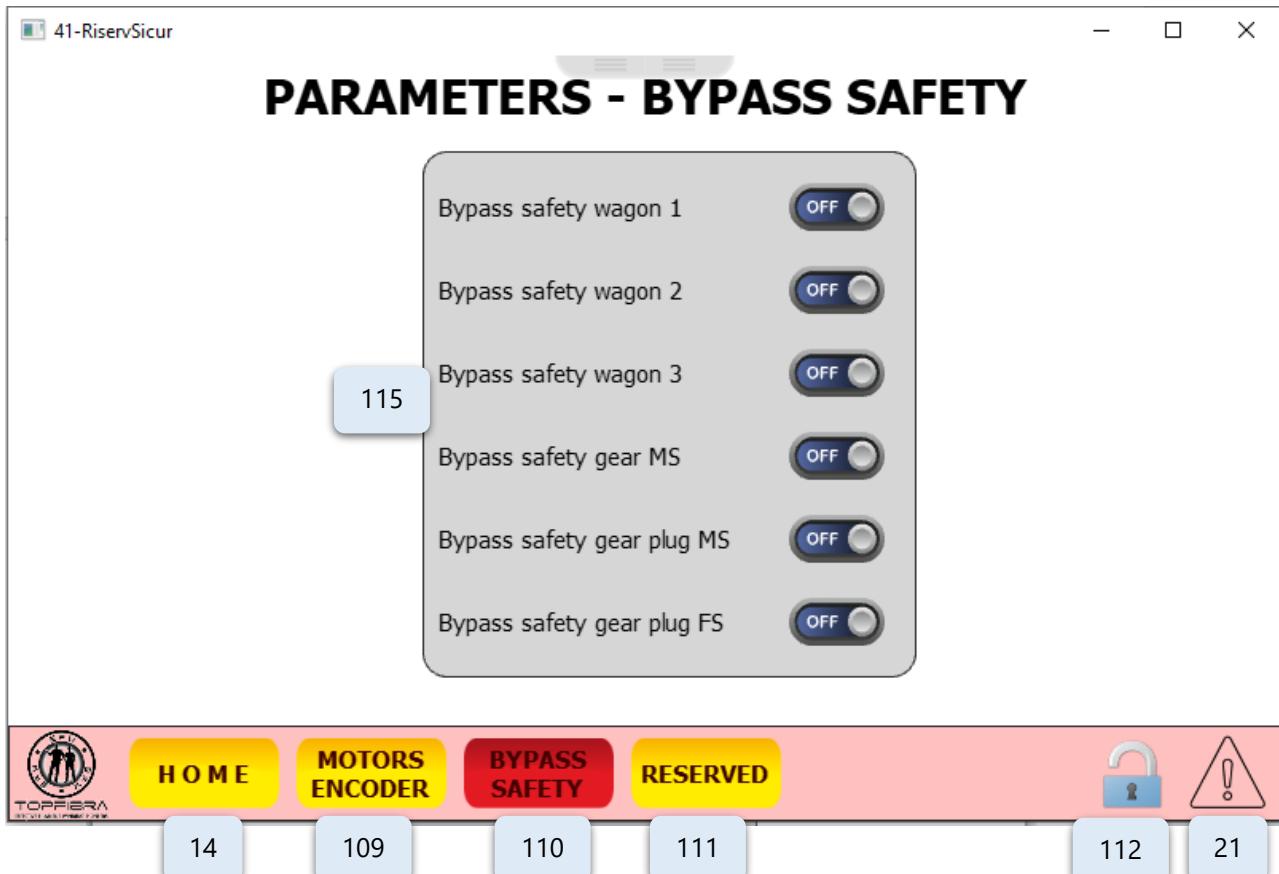


Figure 24

Ref.	Description
14	Activate the HOME page
21	Activate the alarm page and view the alarms
109	Activate the encoder page
110	Activate the safeties exclusion page
111	Activate the page reserved for the technician
112	Unlock the protected pages
115	Bypass of the machine safety

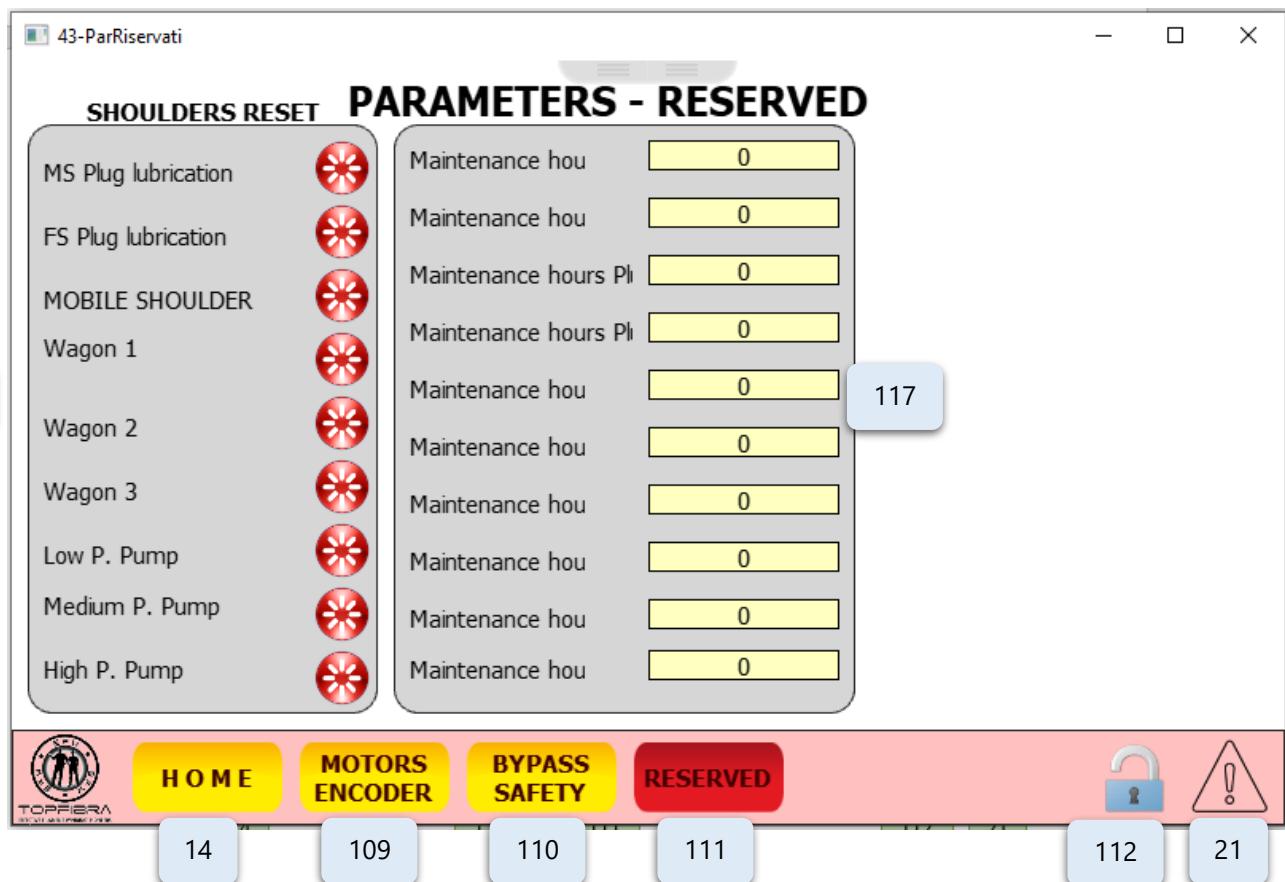


Figure 25

Ref.	Description
14	Activate the HOME page
21	Activate the alarm page and view the alarms
109	Activate the encoder page
110	Activate the safeties exclusion page
111	Activate the page reserved for the technician
112	Unlock the protected pages
116	Reset of single functions
117	Hours after which maintenance should be performed

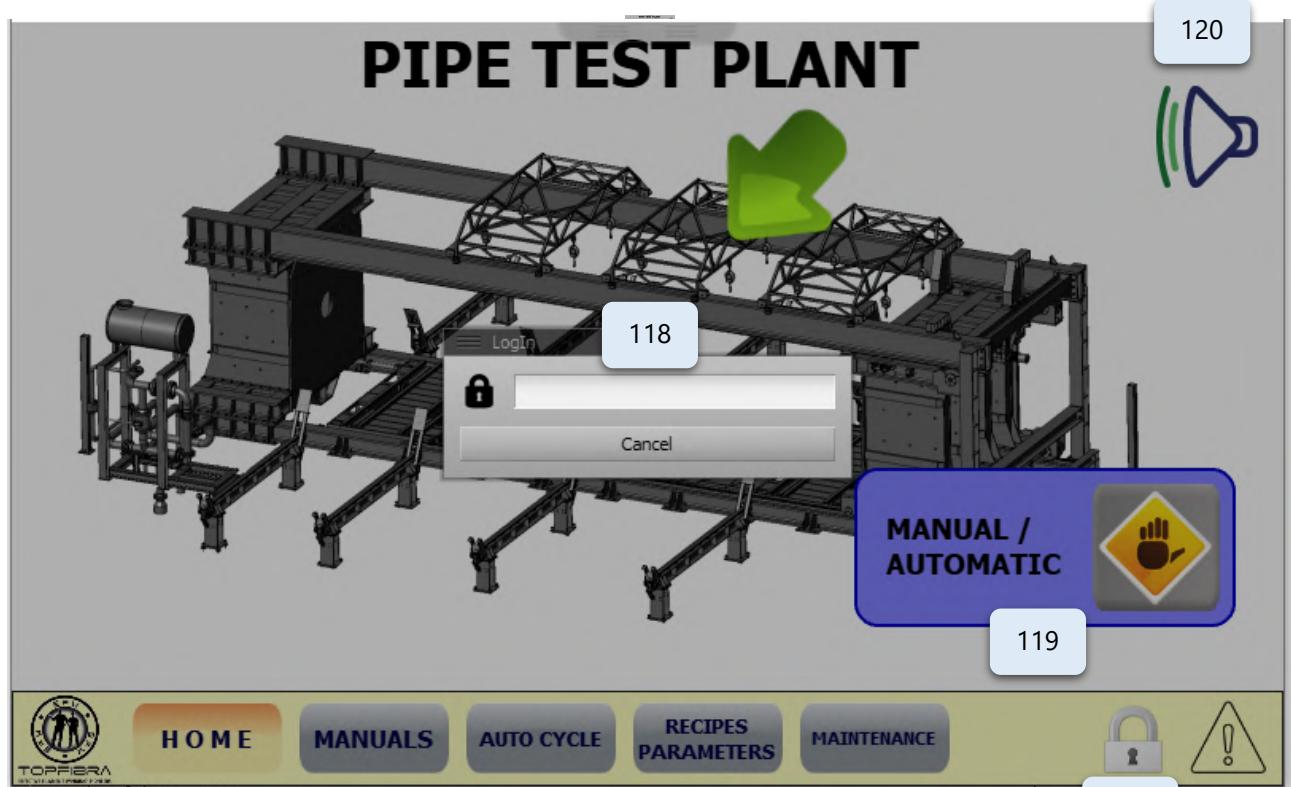


Figure 26

Ref.	Description
118	Password input area, called up by pushing the key lock button (112)
119	Select the manual or automatic mode
120	Alarm silencer
112	Unlock the protected pages

2. OPERATING SEQUENCES

Check for a recipe in the machine. If there is no recipe, or if the loaded one does not match the pipe you are testing, you should proceed as indicated below to load the proper recipe.

If there are no recipes already completed, the procedure involves the realization of a new recipe.

3. LANGUAGE SELECTION

Starting from the HOME page, select the Topfibra logo:

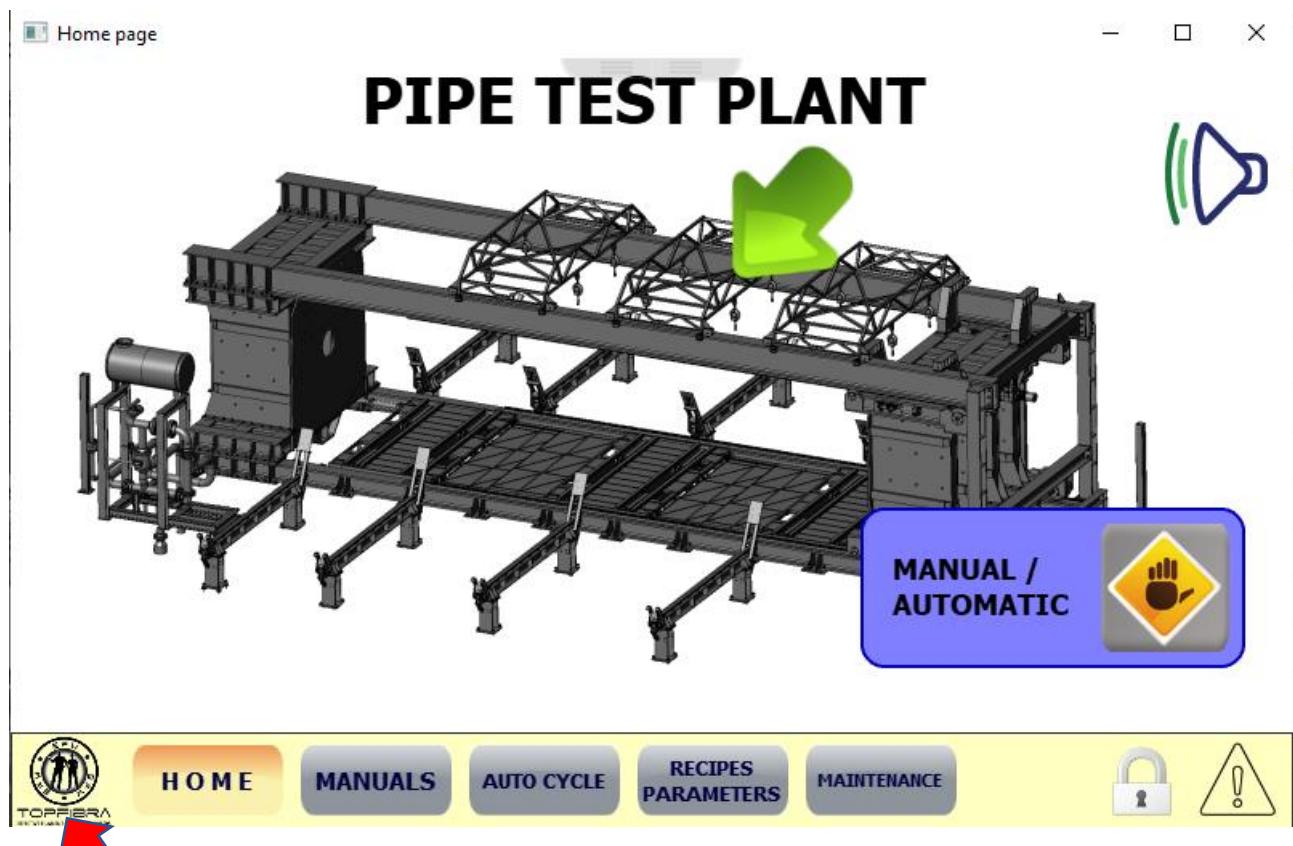


Figure 27

Clicking on the Topfiba logo activates the next page; press the flag of the language with which you want to work, with the touch panel.

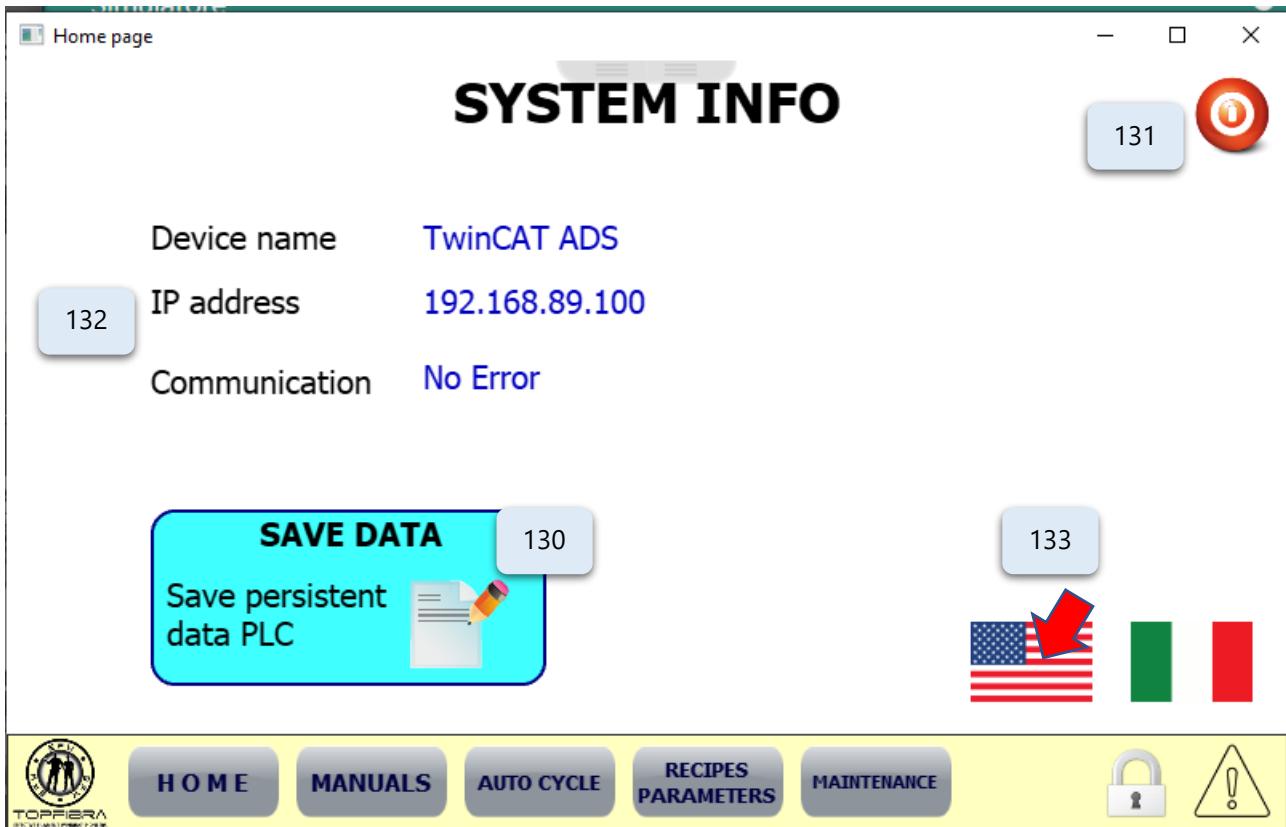


Figure 28

Ref.	Description
130	The data save button, must be pressed to save new parameters
131	Runtime exit
132	The IP address of the touch panel
133	Language selection

4. RECIPE

4.1. Creation of a new recipe

From the Home page press the "RECIPES PARAMETERS" button:

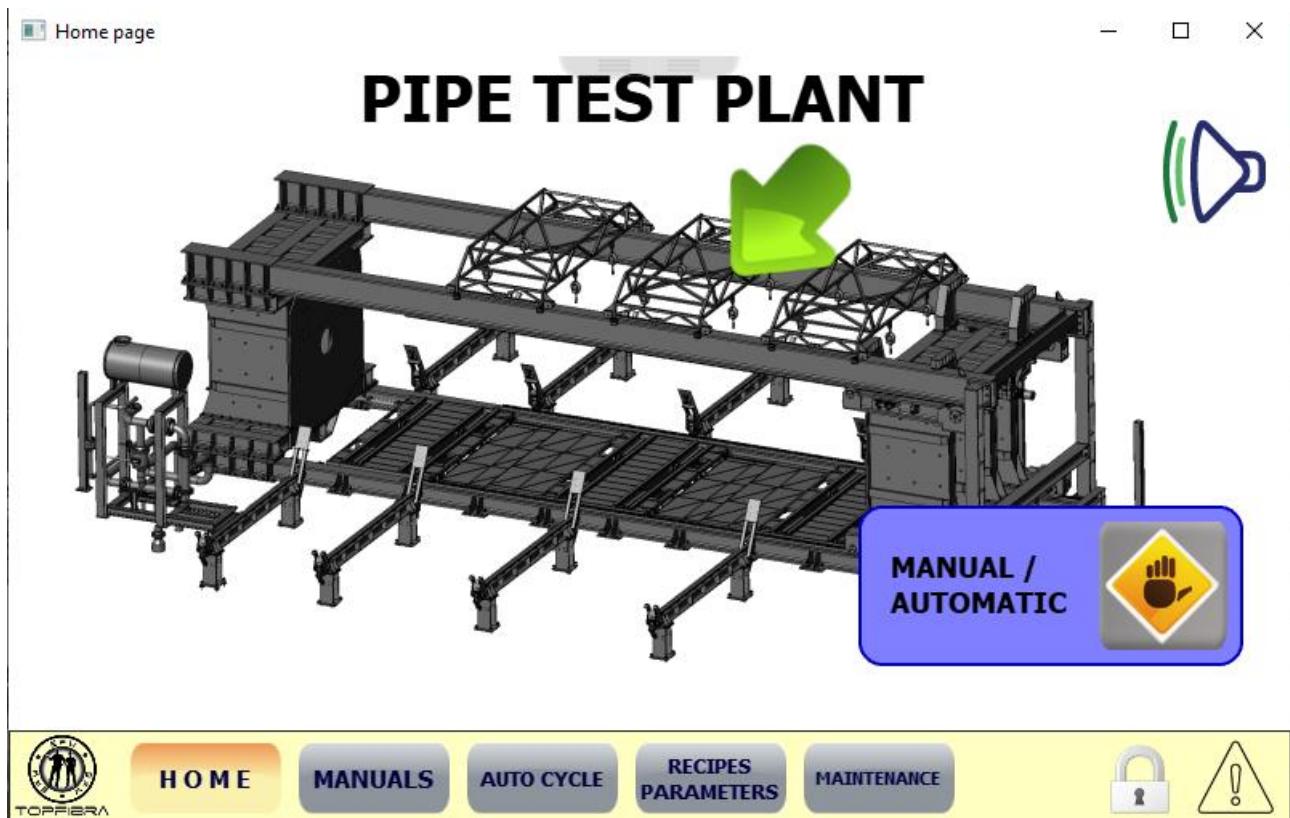


Figure 29



Figure 30

4.2. Select the recipe to use or write a new one

To recall an existing recipe, select the name "138", press the 139 button and send the data to the machine with the 140 button. Now the machine is ready to work.

4.3. Write a new recipe

Enter a name for the recipe.

Enter a comment or code.

Insert the pipe length in mm.

Insert the pipe diameter in mm.

Insert shoulder clearance during the opening, in mm.

Enter the distance of the shoulder during the opening, in mm.

Enter the test pressure value in the bar.

Insert the pressure with which you want to open the machine, cannot be greater than 1.

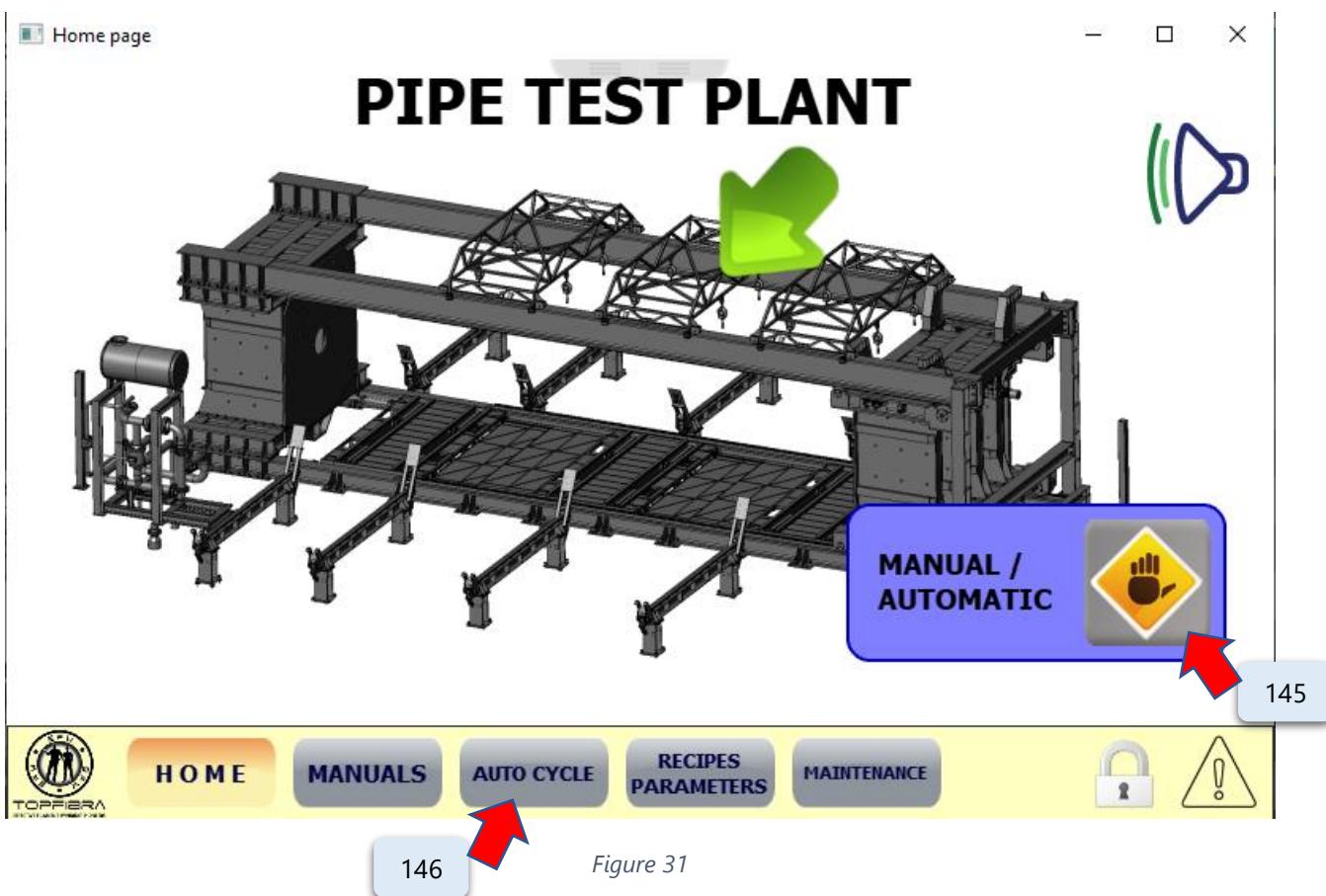
Maximum filling time in seconds (it must be a bigger number than the filling time required for the pipe).

Verification time in seconds: time to hold the test pressure.

Maximum time for pipe emptying: same value as filling time.

Save the recipe by pressing the 142 button and then proceed as per the previous step.

5. AUTOMATIC CYCLE MODE



Press button 145 to enter the automatic working cycle.

Then press the 146 "AUTO CYCLE" button and the next page will appear.

ATTENTION!

If you need to perform a format change or removal of the wagons, these operations are only possible in manual mode.

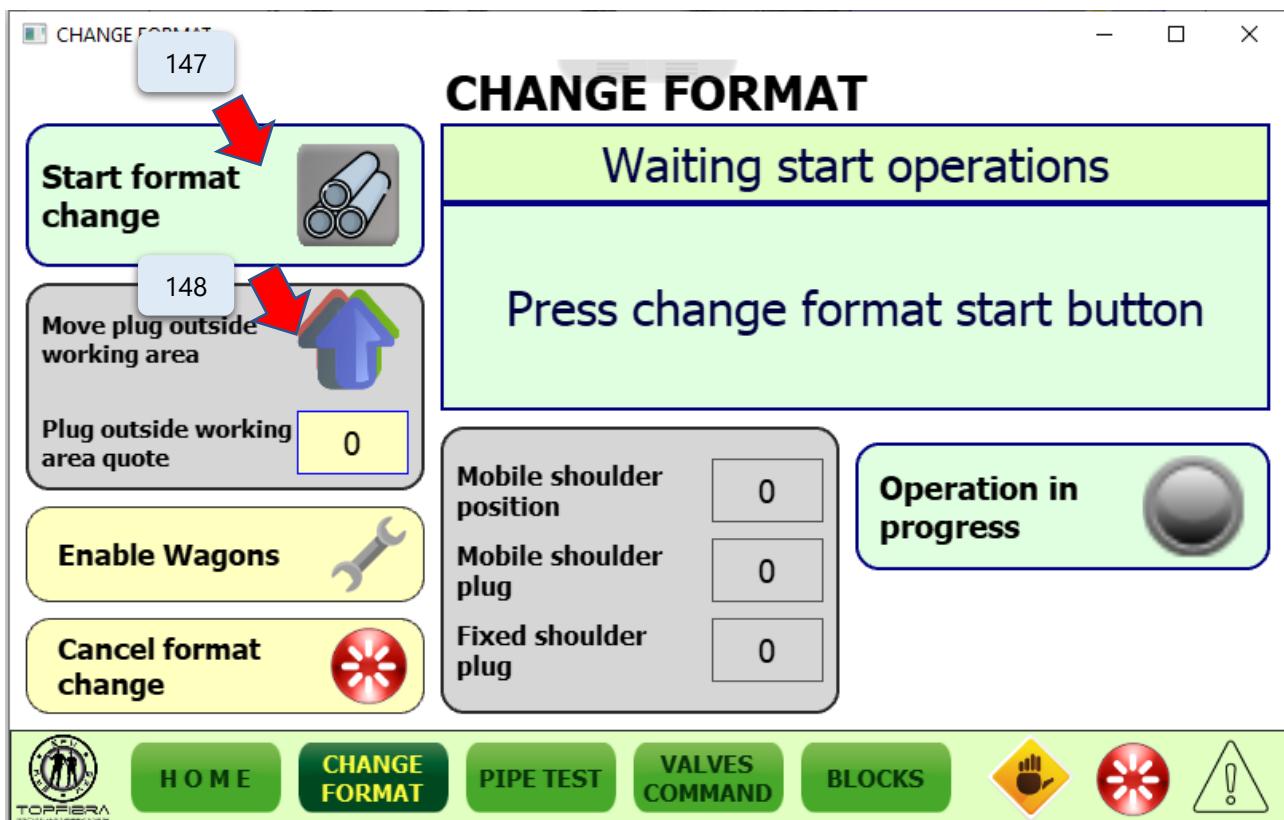


Figure 32

If a new recipe is called, it is essential to perform a format change before proceeding. Before making the format change check, evaluate how many wagons are needed, depending on the length of the pipe you intend to test. Then remove or enter the number of wagons needed.

This operation is facilitated by using the manual controls and by using the "out of working area" function (button 148) to lift the plug of the mobile shoulder, allowing the wagons to pass under the mobile shoulder.

Once the wagons have been removed, and if the electrical connections are not removed, proceed with the deactivation of the removed wagons, see the following image.

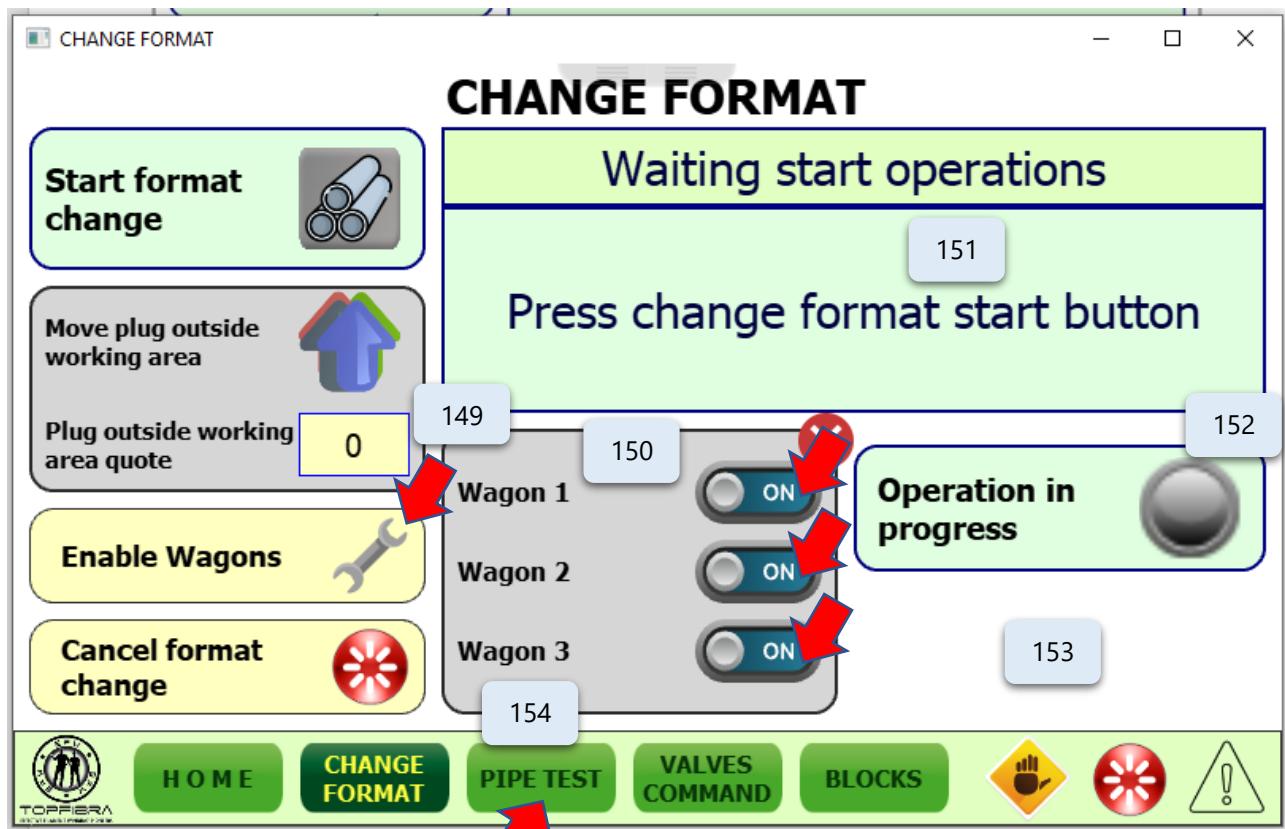


Figure 33

Press the 149 button and the 150 pop-up window will appear, then put the wagon that will not be used in OFF mode.

At this point you can change the format; then press the 147 button (see previous image).

The operations to be performed in window 151 will appear on the monitor; the required operations must be performed and then confirmed by pressing the 152 button. When the machine has completed the movements, a confirmation window will appear at position 153.

When you see the initial screen again, the one we see in the image, the format change is complete and you can proceed with the pipe load and the test cycle.

The machine has positioned the shoulder and is ready to start the sequence.

Then press the "Pipe Test" button, it will activate the page of the cycle we see below.

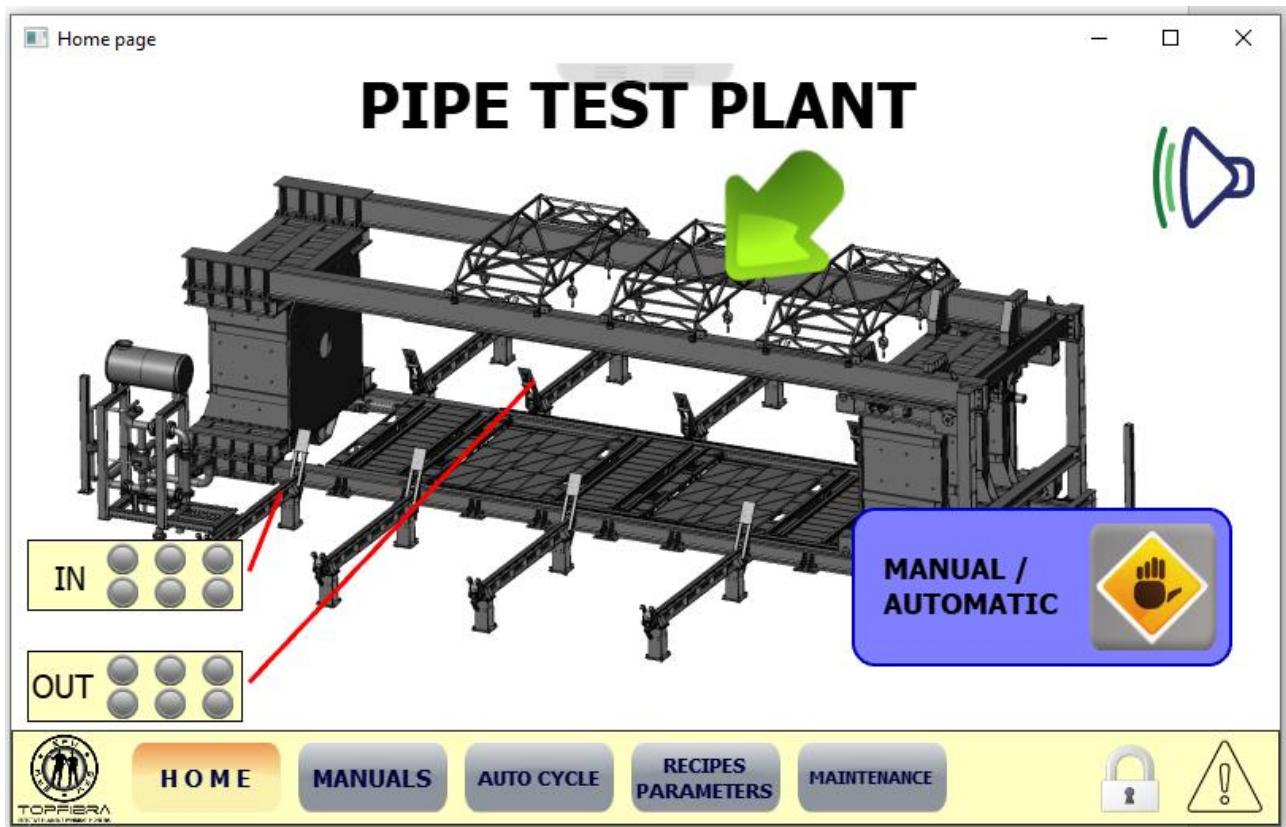


Figure 34

6. PROCEDURE FOR CREATING THE RECIPE WITH A POSSIBLE CHANGE IN DIAMETER

From the Home main page press the button "recipe parameters".

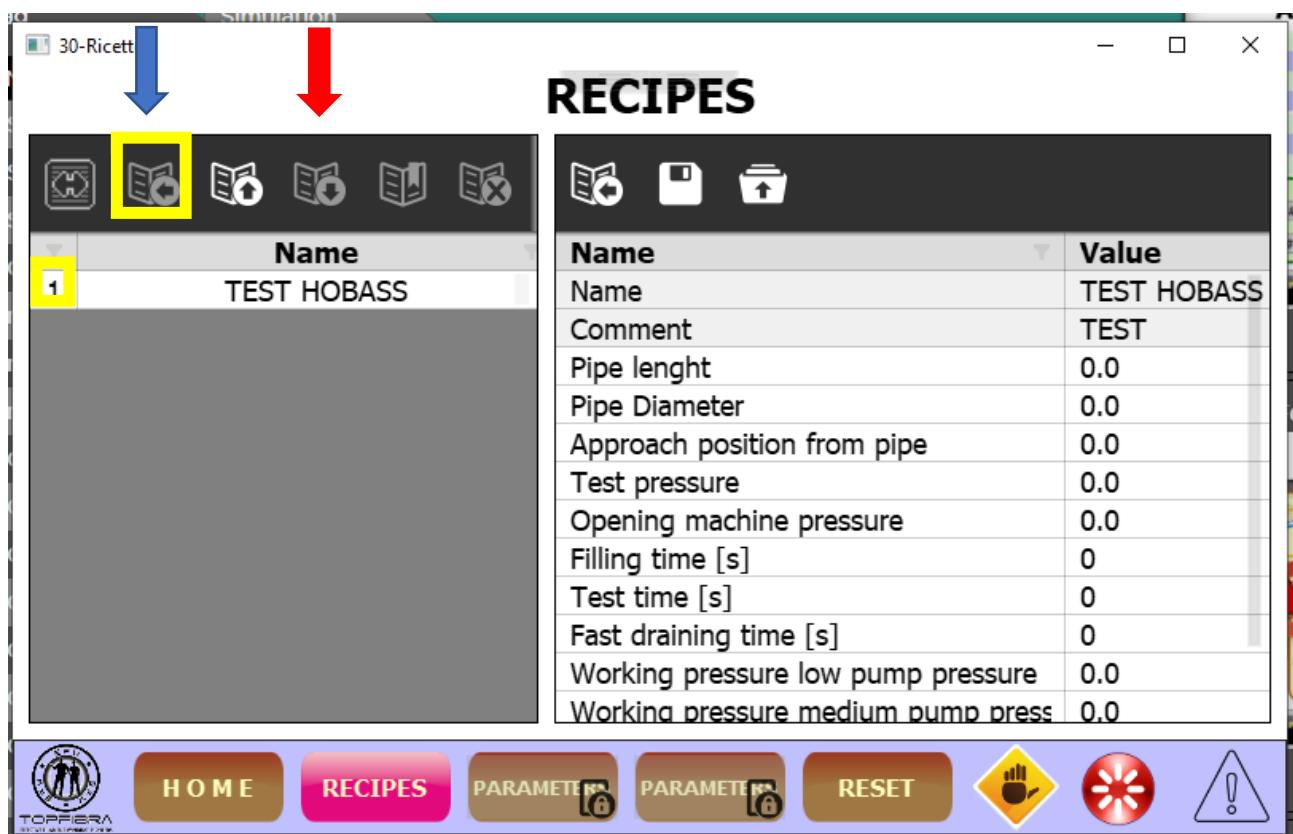


Figure 35

Select the recipe (see yellow marker), and send the recipe to the side table to check its contents (see blue arrow). If the content is OK, send it to the PLC with the SEND button (see red arrow).

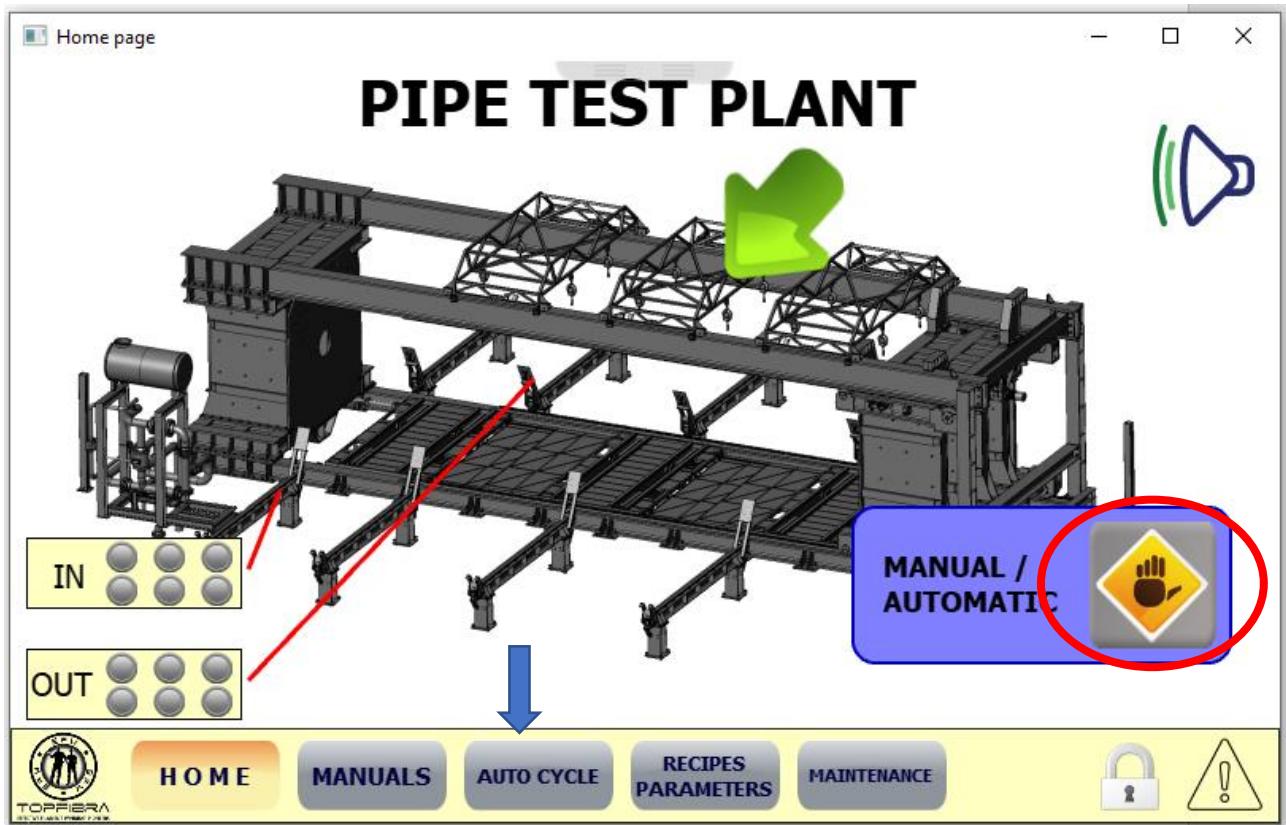


Figure 36

Now, from the home page, press the button "AUTOMATIC CYCLE" and put the machine in automatic mode (see red circle).

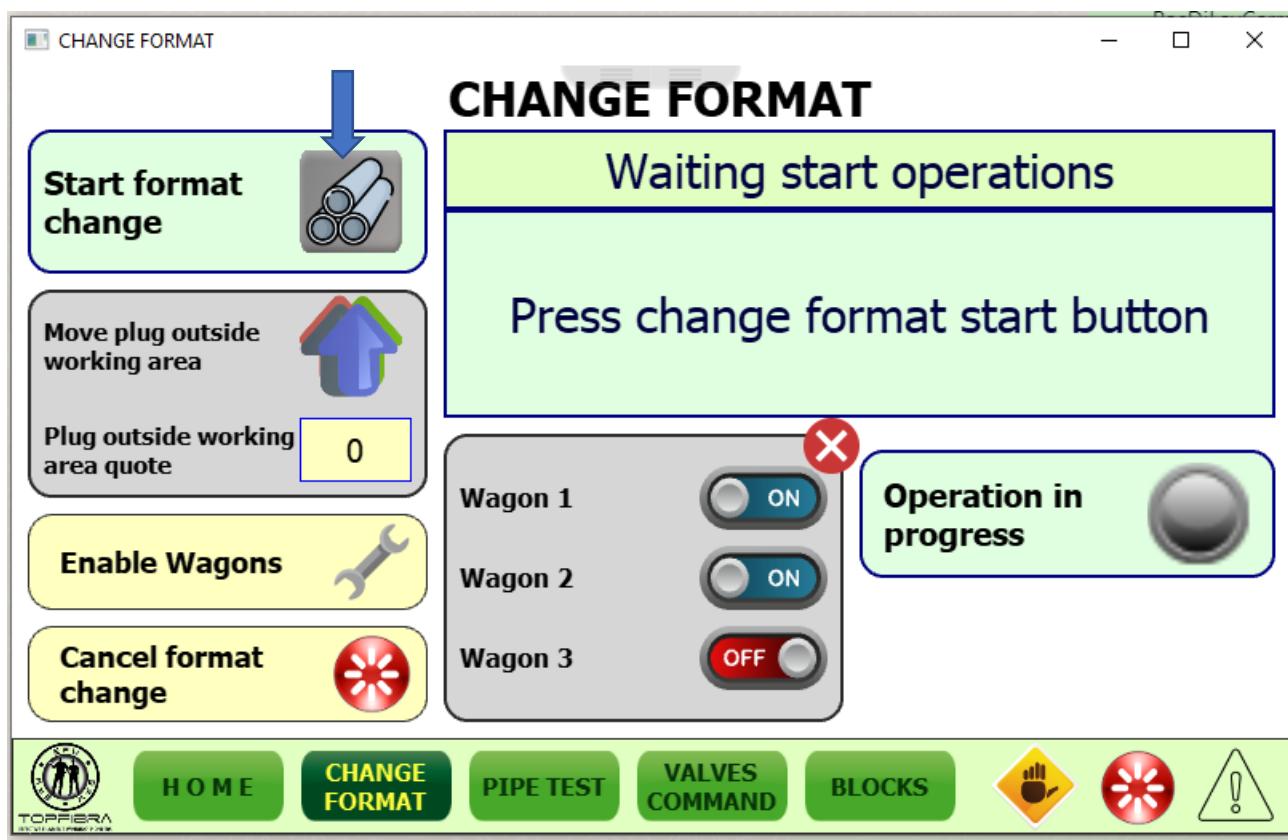


Figure 37

From the automatic page press the FORMAT CHANGE button and follow the wizard that appears on the side.

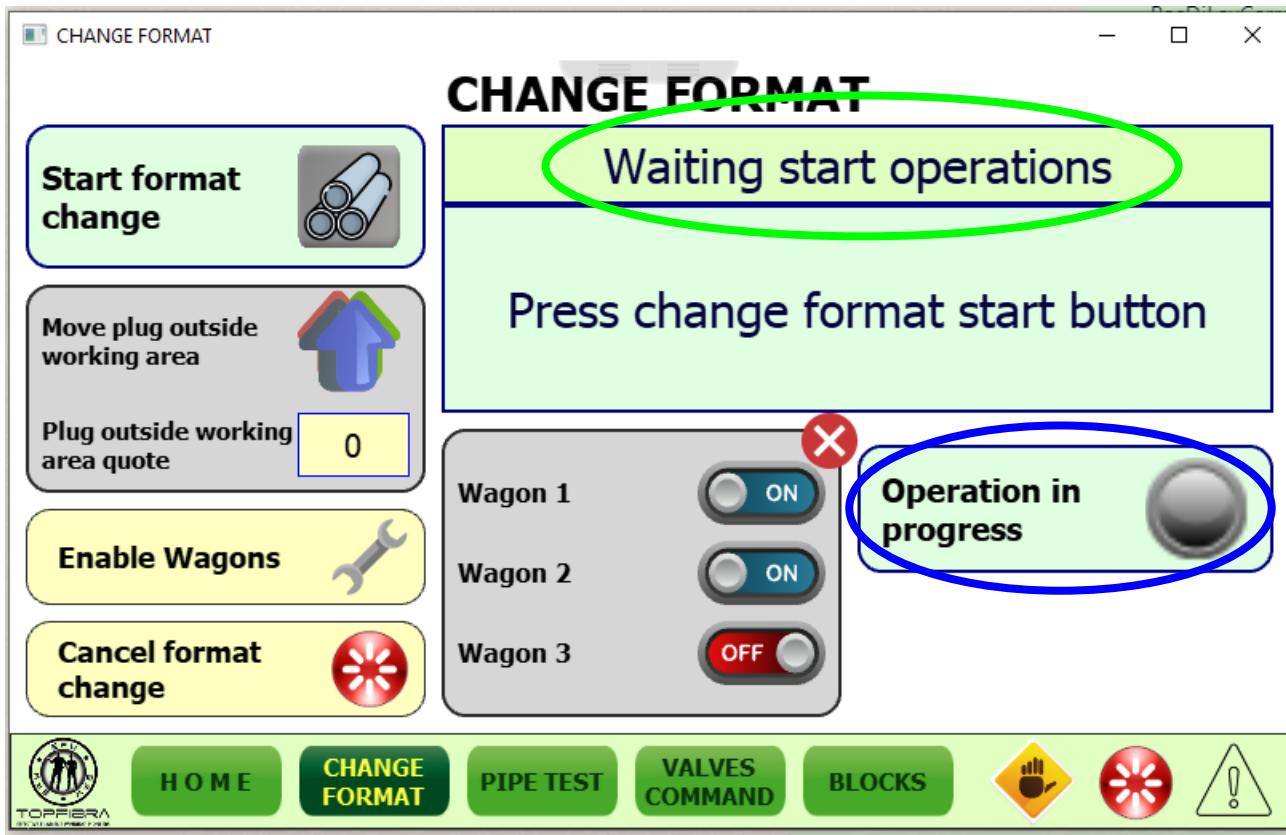


Figure 38

The green box contains the information to run, the blue box activates a button to confirm the execution of the required command. In the end, the home screen appears, like the one in the figure, which indicates the waiting for the start of operations.

Now the machine is in a position to run this new recipe.

At this point, if the recipe has never been executed, that is, it is the first time that it is activated, check the position of the pipe stoppers with a manual test.

Lift the outlet pipe stopper using the manual controls (see next screenshot).

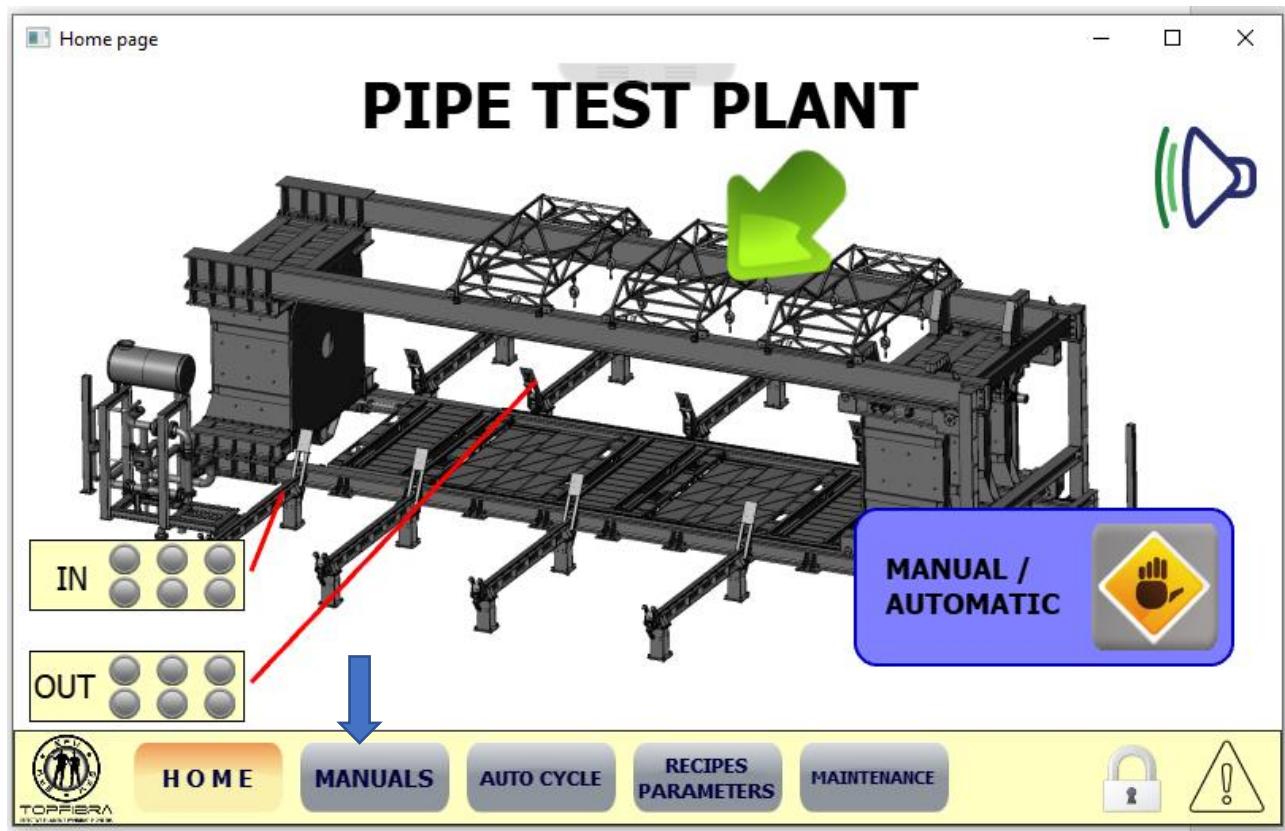


Figure 39

Return to the Home page, select the MANUAL key and the following window will appear, then press the WAGONS button (see blue arrow).

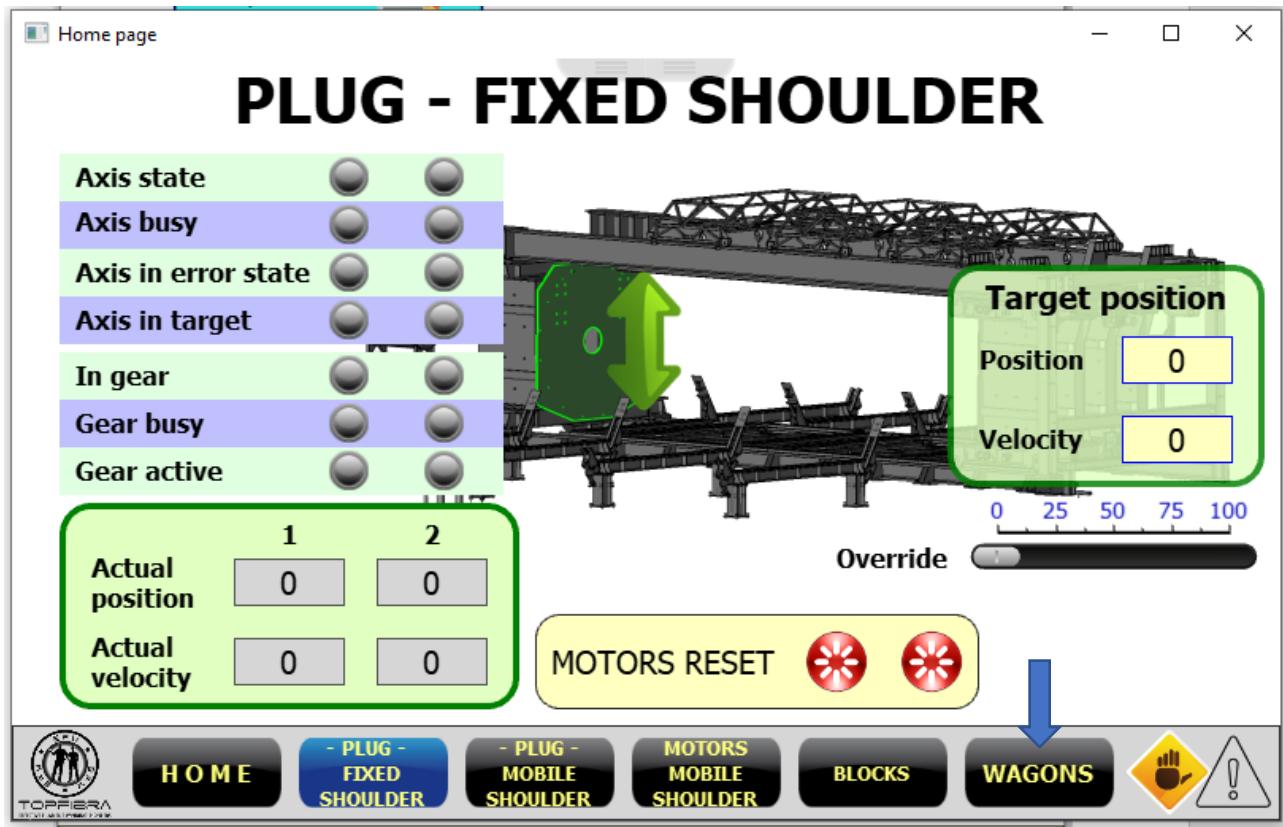


Figure 40

When you press the WAGONS button, the following screen shown below will appear, with all the manual controls of the wagons.

First, raise the outlet pipe stoppers only of wagon 1 (blue box), then insert the pipe to be tested, and raise the inlet pipe stopper (red box), being careful not to crush the pipe (pipe stoppers may suffer damages).

If with the levers completely in the high position the pipe is correctly positioned in the centre and does not strain, it means that the loaded recipe is correctly configured.

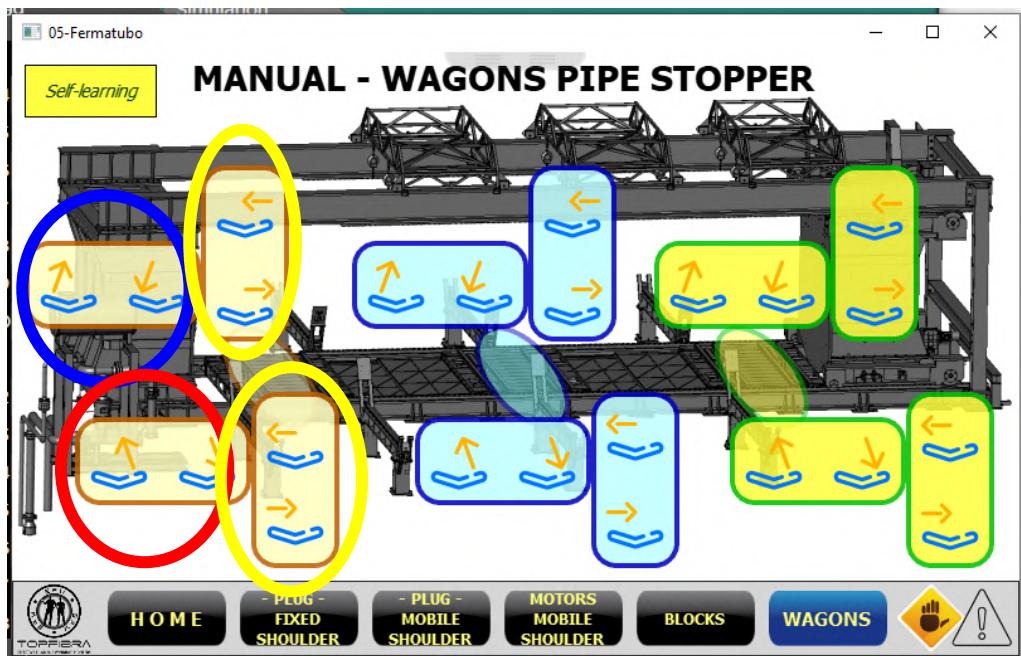


Figure 41

Otherwise, if the pipe is not correctly positioned, measure how much they need to move to be in the correct position. Lower the inlet pipe stops, pay attention that the pipe does not roll, lower also the outlet stops (see next screen, blue box).

When the stops are in a low position, move them to the position measured using the buttons in the red boxes.

Attention: balance the measurement a bit on each side.

Repeat the centring verification operation until the pipe is correctly centred.

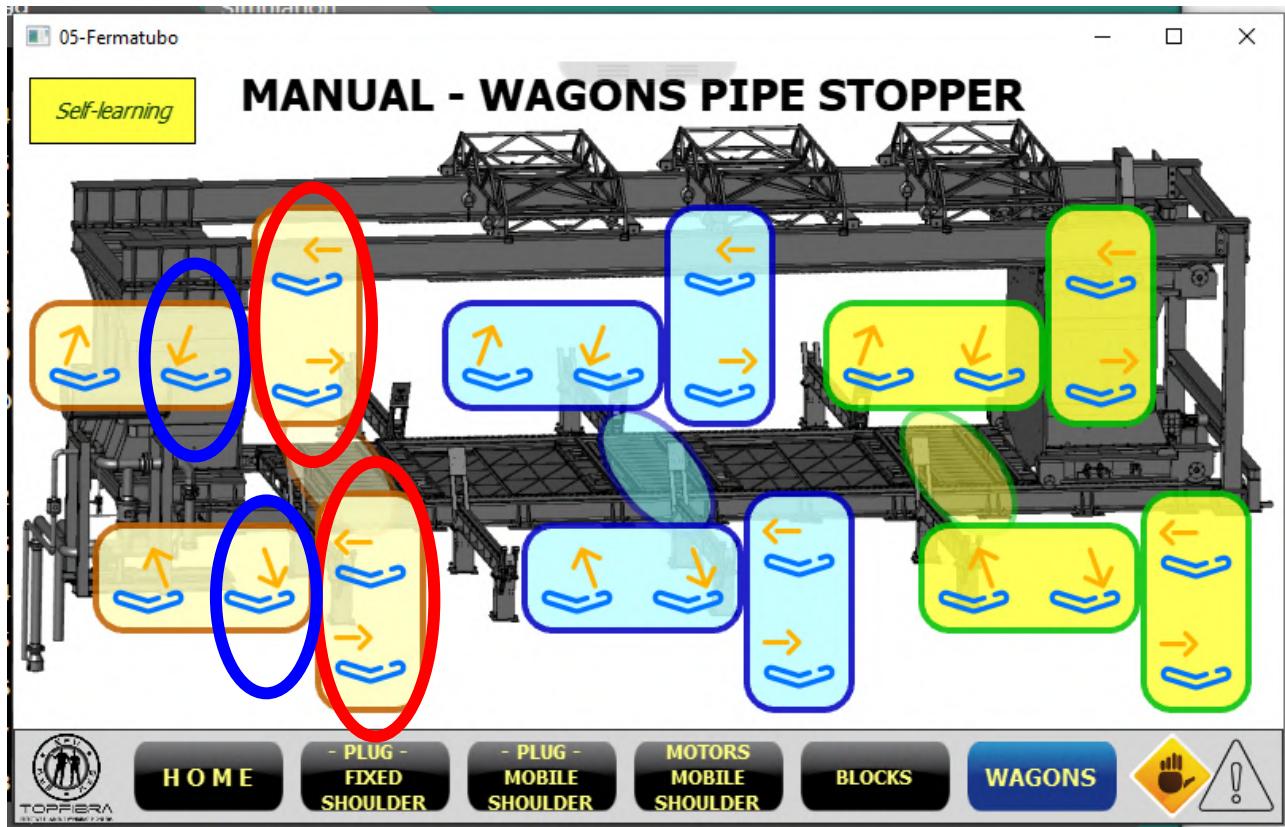


Figure 42

When the pipe is correctly centred, press the button in the blue box (see next screen). A pop-up window appears with the buttons necessary for self-learning the position. Activate the safety selector in the yellow box, then press the green box button, this way the correction position is learned. Close the pop-up window with the red X in the window.

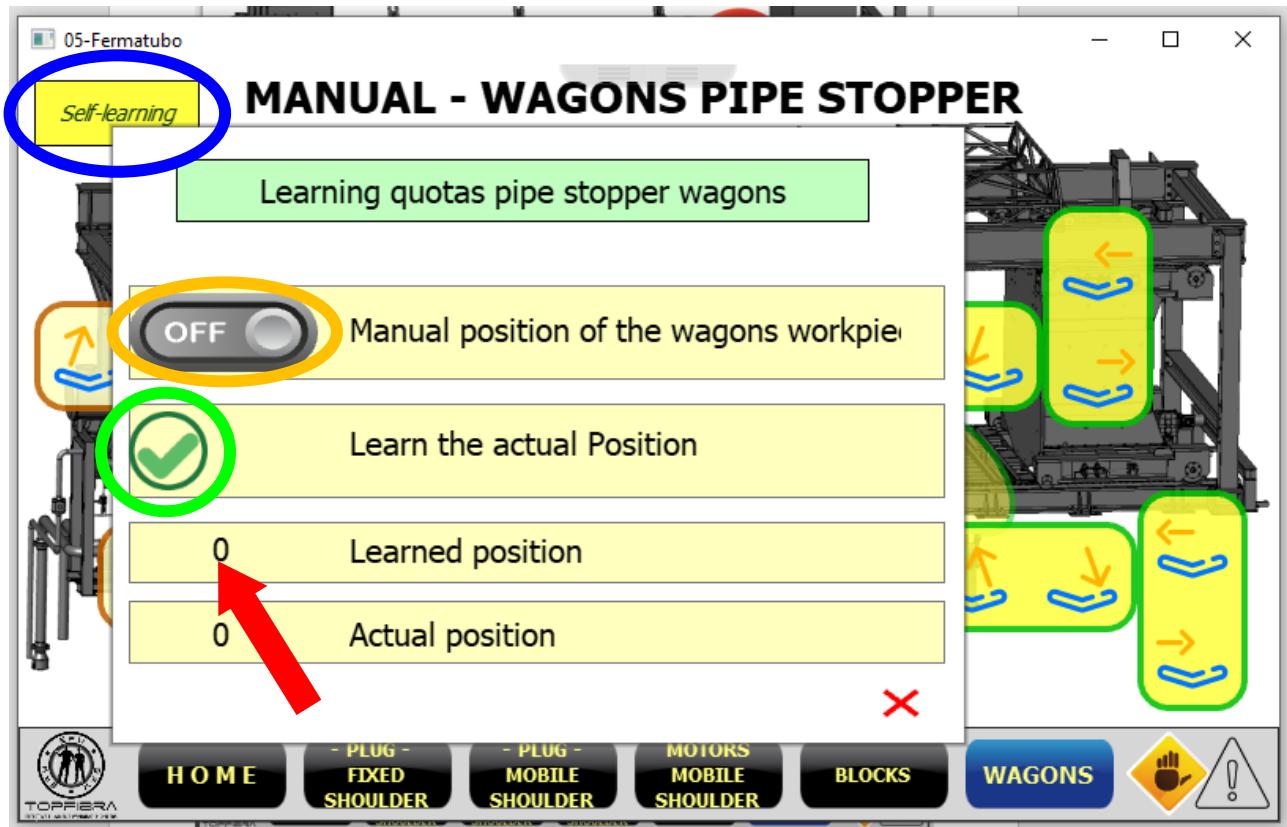


Figure 43

Now we must memorize this correction in the current recipe. Press the Home button again, from Homepage press Recipe and Parameters, and the following page will appear.

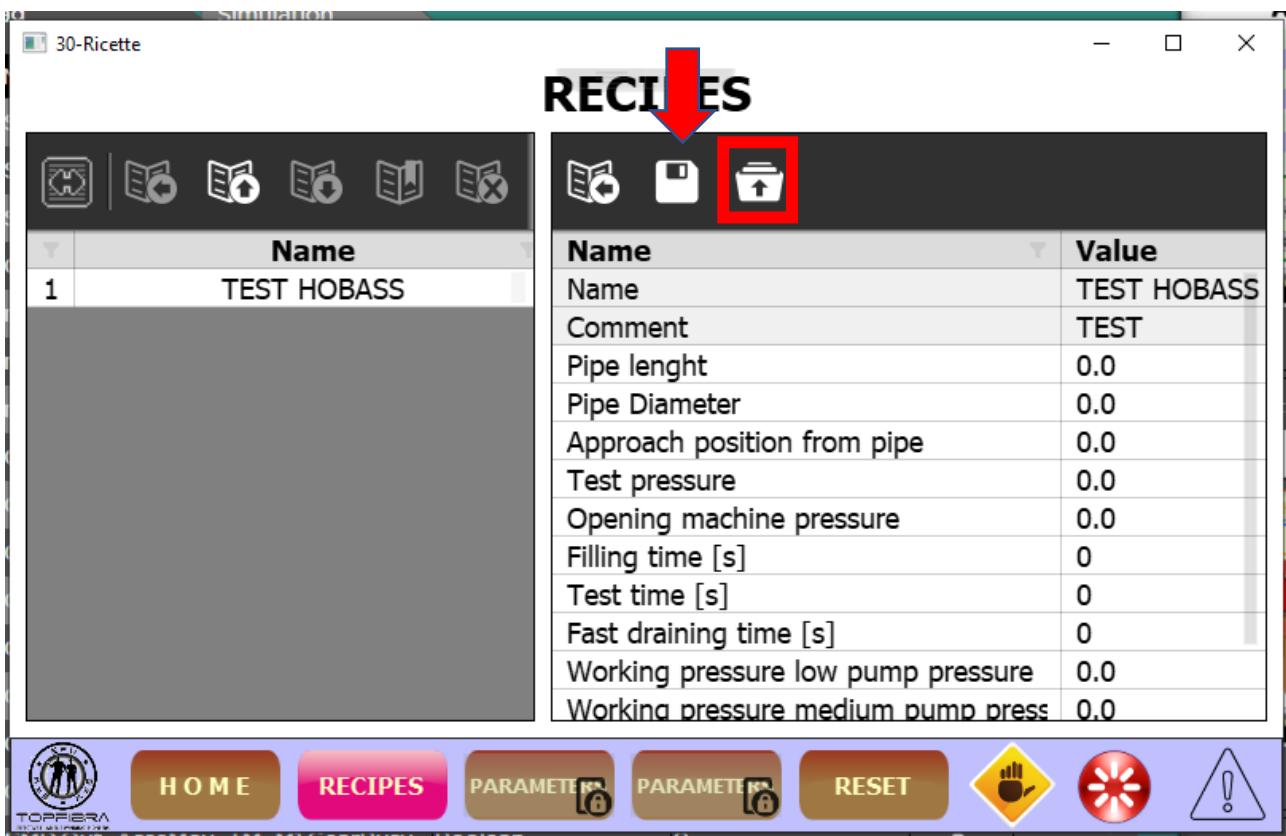


Figure 44

Now press the button in the red box to read the new configuration and then the save button (blue arrow) to save the recipe.

The recipe has been successfully updated and saved for future use.

Resume operations with the format change and then put the machine in automatic mode and proceed with the test of the new pipe.

Alternative to the self-learning procedure.

The alternative to the self-learning procedure is to write the correction value directly in the recipe field. In essence, if you know the distance to be corrected expressed in mm, it should be divided by two and written in positive value if you must widen the arms of the pipe stop, or negative if you must tighten. See the following image.



Figure 45

The machine has put the shoulder in place and is ready to start the sequence.

AUTOMATIC CYCLE AND PIPE TEST

Press button 145 to enter the automatic working cycle.

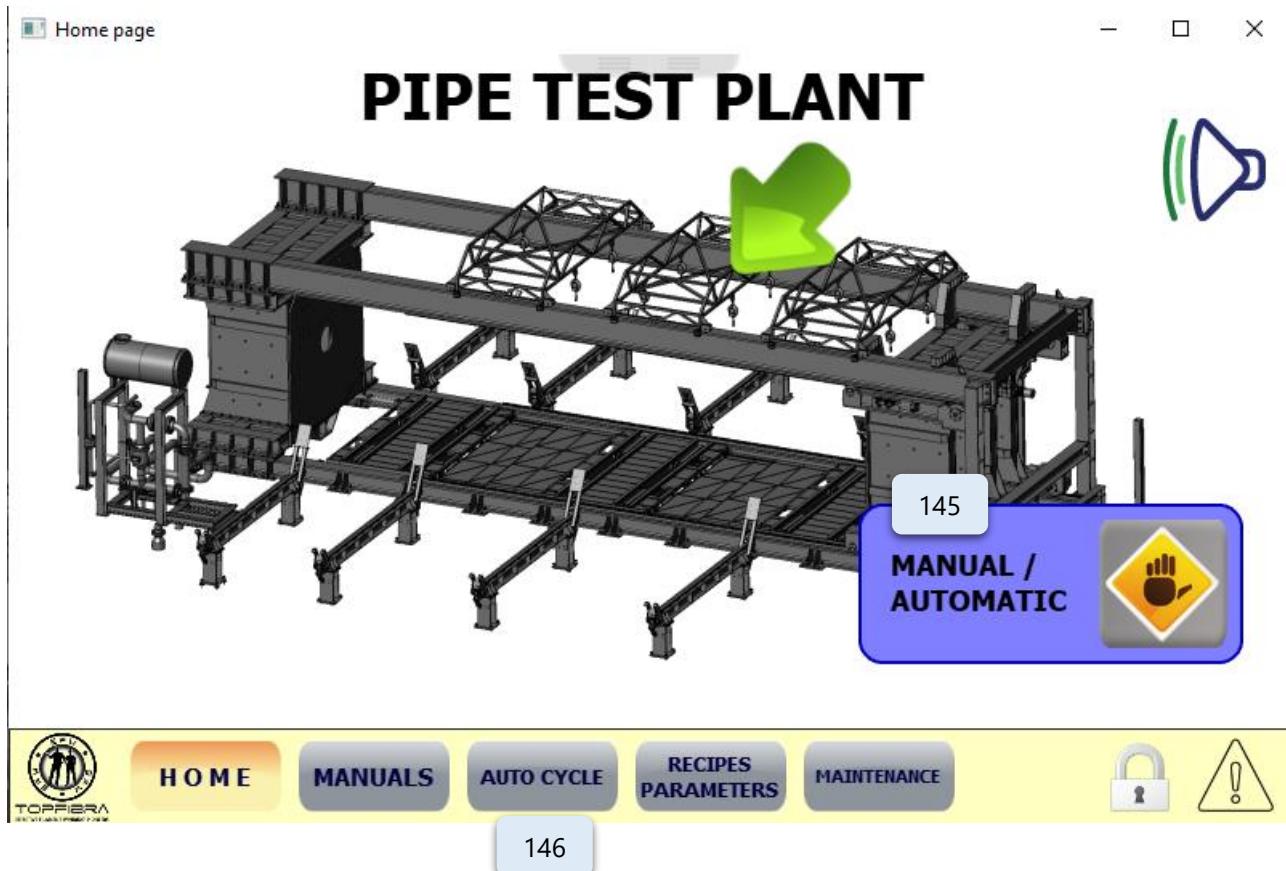


Figure 46

Then press the 146 "AUTO CYCLE" button and the next page will appear.

ATTENTION!

If a new recipe is called, it is essential, before proceeding, to perform a format change (SEE FORMAT CHANGE).

If the machine is in Automatic mode, see gear symbol 156, it is now ready to receive a pipe.

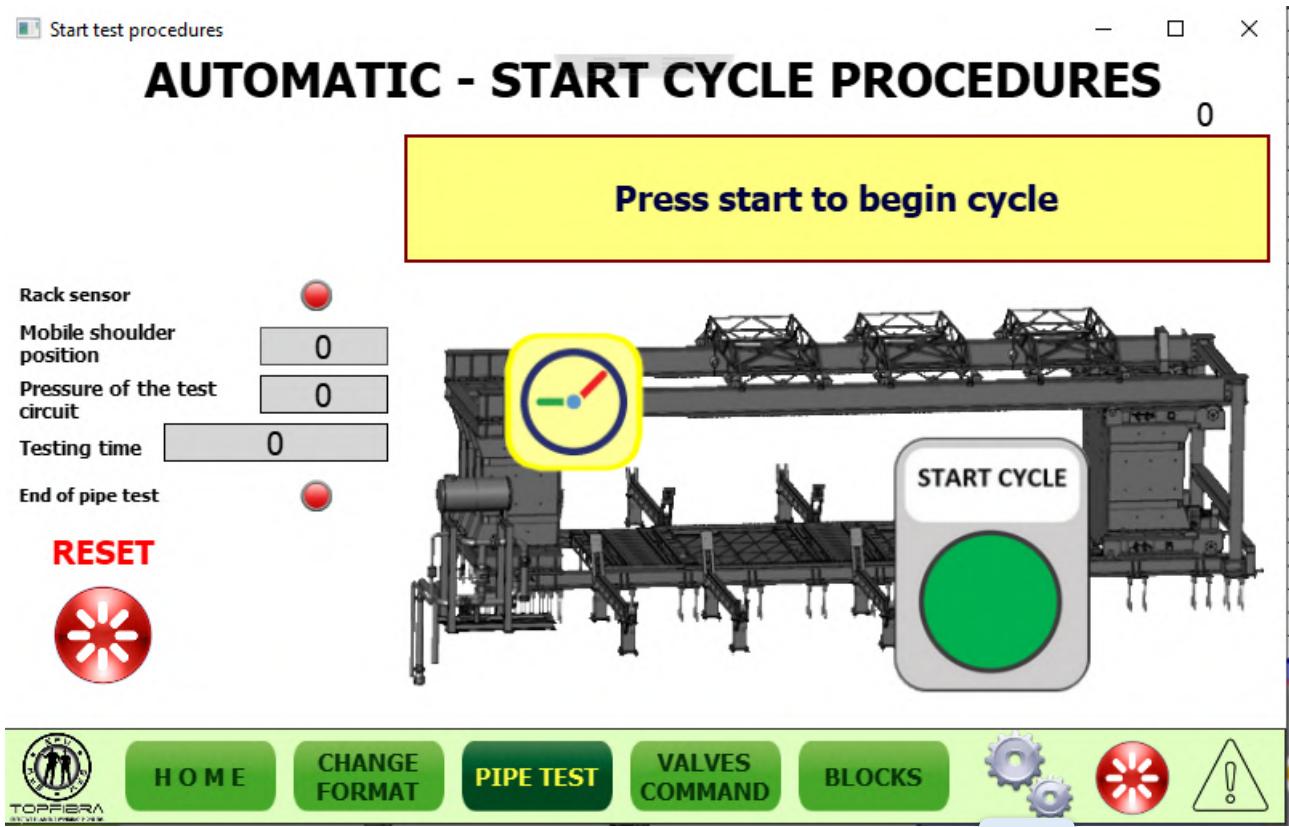


Figure 47

156

Lay the pipe on the entrance beams, making sure that all the pipe stops of the beams are positioned at the top.



Figure 48

Now press the green light button, which in this mode is flashing, to begin operations. The green blinking button indicates the request confirmation from the operator.

ATTENTION!

Before any confirmation is given, perform first the operations that are required to monitor.

Now press the green light button, which in this mode is flashing, to begin operations.

The green blinking button indicates the request confirmation from the operator.

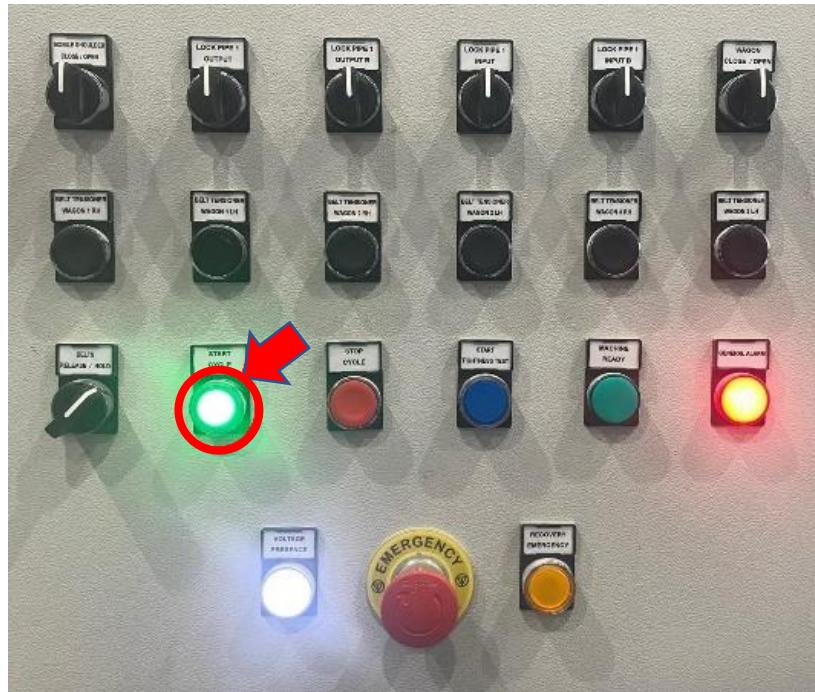


Figure 49

ATTENTION!

Before any confirmation is given, perform first the operations that are required to monitor.

On the page "Pipe Test" the image that you see below will appear, indicating that you must reposition the wagons in the position farthest from the fixed shoulder towards the centre of the machine.

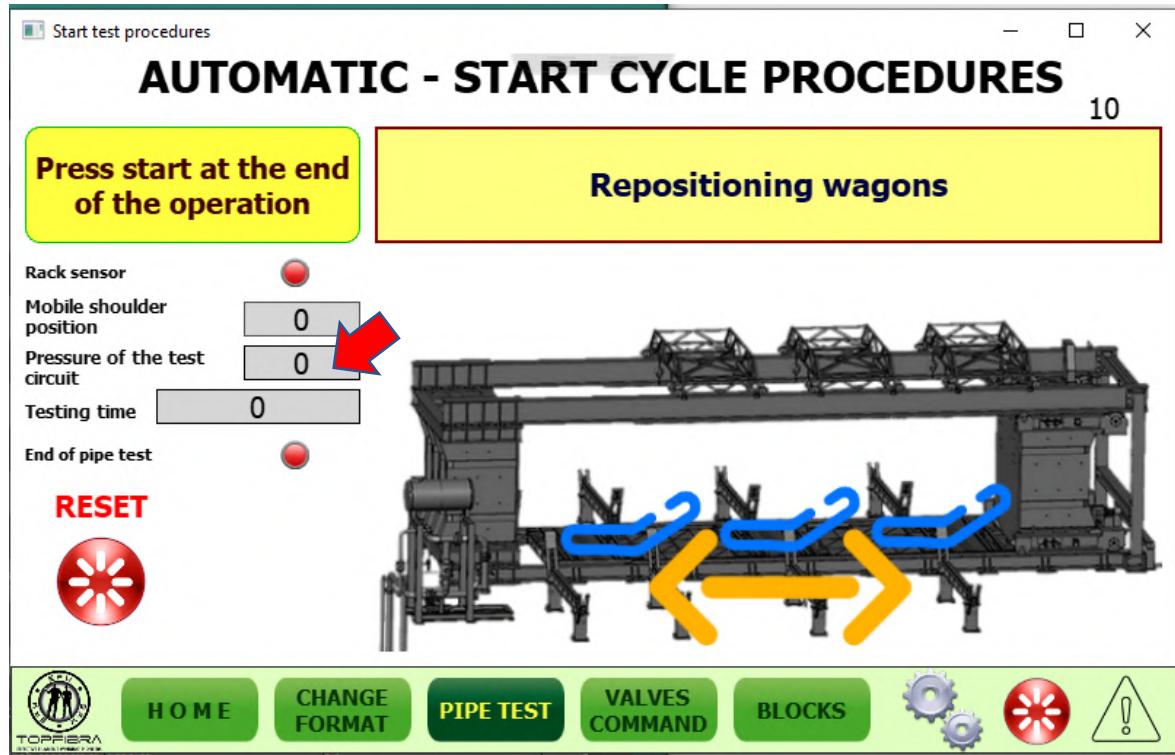


Figure 50

This must be done by moving the selector indicated in red below.

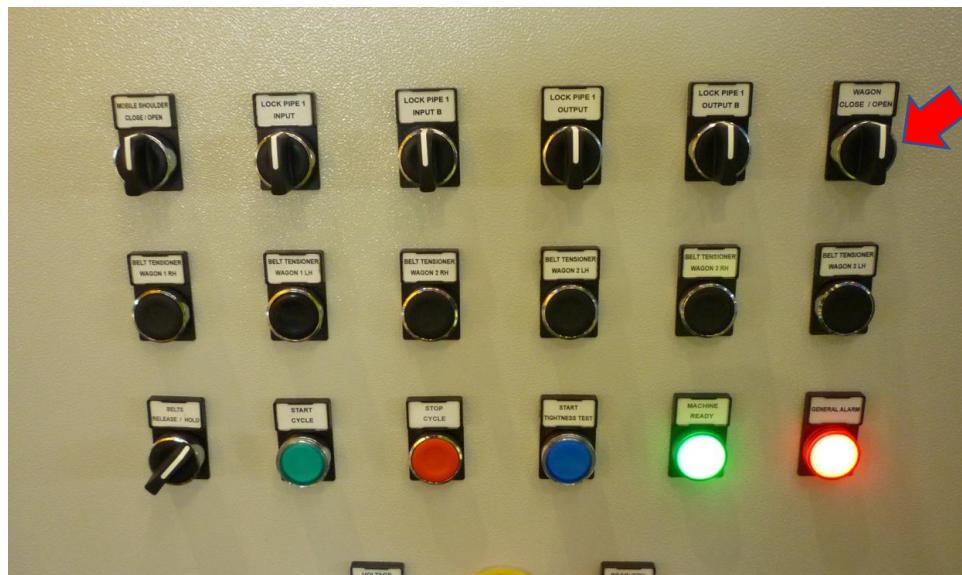


Figure 51

After placing the wagons manually, the machine will automatically have repositioned the pipe stops in the wagons and tension belts, at this point the following image is displayed.

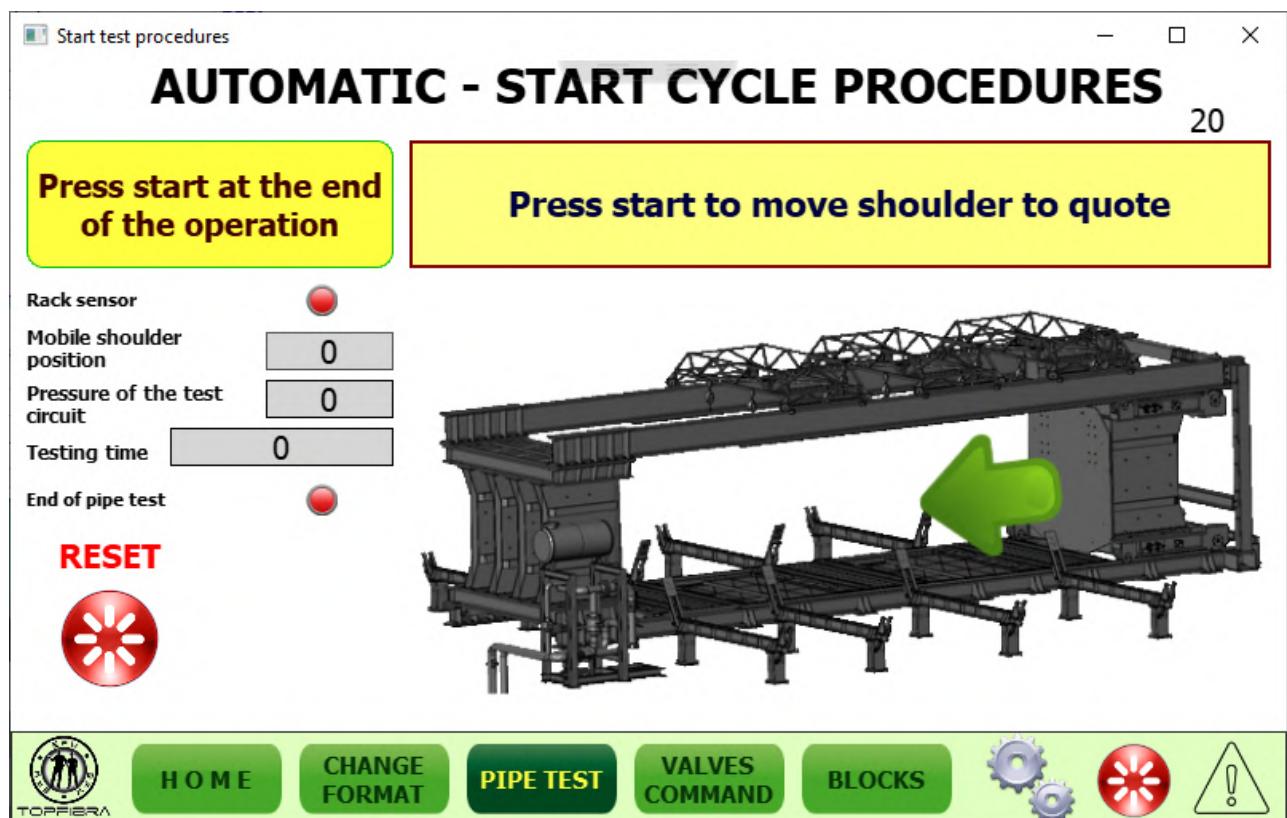


Figure 52

In this situation, the machine asks the operator if it is possible to move the moving shoulder. Confirming with the green button present in the electrical panel, which is now flashing, indicating that it requires a confirmation from the operator.

Once confirmed, the moving shoulder will move into the position of receiving the pipe.

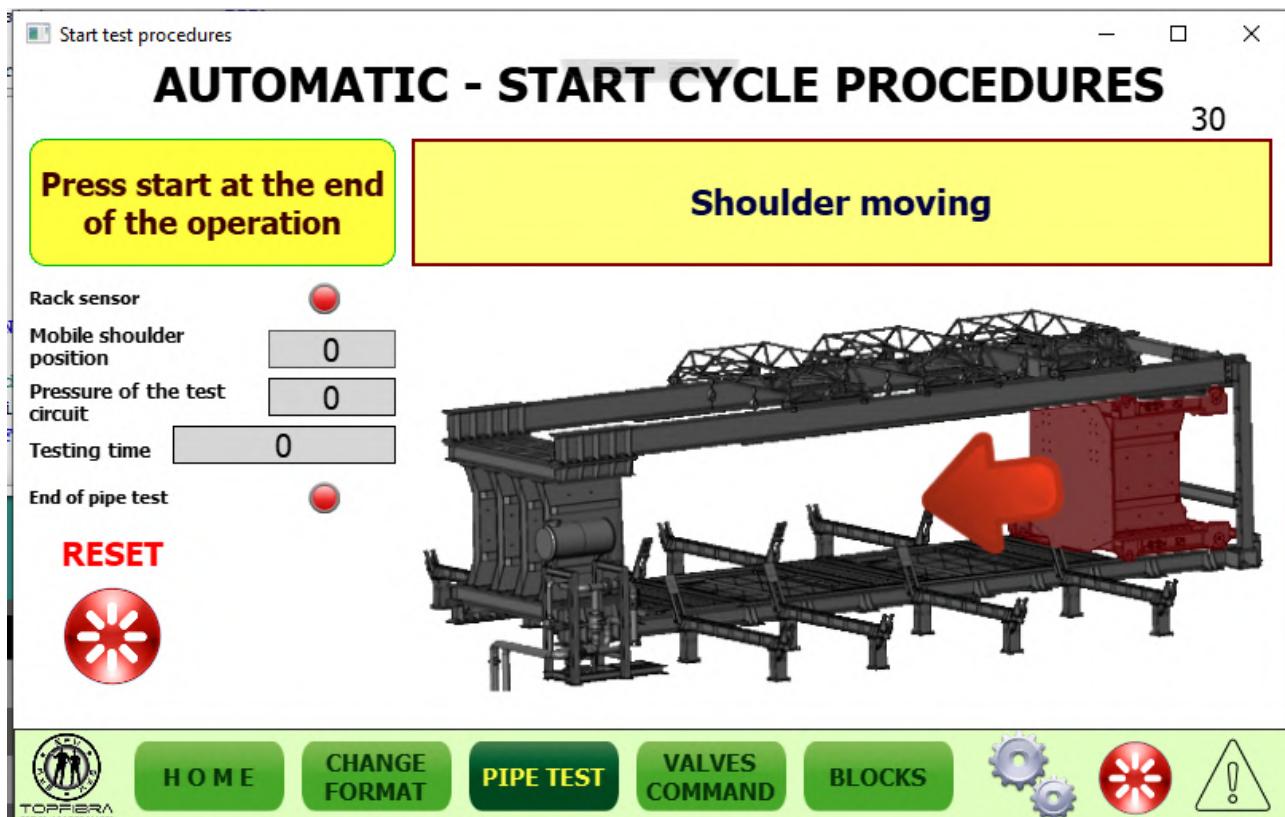


Figure 53

The shoulder moves to the destination.

In the end, you will be asked for confirmation to place the pipe stops.

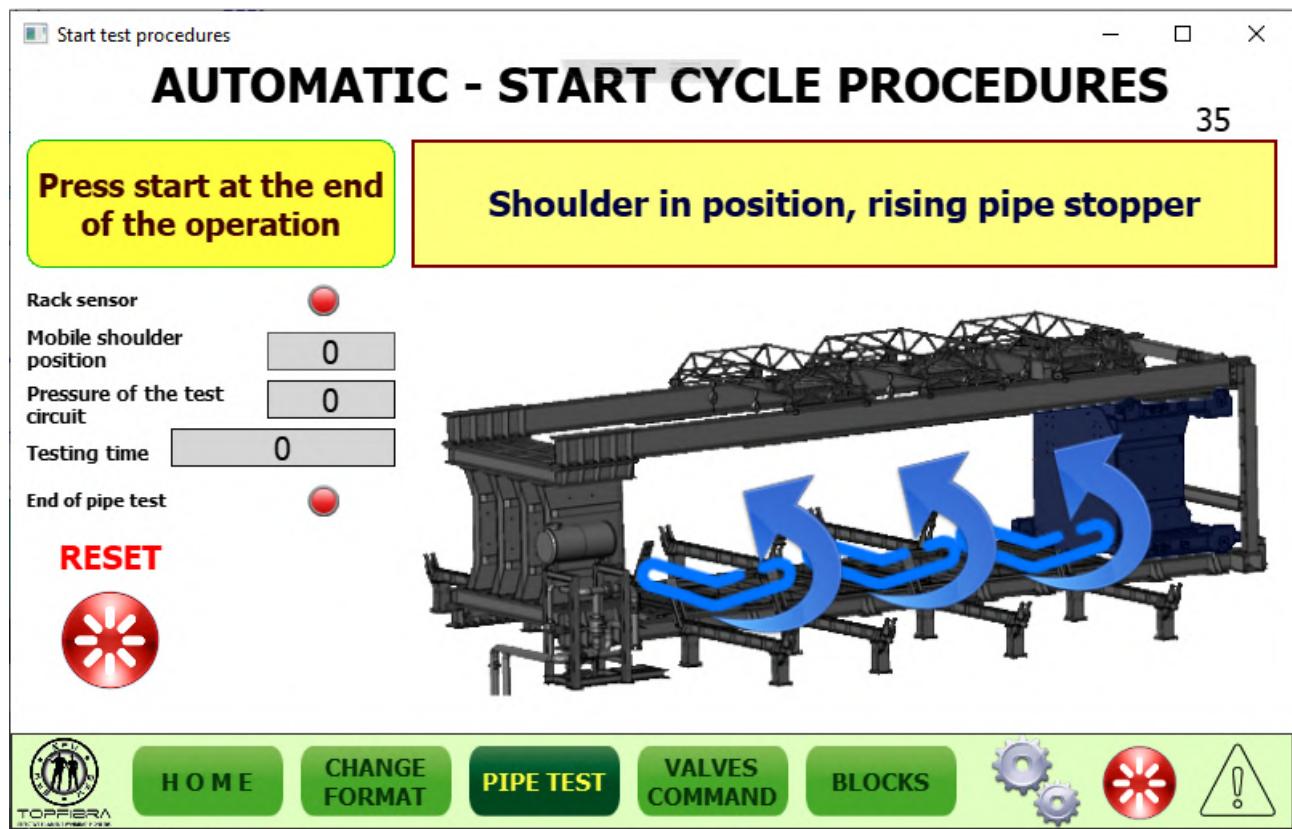


Figure 54

Pipe stops are placed in position "ready" to receive the pipe to be tested.

NOTE:

When moving the pipe to the hydrostatic tester, please make sure to align the pipe to where it does not make contact with the shoulders of the machine.



Figure 55

Start test procedures

AUTOMATIC - START CYCLE PROCEDURES 40

Press start at the end of the operation

Place pipe to test

Rack sensor

Mobile shoulder position 0

Pressure of the test circuit 0

Testing time 0

End of pipe test

RESET

HOME CHANGE FORMAT PIPE TEST VALVES COMMAND BLOCKS

Figure 56

Load the pipe as shown in the image, to load the pipe, and to be able to pass the pipe from the beams to the machine, the stops of the beams must be low.



Figure 57



Figure 58



After putting the pipe in the machine, lift the pipe stops of the beams to proceed with the operations.

Confirmed the loading operation and lifted the stops of the beams, confirming with the green button that now flashes, the pipe stops of the wagons will rise, holding the PIPE in the centre of the machine.

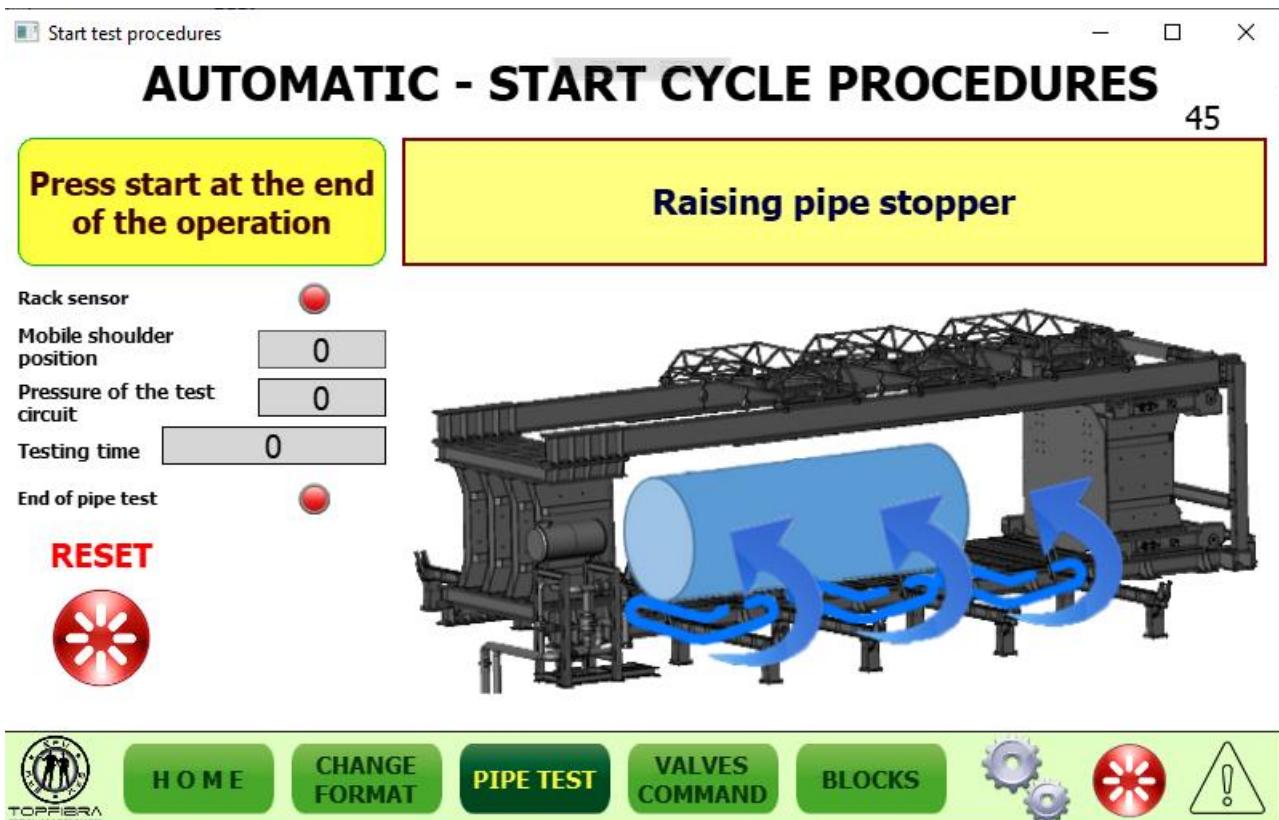


Figure 59



Figure 60



Figure 61

Upon completing this operation, the following image will appear, indicating that one needs to apply the belts to the pipe.

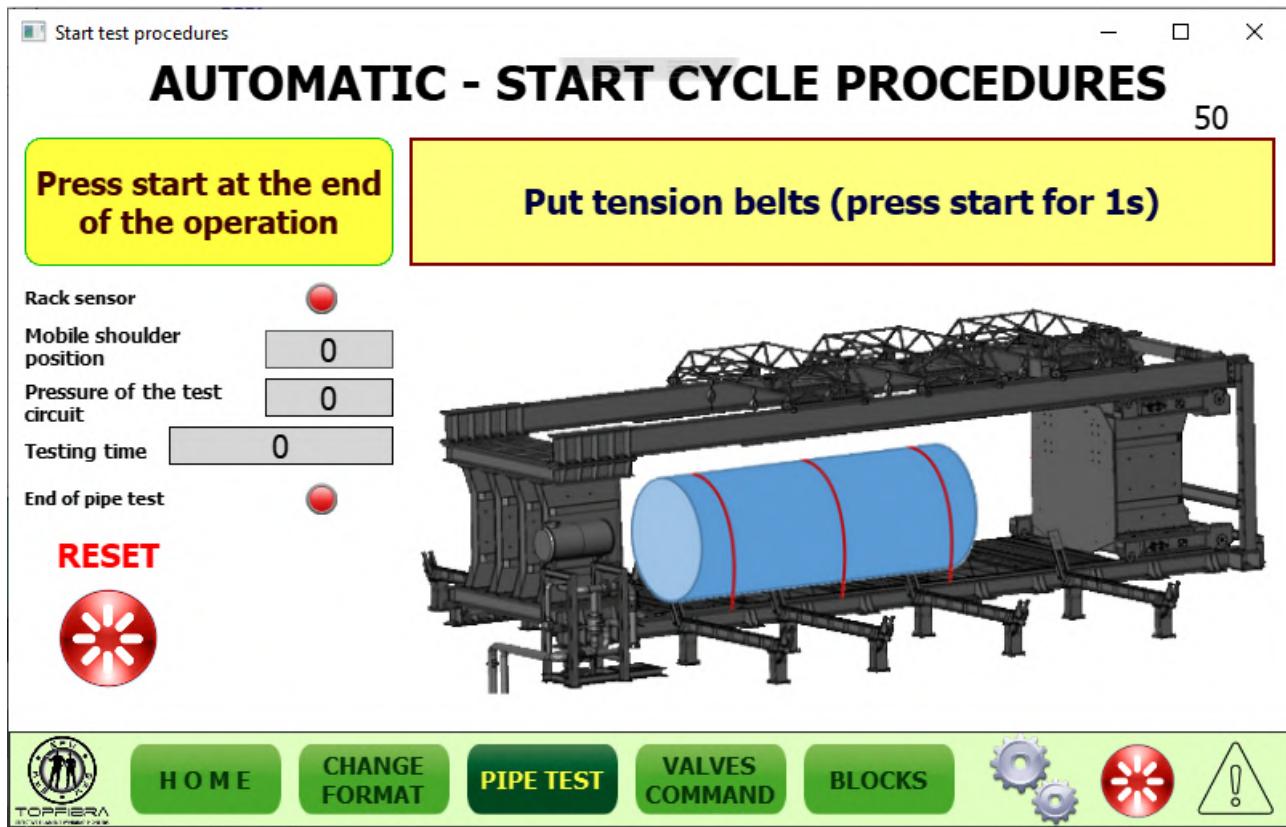


Figure 62

Apply the belts to the pipe and proceed with the tensioning. Tensioning is an operation that must be performed by the operator by pressing the buttons in the control cabinet.

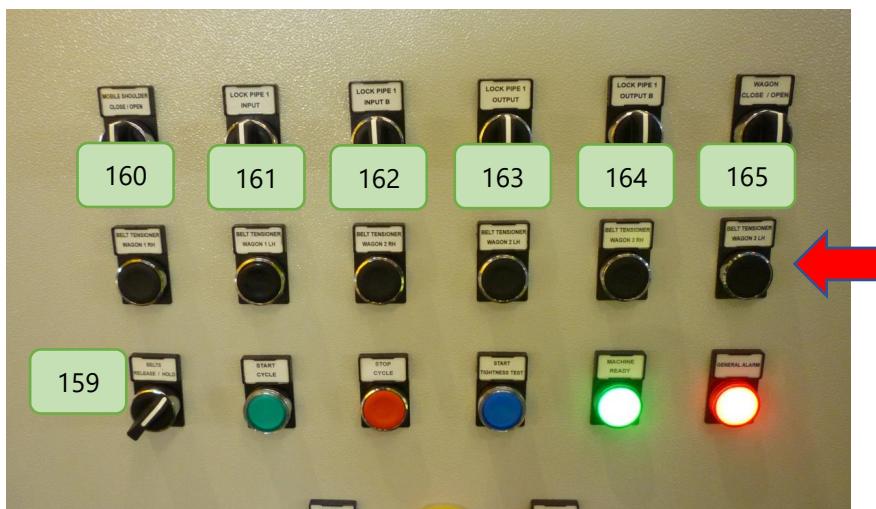


Figure 63

The Selector 159 allows the selection of tensioning or relaxation of the belts.

160 tensioning of belts of wagon 1 left side.

161 tensioning of belts of wagon 1 right side.

162 tensioning of belts of wagon 2 left side.

163 tensioning of belts of wagon 2 right side.

164 tensioning of belts of wagon 3 left side.

165 tensioning of belts of wagon 3 right side

After tensioning the belts confirm with the green button in the electrical panel.

If the operator is testing a 20ft pipe with 2 wagons, use the buttons for the required belts.

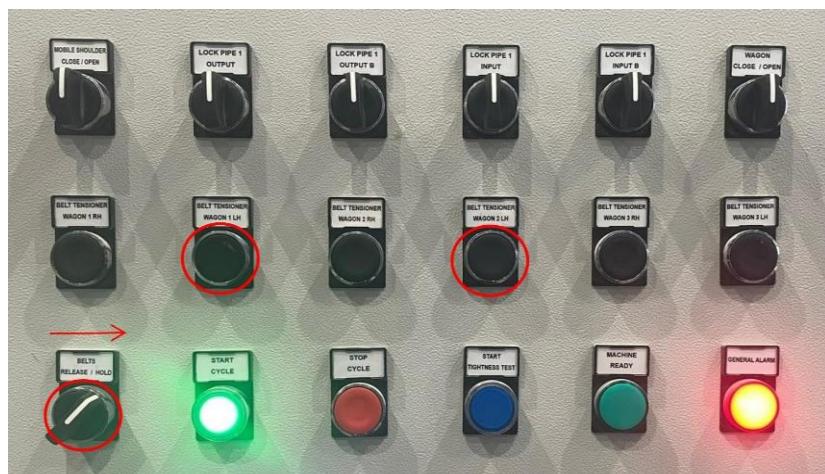


Figure 64

The machine now asks for the placing of the pipe in the plug of the fixed shoulder, and to bring it in the correct position.

This operation is done manually by operating the selector in the electrical panel.

After completion, the operation is confirmed by pressing the green button on the electrical panel.



Start test procedures

AUTOMATIC - START CYCLE PROCEDURES

60

Press start at the end
of the operation

Wagons movement towards fixed shoulder
(press start for 1s)

Rack sensor



Mobile shoulder
position

0

Pressure of the test
circuit

0

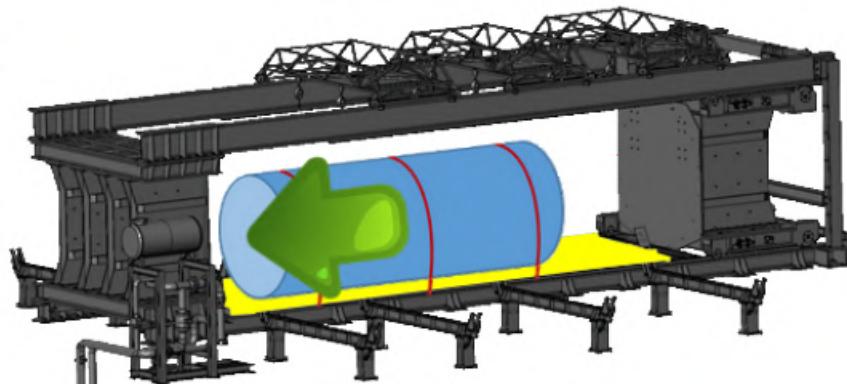
Testing time

0

End of pipe test



RESET



HOME

**CHANGE
FORMAT**

PIPE TEST

**VALVES
COMMAND**

BLOCKS



Figure 65

Use the wagon close/open selector. Turn it to close until the pipe lines up with the fixed shoulder.



Figure 66

Turn it to close until the pipe lines up with the fixed shoulder. Once the line is slightly past the shoulder, it should be barely visible or completely gone.



Figure 67

After completing the operation, confirm by pressing the green button on the electrical panel.

Now the machine will be ready to move the mobile shoulder.

Confirm with the green button present in the electrical panel, which is now flashing, indicating that it requires confirmation from the operator.



Figure 68

When the operation is confirmed, the mobile shoulder will move closer to the pipe.

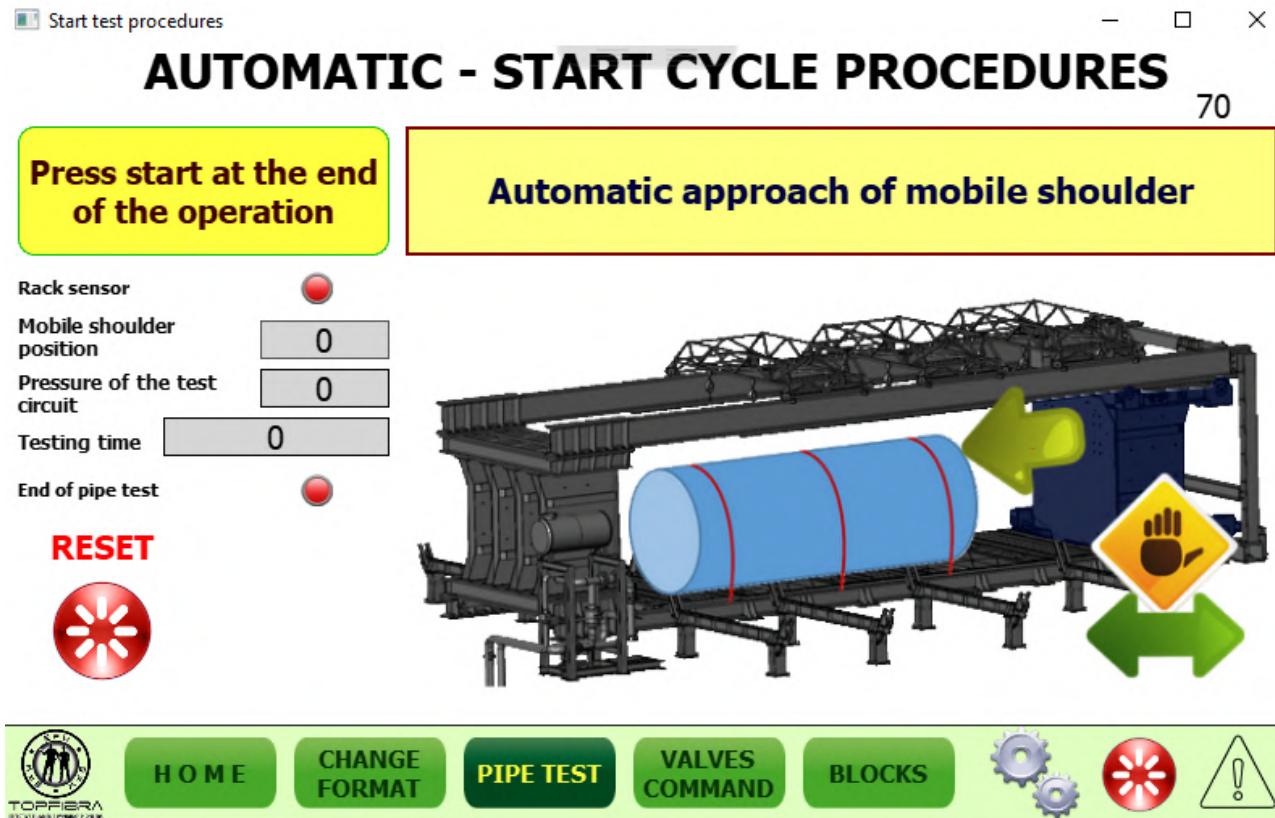


Figure 69

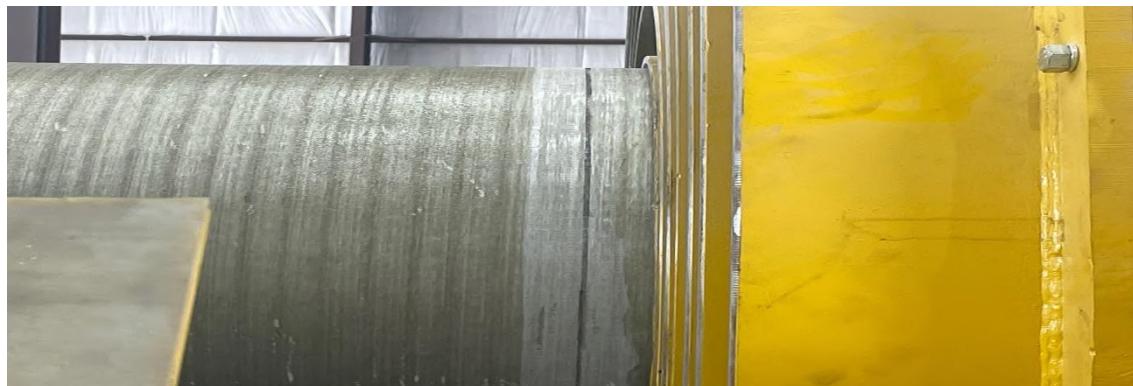


Figure 70

After the approach, you will be required to manually position the mobile shoulder in the correct position.

Move it carefully, checking that the pipe fits correctly into the plug.



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Figure 71

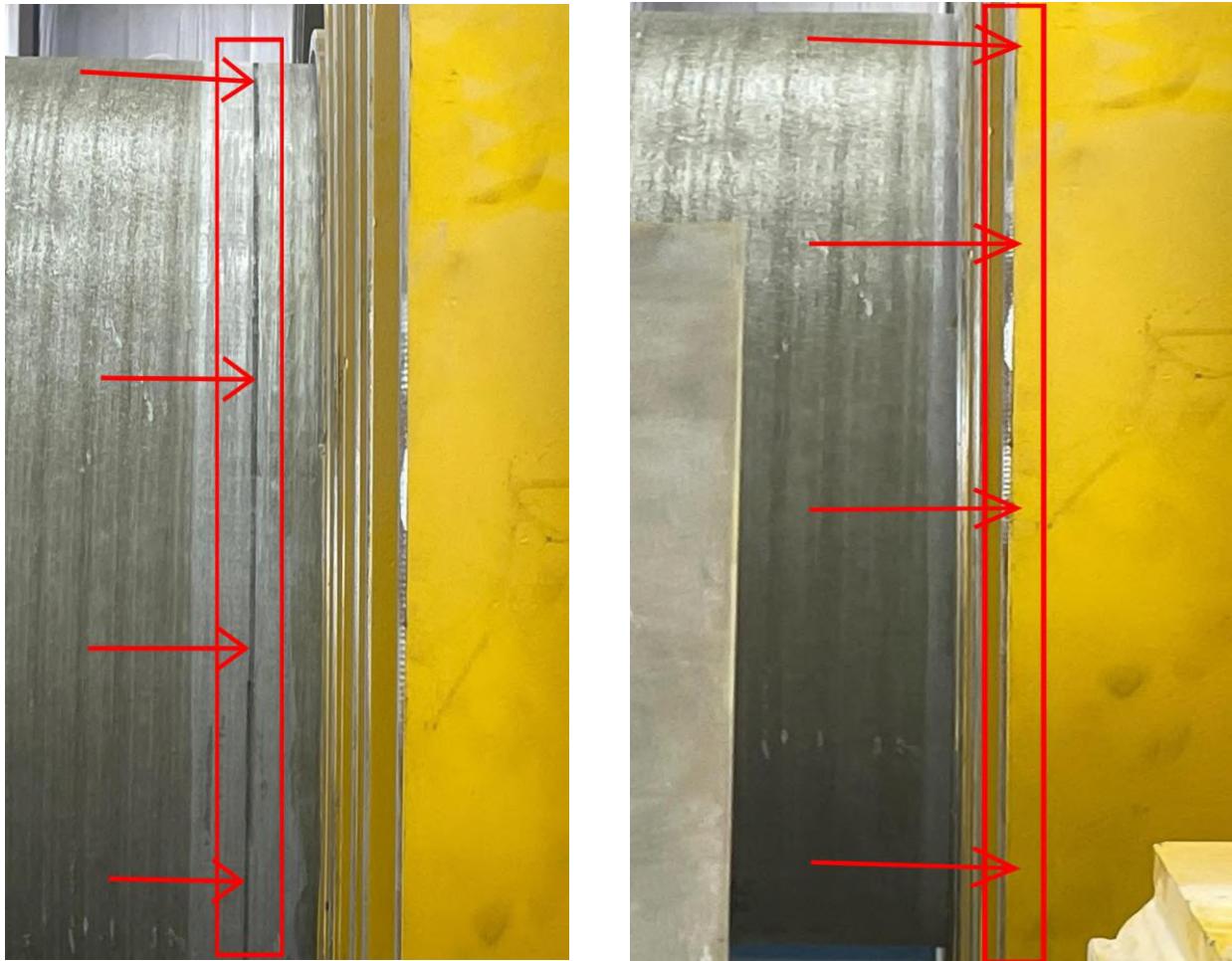


Figure 72

After positioning the mobile shoulder, confirm with the bright green button; the shoulder moves in place to hook the mechanical blocks.

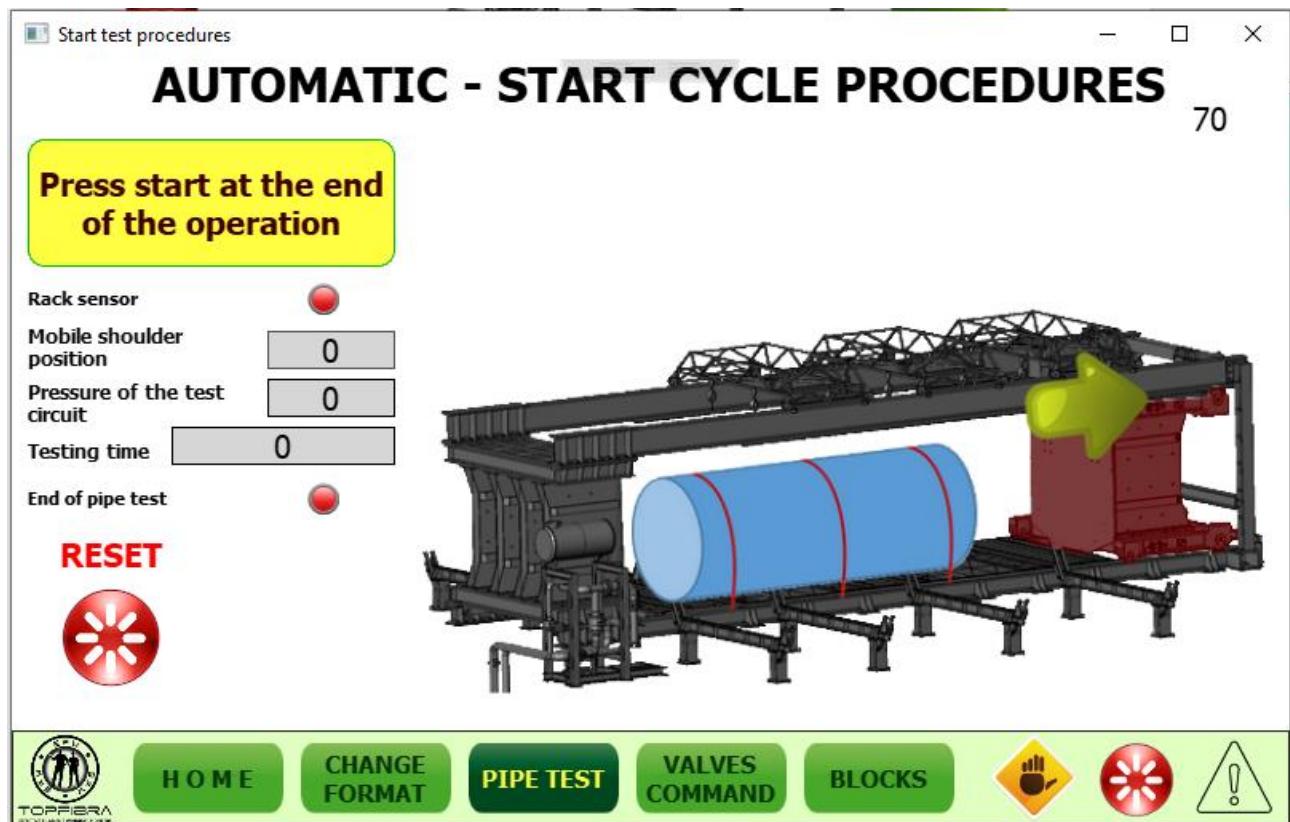


Figure 73



Figure 74



Figure 75

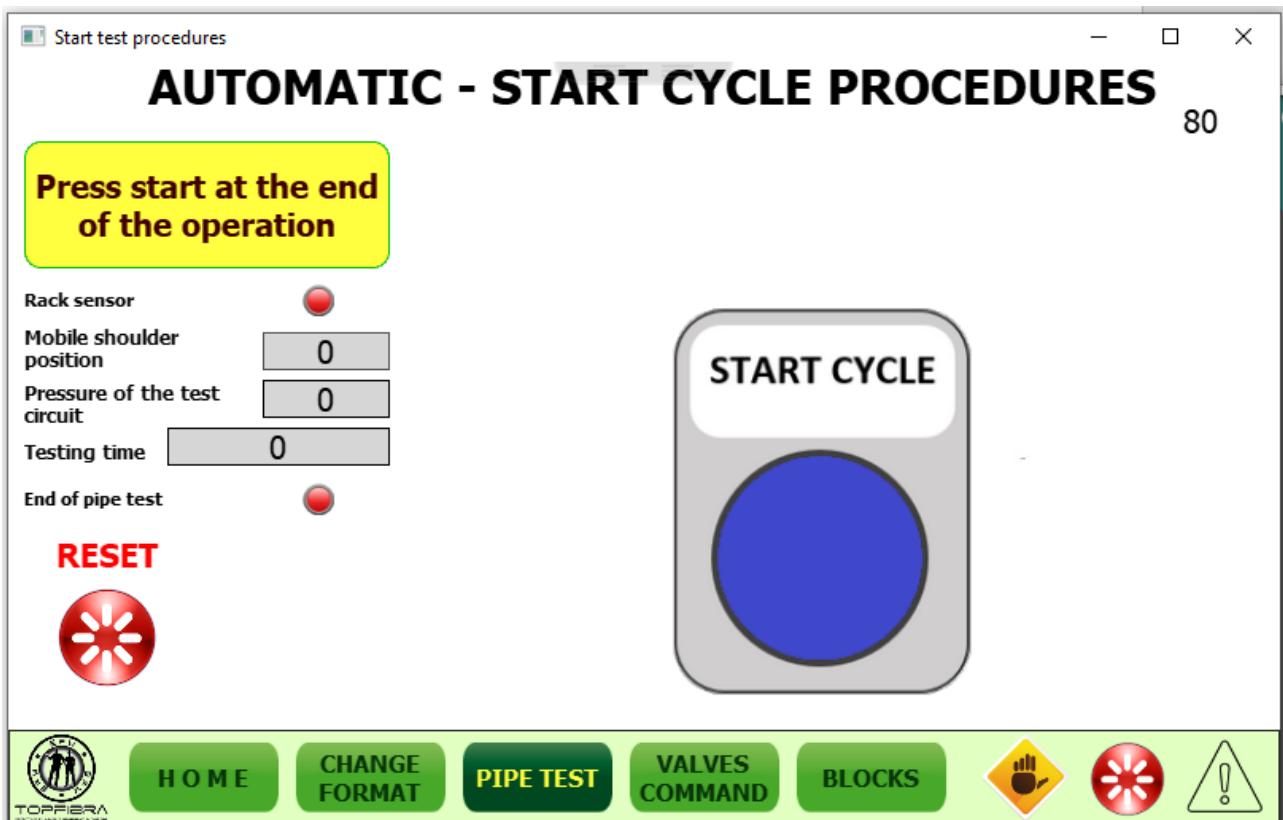


Figure 76

The pipe is positioned and locked; press the blue button on the electrical panel to start the hydraulic test. When the blue button flashes an operation is required; the fast blink indicates a request for operator intervention following an error.



Figure 77

You can choose to cancel the cycle with the red button or to resume by pressing the blue button.

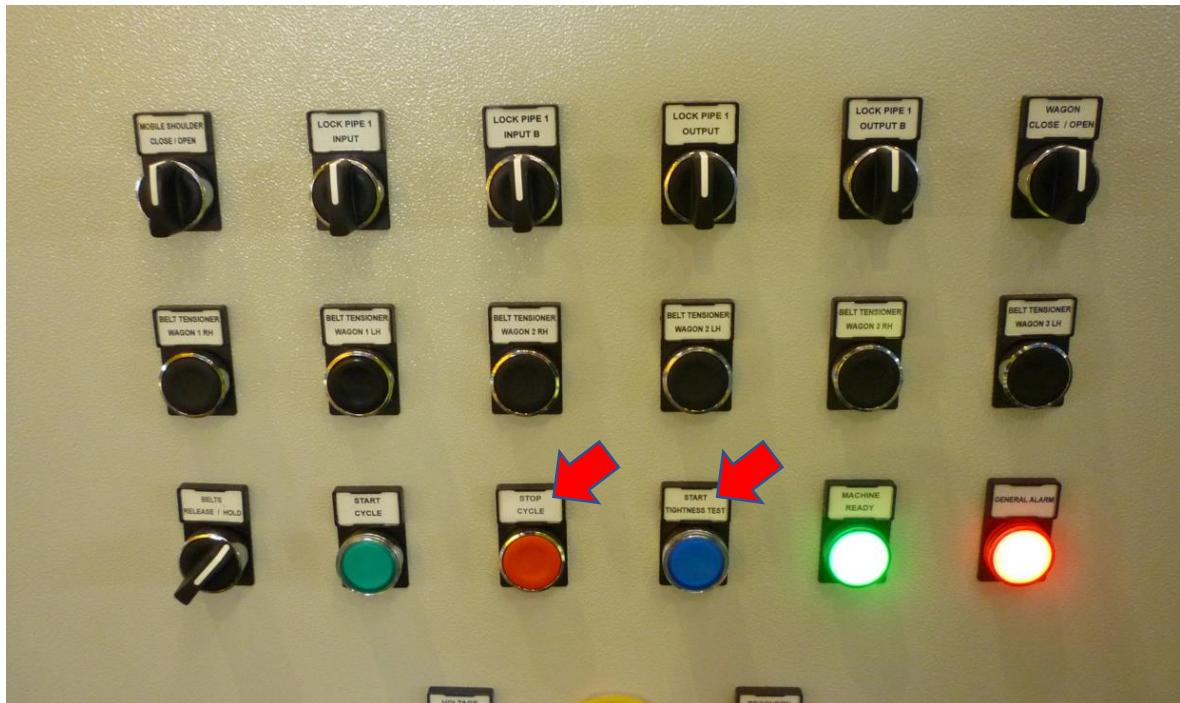


Figure 78

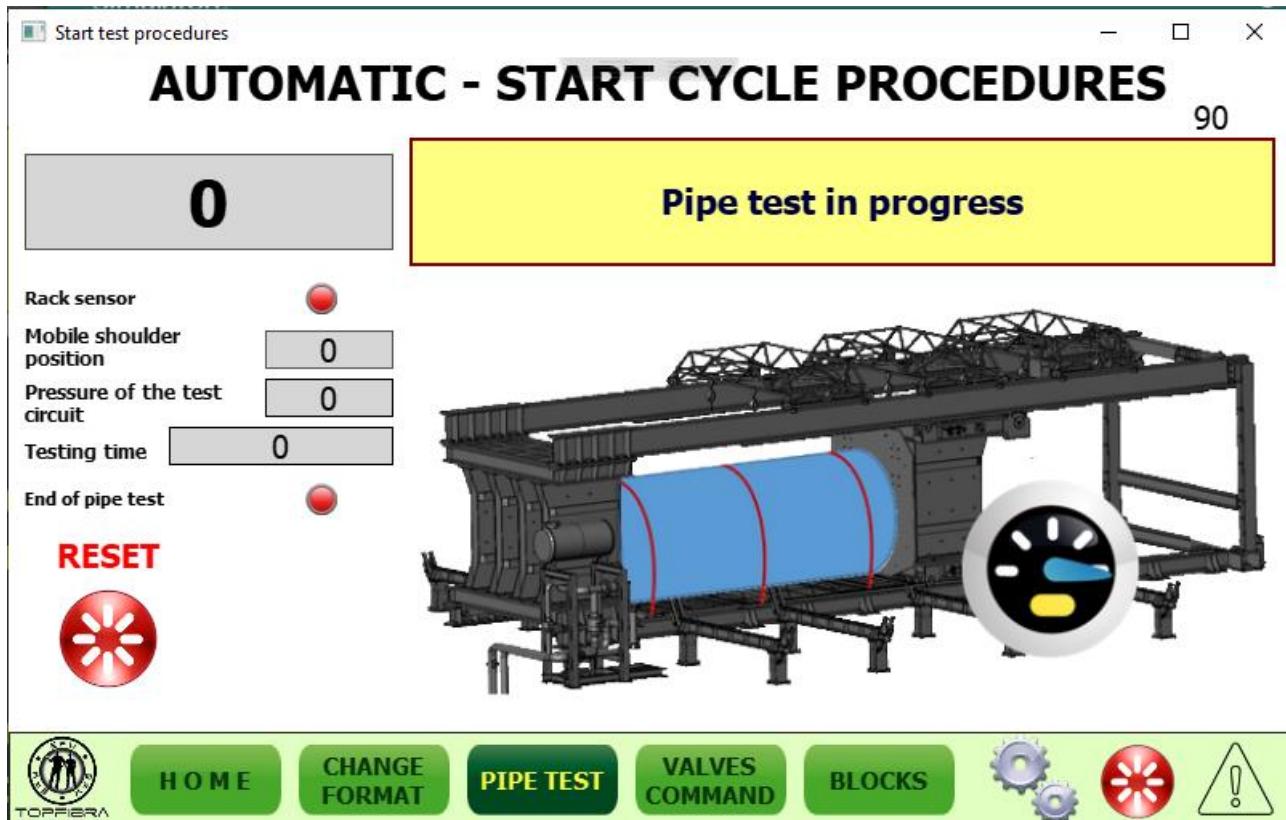


Figure 79

The leak test is in progress. The pipe will be put under pressure.

WARNING!

If any leakages are evident during the testing, press the stop button to stop the procedure.



Figure 80

To completely stop the whole machine, press the Emergency Button.



Figure 81

If the filling proceeds normally, the water will begin filling up and approaching the pressure set in the recipe for the middle pump (for a 10-bar test we recommend 7 bar of pressure). The

middle pump pressure must always be less than 8 bar. During this process, please check for any leaks coming from the pipe. Once it reaches 7 bars of pressure, the machine will stop and wait for the next command. Before proceeding inspect the pipe for any water leakage.

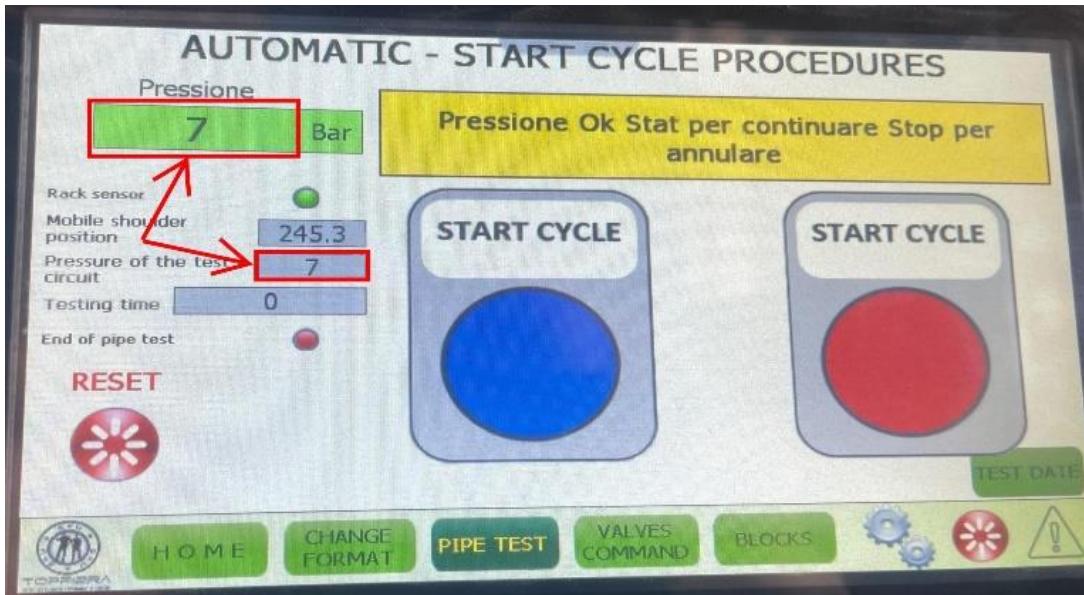


Figure 82

If there are no leakages, press the flashing blue button again.



Figure 83

The high-pressure pump will bring the pressure up to the pressure set for the high-pressure pump in the recipe. If the test is up to 10 bar, after reaching the pressure, the system will hold that pressure for the time set in the recipe (for example 120 seconds). During this time, continue observing the pipe for any leakages.

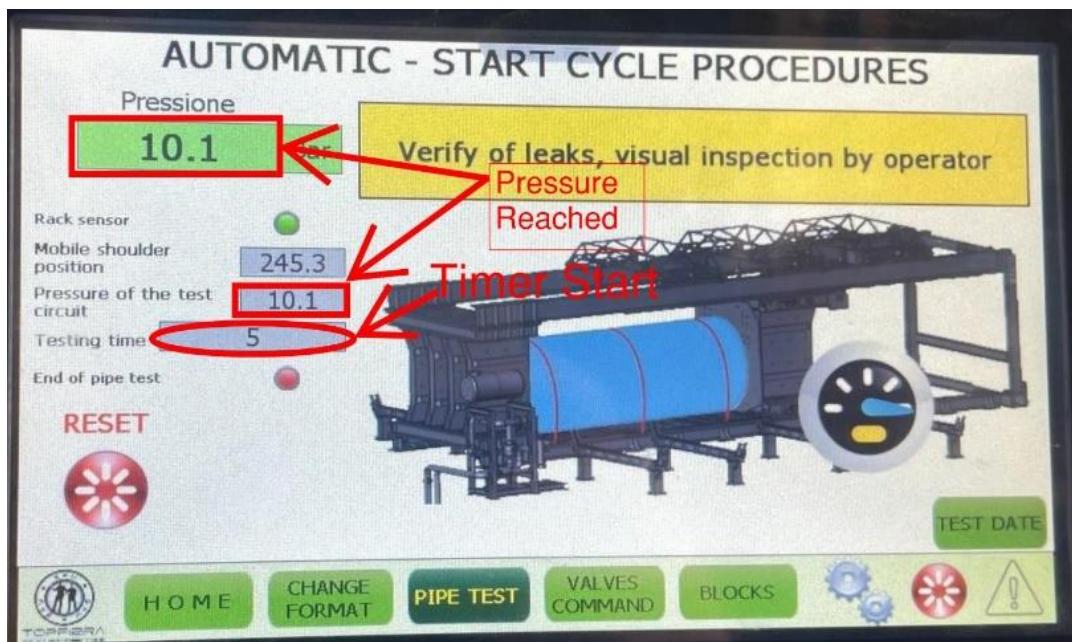


Figure 84

When the hydraulic test is finished, the buzzer will emit an intermittent sound. If the automatic pressure release is activated, the machine will release the pressure and start pumping the water out of the pipe.



Figure 85

After the draining is finished the machine will ask the operator the confirmation to move the shoulder away from the pipe.

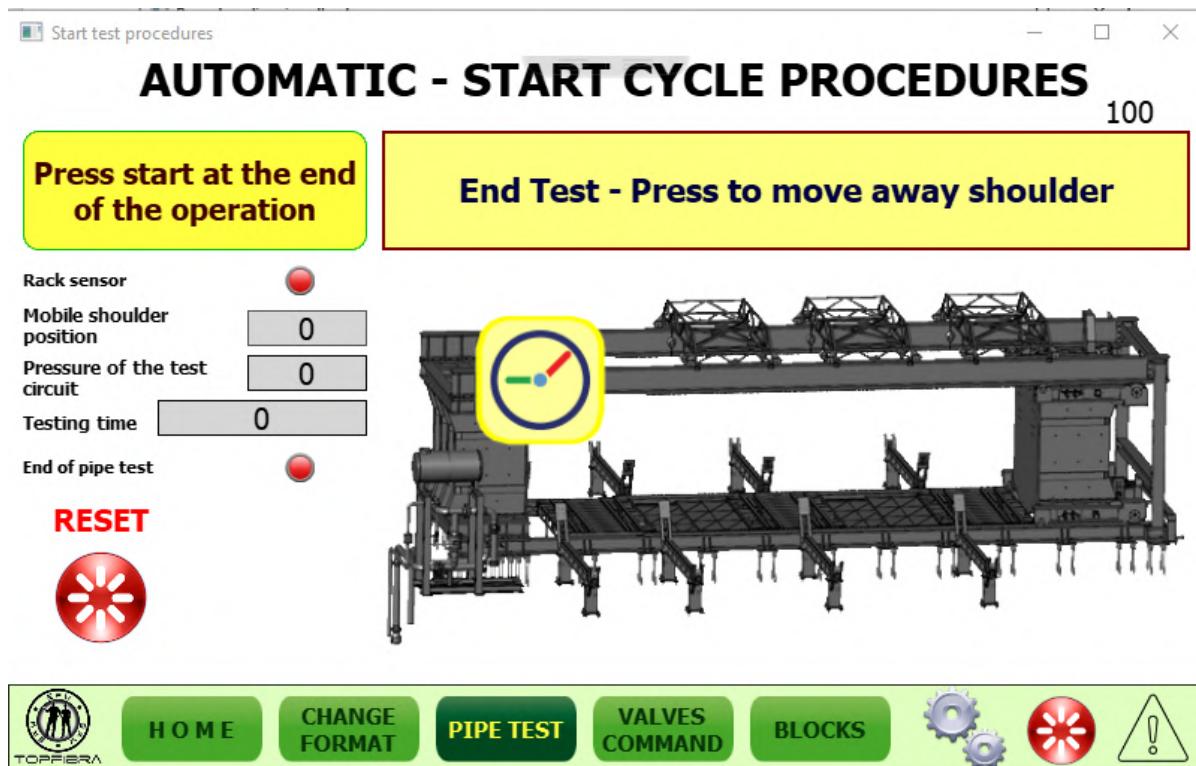


Figure 86

Confirming with the green button, you start the cycle of unlocking the machine and extraction the pipe and the following image will appear indicating that the shoulder is in motion.

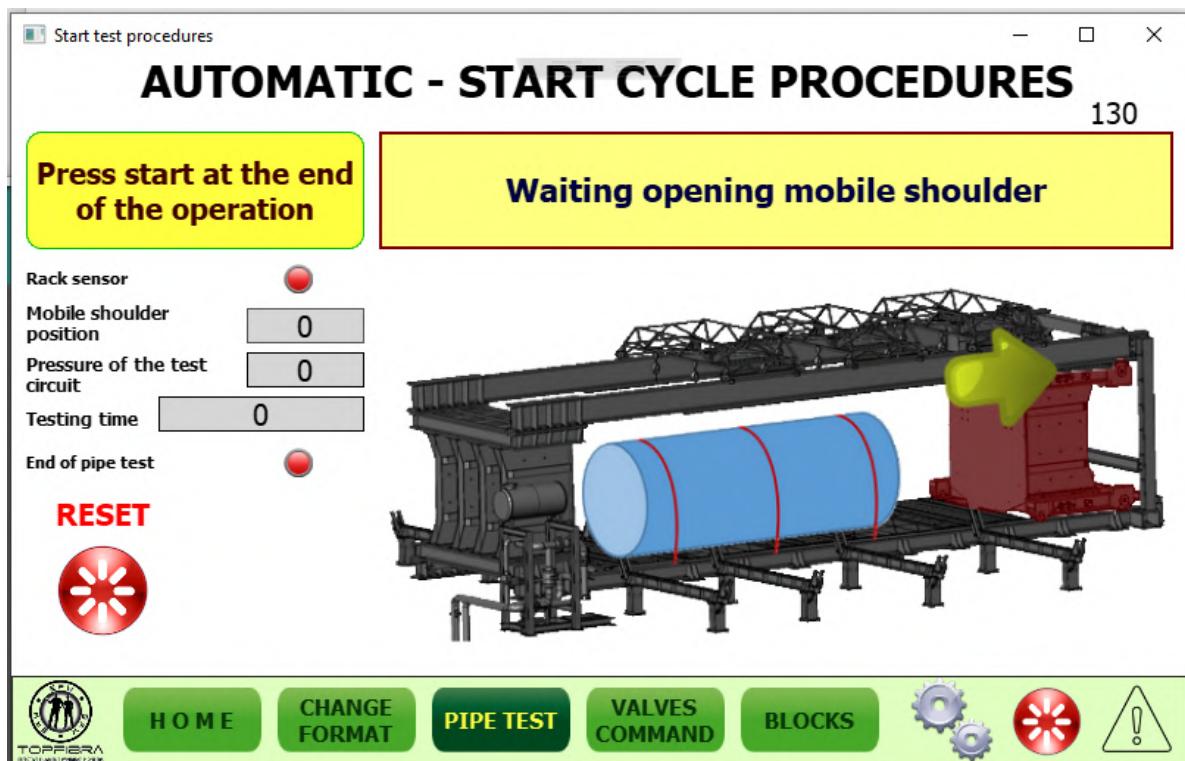


Figure 87

When the hydraulic test is finished, this screen appears indicating the end of the hydraulic test and the buzzer will emit an intermittent sound.

Confirming with the green button you start the cycle of unlocking the machine and extraction of the pipe and the following image will appear indicating that the shoulder is in motion.

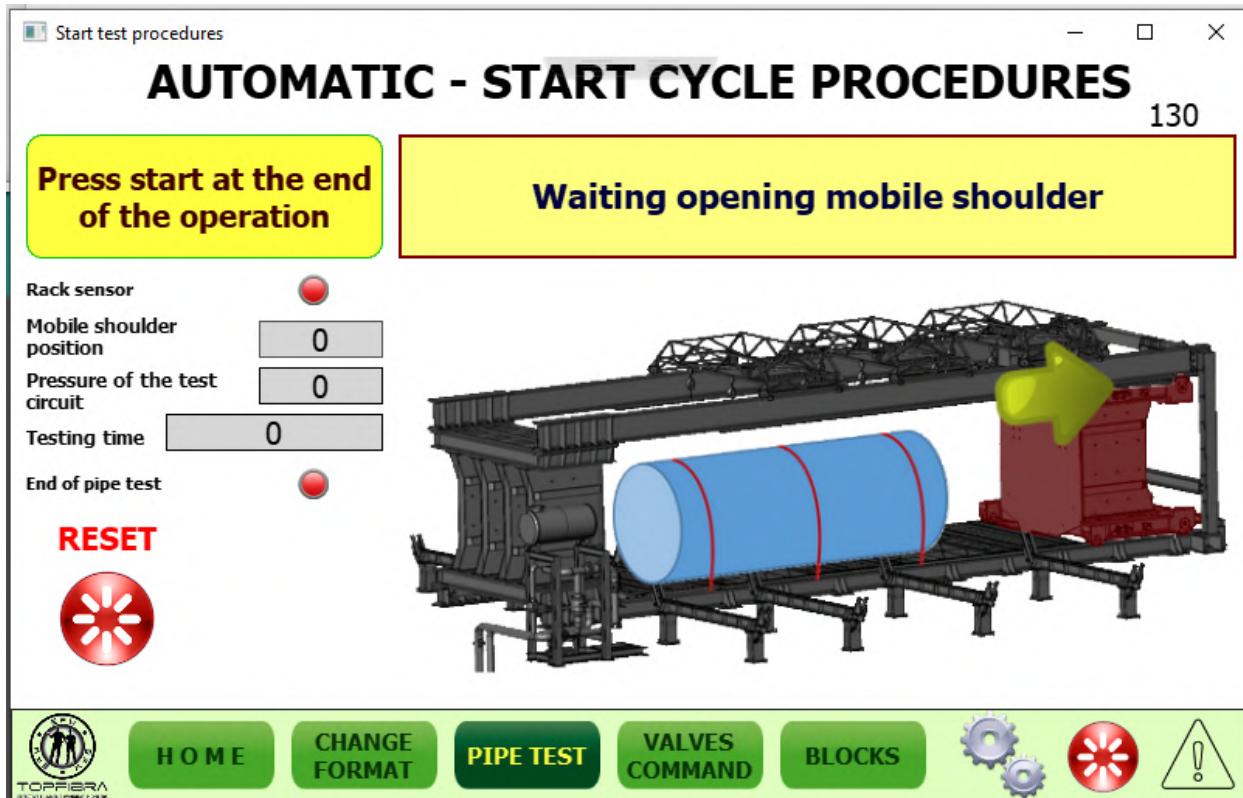


Figure 88

The brakes will open and the shoulder will move away from the pipe.

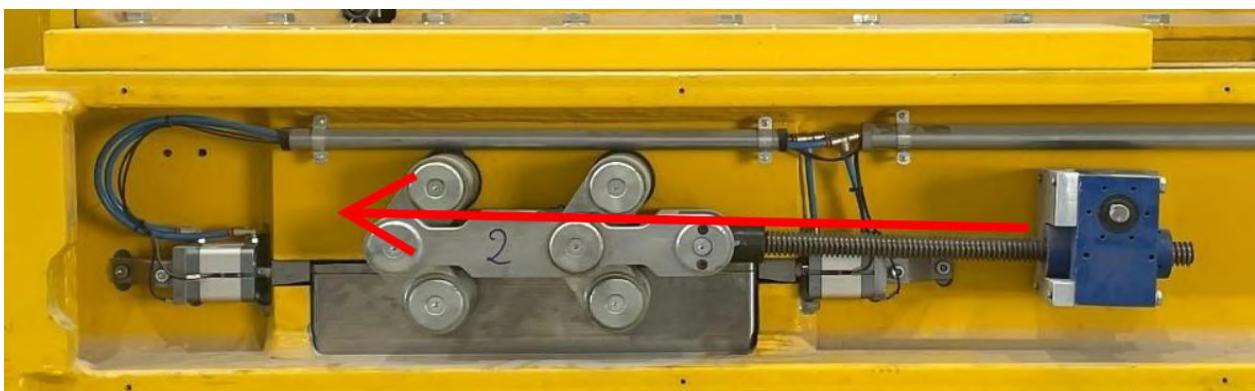


Figure 89



Figure 90

At the end of the movement, this screen appears, asking the operator to remove the pipe from the plug of the fixed shoulder.

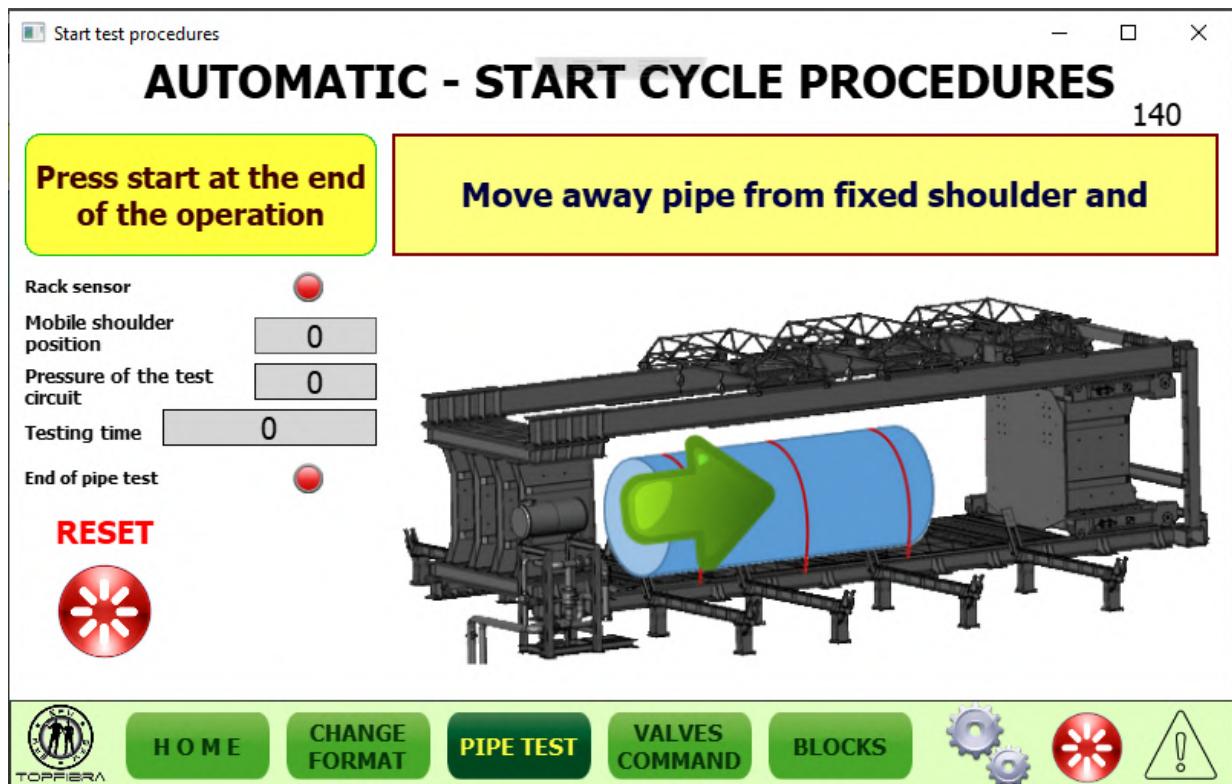


Figure 91

This is possible by pressing the selector on the electrical panel, shown below.



Figure 92



Figure 93

When the operation is complete, confirm by pressing the bright green button which is now flashing.

Confirming appears in the following image that indicates the removal of the belts by the operator.

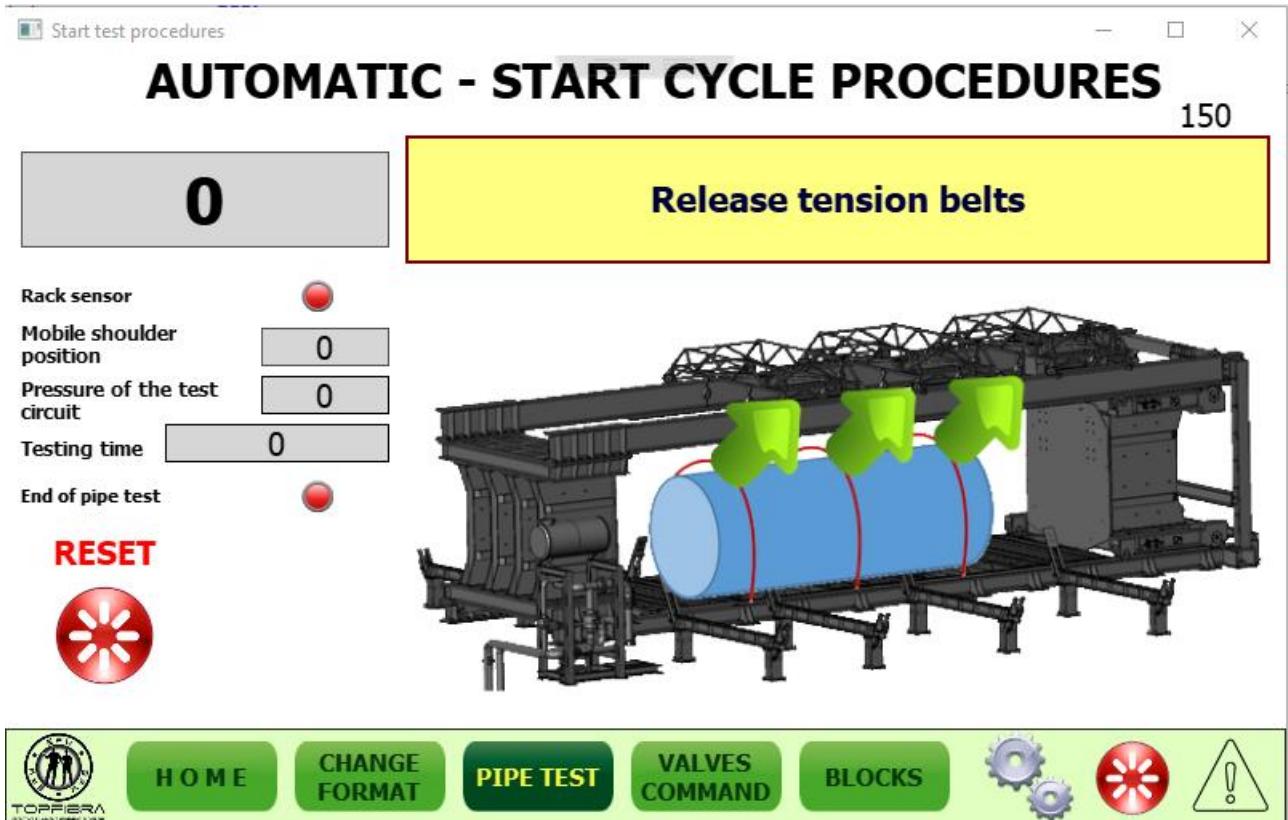


Figure 94

After removing the straps, press the green button to confirm the operation.

The following image appears, indicating the opening of the pipe stops on the discharge side; now it is possible to unload the pipe by lowering the pipe stops of the outgoing beams, using the selectors in the panel.

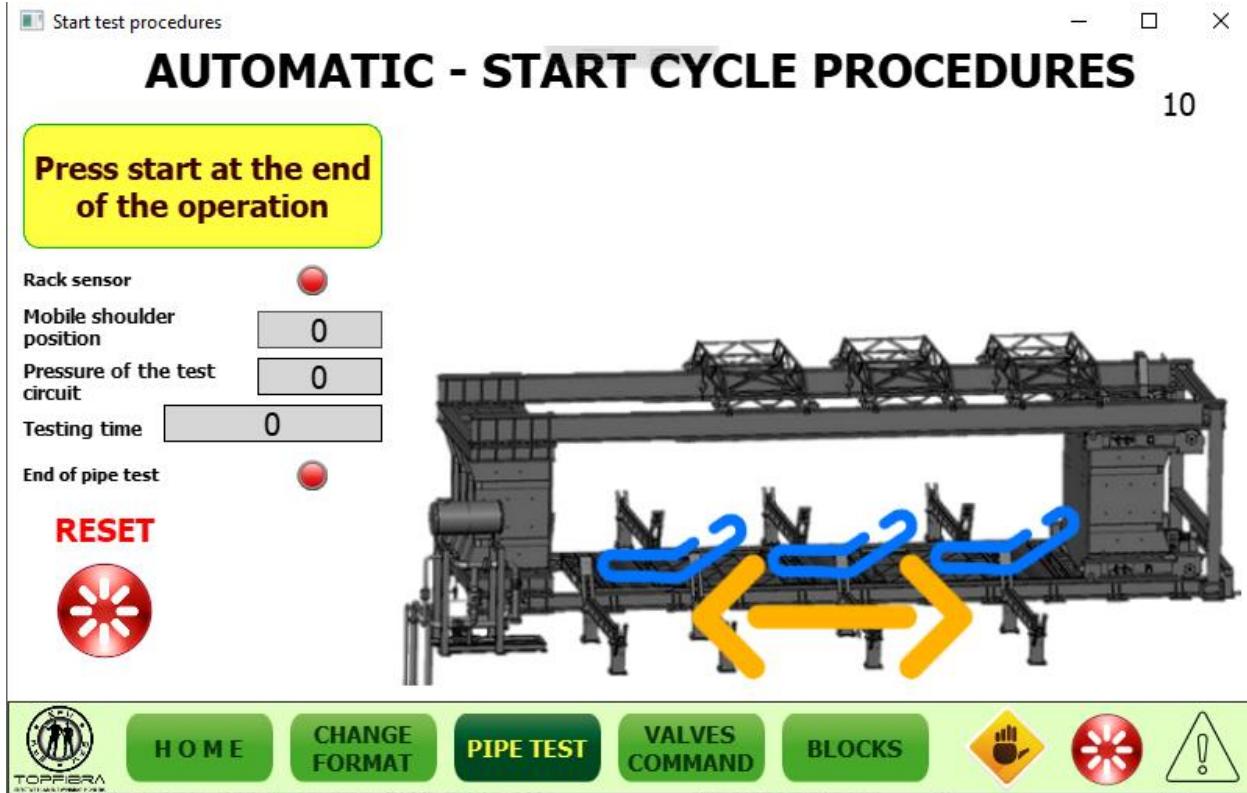


Figure 95

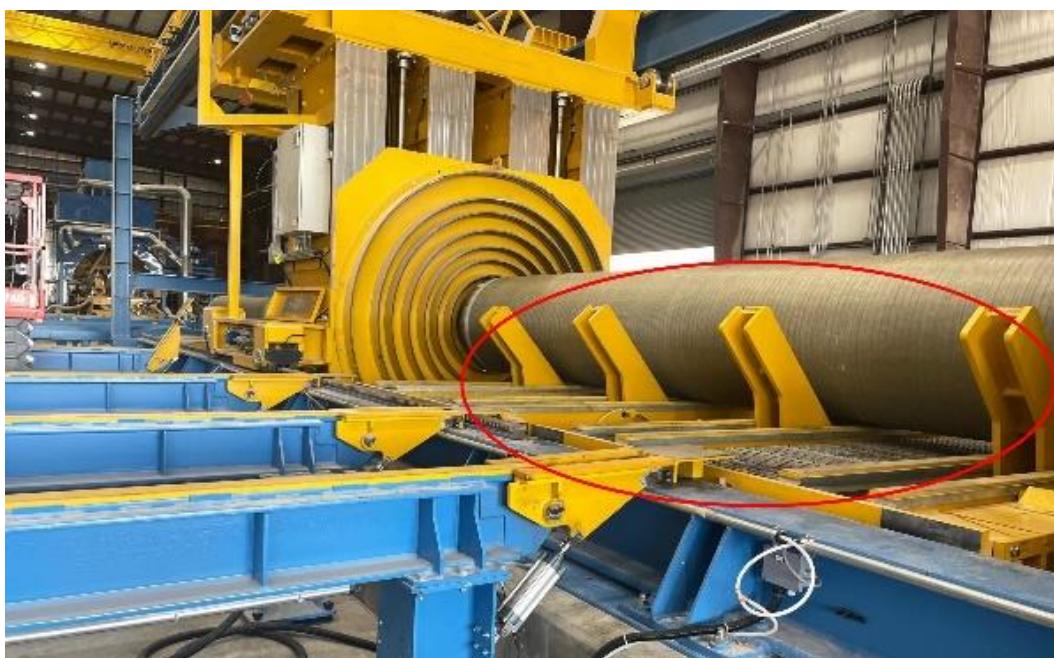


Figure 96

Before loading the pipe onto the racks, confirm that the Pipe output B stoppers have been lowered.

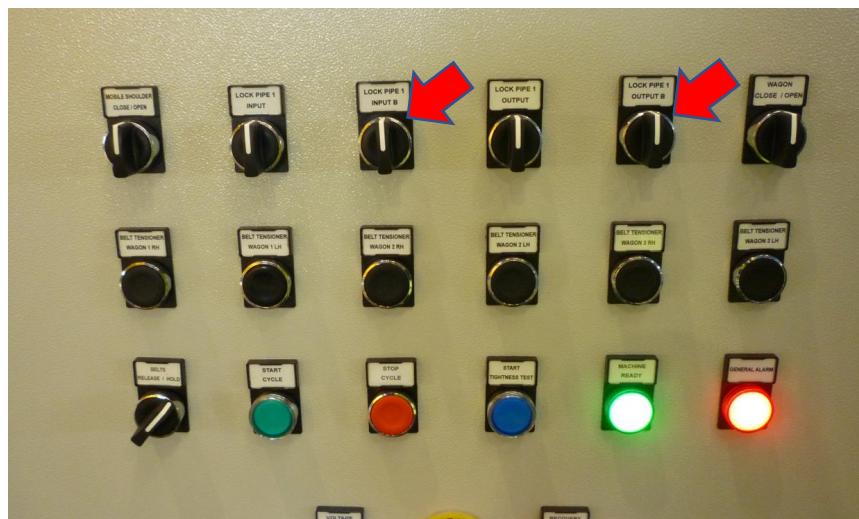


Figure 97

The letter B, in the description of the selectors that move the pipe stops of the beams, indicates the position of the pipe stops closest to the machine.

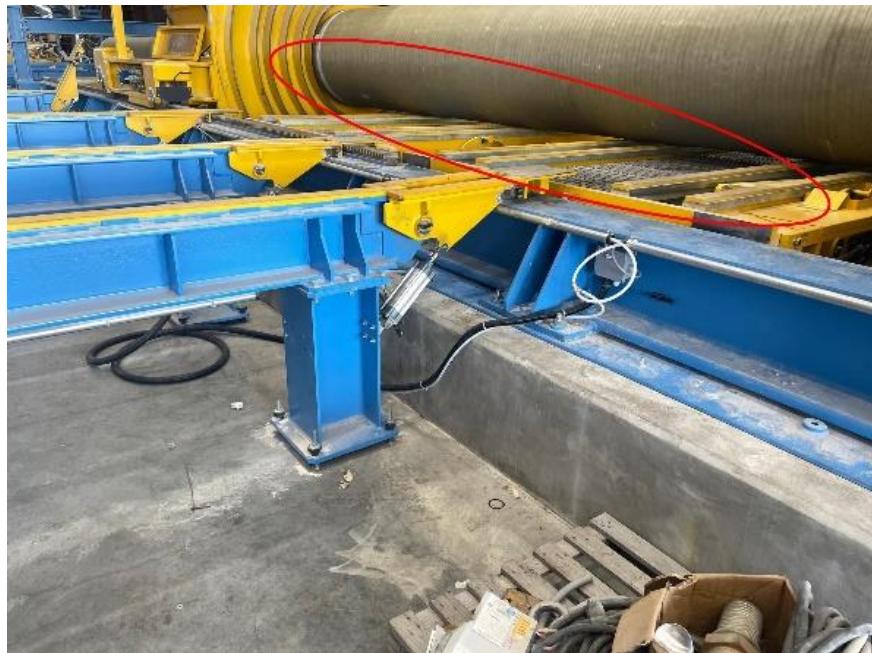


Figure 98

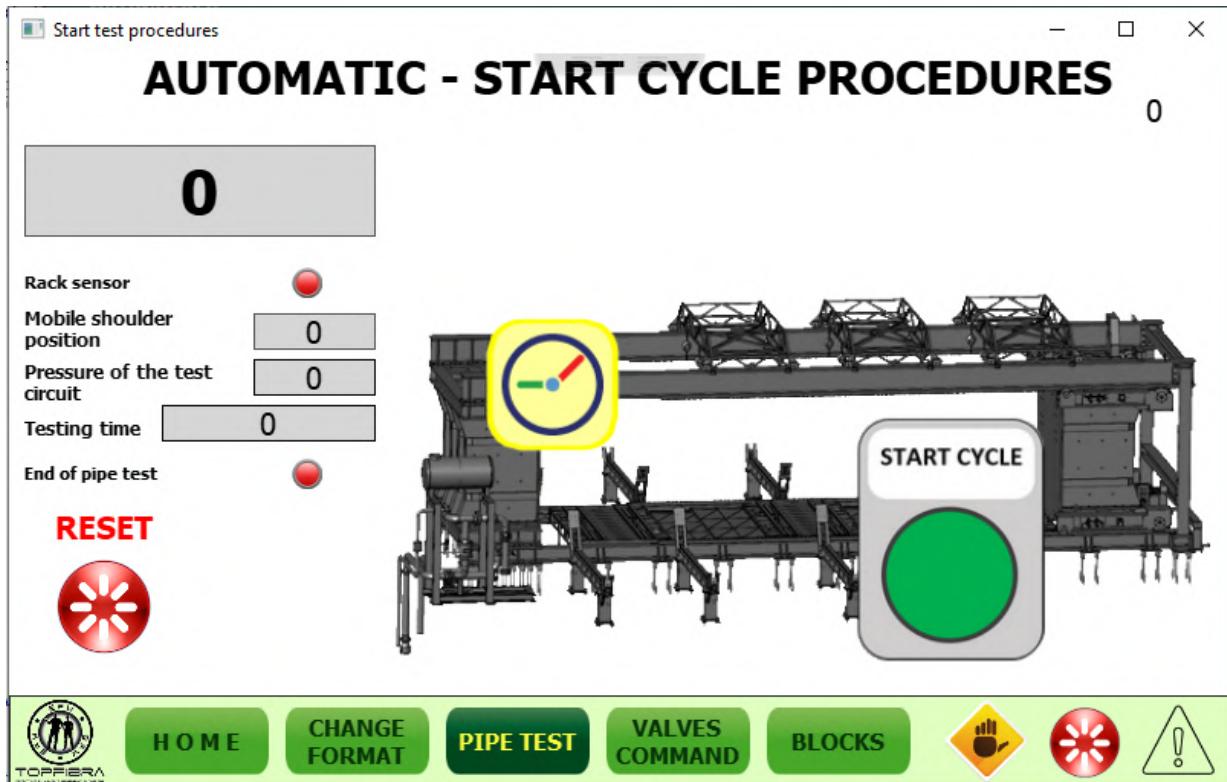


Figure 99

The cycle is finished; the machine is ready for a new test.

If the operator pushes the green button, the machine will start a new cycle.



Figure 100

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