

Improvements SK350

Sassenheim, September 2019



New control board and other updates for the SK350 shaker

For many of our customers, the SK350 has been their reliable shaker since 2007. And for us at FFM it's been a great commercial success too, with the ten-thousandth SK350 expected to roll off the production line this year.

After so many years of service, there are control board components that are no longer available on the market. To ensure the popular SK350 stays fully up to date, our engineers have developed a completely new board. And while we were at it, we freshened up the looks and included some other improvements. All in all, the new features are aimed at increasing operator and service engineer friendliness, as well as ensuring ultimate safety.

Despite its rejuvenation, the SK350 is still the same product for the most part. And the new spare parts board works perfectly as a spare part in the older SK350. Not even the name has changed.

Please read on for more information.

Operator friendliness

Operator display

The operator gets a display

The service display moved to the outside of the machine and is now visible to the operator (previously the display was a service display only, located behind the front).

The display supplies the operator with additional information like a count down timer, error codes and information about the state of the machine. When the shake cycle is done, it will for instance read 'rdY' in the display.



Emergency switch

Emergency switch stops shake process

When pressing the emergency switch the shake process stops, but the machine is no longer powered off. In this way, operations may continue quicker after the release of the emergency switch.



On/Off switch

New On/Off switch to save power

The refresh of the SK350 has a On/Off switch at the back of the machine. Turning the machine off is easier this way. It will save power.



Move clamp plates up with open door

The operator can move the clamp plates up when the doors are open

The operator may move the clamp plates up when the doors are open. This makes it easier and faster to shake different can sizes. This feature can be disabled via the settings menu.



Service engineer friendliness

FFM Maintenance

FFM Maintenance using USB connection

An USB connection is available. The USB port is located at the back of the machine. It is no longer needed to open the machine to access the serial port in case of maintenance.

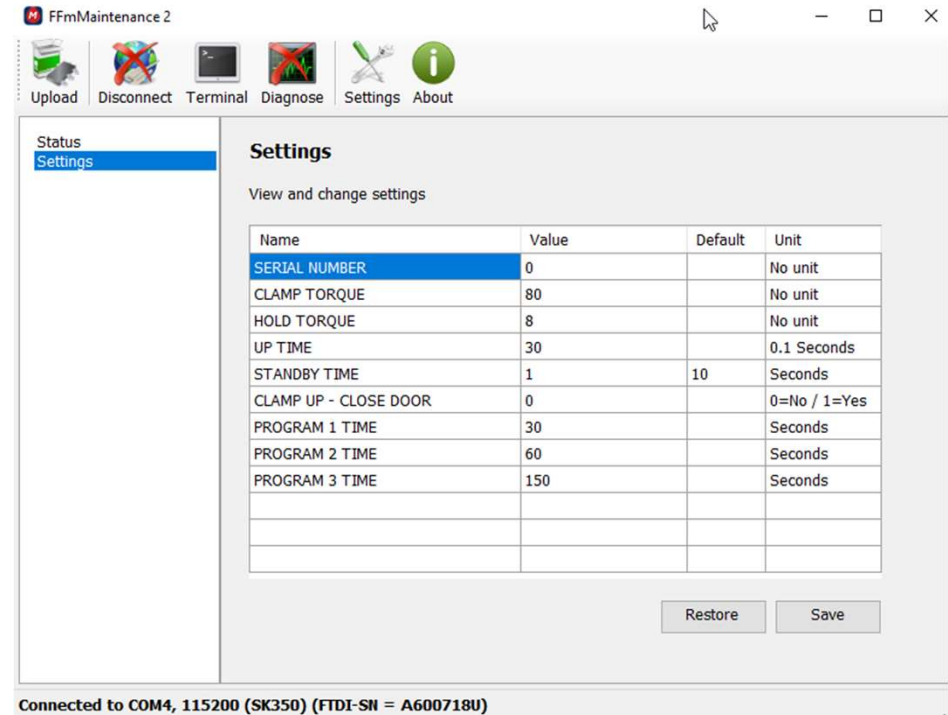
The service engineer may now use FFM maintenance to adjust settings and programs of the machine using the USB port. This works similarly to it's larger brother, the SK550 1.1.



FFM Maintenance

Use FFM Maintenance to change settings

In FFM Maintenance the service engineer may change settings. For example the Clamp Torque value.



The screenshot shows the FFMaintenance 2 application window. The title bar reads "FFMaintenance 2". The menu bar includes "Upload", "Disconnect", "Terminal", "Diagnose", "Settings", and "About". The "Settings" tab is selected in the left sidebar. The main area is titled "Settings" and "View and change settings". It contains a table with the following data:

Name	Value	Default	Unit
SERIAL NUMBER	0		No unit
CLAMP TORQUE	80		No unit
HOLD TORQUE	8		No unit
UP TIME	30		0.1 Seconds
STANDBY TIME	1	10	Seconds
CLAMP UP - CLOSE DOOR	0		0=No / 1=Yes
PROGRAM 1 TIME	30		Seconds
PROGRAM 2 TIME	60		Seconds
PROGRAM 3 TIME	150		Seconds

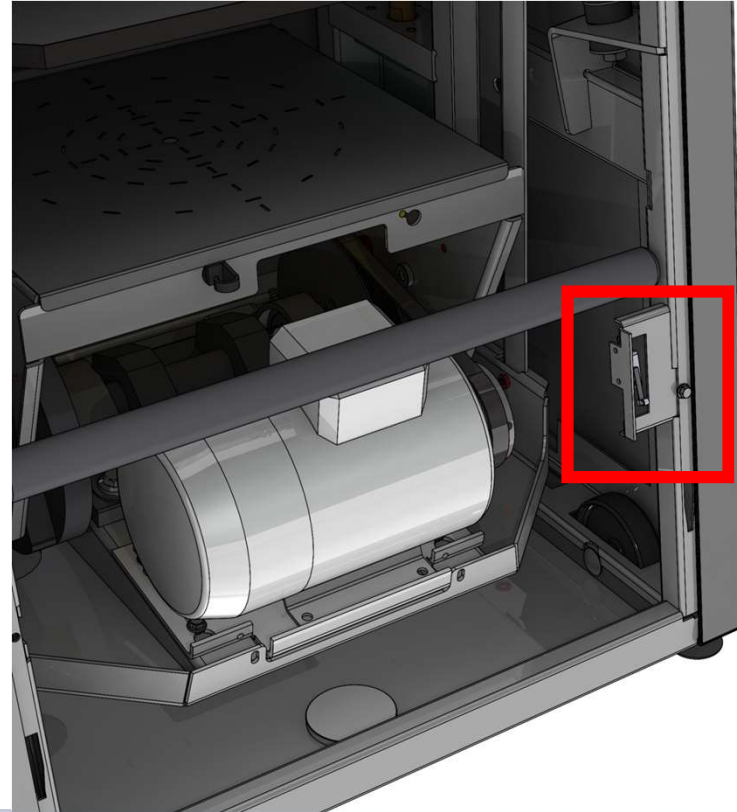
At the bottom right of the settings area are "Restore" and "Save" buttons. At the bottom of the window, a status bar reads: "Connected to COM4, 115200 (SK350) (FTDI-SN = A600718U)".

Safety

Additional door switch

Second door switch

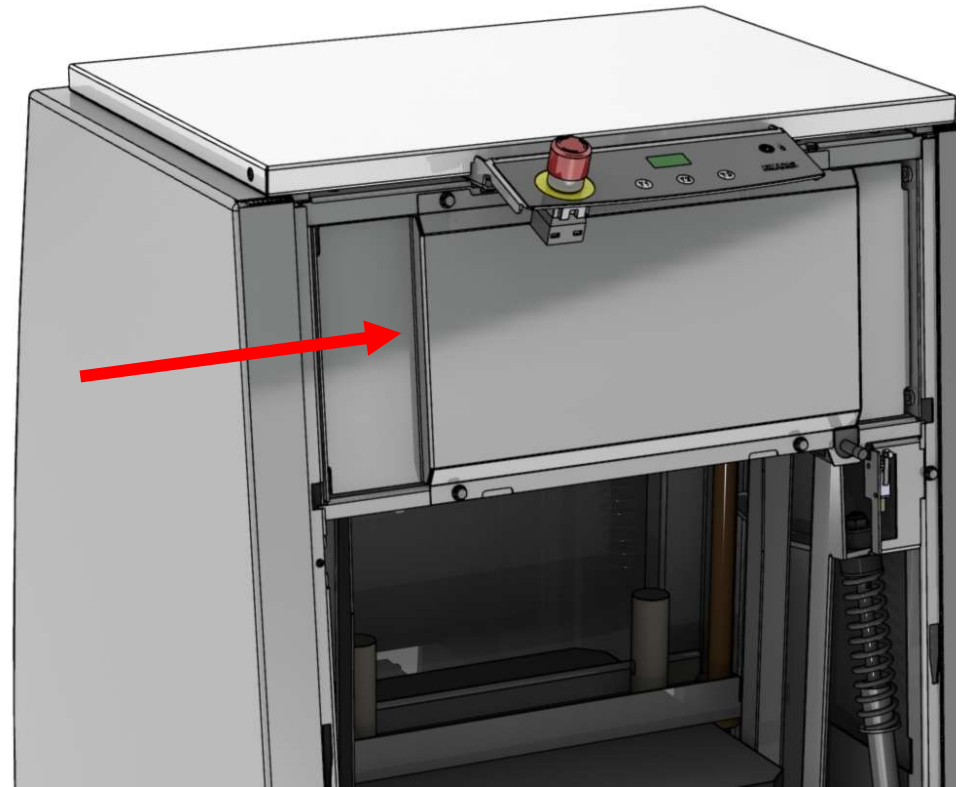
An additional door switch was introduced for the lower door. The second switch enhances security. It is an extra safety measure to ensure both doors are closed at all times during operations.



Cover for power board

A cover for the power board

A cover for the power board was introduced as a fire retardant.



Frequently asked questions

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What's the machine code of the new SK350?
It remains 350000000.

Will there be a new spare part book for the new SK350?

Yes. An updated spare part book will be available when production starts.

Will there be a new manual?

Yes. An updated manual will be available when production starts.

Do I need new firmware?

The new board requires new firmware. Via My Fast Fluid you will be able to download the latest firmware for the new and previous board.

