



WELDCUBE RELEASE 1.4

Release Description

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1 OVERVIEW: NEW FUNCTIONS

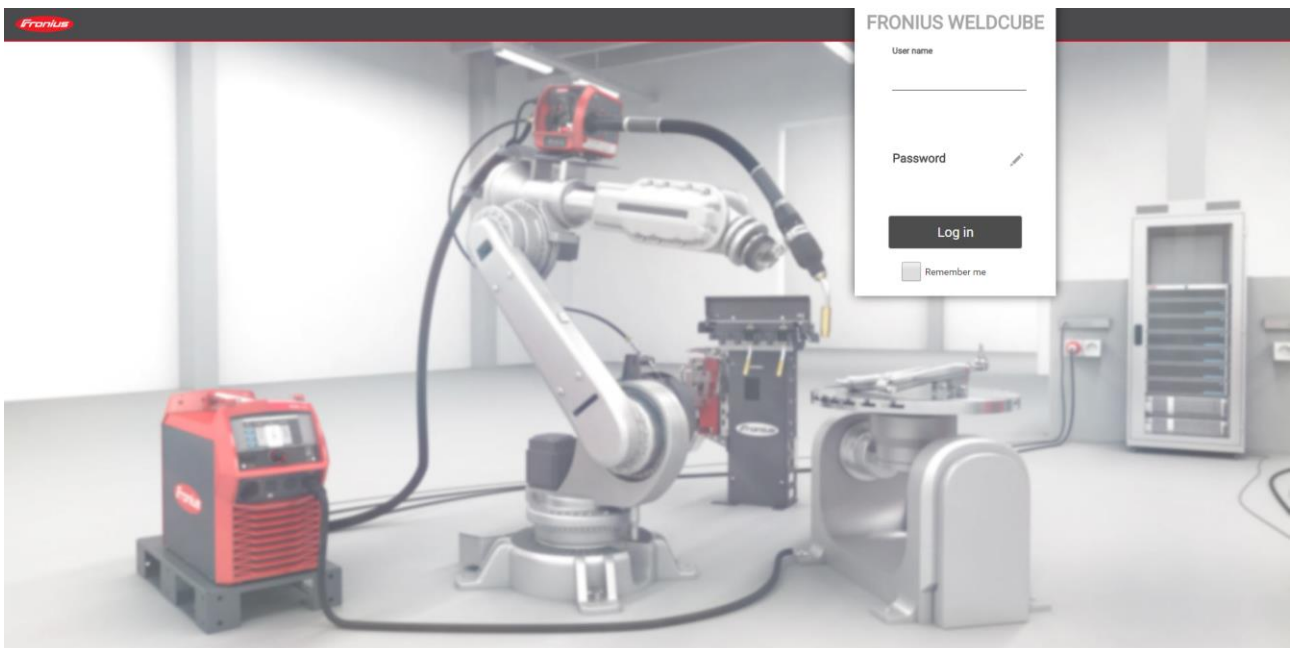
The following news are available with WeldCube release 1.4:

- / General
 - / New user interface.
 - / Improved data connection for TPS / MW / TT.
 - / 6 new languages available.
 - / Link to TPS/i website
- / Set values / jobs
 - / Searching & finding seams for selected jobs.
- / Actual values
 - / Multi CSV export for welding seams.
 - / Optimisation of DeltaSpot actual value charts.
- / Part management & reporting.
 - / Web API to trigger the part report PDF.
 - / Optimisation of part report PDF.
 - / Total processing time per part.

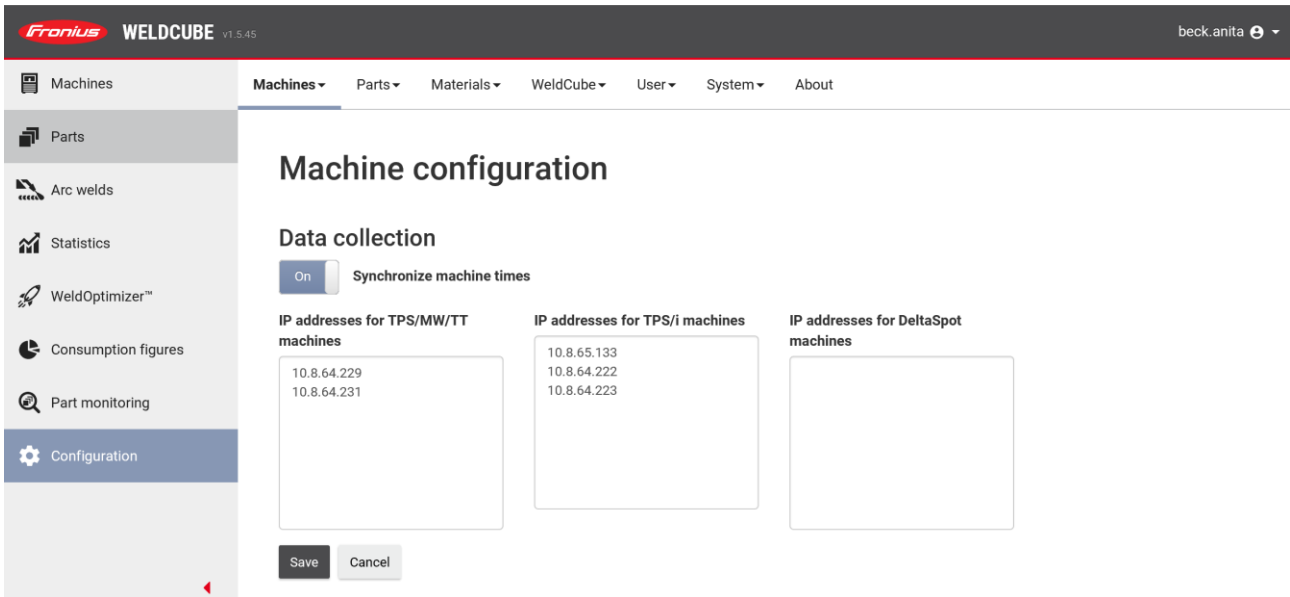
2 GENERAL

2.1 New user interface

The total WeldCube user interface is now available in the new Fronius software and online style.

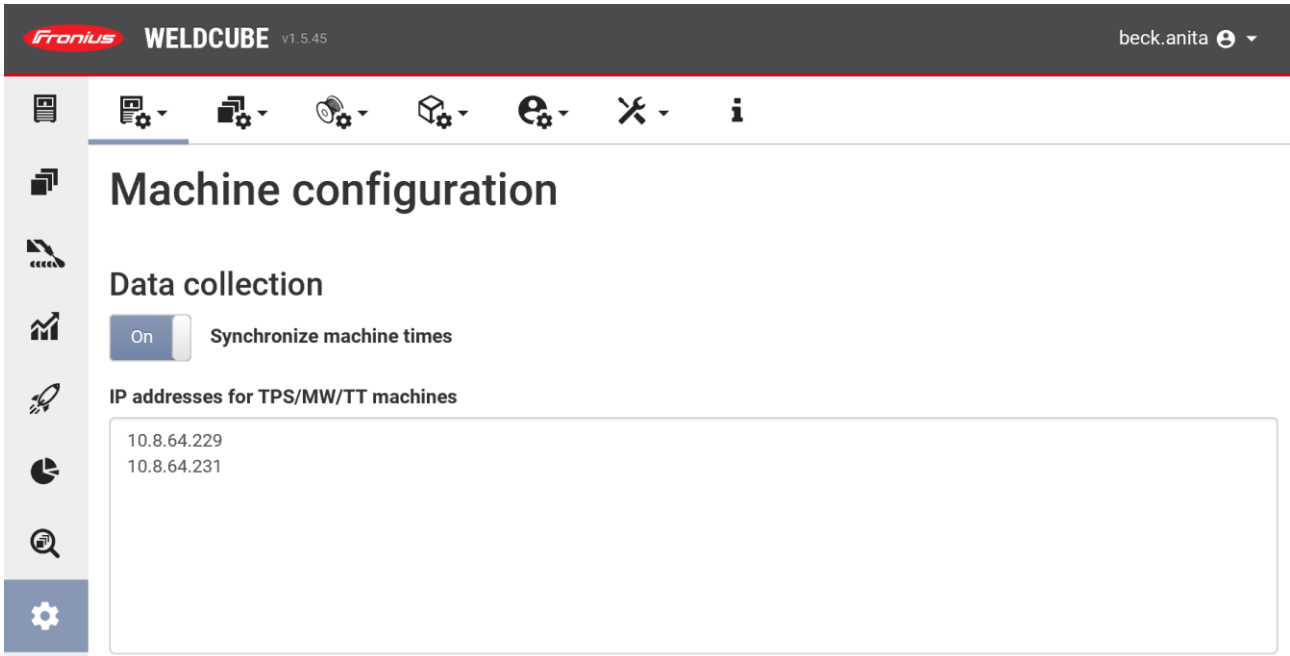


With this re-styling the configuration menu has also been restructured in order to provide optimum overview for all (new) functions and features.



Optimised mobile view

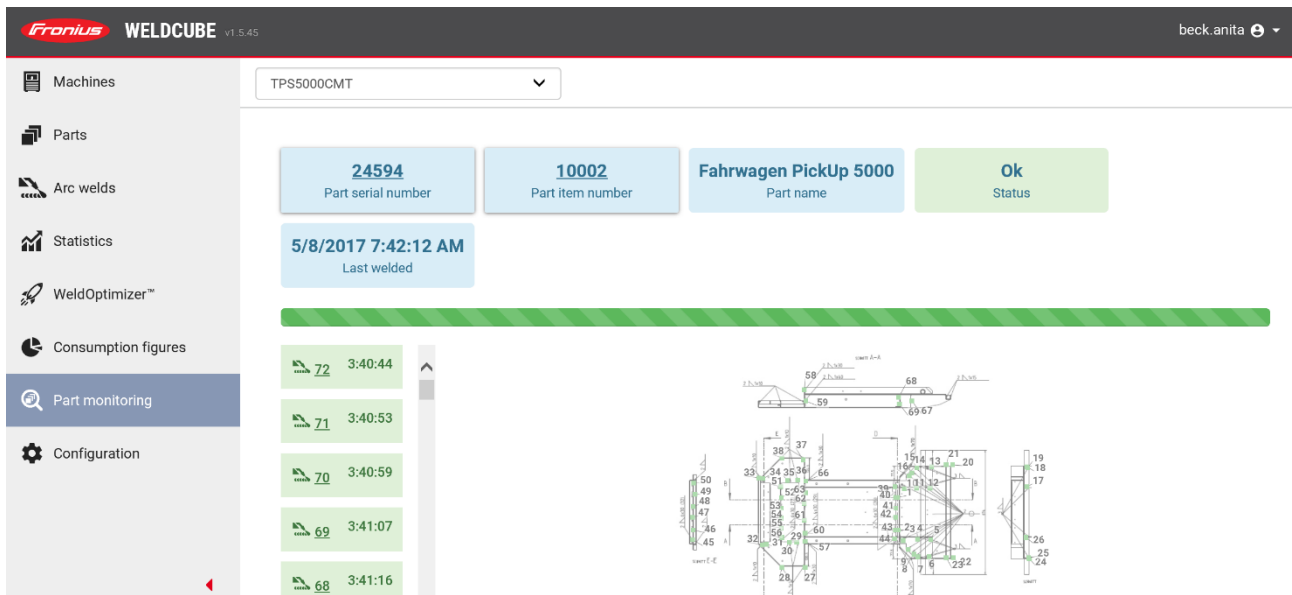
Menu and submenu are optimised for using WeldCube with mobile devices. The views now show icons instead of texts for smaller screens.



Part monitoring: all relevant part information at a glance

Without scrolling the most important part information is available at a glance: basic part information, pictures and progress bar.

What's new is a list of process steps already finished - the newest step is always on top and a direct link to corresponding seam details is available.



2.2 Improved data connection

Data connection for TPS / MagicWave / TransTig has been optimised. Thus problems with MagicWave are a thing of the past now.

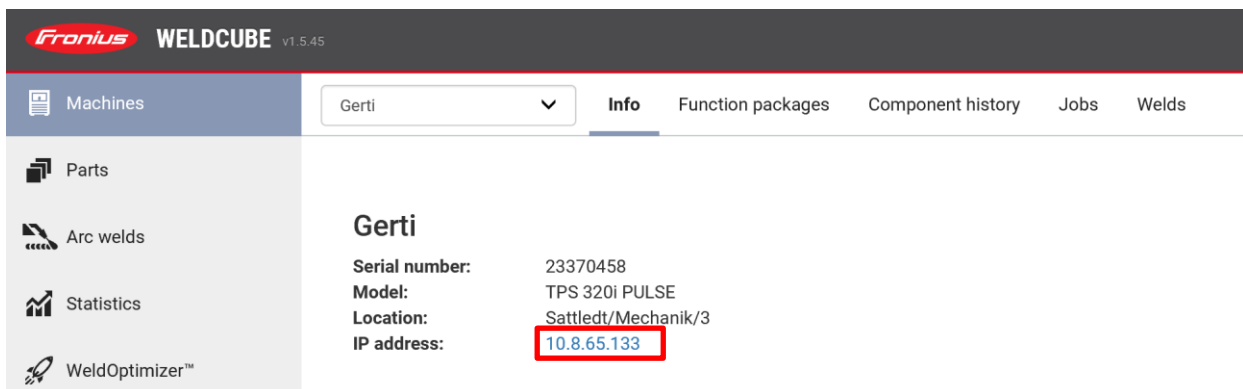
2.3 6 new languages

With the new 1.4 release the following new languages are available:

- / Finnish.
- / Swedish.
- / Hungarian.
- / Japanese.
- / Romanian.
- / Estonian.

2.4 Link to TPS/i website

At the machine information page as well as at the live view a link to the TPS/i power source webpage is now available.



Fast and convenient navigation is thus possible.

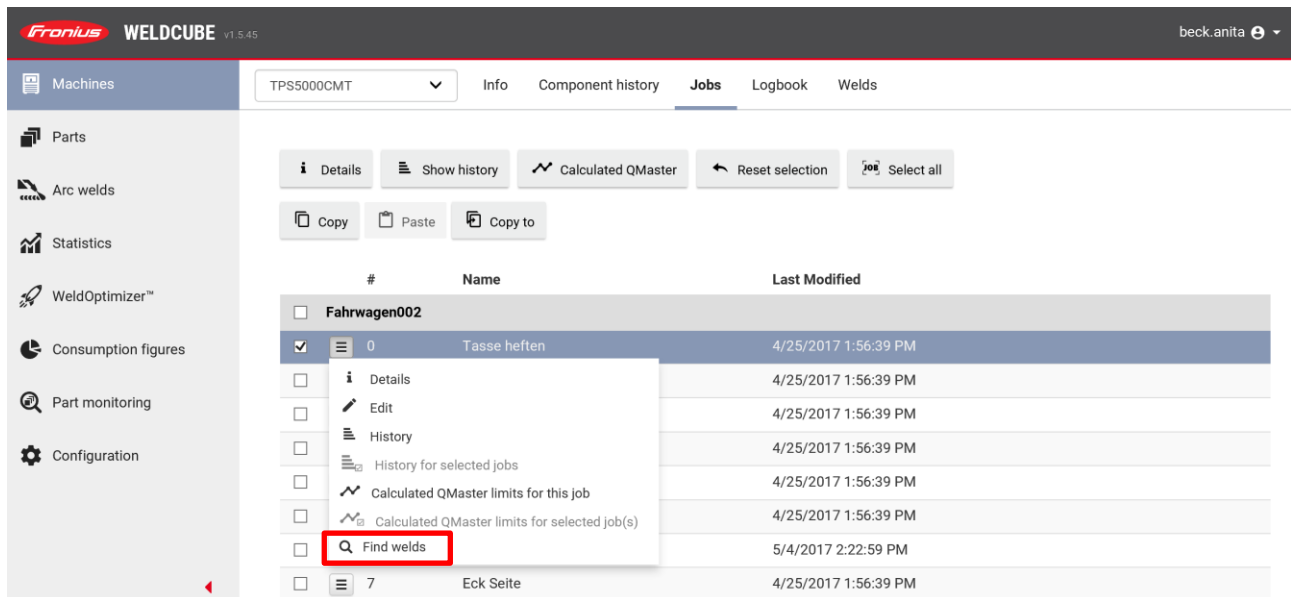
3 SET VALUES / JOBS

3.1 Finding seams based on jobs

While it was already possible to find corresponding jobs based on welding seams it is now also possible to find welded seams based on chosen jobs fast and easily.

Within JobExplorer

Using the context menu you can search for all welding seams the chosen jobs has been used for:

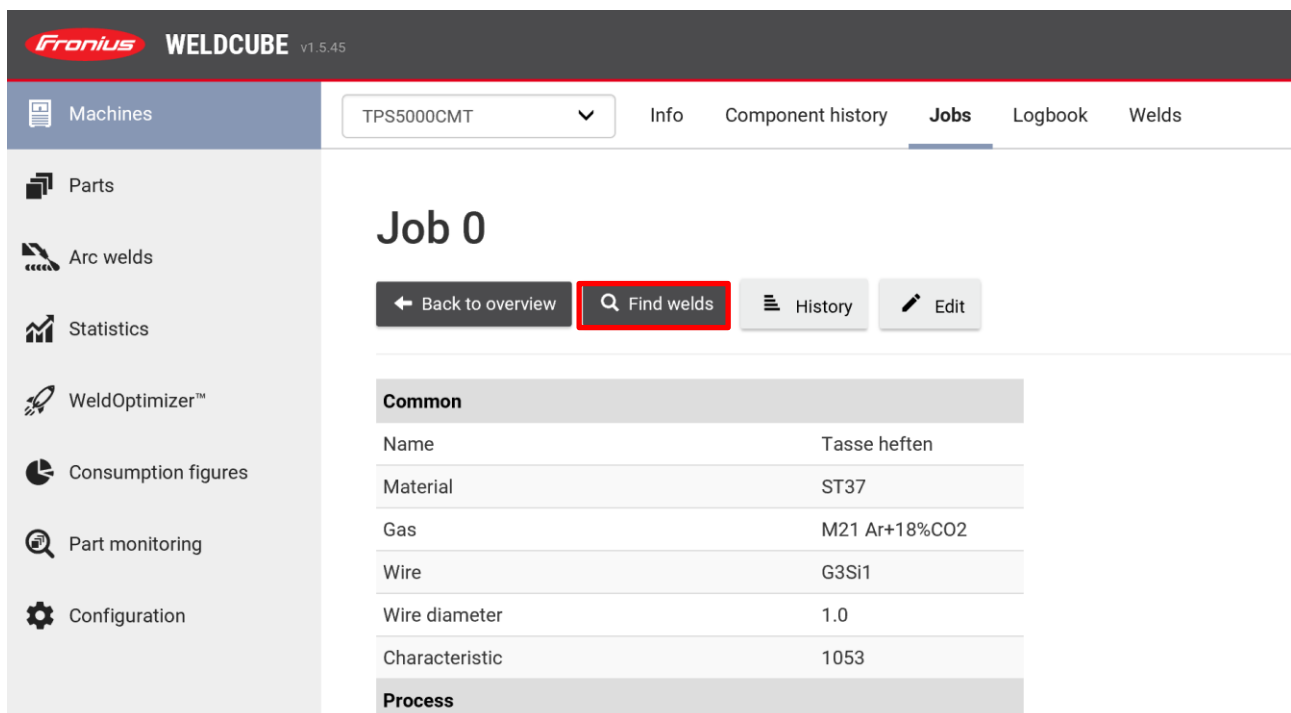


The screenshot shows the 'Jobs' tab in the WELDCUBE interface. A table lists jobs with columns for '#', 'Name', and 'Last Modified'. Job 0, 'Tasse heften', is selected. A context menu is open over it, with 'Find welds' highlighted in red. Other menu items include Details, Edit, History, and Calculated QMaster limits.

#	Name	Last Modified
0	Tasse heften	4/25/2017 1:56:39 PM
7	Eck Seite	4/25/2017 1:56:39 PM

Within job details

Within the job details there is also a search button for seams of the chosen job available:



The screenshot shows the 'Job 0' details page. A 'Find welds' button is highlighted in red. Below the button is a table with job details.

Common	
Name	Tasse heften
Material	ST37
Gas	M21 Ar+18%CO2
Wire	G3Si1
Wire diameter	1.0
Characteristic	1053

Process	
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Within job history

Even within job history searching welding seams of a job is possible. The search button is available as soon as the user selects a job:

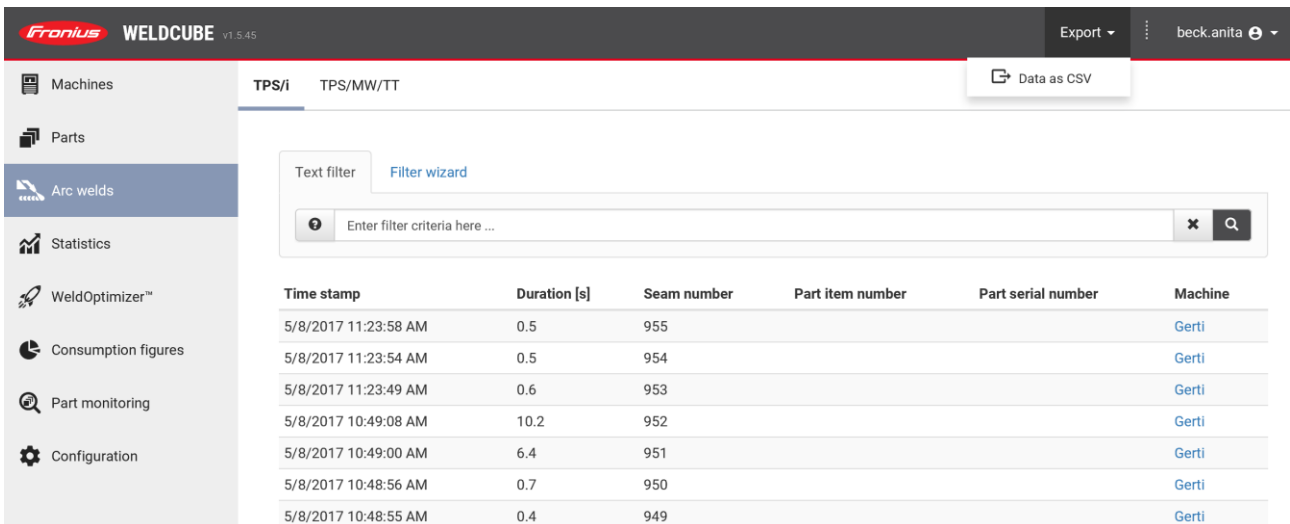
The screenshot shows the 'History for job 0' page in the WELDCUBE software. The interface includes a top navigation bar with the 'Jobs' tab selected. A sidebar on the left contains various menu items like 'Machines', 'Parts', 'Arc welds', etc. The main content area features a search bar with 'Find welds' highlighted in red, and a table of welding parameters for different time slots. The selected time slot is 10/31/2016 12:52:03 PM.

Value	<input type="checkbox"/> 4/25/2017 1:56:39 PM	<input type="checkbox"/> 4/18/2017 8:08:19 AM	<input checked="" type="checkbox"/> 10/31/2016 12:52:03 PM	<input type="checkbox"/> 10/31/2016 12:51:21 PM	<input type="checkbox"/> 6/7/2016 9:05:29 AM	<input type="checkbox"/> 6/7/2016 9:01:37 AM
Common						
Name	Tasse heften		Tasse heften		Tasse heften	
Material	ST37		ST37		ST37	
Gas	M21 Ar+18%CO2		M21 Ar+18%CO2		M21 Ar+18%CO2	
Wire	G3Si1		G3Si1		G3Si1	
Wire diameter	1.0		1.0		1.0	
Characteristic	1053		1053		1053	

4 ACTUAL VALUES

4.1 Multi CSV export

Until today it was possible to export a CSV file with all actual values per welding seam. With the “multi CSV export” function it is now possible to export all welding seams of a user specific list view together:



In this case a CSV file per welding is generated. The resulting amount of several CSV files is then packed within a ZIP file and downloaded.

Note:

The default welding list is limited to an amount of 200 welding seams. If the user wants to export more than these 200 seams, these additional data sets need to be added to the view using the

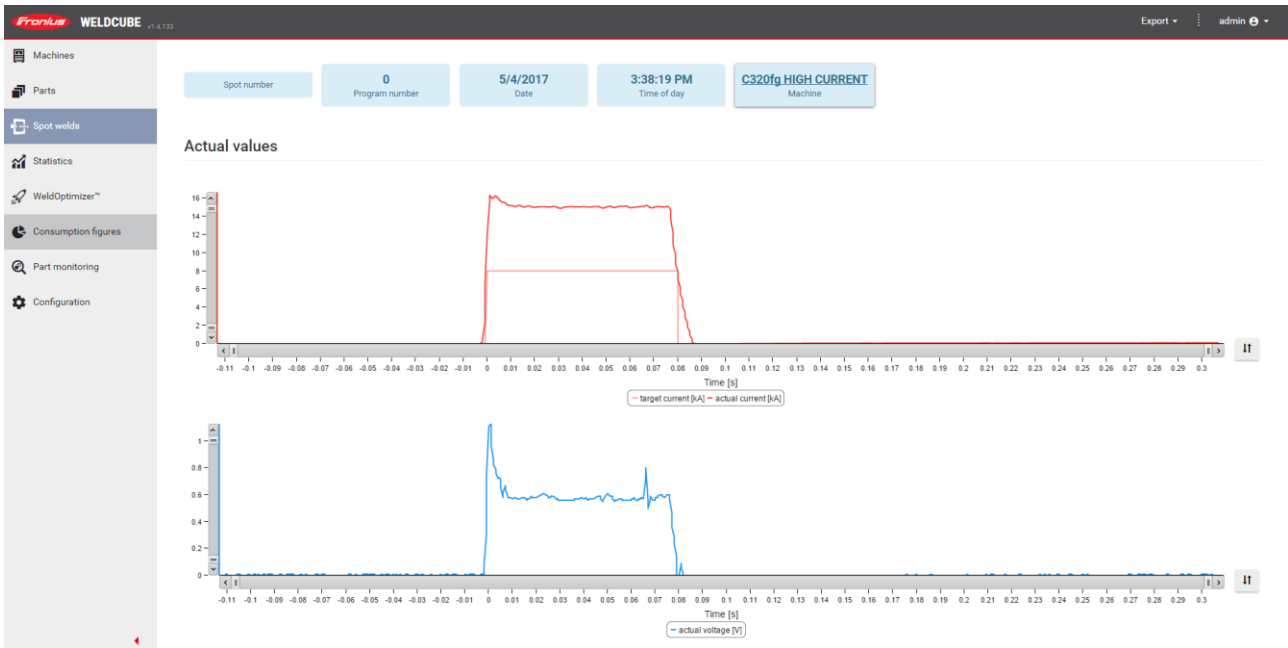
(Only the first 200 results are displayed) button.

Recommendation:

Bigger export projects need some time. Thus Fronius recommends to split bigger lists to several exports – e.g. based on the date.

4.2 Optimisation of actual value diagrams of DeltaSpot

DeltaSpot provides many actual values concerning actual values. Those values were displayed within one common chart until now. In order to improve clearness and easy readability of the charts for our users, WeldCube now generates several diagrams: one diagram per actual value recorded is provided.



The user can sort this list of charts based on his / her favourite sequence.

By hovering the charts the familiar tooltip shows up showing all values of the chosen point of time. Thus easy comparison of values is possible. The vertical metering bar also shows up within all diagrams.



5 PART MANAGEMENT & REPORTING

5.1 Web API

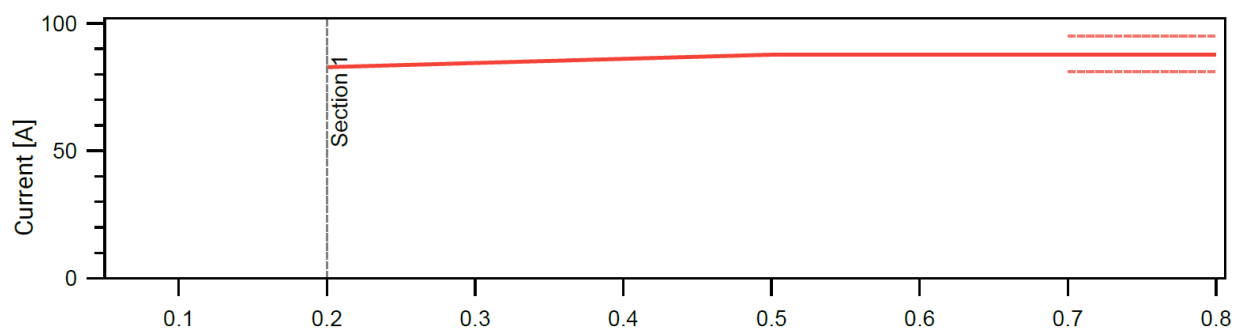
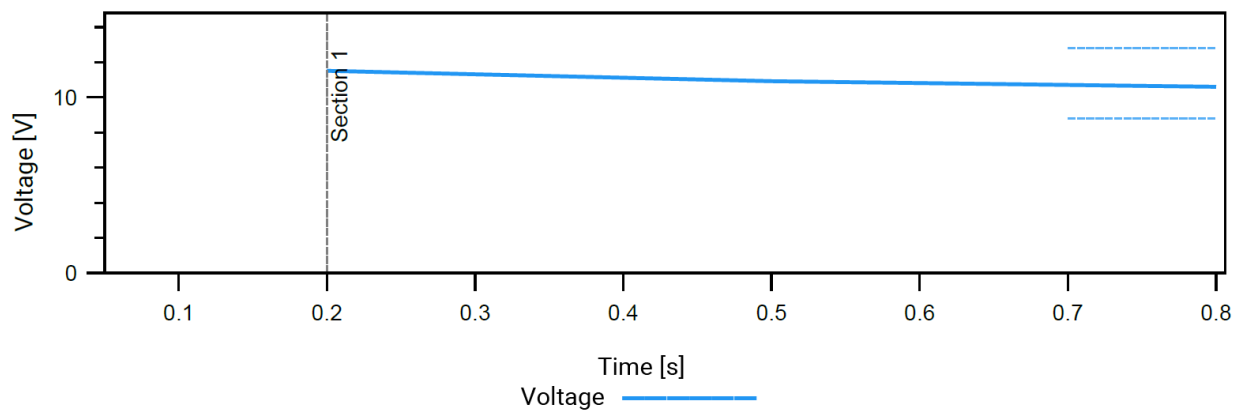
The web API provides the possibility to automatically interrogate WeldCube data using customer's programs. Currently this function is available for creating the part report PDF.

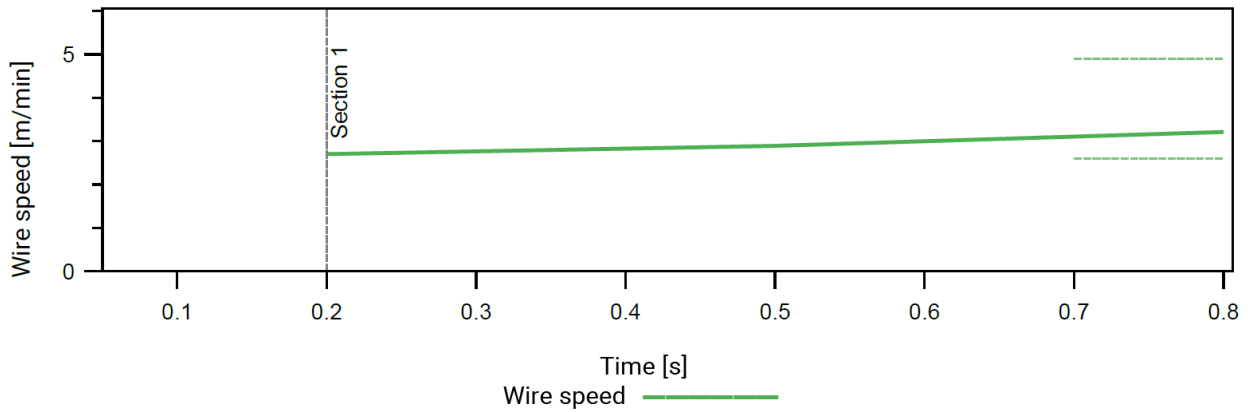
In order to protect WeldCube from unauthorized access a key (guid) authentication was implemented. Every WeldCube owns a global key (guids) list authorized users can edit. Any API initiator receives an API key. Details like name and location of the initiator can be saved per API key. Furthermore the last access time is recorded and displayed per API key.

5.2 Optimised part report PDF

The part report (PDF) shows welding parameters within separated charts in the future:

Actual values





With this optimisation **clearness** and easy readability of the information / values provided are clearly improved. Depending on the data amount the power source provides these charts might be split to several pages. 3 to 4 charts at maximum will be shown per page in order to ensure that the values within the charts are clearly readable.

Integrating the charts as vector graphics within the pdf guarantees **perfect print quality** as well as sharp edges irrespective of the zoom level.

As additional benefits the optimisation measures resulted in clear **time savings** when creating the reports (up to 5 times faster) as well as in the **reduction of the file size** to a fifth of the original size.

5.3 Total processing time per part

Part report and report PDF now contain the total processing time (process time). The value is calculated based on the time period starting with the first and ending with the last seam. Thus the overall part fabrication time (time for welding) of a part can be provided for our customers