



Plant genomics & gene editing congress

UgenTec



Laboratories are changing.

Fragmented. Paper-driven. Spreadsheets, Macros, Time consuming.



Consolidated. Software-driven. Automated.



They need qualitative tests, automated hardware & software to sew everything together.



Challenges in high-throughput genotyping

Ops

If required, could we **scale up**?
Can we easily **predict future costs** in terms of analysis?

Lab management

Is your laboratory process as **efficient** as it could be?
Are the results **correct & standardised**?
Is your staff **happy**?

Lab Personnel

Unchallenging, **repetitive tasks** adding no structural value to the lab?

Systems

How can I implement new technology in **increasingly busy workflow**?
How do I standardise my PCR analysis across **multiple locations or departments**?

Artificial intelligence & software enabling laboratories.



FastTyper

Breeding & purity check
workflows

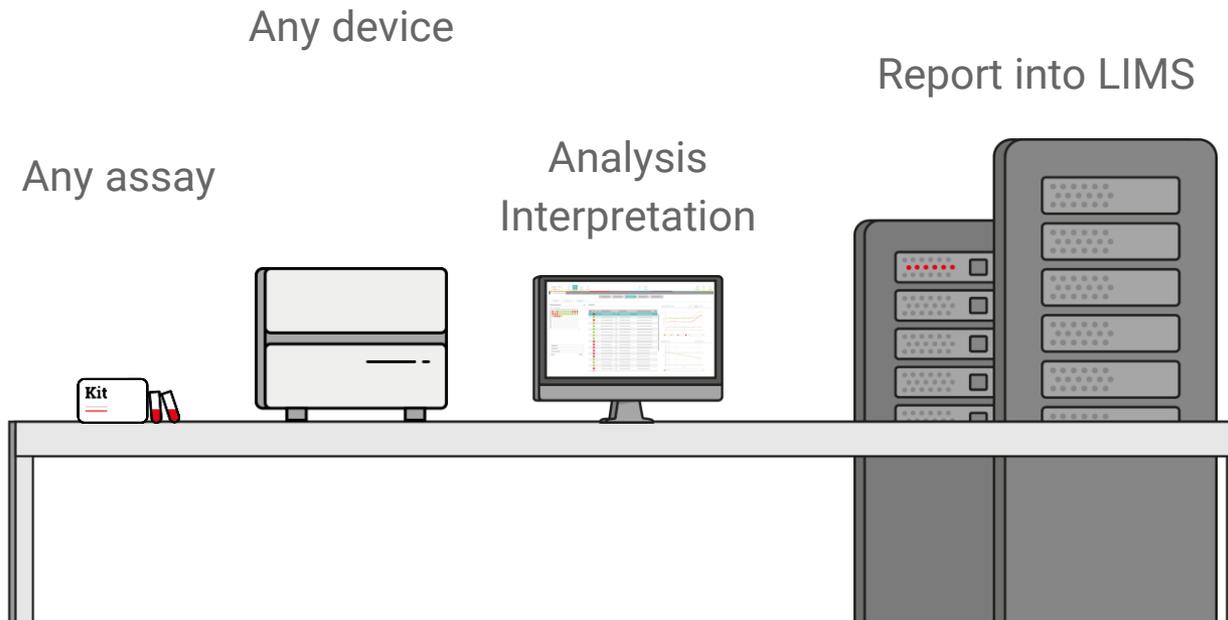


FastFinder

Pathogen detection workflows

FastFinder

Deploy artificial intelligence for real-time PCR



Set up a run in seconds

UgenTec

START ANALYSIS DEVICES ASSAYS

OC ARCHIVE

SETTINGS HELP LOGOUT

New run

DATA INPUTS RESULTS EXPORTS REPORTS REPORT VIEWER

1 Select datafile 2 Assign assay(s) 3 Configure assay(s)

Current directory: C:\Users\Wouter Utem\Desktop\Demo files\Demonstration 3.0

Browse Refresh

Showing 7 of 7

File name	Date	Filesize (MB)
20160703-qPCR-demo.iso	24/08/2017	3.25
20160704-qPCR-demo.iso	24/08/2017	3.25
20160705-qPCR-demo.iso	24/08/2017	3.25
20160706-qPCR-demo.iso	24/08/2017	3.25
20160803-qPCR-demo.iso	24/08/2017	3.27
20160804-qPCR-demo.iso	24/08/2017	3.27
20160805-qPCR-demo.iso	24/08/2017	3.27

NEXT STEP

Choose a run. Plate is set up automatically. Click analyse.

Raw file to report in a matter of seconds.

UgenTec

START ANALYSES DEVICES ASSAYS

OC ARCHIVE

SETTINGS HELP LOGOUT

demoQuant_exrun_upd1

DATA INPUTS RESULTS EXPORTS REPORTS REPORT VIEWER

Overview Resolve Details

Result controls: All negative controls are valid All positive controls are valid Not all regular samples are valid

Showing 29 of 29

Well	Name	Assay	Result	Cq values	Sample comment	Overall results
B10	NC-Mix	DEMO quantification - Mix - Negative control	Negative	Internal control: 29.01		NC NC valid.
B11	NC-Mix	DEMO quantification - Mix - Negative control	Negative	Internal control: 29.00		NC NC valid.
B12	NC-Mix	DEMO quantification - Mix - Negative control	Negative	Internal control: 26.85		NC NC valid.
A10	PC-Mix	DEMO quantification - Mix - Positive control	Positive	Target 1: 24.38 Target 2: 23.96 Target 3: 24.57		PC PC valid.
A11	PC-Mix	DEMO quantification - Mix - Positive control	Positive	Target 1: 24.72 Target 2: 23.96 Target 3: 24.57		PC PC valid.
A12	PC-Mix	DEMO quantification - Mix - Positive control	Positive	Target 1: 24.13 Target 2: 23.99 Target 3: 24.95		PC PC valid.
A1	1345-Mix	DEMO quantification - Mix - Regular (Sample)	Positive	Target 1: 34.06 Target 2: 33.98 Target 3: 34.74		1345 Target 2, Target 3, Target 1 detected High positive targets might inhibit the IC. A poor extraction can cause lower Cq values.
A2	4354-Mix	DEMO quantification - Mix - Regular (Sample)	Positive	Target 1: 34.02 Target 2: 33.94		4354 Target 2, Target 3, Target 1 detected

RESTART ANALYSIS REJECT ANALYSIS AUTHORISE ANALYSIS

Raw file to report in a matter of seconds.

Export to LIMS, PDF-report or CSV

The screenshot shows the UgenTec software interface with the 'EXPORTS' tab selected. The interface is divided into several sections:

- Export settings:** Includes fields for 'Export name' (20160905-qPCR-demo) and 'Export by' (thomas.beuls+sales@ugentec.com). It also has checkboxes for 'LIMS Export' (Standard ASTM Integration), 'Standard report' (Amplification Curve Analysis (PDF)), 'Custom report' (Ct ABI7500 (CSV), Delta Rn ABI7500 (CSV), Results ABI7500 (CSV)), and a text area for 'Report comments (only PDF)'.
- Experiment information:** Displays details such as 'Experiment file' (20160905-qPCR-demo.eds), 'Device name' (ABI), 'Instrument version' (7500 Software v2.0.4), 'Instrument ID' (12345), and 'Experiment created by' (magda).
- Analysis information:** Shows 'Analysis name' (20160905-qPCR-demo), 'Start time analysis' (24/08/2017 17:23:27), 'Analysis created by' (thomas.beuls+sales@ugentec.com), 'Software version' (3.0.1), and 'Authorised at' (24/08/2017 17:24:15).
- Assay information:** Lists 'DEMO LIMS', 'Assay version' (v0.1), 'Algorithm version' (AMP5_1), and 'Lot number' (testlot).

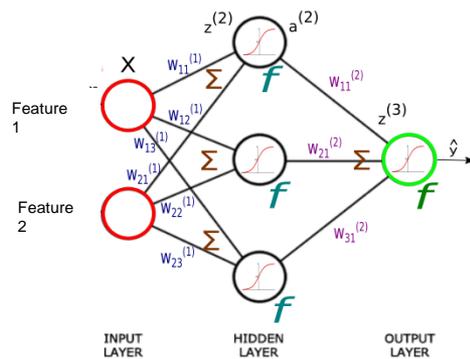
A blue 'EXPORTS' button is located at the bottom right of the interface.

Direct export to LIMS, PDF report or CSV-download

How does it work?

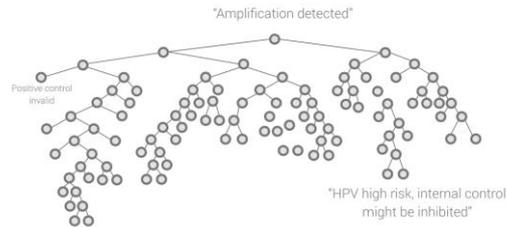
1.

AI to analyse curves



2.

Associate decision trees



3.

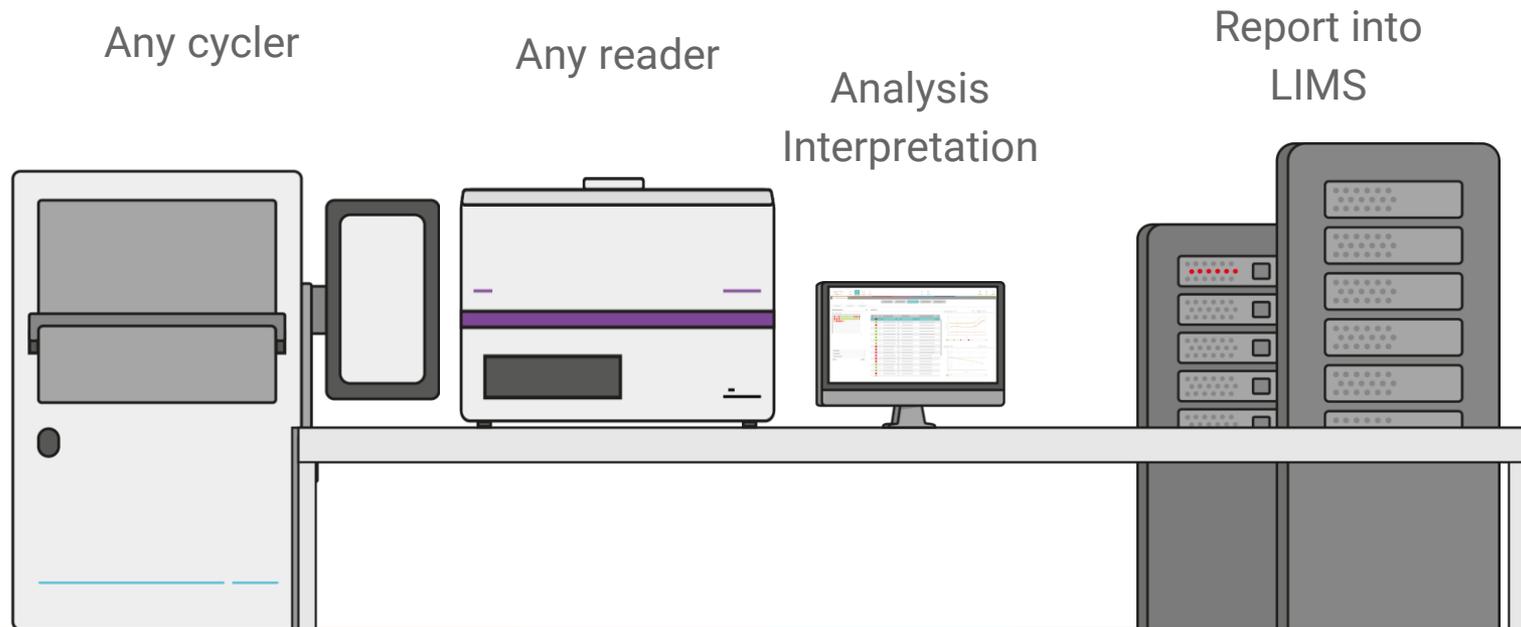
Process result downstream





FastTyper

Deploy artificial intelligence for end-point PCR



A user interface built for productivity

The screenshot displays the FastType application interface. At the top left, the logo 'FastType' is visible. The main navigation bar includes tabs for 'Orders', 'Assays', and 'Workflow'. On the right side of the navigation bar, there are icons for help, notifications, settings, and a user profile for 'Francis Rice'. Below the navigation bar, there are three browser tabs, each labeled '56789-Ordername'. A search bar with the placeholder text 'Type something' and a magnifying glass icon is positioned above a table. The table contains 14 rows of data, with columns for Order ID, Ordername, #Assays, #Masterplates, #Creation Date, Last Modified, and User. Each row represents an order, with the first 13 rows having an Order ID of 67309 and the last row having an Order ID of 67308. All order names are 'BEETS ASXF', the number of assays is 234, and the number of masterplates is 34. The creation and last modified dates are either 11-03-2018 or 11-27-2018, and all users are listed as 'Edgar Hardy'.

Order ID	Ordername	#Assays	#Masterplates	#Creation Date	Last Modified	User
67309	BEETS ASXF	234	34	11-03-2018	11-27-2018	Edgar Hardy
67309	BEETS ASXF	234	34	11-03-2018	11-27-2018	Edgar Hardy
67309	BEETS ASXF	234	34	11-03-2018	11-27-2018	Edgar Hardy
67309	BEETS ASXF	234	34	11-03-2018	11-27-2018	Edgar Hardy
67309	BEETS ASXF	234	34	11-03-2018	11-27-2018	Edgar Hardy
67309	BEETS ASXF	234	34	11-03-2018	11-27-2018	Edgar Hardy
67309	BEETS ASXF	234	34	11-03-2018	11-27-2018	Edgar Hardy
67309	BEETS ASXF	234	34	11-03-2018	11-27-2018	Edgar Hardy
67309	BEETS ASXF	234	34	11-03-2018	11-27-2018	Edgar Hardy
67309	BEETS ASXF	234	34	11-03-2018	11-27-2018	Edgar Hardy
67309	BEETS ASXF	234	34	11-03-2018	11-27-2018	Edgar Hardy
67309	BEETS ASXF	234	34	11-03-2018	11-27-2018	Edgar Hardy
67308	BEETS ASXF	234	34	11-03-2018	11-27-2018	Edgar Hardy

All your projects. Across multiple devices.

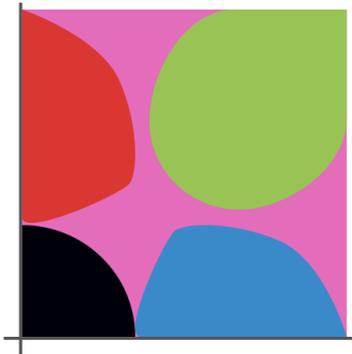
A user interface built for productivity



Automatically analyse hundreds of plates. FastTyper filters out anomalous results.

FastTyper becomes (even) smarter over time.

Generic algorithm



Assay 1



Assay 2



Assay 3



Assay-specific models

*Examples

Secure. Validated. Global.

UgenTec focuses on building secure hosted solutions, so data is always safe, private & fast.

Hosted across
the globe on



Certified quality
management system



Come and discuss AI and your
workflow at our booth



FastTyper

Breeding & Purity check
workflows



FastFinder

Pathogen detection workflows