

One-stop shop

Profit by our complete workflow

- > user requirements
- > technical specifications
- > microfluidic design
- > simulation, prototyping of disposables
- > preloading of a multitude of reagents
- > functional testing

Our infrastructure and qualification

- > computer aided design of microfluidics
- > S2/S3** labs for verification and validation
- > pilot line for production enabling clinical validation
- > DIN ISO 9001:2015 and DIN ISO 13485 certificates (expected from mid 2019 on)

Benefit from our modular system
at high technology readiness level!

We are looking forward to
get in touch with you!

■ Your contact

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Your assay
on a customized
Point-of-Care platform



Example
developed for

Nice to meet you!

You are looking for a customized Point-of-Care platform

- > to **miniaturize, integrate, automate** your assay
- > with reduced development risks and costs (**minimum invest**)
- > and with **short time to market** (6–12 months for fully functional prototype)
- > from small batch series of **10 up to 200,000 diagnostic cartridges/year**

We implement your assay ...

As R+D partner and problem solver we

- > take on your challenges in liquid handling and assay miniaturization
- > work with you to deliver intelligent solutions
- > support you from the initial idea or concept all the way through to production

... and develop the fitting solution for your test like

- > liquid biopsy and cancer monitoring
- > sample prep for next generation sequencing and proteomics
- > food analysis
- > pharma
- > **your issue**

With years of development and experience, we are now able to work with **exceptionally small volumes** and deliver the results in the **shortest possible time at the Point-of-Care**. Our system allows the analysis of **different types of samples**.

Example developed for our reference customer



- > screening for antibiotic resistant bacteria
 - > PCR based assay
 - > results within 30 minutes
- more on: www.spindiag.com

Technical details

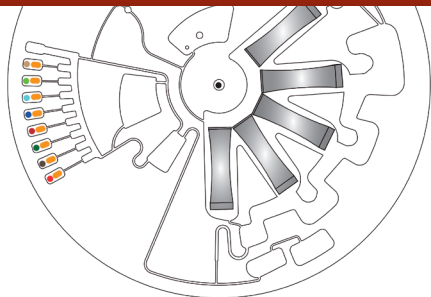
Our platform of choice: Centrifugal microfluidics

There are many different ways to implement assays. Based on 20 years of experience we chose centrifugal microfluidics. Advantages are

- > no pumps and no tubings needed (simple interfaces)
- > no issue with gas bubbles
- > easy to use at Point-of-Care
- > enables implementation of complex assay
- > easy to manufacture cartridges (assembled of two main parts only)

Technical specifications

- > sample input from blood, saliva, skin, food, meat, ...
- > dry and liquid reagent storage, automatic release (50 μL – 1.500 μL ; shelf life > 12 months for liquids)
- > sample interface (swab, capillary, pipetting, ...)
- > metering 50 nL (CV: < 5 %); 10 μL (CV: < 1 %)
- > aliquoting and geometric multiplexing (typical 10 – 48)
- > up to four color multiplexing (e.g. FAM, ROX, Hex, Cy5)
- > incubation and thermocycling (30 – 95 $^{\circ}\text{C}$; +/- 0,1 $^{\circ}\text{C}$)



Microfluidic layout



Pilot line



Diagnostic cartridge