Agilent Technologies Cobalt

Company information

- US'
- Revenue: \$5 BILLION USD
- Employees: 13.500 But less than 100 for Cobalt
- Acquisition of Cobalt Light (UK): 2017
- Production US (Raman)

Market presence

- Global
- Big partner's network
- Many technologies. But Cobalt systems, only Raman portable (but not handheld)
- Life Science, Pharma, Environmental, Materials, S&S

Raman portfolio

- Resolve (portable, not handheld)
- Rapid ID (transportable, not portable)
- Insight 200M (transportable, not portable)
- Note: Rapid ID and Insight are not Raman handheld.

Price range 65 – 80 k €

Support/Warranty

- 1-2 years
- 24/7 Reach-back support. Local number, site

Positioning

- All bets on "Through-Barrier": Scarifying real handheld capability for analysis through any barrier (even dark and opaque)
- Strong in Airport security. They combine Resolve Raman with non-invasive screening
- of aerosols, gels and other liquids with Rapid ID and Insight 200M
- NEW DEVICE: VAYA. Strong in Pharmaceutical quantitative analysis of tablets and capsules, raw materials ID verification of pharmaceutical incoming goods

SW/FW/libraries

- Target customers: S&S (airports) / Pharma / Industry / S&S (mainly airport sec.)
- Libraries: Same than 100 Indicator
- Updates/upgrades (Libraries, FW, SW): free & unlimited

Weaknesses

- Very bulky and heavy (Portable, but not handheld)
- Very complex use
- High price
- Cumbersome measuring process
 Terrible GUI, usability and user experience
- Neither SERS nor 1064nm: Just 810nm
- lasers: Not enough against fluorescenceOnly 4 hours battery. They need 2 batteries
- Their "through-barrier" (SORS): high risk of igniting or triggering an explosion when scanning a barrel that may contain sensitive explosive material
- In summary: It is overdesigned

Strengths Serstech's response "Through-Barrier": SORS Rarely needed. And to perform a "through barrier" measurement in field conditions is very cumbersome and hard to make it work Strong laser power output: up to 475mW No need to go that high: Risk of burning the sample. They need that much laser power output to perform their "through-barrier" technique.

Good resolution \rightarrow

Resolution: Same than ours + we are much smaller in size!

Notes:

How Serstech wins

- Size, weight, price
- Speed
- SERS kit
- Ease of use
- Overall solution
- Having SERSTECH as a company: Easier to reach Better and faster support Fully focused on Raman
- We're not arrogant towards users



Agilent – Vaya



Positionina

- New Agilent solution for Pharma applications, based on Resolve platform
- Also strong in Pharmaceutical quantitative analysis of tablets and capsules, raw materials ID verification of pharmaceutical incoming goods
- Unique technology: "Through-Barrier": Scarifying real handheld capability for analysis through any barrier (even dark and opaque)
- Laser: 830nm
- Pharmacopeias: 21 CFR Part 11, USP <1120> and EP 2.2.48, USP<1225>, USP<1058>

Price range

• 60-70 k €

Weaknesses

- Very bulky and heavy (Portable, but not handheld)
- Very Long analysis time
- Cumbersome measuring process
- Neither SERS nor 1064nm; Just 810nm lasers: Not enough against fluorescence and no solution for low concentrations
- Only 4 hours battery. They need 2 batteries
- Their "through-barrier" (SORS): high risk of igniting or triggering an explosion when scanning a barrel that may contain sensitive explosive material
- One single focal point: No Autofocus
- Problems with heterogeneous samples
- Problems with fluorescence from wall containers





"Through-Barrier": SORS \rightarrow Rarely needed. And to perform a "through barrier" measurement in field conditions is very cumbersome and hard to make it work Strong laser power output: up to $475 \text{mW} \rightarrow$

Strenaths

Good resolution BCS: Supports most 1D and 2D barcodes \rightarrow

How Serstech wins

- Size, weight, price
- Speed • Ease of use
- Overall solution
- SERS kit (fluoresc. & LOD) ARX SharpEve & autofocus:
- Reduced glass fluorescence
- No sample heterogeneity issues
- Faster speed of analysis ARX device workflows:
- Simpler navigation
- Shorter time to measurement
- Comprehensive analysis
 - modes

Comments:

- New Serstech SharpEye lens system and the auto focus algorithms • automatically adjust the focal position to where the Raman signal is the strongest. Moving the focal point and evaluating strength of the Raman response is done in milliseconds.
- AUTOFOCUS AND SHARPEYE LENS ARE UNIQUE IN THE MARKET

- No need to go that high: Risk of burning the sample. They need that much laser power output to perform their "through-barrier" technique.
 - Resolution: Same than ours + we are much smaller in size!
 - Camera / Barcode Reader

Serstech's response

Agilent – Resolve



Positionina

- Agilent solution for handheld Raman for S&S
- Unique technology: "Through-Barrier": Scarifying real handheld capability for analysis through any barrier (even dark and opaque)
- Strong in Airport security. They combine Resolve Raman with non-invasive screening of aerosols, gels and other liquids with other Agilent devices
- Laser: 830nm

Price range 60-70 k €

Weaknesses

- Very bulky and heavy (Portable, but not handheld)
- Not at all user friendly
- Very Long analysis time
- Cumbersome measuring process
- Terrible GUI, usability and user experience
- Neither SERS nor 1064nm: Just 810nm lasers: Not enough against fluorescence and no solution for low concentrations
- Only 4 hours battery. They need 2 batteries
- Their "through-barrier" (SORS): high risk of igniting or triggering an explosion when scanning a barrel that may contain sensitive explosive material
- In summary: It is overdesigned
- One single focal point: No Autofocus
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- No need to go that high: Risk of burning the sample. They need that much laser power output to perform their "through-barrier" technique.
- Good resolution \rightarrow
- Resolution: Same than ours + we are much smaller in size!

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- Size, weight, price
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- Overall solution • SERS kit (fluoresc. & LOD)
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