

QualitySense

SOI²
Smart QSorter Inspection Insights

get
all the
quality
data

and
get
it
right

Bean by Bean



QSorter[®]
**Automatic Grading
Green Coffee Beans**



NESPRESSO



SUNTORY

30 min for grading 300 gr with
only a few quality parameters

high subjectivity errors and
only average values

quality differences between
pre-sale and arrival samples

confusion due to dozens of
quality scoring systems

**troubles in
transactions,
tracking,
processing and
taste**





QSorter® - The New Coffee Quality Language

Measure automatically several quality parameters with accuracy and lots of insights

Inspect 300
gr in 5 min

No
consistency
errors

Test more
and
everything

Translate
results in all
systems



Q Bean by Bean Automatic Grading

Grade and Defect Analysis

- ISO standard 10470 definitions
- SCA and GCA grade

Physical Properties

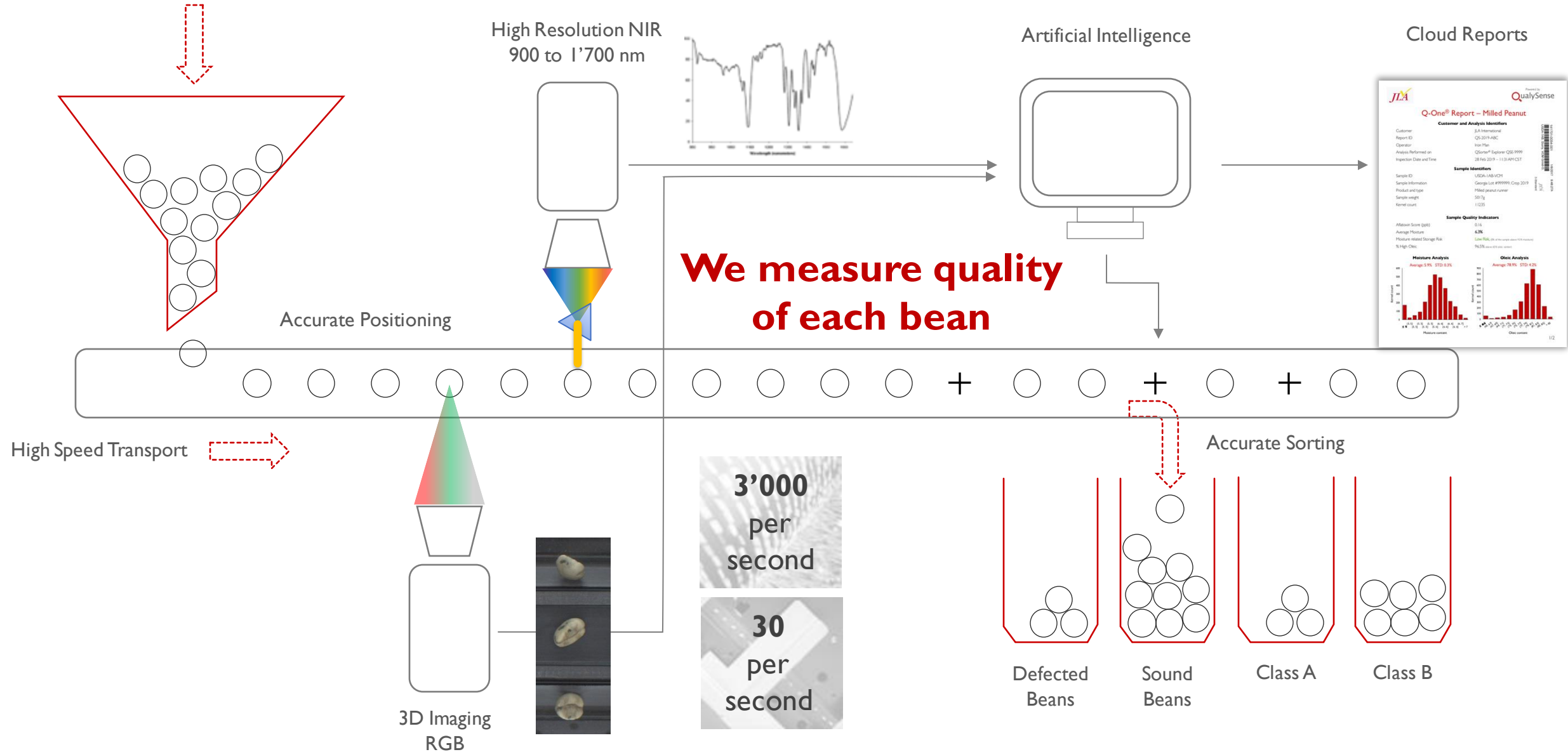
- Size distribution
- Color L^*a^*b and shape analysis

Biochemical and Roasting Analysis

- Moisture, sucrose, protein, lipids
- Single bean distributions



Advanced Robotics and Sensing with AI



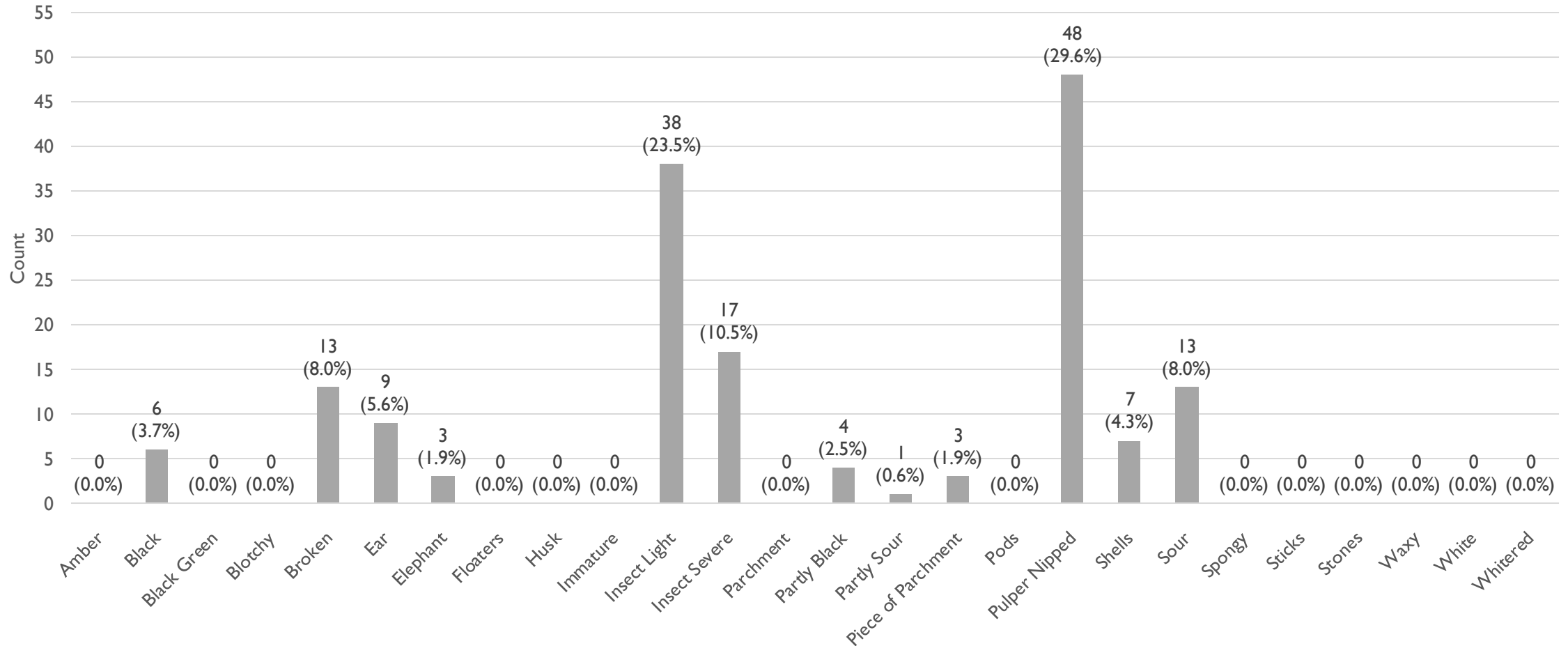
Introducing the ...



Smart **QSorter** Inspection Insights

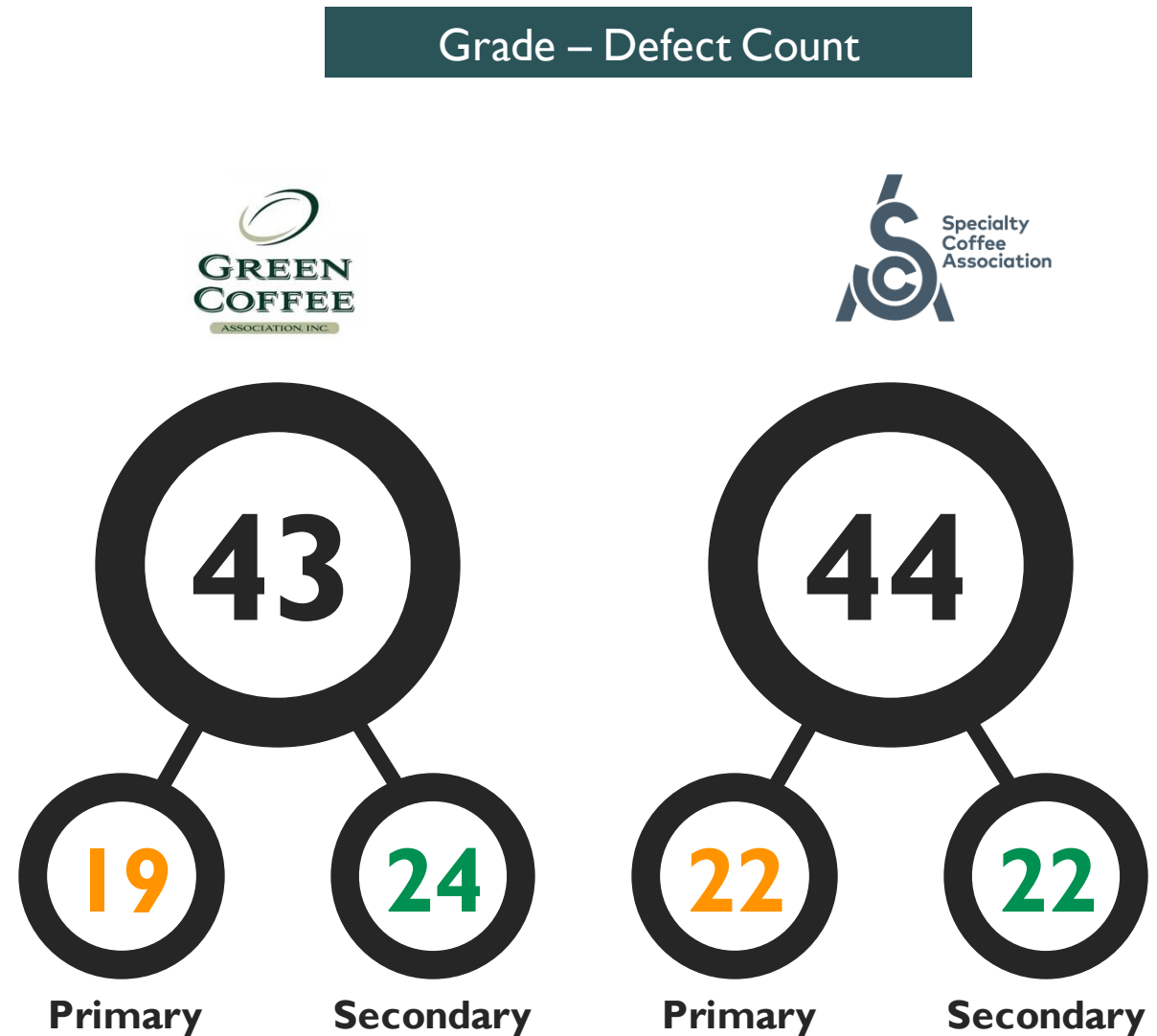
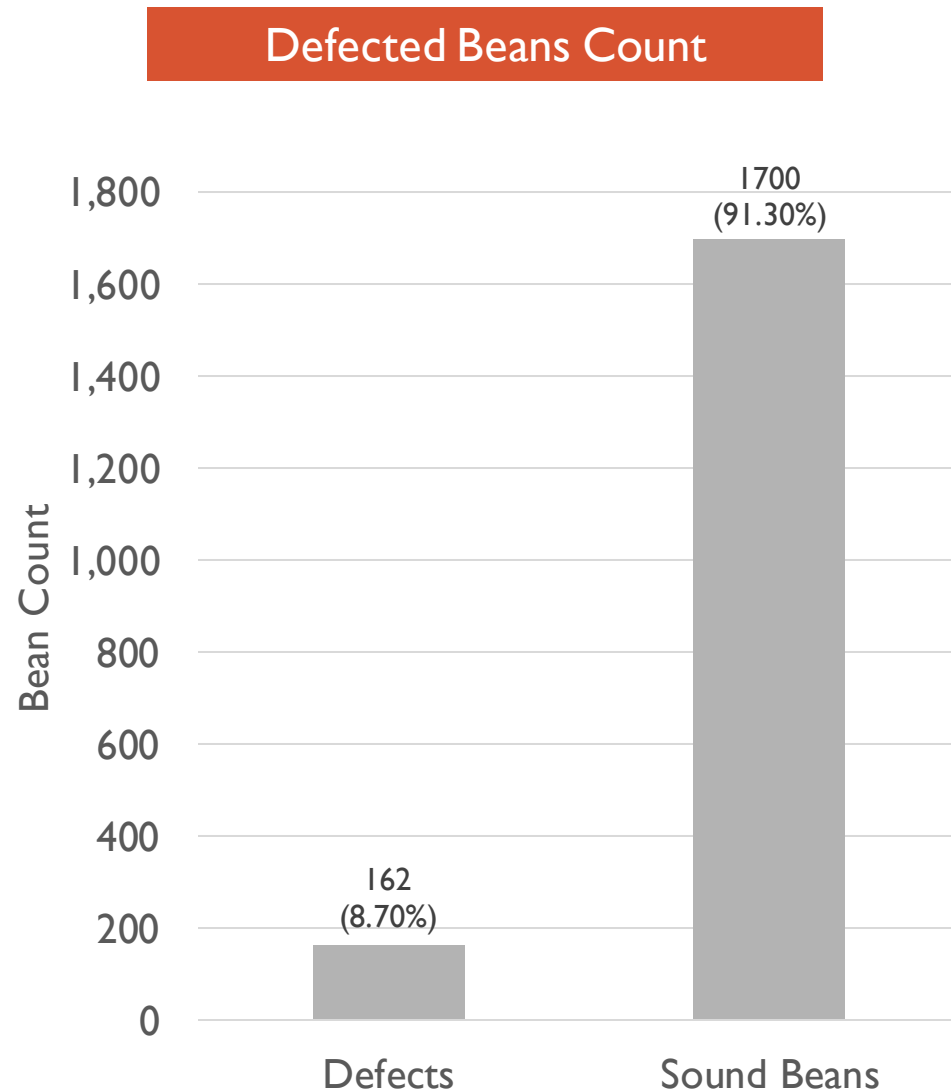
Accurate Defects Count with AI

Beans Count per Defect



ISO standard 10470 definitions

From ISO Count to Any Scoring System

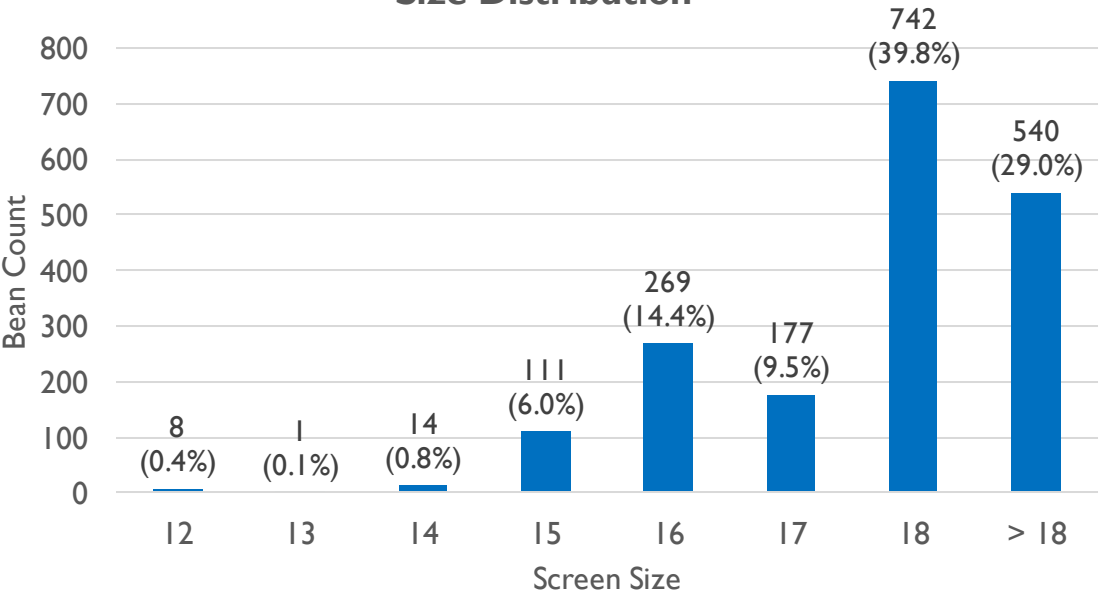




Physical and Biochemical Analysis

Physical Analysis

Size Distribution



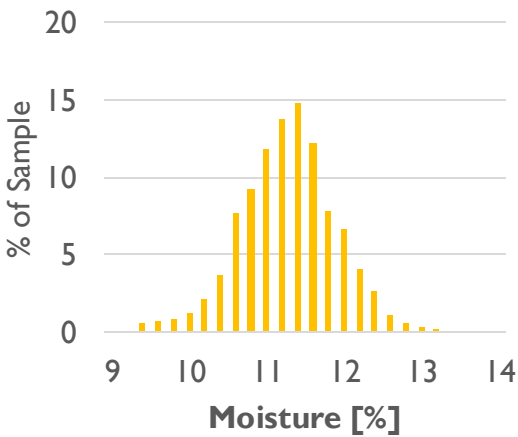
Color Analysis

Lightness	[0 to 100]	53.0
a (Green to Red)	[-128 to 128]	1.7
b (Blue to Yellow)	[-128 to 128]	20.4

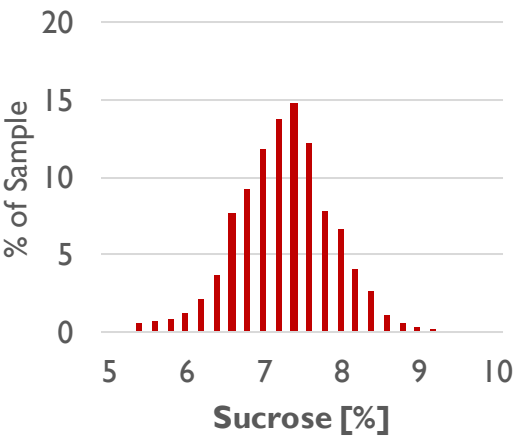


Biochemical Analysis

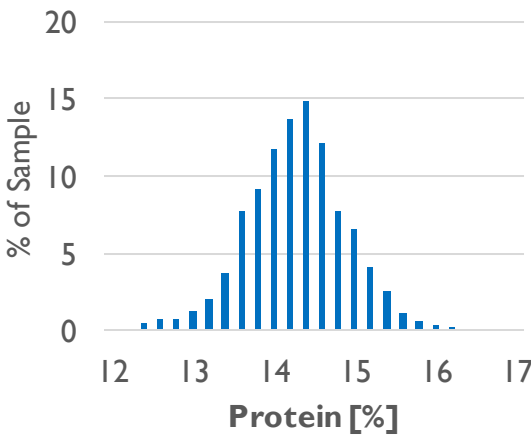
AVG 11.4% - STD 0.6%



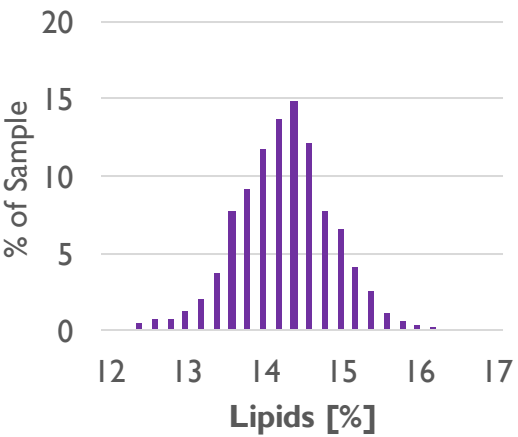
AVG 7.2% - STD 0.4%



AVG 10.5% - STD 0.5%

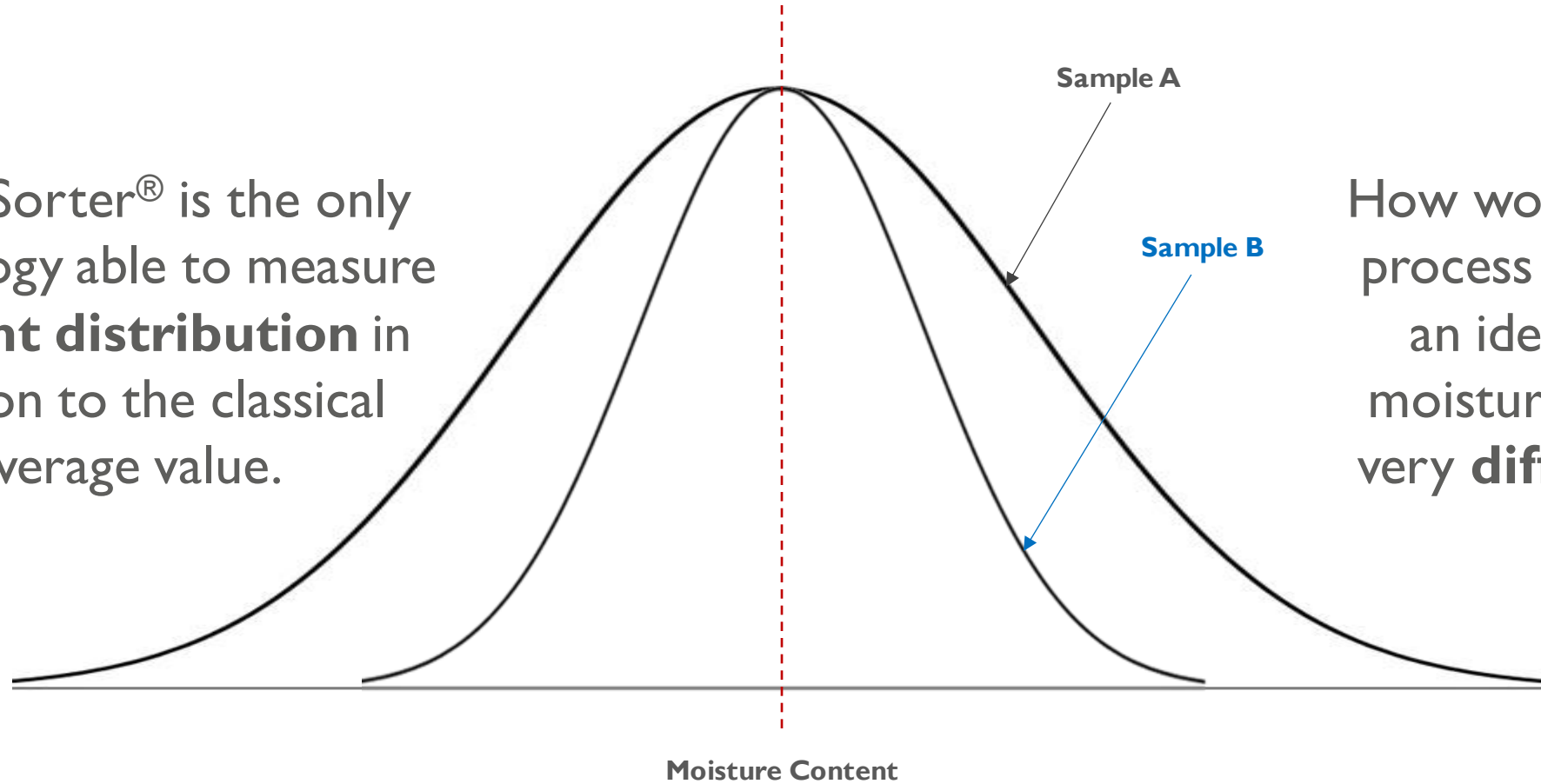


AVG 14.9% - STD 0.6%



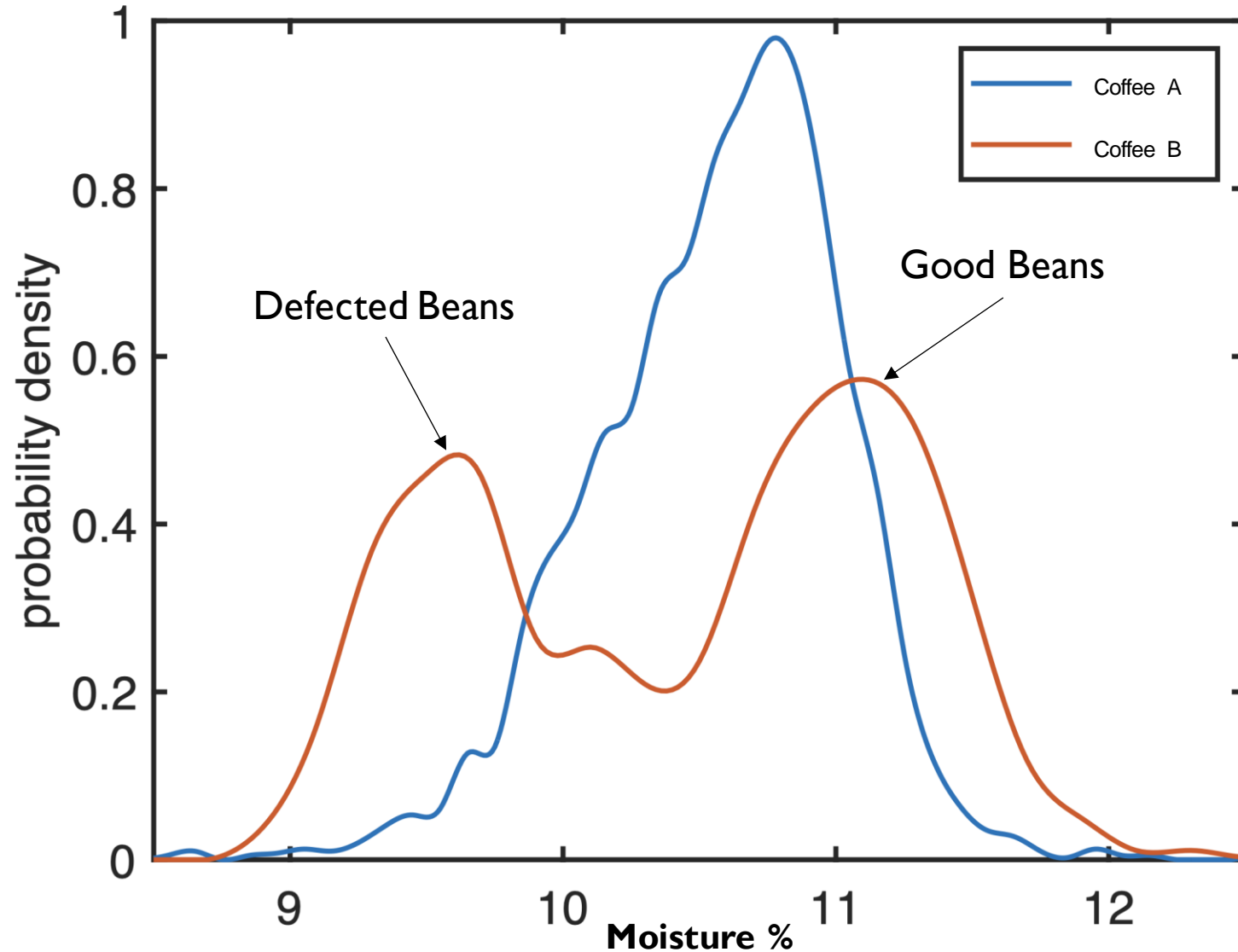
Q Insights from Bean by Bean Distributions

The QSorter® is the only technology able to measure **content distribution** in addition to the classical average value.



How would you store or process 2 lots that have an identical average moisture content but a very **different spread**?

Unique Quality Insights with QSorter®



The moisture distribution of a sample of “Coffee B” shows 2 peaks. After careful analysis, we discovered that the lower peak around 9.5% was due to a large amount of defected beans.

Open questions:

- Are the defected beans belonging to the same coffee and same season?
- Is this double peak going to have any impact on the cup quality?
- If there was intentional blending, was this known to the buyer?

A photograph of a warehouse or storage area for coffee. In the foreground, several large burlap sacks are stacked. One sack prominently displays the text "CAFÉS DO BRASIL" in bold black letters, with a small red and green logo above it. Another sack to the right has text including "FAZENDA DO SE", "YELLOW BOURBON", "CARMO DE MINAS", "PRODUCT OF BRAZIL", and "BECCOR". In the background, rows of white plastic bins are visible. A semi-transparent white banner with the text "Is your coffee SQL² tested?" is overlaid across the middle of the image.

Is your coffee SQL² tested?

Easy Steps and SQL² Cloud Results



1
Insert
300gr
sample

2
Input
Batch ID
and Start

3
Wait for
Results
Online

Please login

Login

Share
Instantly

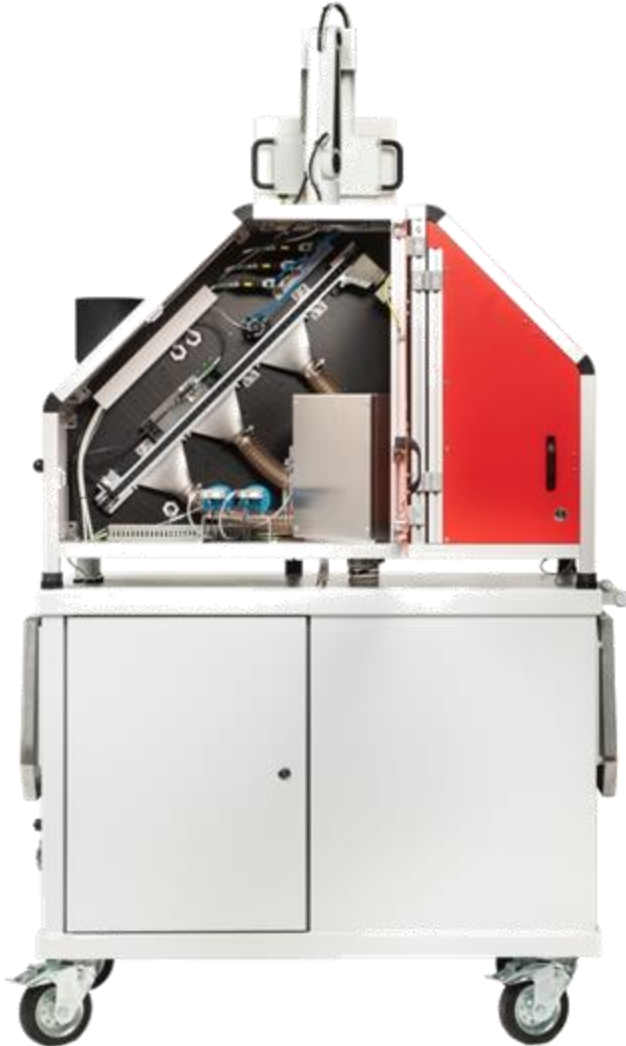
Download
PDF

Results in
Any Score

Analyze
Trends

SQL²
Smart QSorter Inspection Insights

Buy Grading and/or Roasting Bundle



Grading properties

- Defect bean count according to ISO 10470
- Defect grading according to SCA or GCA
- Size distribution
- Color L*a*b and shape analysis
- Moisture

Roasting properties

- Protein
- Sucrose
- Lipids

Support tools

- Wi-Fi and LAN connectivity
- Sorting capabilities
- QualySense remote support

QSorter[®]: a New Coffee World

Buy and Sell at the Right Price

QSorter[®] inspects with high reliability and prevents you from doing mistakes when buying or selling coffee. Trade for the right defects score and enable discounts or premium for uniformity.

Identify Quality Issues and Reacts Immediately

Thanks to its bean-by-bean quality analyses, the QSorter[®] spots anomalies of quality parameters and helps you optimizing blending, storage, and processing.

Tracking Quality Data RealTime with the QvalySense SQL² Cloud

Quality reports are instantaneously available to all stakeholders of the company, no matter in which country they are, to allow better tracking, to avoid fraud and monitor operations.

Speak the Same Language with Suppliers, Customers and Subsidiaries

The QSorter[®] can translate all the quality data in any standard or scoring system at the push of a button. Avoid misunderstanding on quality and concentrate on the transaction.

Several Quality Insights for a More Sustainable Value Chain

The simultaneous measurement of physical and biochemical parameters, enable coffee players to bring coffee quality to a new dimension and help optimizing agricultural and processing practices to reduce energy waste and CO₂ emissions.

Get all the Quality Data and Get it Right



QSorter® Explorer

Ask for a demo
sales@qualysense.com

Innovation Partners



NESPRESSO



SUNTORY