

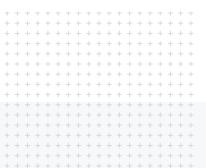


#### **ABOUT**

### **TAGARNO**

- Founded in 1971, Denmark, Scandinavia
- Leading global supplier within our niche
- Deliver intelligent, intuitive, and agile tools for many industries (electronics, medtech, foods, agriculture, plastics, metals, etc.)
- Allow you to see smarter
- Benefits:
   Maximize your efficiency
  - Enhance your communication
  - Increase your collaboration
  - Improve your work environment
  - Improve workspace ergonomics

## TAGARNO DIGITAL MICROSCOPES



# Good for business, good for people!



- ✓ Optimize your processes
  - Leaner workflow, increased output
- ✓ Cost effective, all-in-one solution

  Everything is built-in, no extra equipment needed
- ✓ A good investment

Long-lasting product with low (or no) maintenance



#### People

- ✓ User friendly, it's plug & play
  - Requires minimum training for new operators
- ✓ Ergonomics, health benefits
  - Working postures adjustable to operator needs
- ✓ Multiviewer collaboration

External display for several viewers in person or online

# **Exceptionally Unique**



- Base magnification range with continuous optical zoom is 1.7x-53x with a working distance of over 9 inches
- Generic camera drivers for simple 'plug and play' capability with software such as Microsoft Teams, Zoom or Laboratory Information Management (LIM) systems
- Tagarno's open API is uniquely suited to create easier AI training programs
- · Motorized Near-Infrared (NIR) changeover to switch from visible light to NIR observation without changing lens or filters
- Footswitch control for hands-free zoom operation
- Real-time autofocus and aperture control with manual overrides
- Real-time full-resolution video (60 frames per second/1080p) to stream and/or store via USB 3.0
- Tagarno is a great partner to their clients and sensitive to customer needs

# **Agriculture References**

BASF Sakata Seed

Syngenta Limagrain

**Bayer Crop Eurofins** 

Science DLF-Trifolium

Monsanto DSV Seeds



#### **CASE - NORDIC SEED**

# Happier and healthier employees

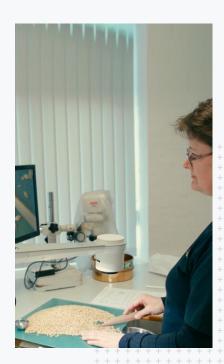
Operators at Nordic Seed, a

Danish seed company, used to
suffer from frequent sick leaves,
massive head aches and stiff
necks from working when using
stereo microscopes 37 hours a
week.

After changing to digital microscopes, Laboratory
Technician Helle Holdgaard emphasizes the ability to change

work posture throughout the day by alternating between sitting down and standing up, as a key reason for a healthier work environment and reducing sick leave.

This flexible setup was also crucial in Helle being able to return to work quicker than expected after being involved in a traffic accident.





#### **AGRICULTURE**

# **Applications**

Seed germination testing	<b>&gt;</b>
Purity analysis	>
Variety identification	>
Seed coating quality analysis	>



# Seed germination and tetrazolium testing

TAGARNO's digital microscopes are an efficient tool for germination capacity and for performing tetrazolium tests.

High quality images clearly display development during germination capacity testing. Photos can be captured automatically or manually with ease.



### **Purity analysis**

The TAGARNO digital microscopes are efficient tools for purity analysis of seeds and grains.

When zooming in on the seeds, you can rapidly spot impurities such as weed seeds and seeds of other species such as broken seeds, soil particles or any other non-seed items. You will also be able to perform Pure Seed Definitions and test the variety of your seeds.



### Variety identification

TAGARNO's digital microscopes are the perfect tool for a varietal admixture.

You can easily **zoom in** to check the grain shape, the pigmentation, the size and more with a variety of available Tagarno applications.



## Seed coating quality

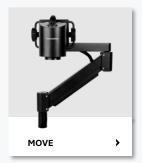
With a digital microscope from TAGARNO, it's easy to zoom in on the coated seeds to determine whether it is evenly distributed and create photo documentation that can be shared with customers and coworkers.

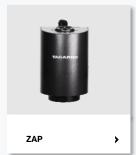
# What we offer













#### Software



Watermark >



Focus stacking



Ruler



Image



Measurement >







Overlay













Open API

comparison

Trichinoscope >



#### **PNG REFERENCE APP**

# Superimpose images for inspection assistance

#### · Create any inspection graphic you want

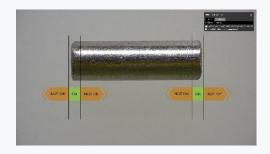
With free image editor programs, you can create any PNG photo you want

#### · Use graphics as inspection assistance

Use custom made graphics and reference images as heads-up displays to assist you during inspections

#### Reduce preparation time

Save your graphic and microscope settings as a preset to eliminate manually adjusting the microscope



Different example of a PNG graphic: GO/NO GO tolerances



#### **COLOR ANALYZER APP**

# Calculate color values automatically and objectively

#### · Identify exact color hue

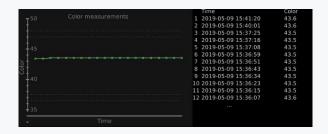
For the naked eye, it's hard to determine if a color is the exact hue that it needs to be. However, Color analyzer app from TAGARNO does it accurately and in a matter of seconds

#### Save template for consistent analyses

Avoid manual adjustment of settings and reduce preparation time by saving your most used settings as a template

#### Compare samples and results

Use on-screen data for cross-sample analysis



By comparing results from previous analyses, it's easy to spot deviations from the ideal color hue and adjust the production accordingly





#### **OPEN API**

# Integration made easy with TAGARNO's Open API

#### Exchange data

Use the Open API to exchange data between the microscope and other systems as part of performing or documenting your work

#### · Easy and cost effective

Wtih the Open API, you can create a customized solution without the involvement of TAGARNO.
All you need is the API protocol

#### **Data Management System**

# Optimize how you store photos and data

If you need to take many photos (and afterwards rename and organize them all), you can significantly reduce the manual workload with an API integration to your Data Management System.

#### Through the API, you can:

- Set/change prefix and format of the images you're about to take
- Pick and transfer the images from the microscope to your system as you need them



# **Questions**

Please stop by our table and try a Tagarno system for yourself!