

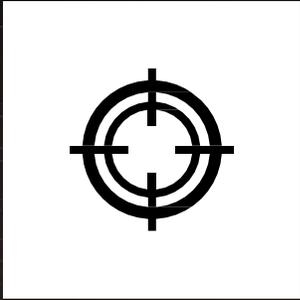
WORLD'S LEADING AI ENGINE BUILDERS

VAIDIO

AICUDA TECHNOLOGY & IRONYUN

# VAIDIO AI VISION PLATFORM

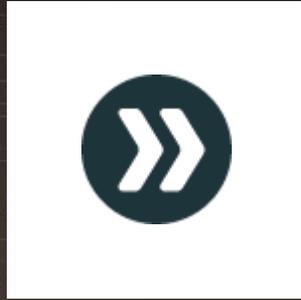




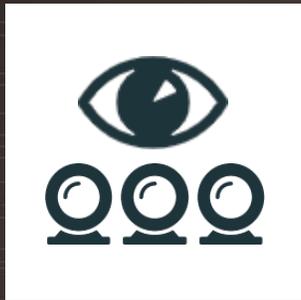
**ACCURATE**  
ALERTS



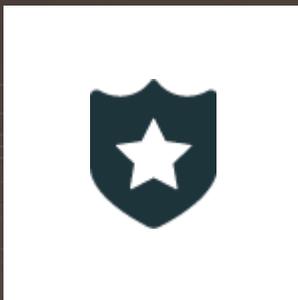
**MAXIMIZED**  
EFFICIENCY



**FAST**  
VIDEO SEARCH



**AI-ENABLED**  
ANALYTICS



**COMPREHENSIVE**  
FUNCTIONALITY

**VERSATILE**

More analytics than any alternative

**FAST**

Search days of video in minutes

**ACCURATE**

Reduce false positives by orders of magnitude

**IMMEDIATE**

Real-time alerts in 3 seconds or less

**INTELLIGENT**

Natural-language search across multiple objects

**OPEN**

Integrate with 97% of ONVIF devices

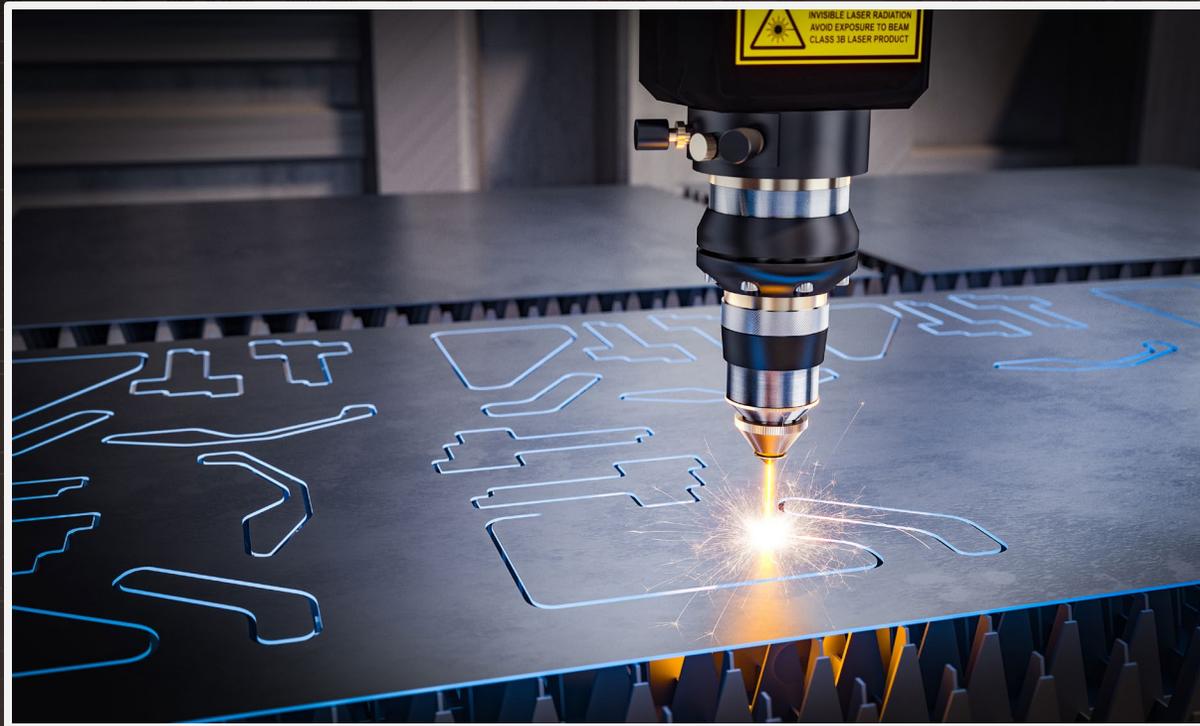
**IMPACTFUL**

Increase alert readiness, improve productivity



# AI ANALYTICS FOR MANUFACTURING COMPANIES

# AI IN MANUFACTURING OPERATIONS



- PRODUCT QUALITY
- INTELLIGENT MAINTENANCE
- PRODUCTION
- PRODUCT DEVELOPMENT
- SUPPLY CHAIN MANAGEMENT
- SAFETY
- ENERGY MANAGEMENT

# AI IN MANUFACTURING OPERATIONS

Product Quality



Intelligent Maintenance



Production



Product Development



# AI IN MANUFACTURING OPERATIONS

Supply Chain Management



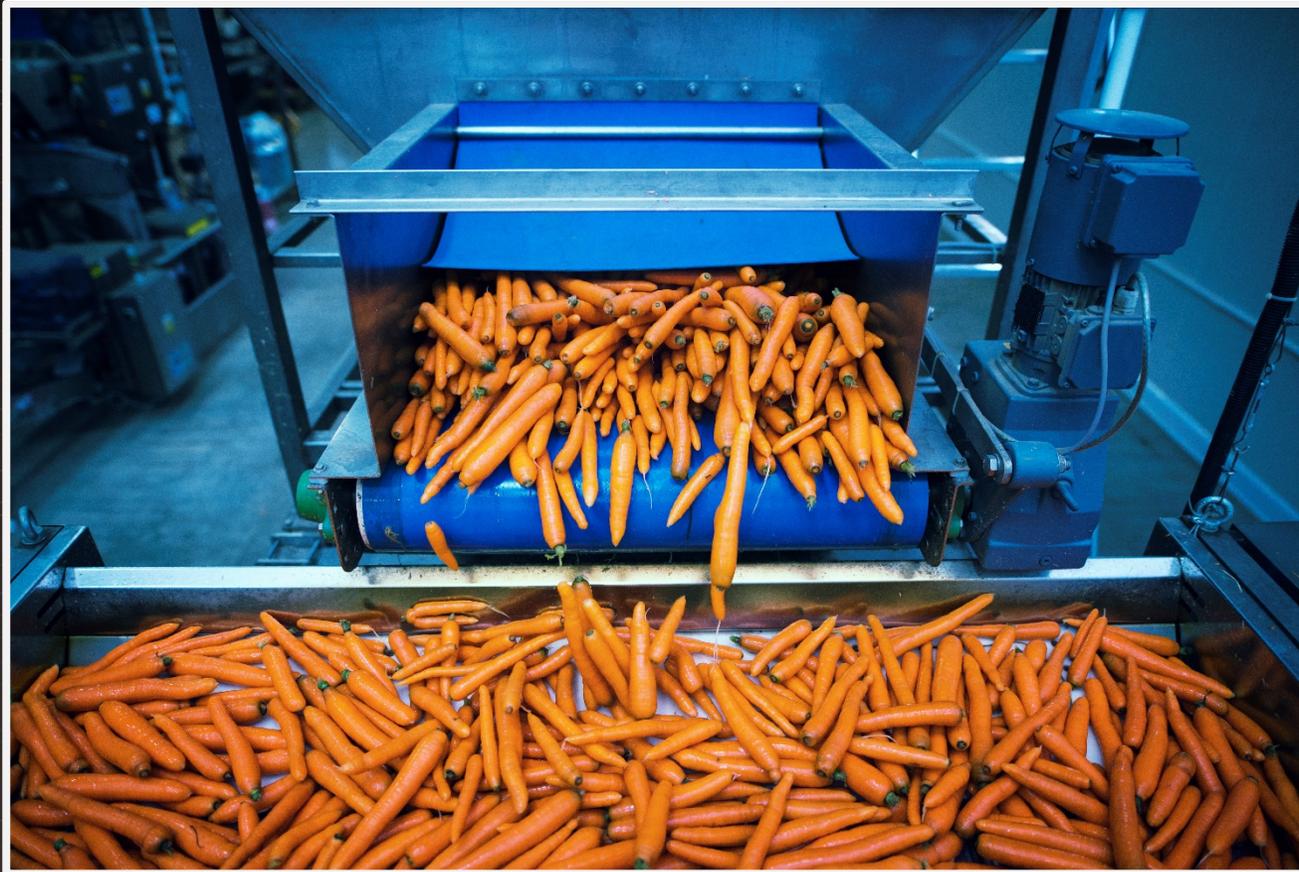
Safety



Energy Management



# PRODUCT QUALITY



PRODUCT QUALITY INSPECTIONS  
BASED ON ARTIFICIAL INTELLIGENCE  
BRING UNIFORMITY AND EFFICIENCY  
IN QUALITY CONTROL

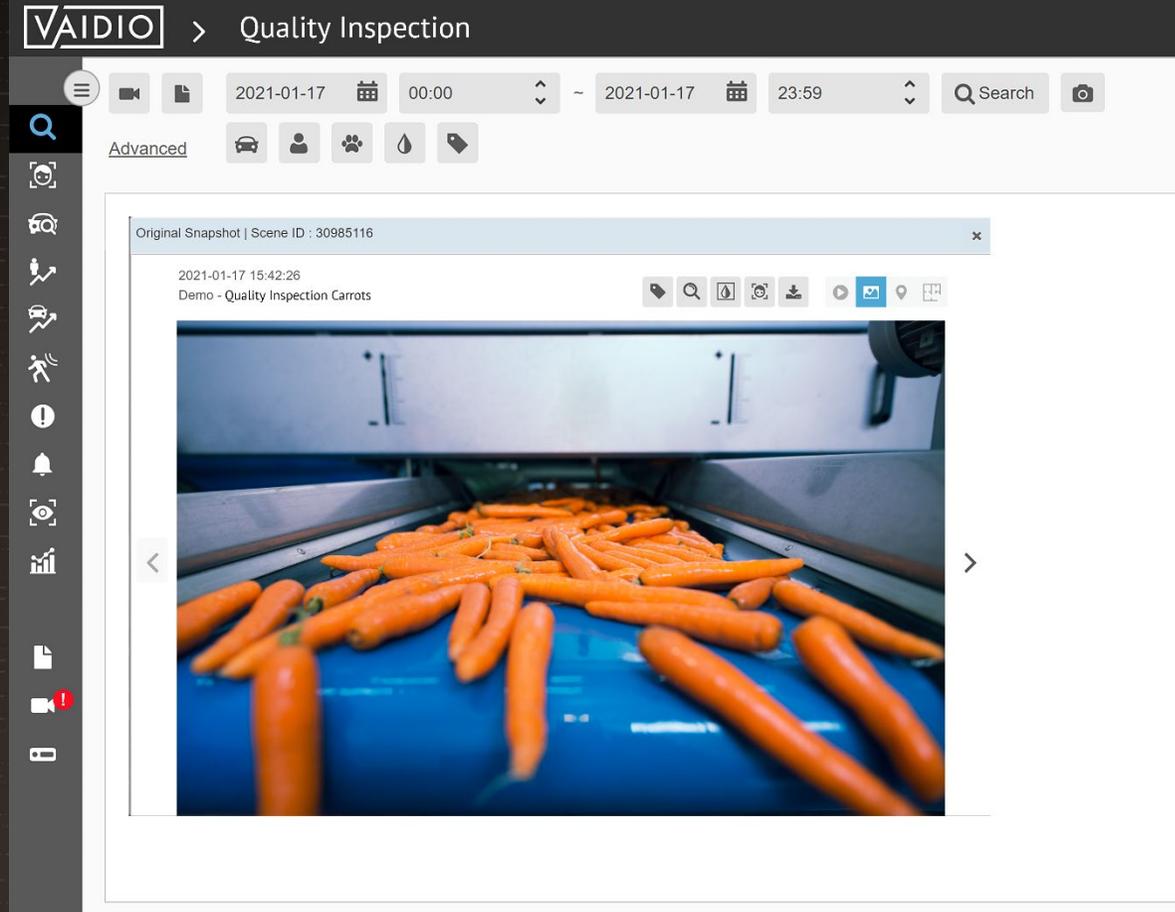
USE VIDEO IMAGES TO DETECT  
CERTAIN ABNORMALITIES IN RAW  
MATERIALS AND PARTS

DETECT ABNORMALITIES IN REAL-TIME  
AND SEND ALERTS TO OPERATORS

PREVENT PRODUCT DEFECTS AND  
RECALLS TO MINIMIZE FINANCIAL AND  
REPUTATIONAL DAMAGE

GENERATE REPORTS TO ANALYZE  
PRODUCT QUALITY DATA

# PRODUCT QUALITY



VAIDIO AI-ENABLED ANALYTICS DETECTS IMPERFECTIONS ON FRUITS AND VEGETABLES

BY APPLYING VAIDIO PREDICTIVE ANALYTICS, THE FRUITS AND VEGETABLES MANUFACTURER CAN TAKE A PRO-ACTIVE APPROACH TO AVOID THAT LOWER QUALITY PRODUCTS LEAVE THE FACTORY.

THE FRUITS AND VEGETABLES MANUFACTURER IS ABLE TO GENERATE REPORTS AND ANALYZE THE PRODUCT QUALITY OF THE DIFFERENT SUPPLIERS

VAIDIO HELPS TO IMPROVE PRODUCT QUALITY AND INCREASE CONSUMER SATISFACTION

## USE CASE VEGETABLES FACTORY



# INTELLIGENT MAINTENANCE



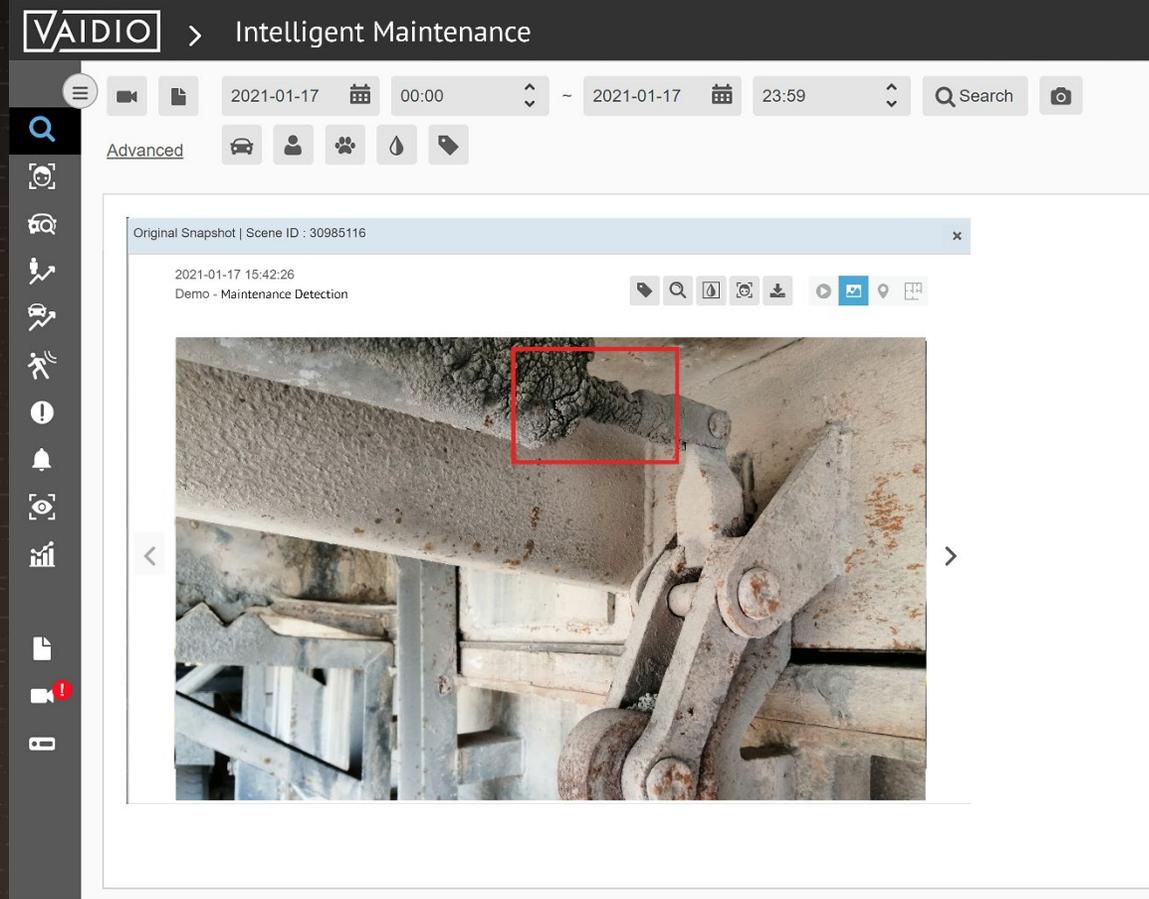
PREDICT AND PREPARE FOR PLANT MACHINERY FAILURE

SPOT EARLY SIGNS OF FAILING PARTS AND REDUCE OR AVOID DOWNTIME OF MACHINERY

USE VIDEO IMAGES TO DETECT ABNORMALITIES SUCH AS INCREASING TEMPERATURE, ABNORMAL PRESSURE READINGS OR OTHER OPERATIONAL PARAMETERS

GENERATE REPORTS TO ANALYZE ROOT CAUSES AND IDENTIFY DRIVERS OF MACHINERY DOWNTIME TO PREVENT FUTURE BREAKDOWNS

# INTELLIGENT MAINTENANCE



VAIDIO DETECTS ABNORMALITIES DURING MACHINE OPERATIONS TO GIVE THE STONE MANUFACTURER A TOOL TO ASSESS THE IMPACT ON BREAKDOWN AND FAILURE RATE

BY APPLYING VAIDIO PREDICTIVE ANALYTICS, THE STONE MANUFACTURER IS ABLE TO MINIMIZE PRODUCTION LOSSES AND MAXIMIZE OVERALL EQUIPMENT EFFECTIVENESS

THE STONE MANUFACTURER IS ABLE TO GENERATE REPORTS AND ANALYZE THE DATA ON PAST FAILURES AND POSSIBLE CAUSES AND CAN PREDICT WHEN A NEXT ISSUE IS LIKELY TO OCCUR.

## USE CASE STONE FACTORY



# PRODUCTION



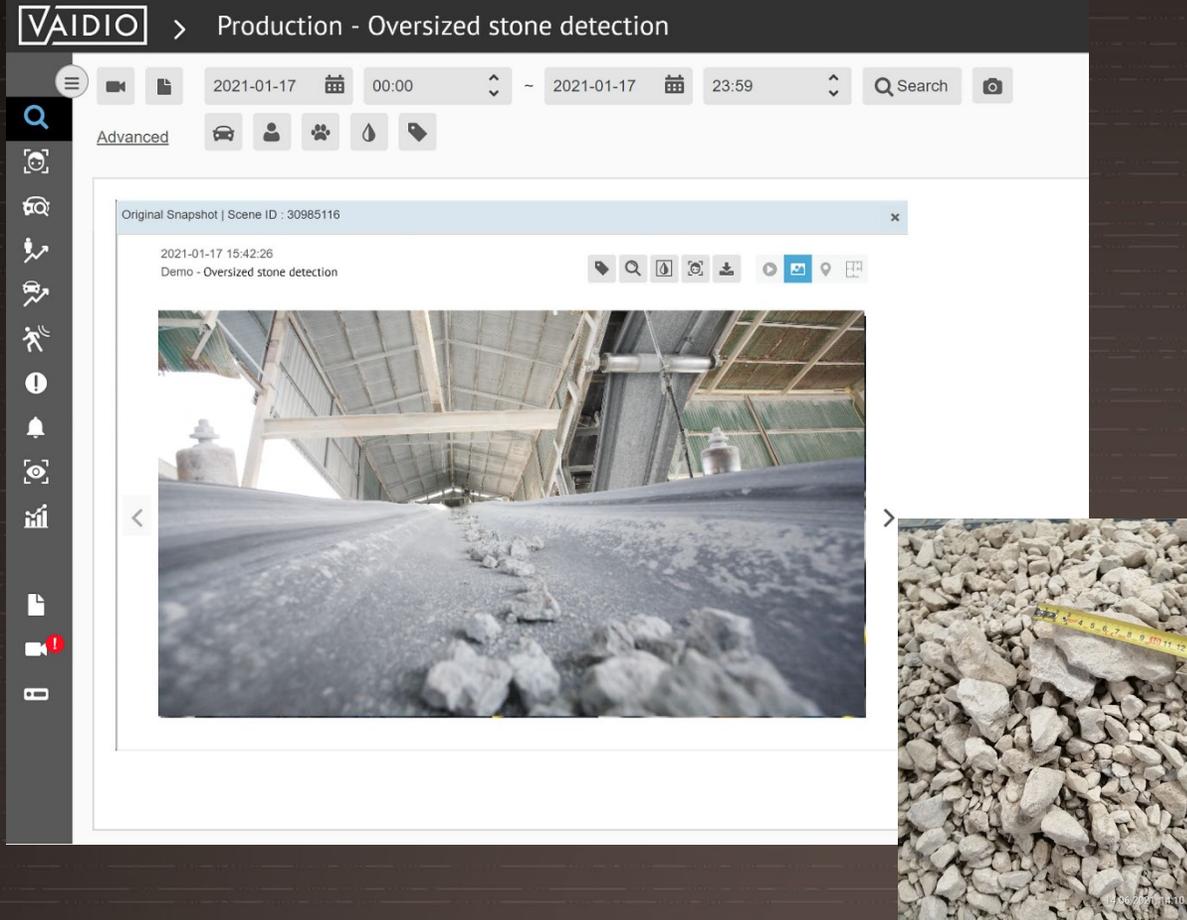
AI-ENABLED ANALYTICS HELP TO DETECT DEFECTS THROUGHOUT THE PRODUCTION PROCESS.

IMPROVING THROUGHPUT AND STREAMLINE THE MANUFACTURING PROCESS WITH AI ANALYTICS TO AUTOMATICALLY ADJUST RATE, SPEED OR ACCELERATION OF THE ASSEMBLY LINES

AI ANALYTICS CAN DELIVER IMPROVEMENTS IN THE PRODUCTION PROCESS WITHOUT CAPITAL INTENSIVE EQUIPMENT UPGRADES

TRAINED AI ANALYTICS MODELS ARE EASILY TRANSFERRED TO SIMILAR ASSETS AND FACTORY SITES

# PRODUCTION



VAIDIO HELPS TO DETECT OVERSIZED STONES IN REAL TIME AND SEND OUT ALERTS TO STOP THE CONVEYOR BELT

VAIDIO SHIFTS THE MUNDANE TASK OF FILTERING OUT OVERSIZED STONES FROM FACTORY WORKER TO MACHINES

VAIDIO AI VISION PLATFORM CAN HELP TO DO THE STONE SORTING AUTOMATICALLY AND IN REAL-TIME BY INSTALLING CAMERAS AT KEY POINTS ALONG THE STONE FACTORY FLOOR

STONE ASSEMBLY LINES WORK BASED ON A SET OF PARAMETERS AND AI-ENABLED ANALYTICS THAT PROVIDE GUIDELINES TO PRODUCE THE BEST POSSIBLE END-PRODUCT

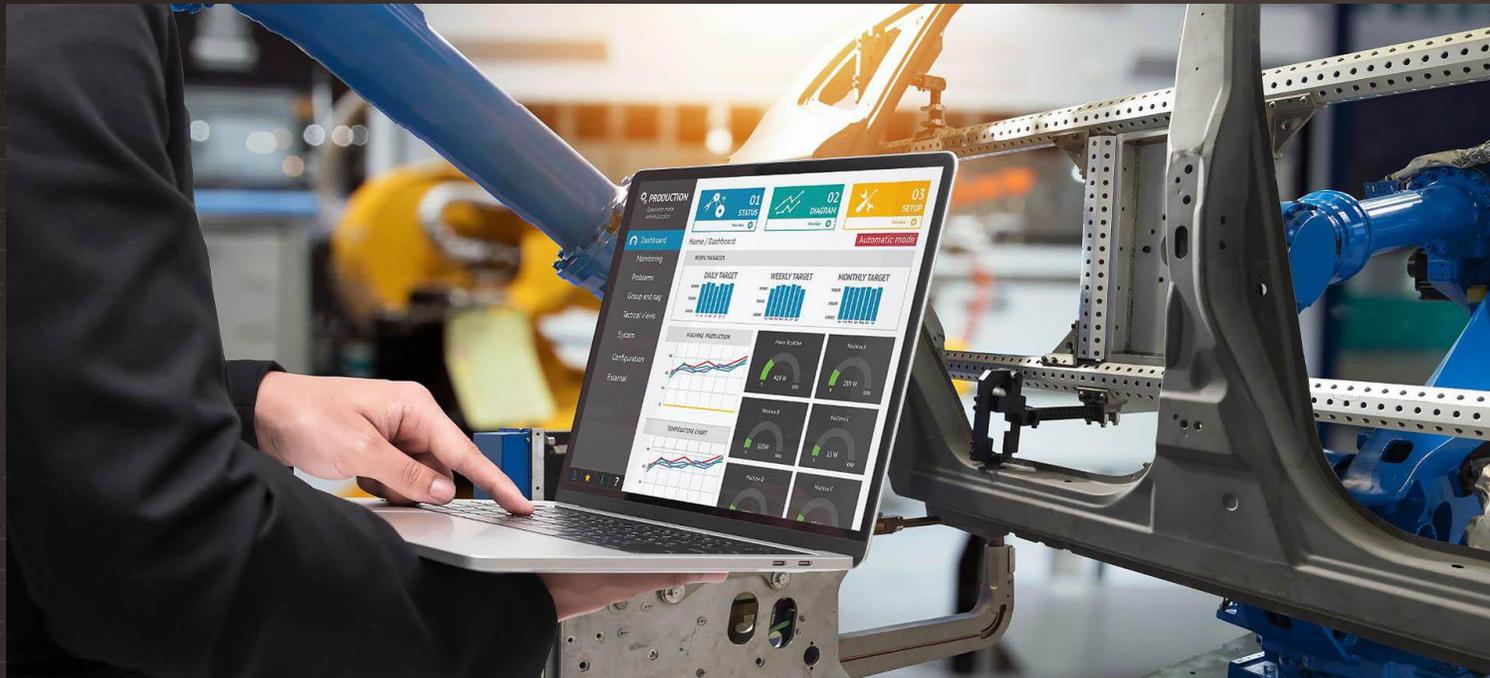
## USE CASE STONE FACTORY



# PRODUCT DEVELOPMENT

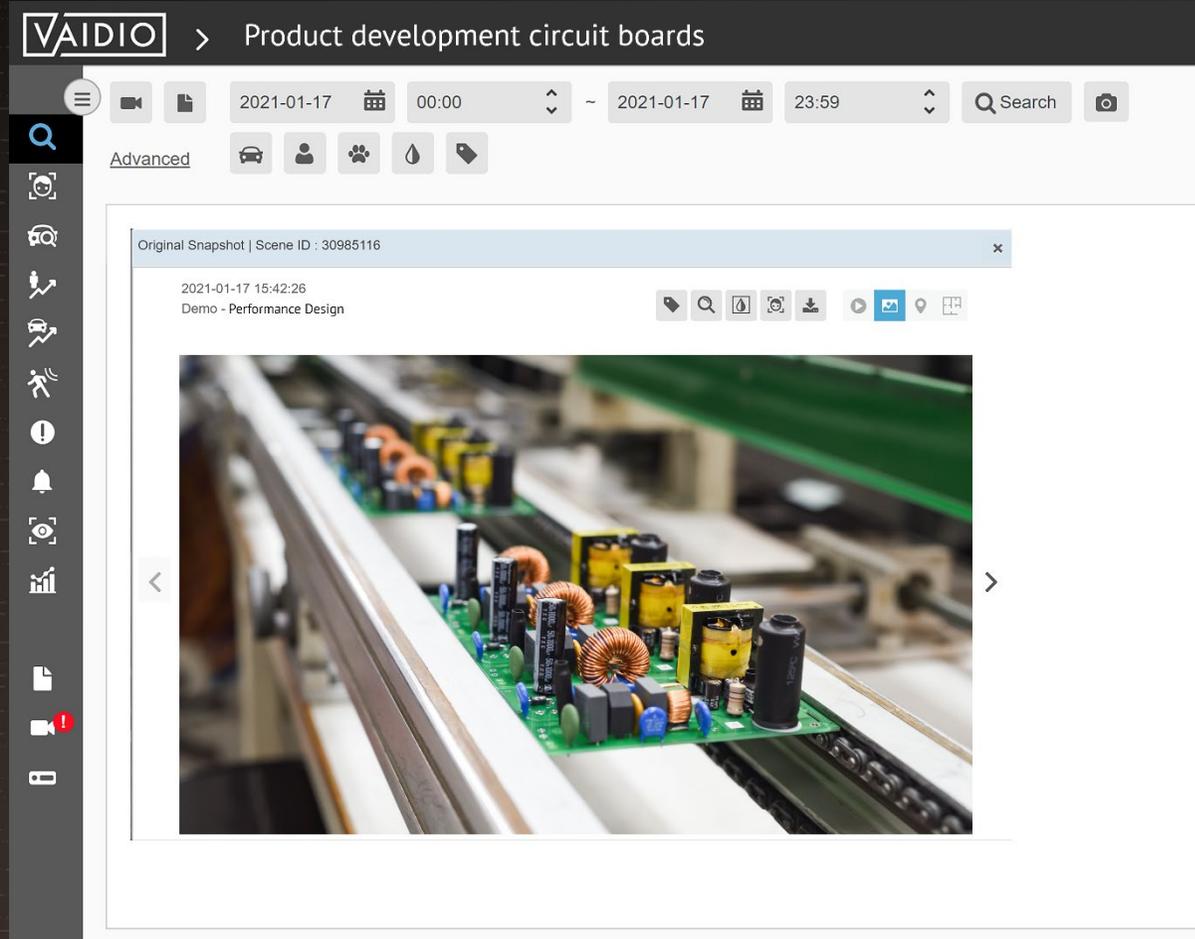
AI-ENABLED ANALYTICS CAN VALIDATE WHETHER INTRICATE GOODS HAVE BEEN PERFECTLY PRODUCED AND CALCULATE HOW MINOR CHANGES TO A PRODUCT WILL INFLUENCE SEVERAL DIFFERENT ASPECTS OF PERFORMANCE

SMART MANUFACTURING PROCESSES USE AI TECHNOLOGY TO TAKE VARIATIONS IN THE ENVIRONMENT (LIKE TEMPERATURE) OR MATERIALS INTO ACCOUNT AND AUTOMATICALLY ADJUST TO CHANGING CONDITIONS



USING AI-ENABLED ANALYTICS IMPROVES QUALITY CONTROL, REDUCES COSTS AND INCREASES RELIABILITY

# PRODUCT DEVELOPMENT



VAIDIO AI-ENABLED ANALYTICS CAN HELP AN ELECTRONICS MANUFACTURER TO TEST A CIRCUIT BOARD AND FIND BUGS OR OTHER DEVIATIONS

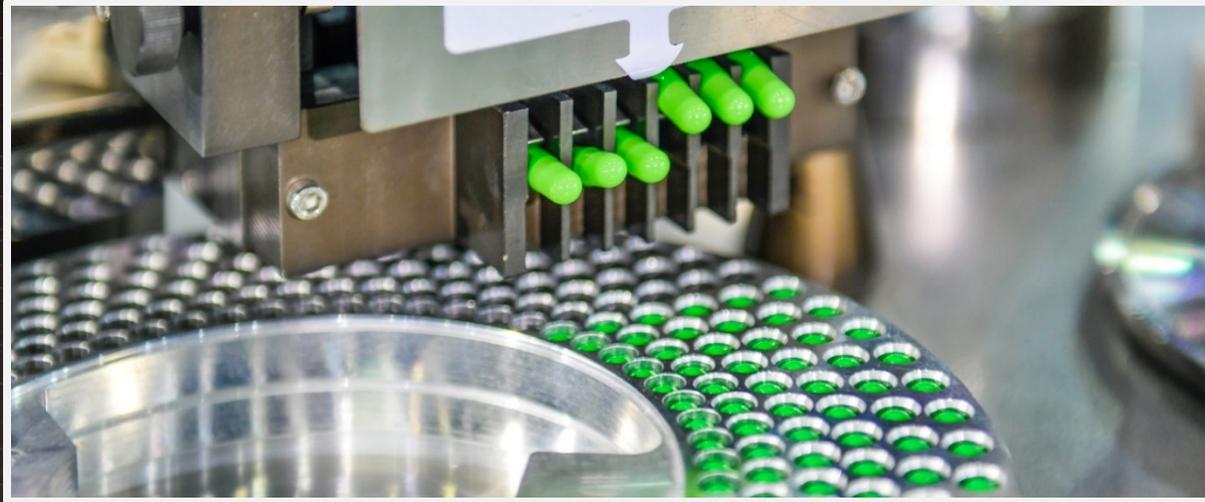
VAIDIO IS USING BEHAVIORAL DATA AS INPUT FOR NEW PRODUCT DESIGN AND DEVELOPMENT AND IS ABLE TO DETERMINE DURING THE DESIGN PHASE IF A DESIGN WILL BE SUCCESSFUL OR NOT

DIGITAL PRODUCT DEVELOPMENT WITH VAIDIO AI-ENABLED ANALYTICS BOOST EFFICIENCY AND REDUCE PRODUCT LAUNCH TIME

## USE CASE CIRCUIT BOARD FACTORY



# SUPPLY CHAIN MANAGEMENT

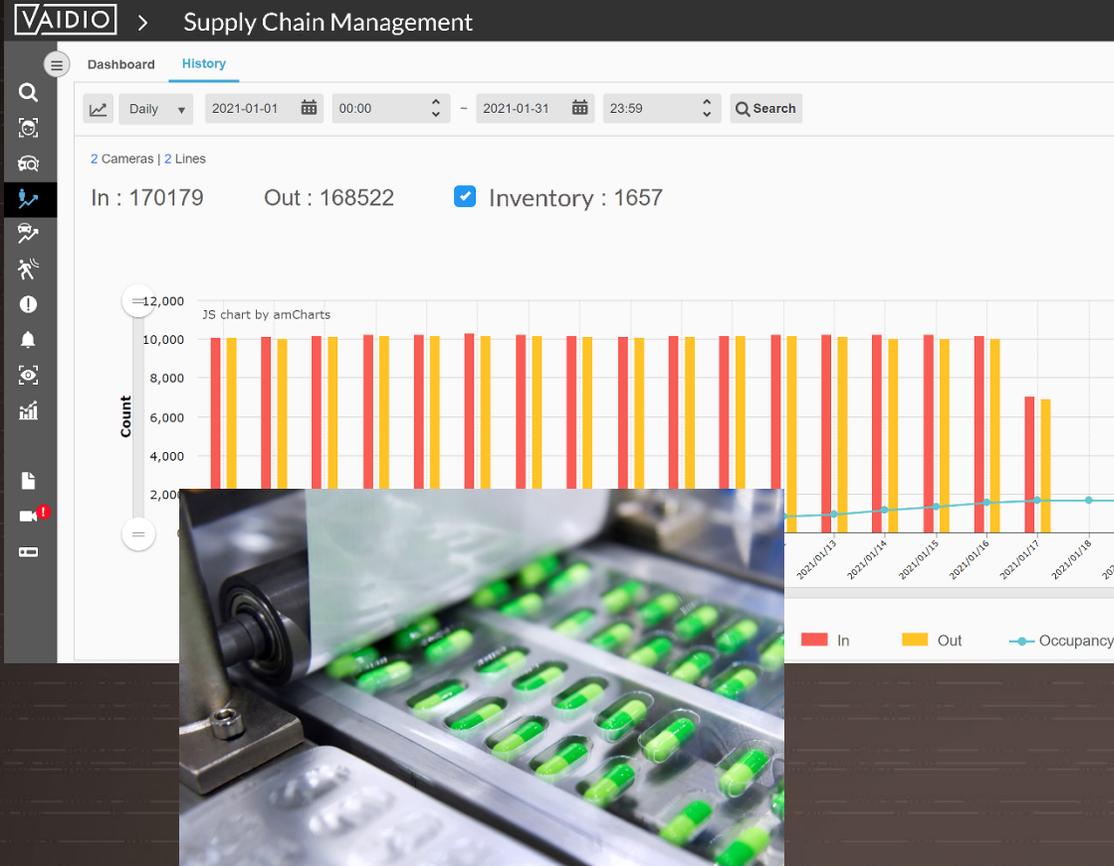


AI-ENABLED ANALYTICS ARE USED TO PREDICT CHANGES IN CONSUMER DEMAND AND ADJUST PRODUCTION SCHEDULES AND RAW MATERIAL PROCUREMENT BASED ON THIS CHANGES

TRAIN AI-BASED SYSTEMS USING HISTORICAL SALES DATA, WEATHER DATA, FINANCIAL DATA, MACRO-ECONOMIC DATA AND THIRD-PARTY DATA SUCH AS SOCIAL MEDIA TO PREDICT FUTURE CONSUMER DEMAND

AI-ENABLED ANALYTICS HELP MANUFACTURERS TO TARGET END CUSTOMERS MORE EFFECTIVELY AND PROVIDE THEM WITH THE PRODUCTS AND SERVICES THEY NEED

# SUPPLY CHAIN MANAGEMENT



VAIDIO AI-ENABLED ANALYTICS HELPS PHARMACEUTICAL PRODUCERS TO BETTER MATCH DEMAND AND SUPPLY

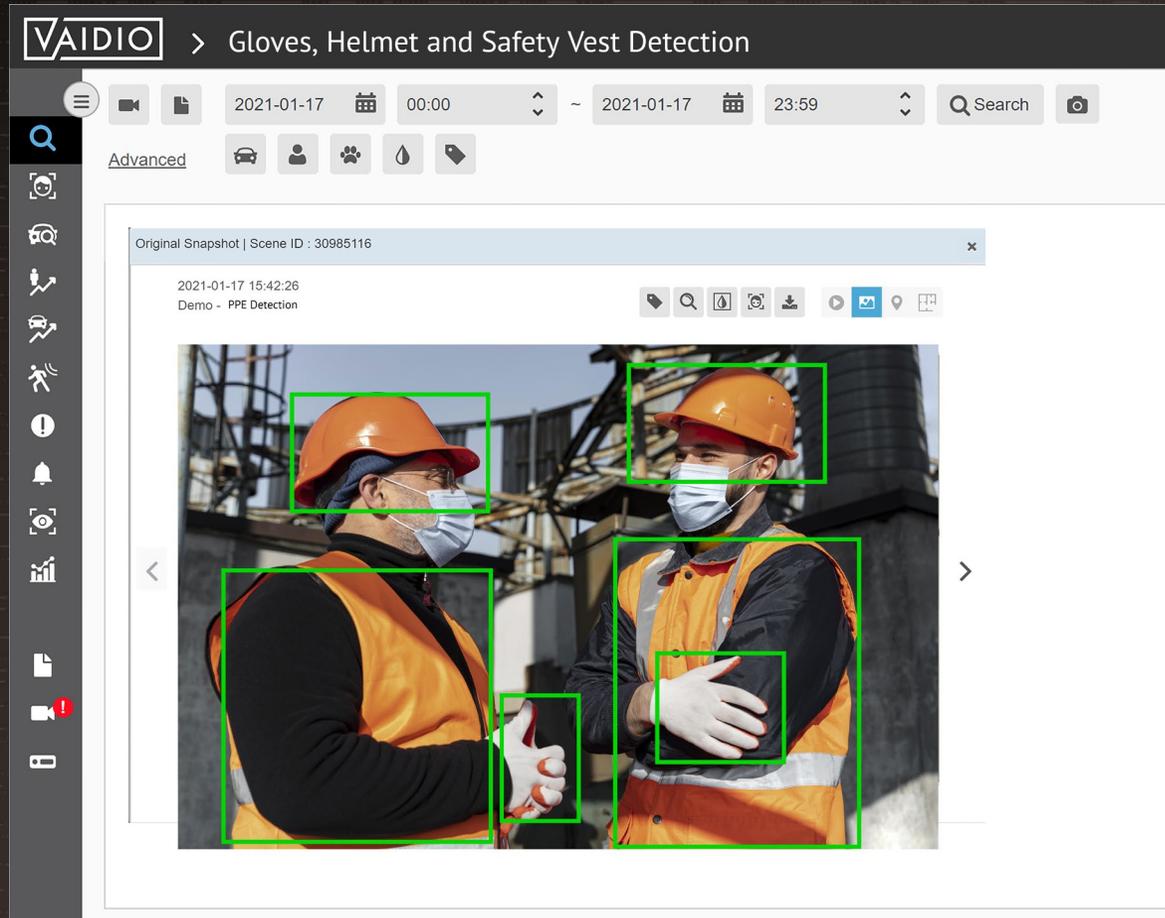
PHARMACEUTICAL PRODUCERS USE VAIDIO PREDICTIVE ANALYSIS TO PLAN AHEAD AND PREVENT OVERSTOCKING, AVOID STOCK-OUTS AND REDUCE WASTE (MEDICINES WITH EXPIRATION DATE)

VAIDIO AI ANALYTICS LET PHARMACEUTICAL PRODUCERS FOCUS ON BUILDING DIFFERENTIATED FORECASTING STRATEGIES TO MEET AND EXCEED CUSTOMERS EXPECTATIONS

USE CASE PHARMACEUTICAL PRODUCER



# SAFETY



DETECT FACTORY WORKERS THAT ARE NOT WEARING GLOVES, HELMET AND SAFETY VEST

GRANT OR DENY WORKERS ACCESS TO THE FACTORY FLOOR BASED ON WHETHER PROTECTIVE GEAR IS IDENTIFIED OR NOT

DETECT A WORKER THAT FALLS IN REAL-TIME AND SEND AN ALERT TO THE OPERATOR

RECEIVE REAL-TIME ALERTS WHEN FACTORY WORKERS ARE SMOKING IN AREAS WHERE SMOKING IS PROHIBITED

IMPROVE SAFETY ON THE FACTORY FLOOR AND GIVE FACTORY WORKERS PEACE OF MIND

# SAFETY



Uniform recognition



Glove usage



People Counting



Person Smoking



Helmet usage



Fall Detection

# ENERGY MANAGEMENT



VAIDIO AI-ENABLED ENERGY MANAGEMENT PROVIDES REAL-TIME VISIBILITY AND INSIGHTS IN THE ENERGY USE THROUGHOUT THE PRODUCTION PROCESS TO MINIMIZE ENERGY CONSUMPTION AND UTILITIES COSTS

VAIDIO AI-ENABLED EFFICIENT ENERGY MANAGEMENT IS OF VITAL IMPORTANCE TO THE ENVIRONMENT & THE SUSTAINABILITY OF OUR PLANET

USE VAIDIO AI ANALYTICS TO MAXIMIZE FACTORY OUTPUTS BY IDENTIFYING THE OPTIMUM PROCESS SET-POINTS

GENERATE REPORTS TO ANALYZE ENERGY CONSUMPTION AND IDENTIFY IF THERE IS ROOM FOR ADDITIONAL ENERGY SAVINGS



# ENERGY MANAGEMENT



Breaker status



Knife switch position



Needle position / fuel level alarm



LED status



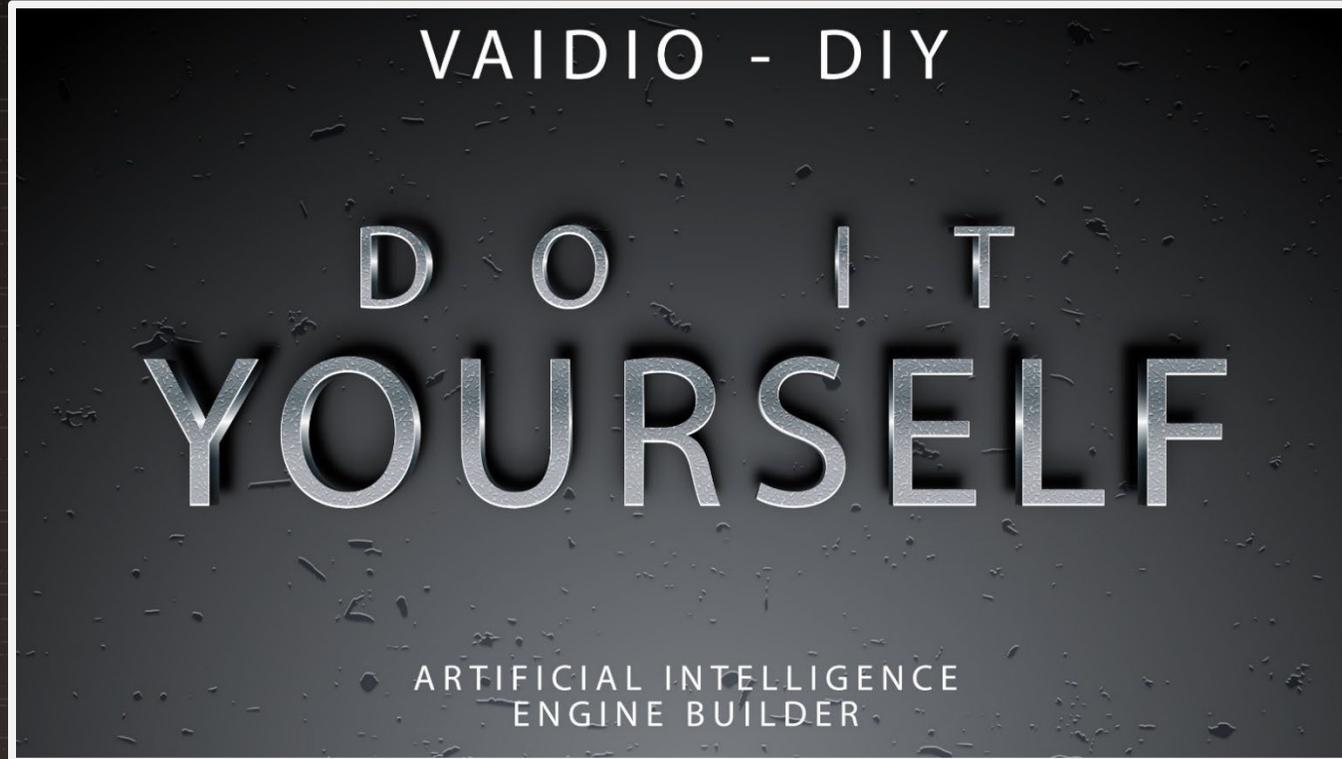
Temperature detection



Switch status (on demand or change)

# EQUIPMENT STATUS

# VAIDIO TOOL KIT



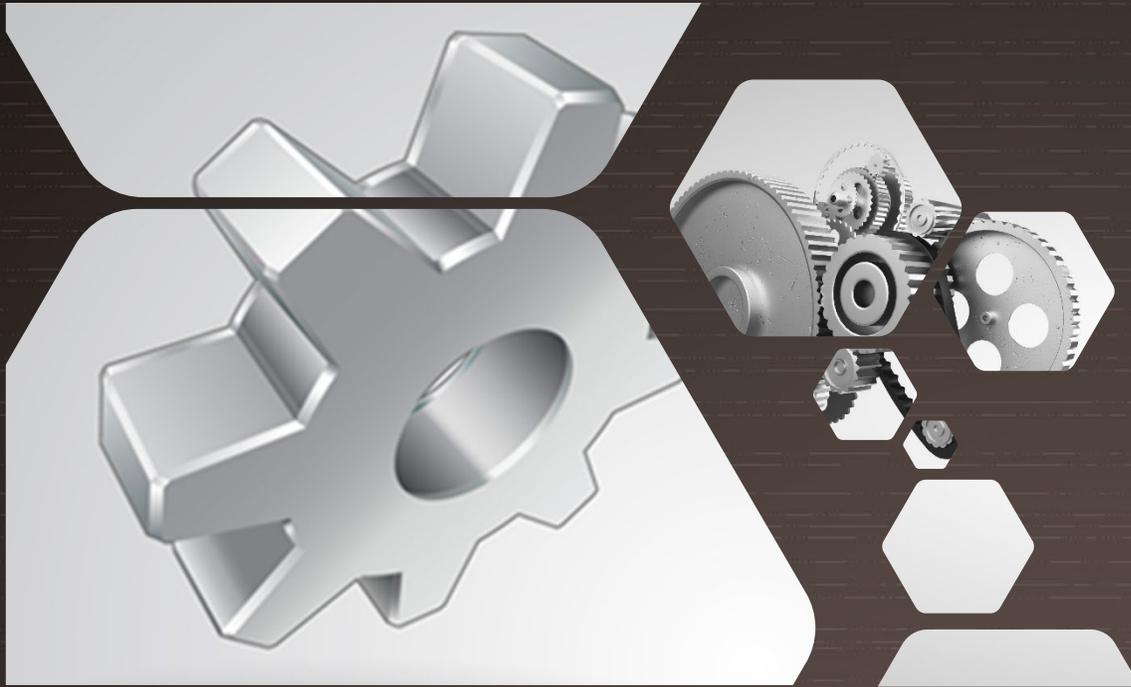
TRAIN YOUR OWN OBJECT  
DETECTION MODEL

INPUT: USER SELECTED  
FOOTAGE

OUTPUT: READY-TO-USE  
AI MODEL



# VAIDIO TOOL KIT



## ADVANTAGES

### EASE-OF-USE

NO KNOWLEDGE REQUIRED AROUND NEURAL NETWORKS, AI LIBRARIES, ALGORITHMS AND DATASETS

### VERSATILITY

TRAIN A MODEL FOR ANY OBJECT

### INTERFACE

INTUITIVE GRAPHICAL USER INTERFACE

### SECURITY

NO DATA SHARING TO 3rd-PARTY LABELLING SERVICES

### CUSTOMIZATION

NO CUSTOMIZATION FEE FOR CUSTOMER SPECIFIC REQUESTS



# USE CASE VAIDIO-DIY



## CHALLENGE

DETECT SCRATCHED AND BURSTED EGGS

## SOLUTION

TRAIN YOUR OWN EGGS QUALITY MODEL  
WITH VAIDIO-DIY

## BENEFITS

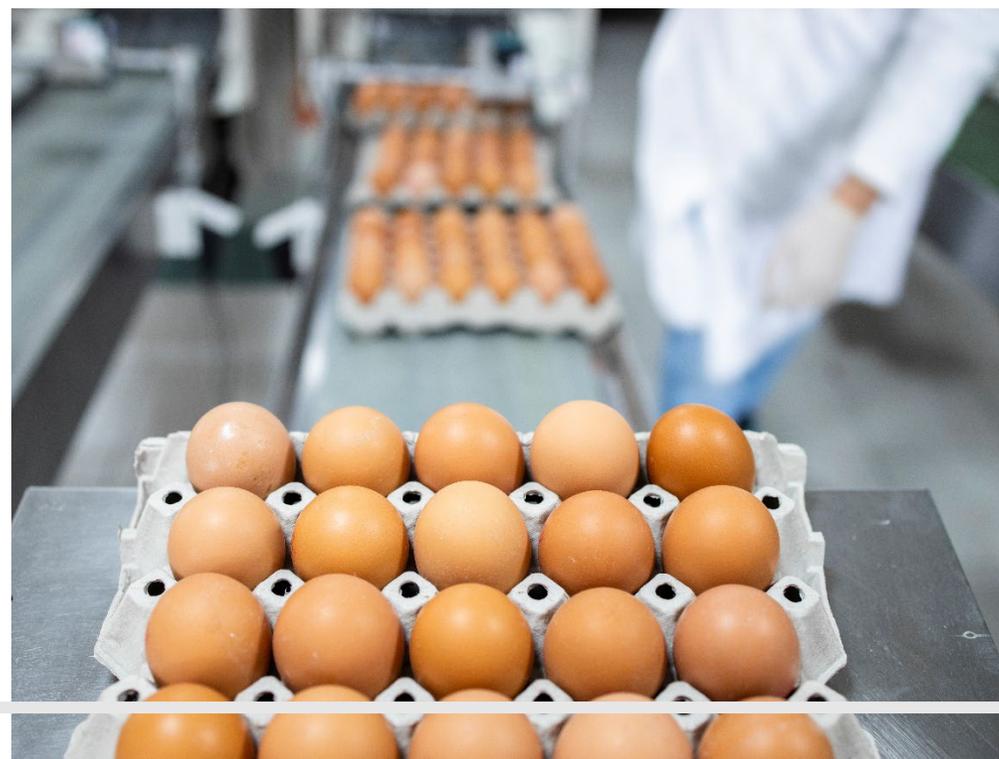
- ❖ DELIVER HIGH QUALITY EGGS
- ❖ PREVENT PRODUCT RECALLS
- ❖ PROTECT AGAINST FINANCIAL CLAIMS  
AND REPUTATIONAL DAMAGE

# AI QUALITY INSPECTION EGGS



# USE CASE VAIDIO-DIY

DETECT IMPERFECTIONS ON EGGS



# INTEGRATION CAPABILITIES



CAMERA INTEGRATION

CLOUD PLATFORM INTEGRATION

ERP INTEGRATION



IO DEVICE INTEGRATION

SOFTWARE SERVICES

VMS INTEGRATION

# AI MANUFACTURING



VAIDIO AI-ENABLED VIDEO ANALYTICS PROVIDES ACTIONABLE DATA TO ANALYZE & OPTIMIZE DECISION MAKING AROUND QUALITY, MAINTENANCE, PRODUCTION, PRODUCT DEVELOPMENT AND SUPPLY CHAIN FROM SOURCE TO FINISHED PRODUCT.

VAIDIO AI-ENABLED ANALYTICS HELP TO IMPROVE PERFORMANCE ACROSS THE ENTIRE PRODUCTION PROCESS

VAIDIO REAL-TIME ALERTS AND PRO-ACTIVE FOLLOW UP WILL IMPROVE PRODUCTIVITY AND REDUCE QUALITY ISSUES AND DOWNTIME TO A MINIMUM

VAIDIO AI-ENABLED VIDEO ANALYTICS WILL REDUCE THE NUMBER OF FALSE POSITIVES TO A MINIMUM – SAVE TIME AND RESOURCES FROM INVESTIGATING FALSE ALERTS

VAIDIO AI-ENABLED VIDEO ANALYTICS HELP MAINTAIN THE SAFETY IN FACTORIES AND IMPROVE WORKERS SATISFACTION BY SHIFTING MONDANE TASKS TO MACHINES

# VAIDIO BENEFITS & SAVINGS

**VAIDIO**™

