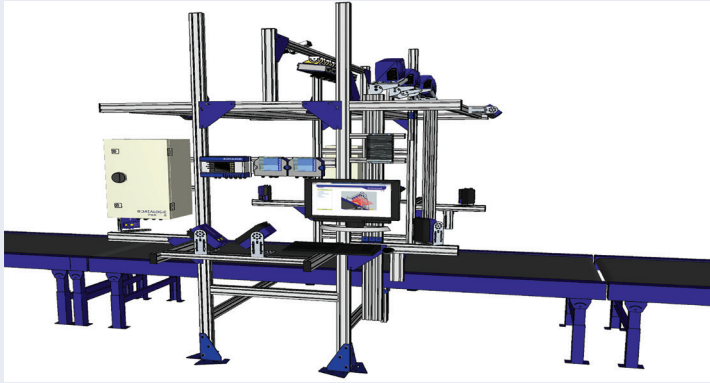# MFDS
MassFlowDetectionSystem
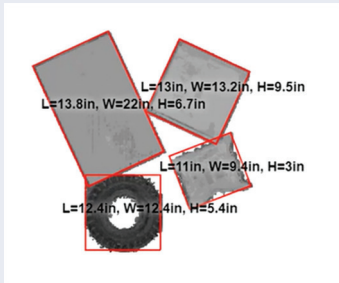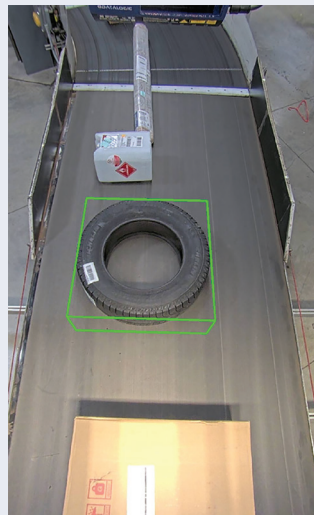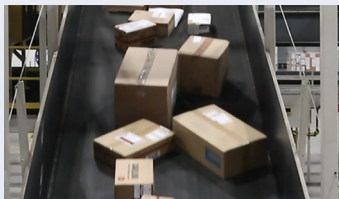
Efficient data collection for non-conveyable parcels

DATALOGIC

MFDS: THE ADVANCED SOLUTION ENABLING AUTOMATED DATA COLLECTION FOR NON-CONVEYABLE PARCELS

MFDS increases process efficiency by automating 4 data collections, introducing the D^4 concept:

- DETECT items even when touching or running side by side on large conveyors (up to 1.5 m)
- DIMENSION items, regular or irregular shaped, LFT certified measurements
- DECODE barcode information on labels and merge it with the respective item
- DEPICT items by capturing and saving respective images

MFDS brings together our best products plus a smart software integration to deliver a turn-key solution:

- Items are DETECTED and DIMENSIONED with the recognized DM3610 LFT measurement system enhanced with advanced 3D analysis to separate irregular shaped objects that are touching
- Barcodes present on items are DECODED by multiple technologies: area imagers (AV900, typically covering from top) and laser readers (DS8110, from remaining sides)
- SC5100 system controller is the system's brain merging all data with the correct parcel
- AV900 area imagers and a color IP camera take multiple views of items running over the conveyor belt. These images can be used for video coding activities and will provide another proof of the objects' condition.

HIGHLIGHTS

- Automated data collection (replaces manual barcode reading) for large items in a non-singulated flow
- Legal for trade volume measurement for a non-singulated flow
- Leverages standard, well known proven components, empowered by new 3D algorithms and system integration software (AV9000, DS8110, DM3610)
- State-of-the-art 3D analysis of touching objects allows a maximum level of object recognition (separation and detection of each item running even if they are touching or side by side)
- The main system component comes in one pallet for ease of installation

TARGET MARKETS AND APPLICATIONS

Transportation and Logistics:
Postal and couriers, 3PL
Retail and E-Commerce:
Distribution centers

BENEFITS

- Saves time with automated data collection
- Increases revenue recovery
- Improved reliable tracking (leading to better customer service quality) with automated data collection vs. manual data collection

TECHNICAL SPECIFICATIONS

Material Flow	Singulated and non-singulated; Conveyor width up to 1500 mm / 60 in
Dimensioning Accuracy	±0.2" for length and width, ±0.1" for height ± 5 mm for length, width, ±2 for height
Box Size (maximum)	L 3800 x W 1200 x H 900 mm / L 150 x W 60 x H 36 in
Box Size (minimum)	L 50 x W 50 x H 20 mm / 2.4 x 2.4 x 1.2 in
Laser Type	Visible laser diode (red) 660 nm, CDRH Class II, IEC 60825-1 Class 3R (Class 2 with adapter)
Temperature	Operating: 0 to 50 °C / 32 to 122 °F Storage: –20 to 70 °C / -4 to 158 °F
Relative Humidity	10-90% non-condensing
Power Requirements	24 VDC +/- 10%
Power Consumption	1450 W Max (full configuration)
Communication Interfaces	Ethernet (TCP/IP), RS-232 / RS-422 / RS-485 (Ethernet IP, Profinet, Profibus available as options)
Programming	On board HTML web server interface
Warranty	2-year limited, parts and labor
Compliances	UL, cUL, FCC (Class A) CE
Legal for Trade Certifications	OIML/MID, NCWM/NTEP, Measurement Canada
Barcode Reading Capability	TOP Imager: 1D and 2D (narrow element greater or equal to 0.3 mm [11.8 mil] for 1D ; narrow element greater or equal to 0.5 mm [20 mil] for 2D) TOP Laser: 1D (narrow element greater or equal to 0.3 mm [11.8 mil] for 1D) SIDES Laser: 1D (narrow element greater or equal to 0.3 mm [11.8 mil] for 1D)

MODELS

PART NUMBER	DESCRIPTION
932700003	MFDS-1100 Top Imager NTEP
932700004	MFDS-1101 Top Imager MID
932700005	MFDS-1110 Top Laser NTEP
932700006	MFDS-1111 Top Laser MID
932700001	MFDS-1500 5S Full NTEP
932700002	MFDS-1501 5S Full MID
932700008	MFDS-1522 5S 6AV 12DS CANADA

ACCESSORIES

CATEGORY	PART NUMBER	DESCRIPTION
POWER CABINET	93ACC0319	PWR-1440-US PWR UNIT 110VAC 24V
	93ACC0326	PWR-1440-EU PWR UNIT 230VAC 24V