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BPD ZENITH

CAMCODE: WHY EFFICIENT ASSET & MAINTENANCE MANAGEMENT BEGINS WITH WORLD-CLASS ASSET TAGGING

Powered by BPD Zenith

Presented by Sarah Brady & Lou Peeples | **July 1st, 2021**

CAMCODE: WHY EFFICIENT ASSET & MAINTENANCE MANAGEMENT BEGINS WITH WORLD-CLASS ASSET TAGGING

Sarah Brady

BPD Zenith - *Intro*

- Why has demand and awareness increased?
- Value & Benefits overview

Lou Peeples

Camcode – *World Class Asset Tagging*

- About Camcode
- Software & CMMS Implementation
- What is a labels purpose?
- Problems Bar Code Tags Solve
- Considerations
- Tagging Strategy
- Label Installation
- Packaging & Customization
- Camcode Clients and Use Cases

AGENDA

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CAMCODE: WHY EFFICIENT ASSET & MAINTENANCE MANAGEMENT BEGINS WITH WORLD-CLASS ASSET TAGGING

WELCOME - HOUSEKEEPING

Recorded – On Demand

- Available post-event

How to Take Part

- Submit questions
- Polls
- Q&A

Available Materials

- Download or Request

Feedback Survey (Post Event)…

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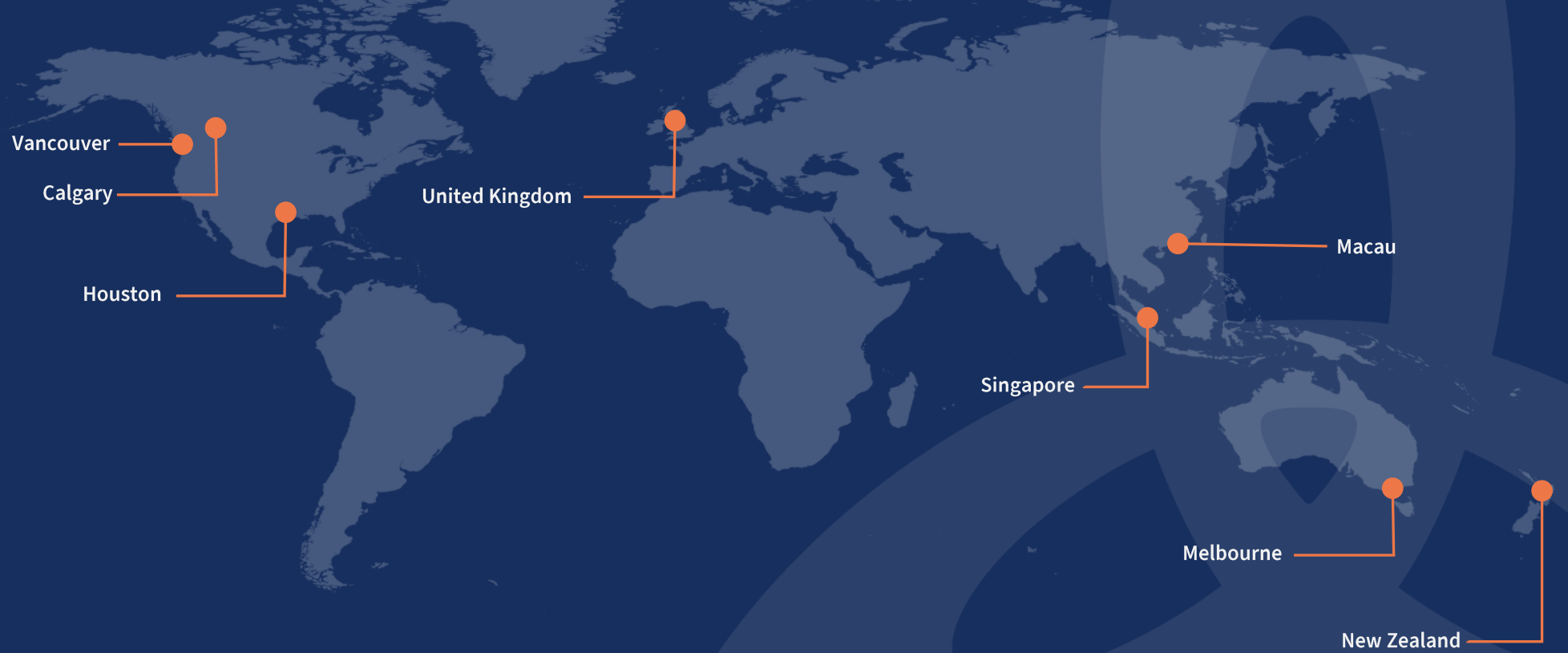
IBM Platinum Business Partner



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- Over 26 years experience providing Enterprise Asset Management
- Clients in every industry, on every continent
- Platinum IBM Business Partner
- Award winning Solutions and Services

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Offshore Wind & Renewables

Facilities Management

Public Sector

Transportation

Oil & Gas

Manufacturing

Life Sciences

Power Generation & Utilities

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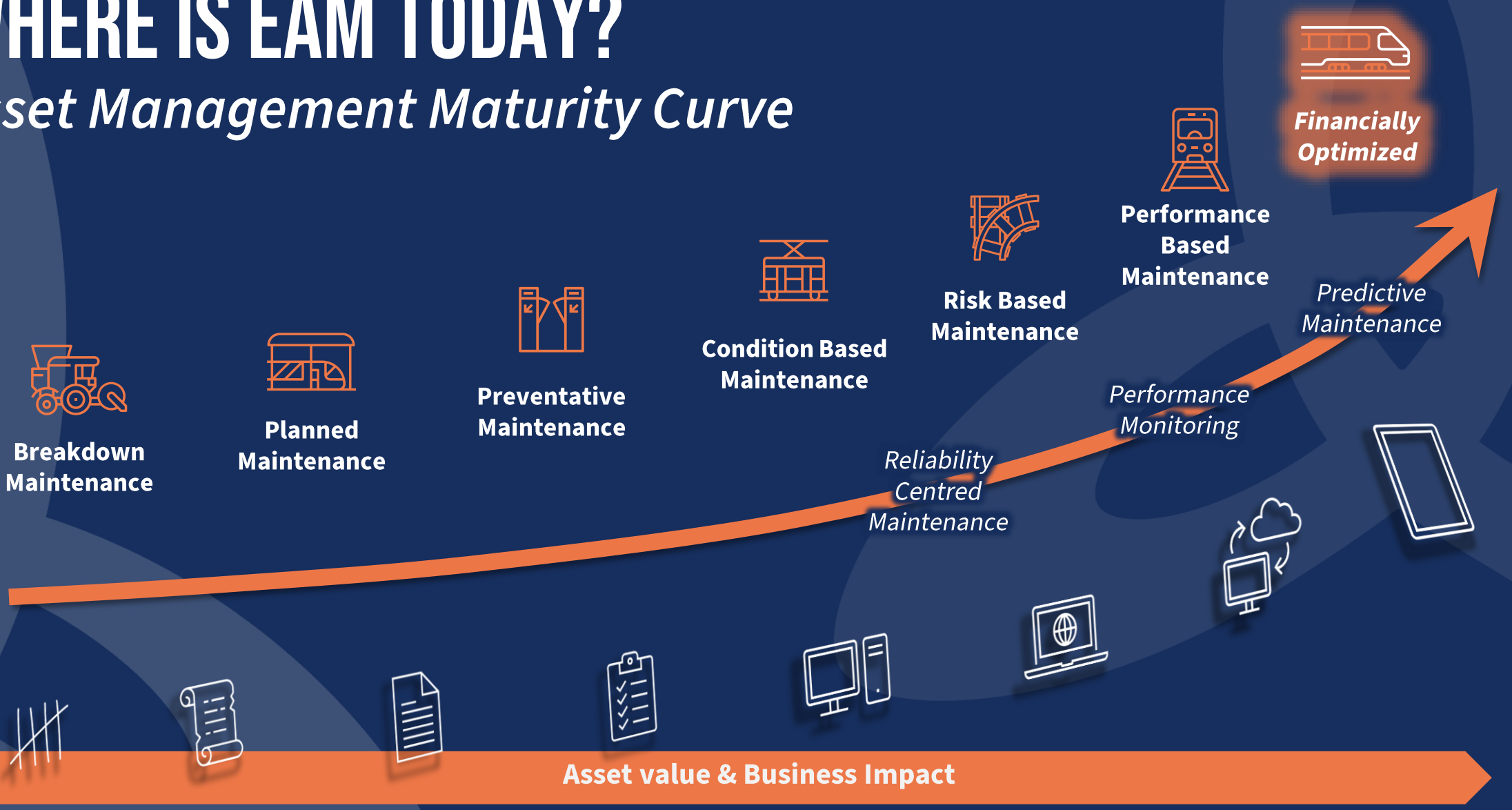
WHERE IS EAM TODAY?

Asset Management Maturity Curve



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Lou Peeples

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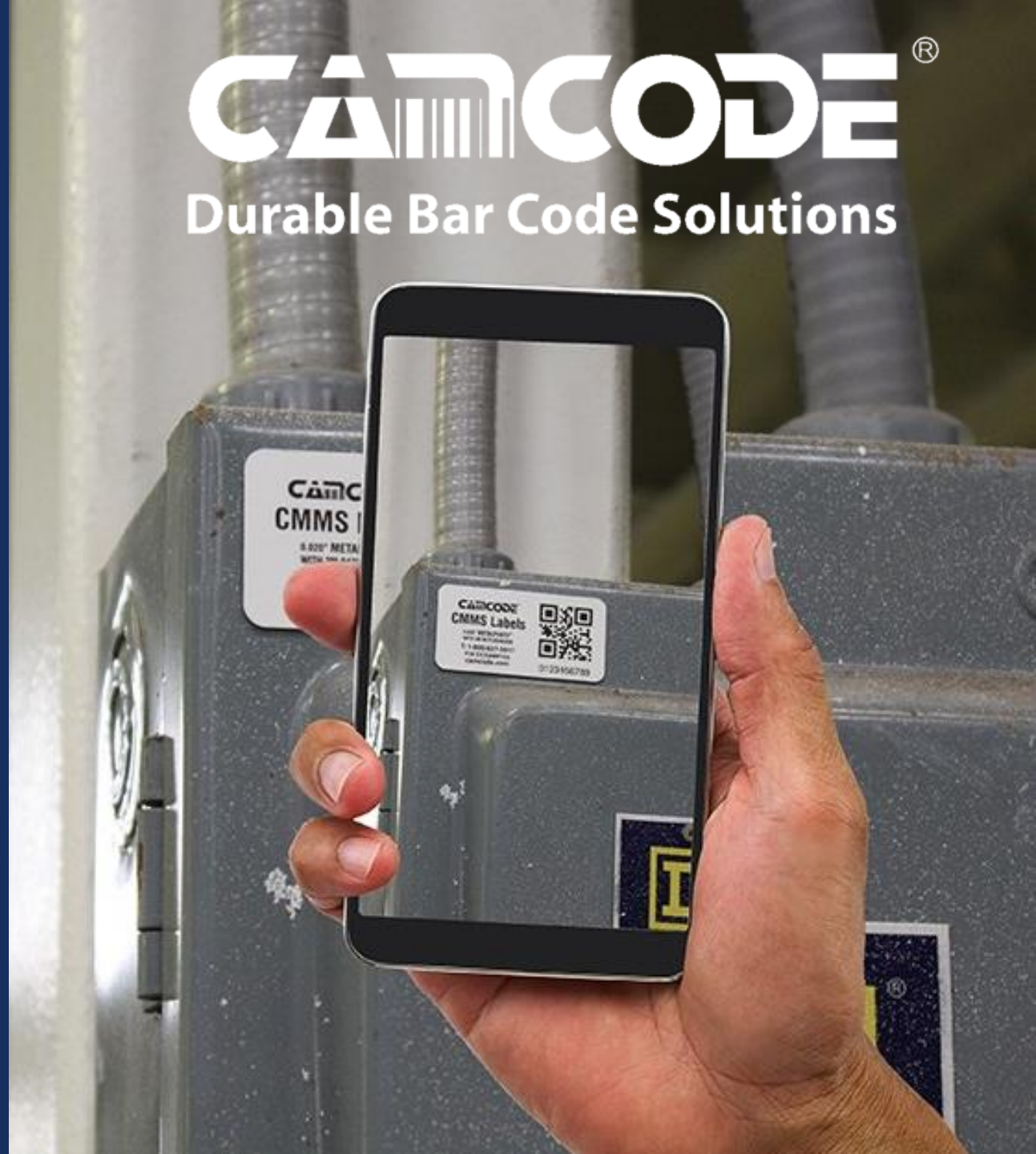

Why efficient Asset and Maintenance Management begins with World Class Bar Code Labels

- Lou Peeples

lpeeples@camcode.com

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Camcode

- Camcode was established as a division of Horizons in 1979
- Formed Camcode Global (subsidiary in the United Kingdom) in 2012 to service the Defense industry
- Camcode produces durable bar code solutions for asset tracking applications in the Auto ID marketplace

Confidential Information
Camcode and Metalphoto are Registered Trademarks of Horizons Incorporated

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Software ~ Levels of Complexity

- Most basic level - Asset tracking
  - Is the asset there? For accounting.

- Next level – CMMS/Inspections
  - CMMS (Computerized Maintenance Mgt System)
    - Preventive maintenance
    - Generating work orders
    - Operator rounds

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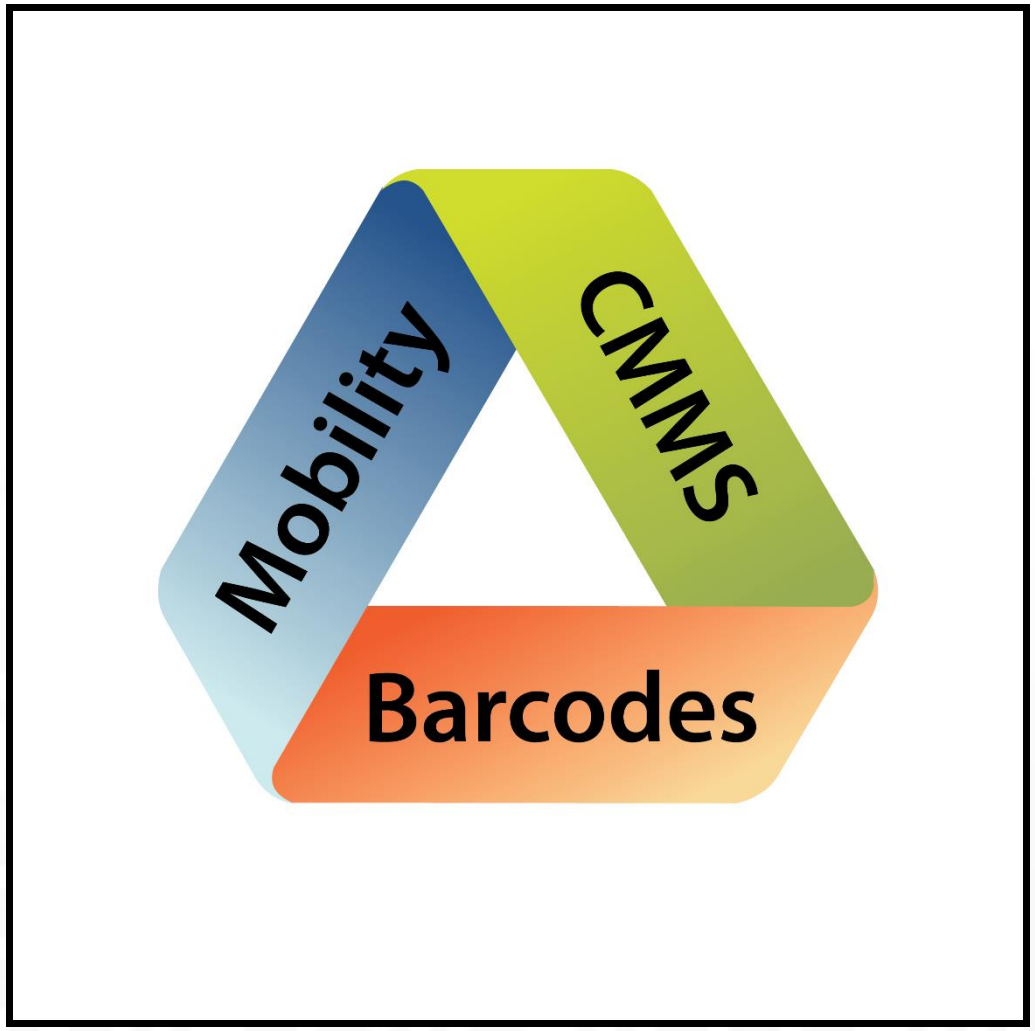
CMMS Implementation



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What is a labels purpose?

Whether the label is for a utility pole, gas meter, solar panel, computer, plant production assets, **Bar Code labels are license plates to access a record for that asset in a database**.

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Problems Bar Code Tags Solve

- 100% database accuracy
  - No more keystroke mistakes
  - Assets are identified correctly 85% of the time.*
- More easily find assets with bar code tag
  - Average time to find the asset information in Maximo including work orders is 9 min.*
  - *actual Maximo customer data

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Problems Bar Code Tags Solve

- More accurate maintenance tracking
  - Start/stop times.
  - Faster reaction times
- Opportunity to clean-up database
  - Re-associate physical assets.
- Tags not lasting, reprints etc
  - 20+ years
  - Using the correct tag on the correct asset

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Considerations

- **Durability**: sunlight, chemicals, heat...
- **Attachment**: adhesives, rivets, ties...
- **Form Factor**: size, thickness, material...
- **Data:** structure, symbology, human-readable info…
- **Installation**: pre-assigned ID-to-asset vs. “licence plate” association in the field.
- **Sustainment**: install SOPs, material specifications, new asset compliance…

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Tagging Strategy

- Design considerations
  - Symbology's (2D: QR/Datamatrix or Code39/128)
  - Sequential numbers vs. specific tag data
- Label Material
  - Last as long as your asset
  - Environment
    - Indoor/Outdoor

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Tagging Strategy

- Surface Type?
  - Metal (painted or exposed steel)
  - Plastic
  - Condition (Rust, oil, dirty)
- Flat, curved?
- Attachment
  - Adhesive, mechanical or wired?

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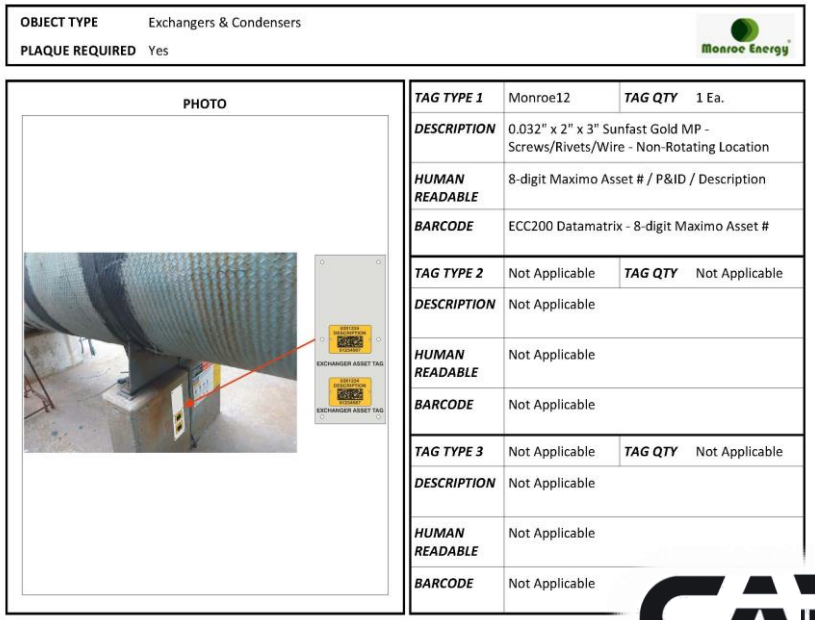
Tagging Strategy

- Tag standardization – Lowers your costs.
- Tag design by asset class for corporate standard.
  - Assessments - Develop Engineering Drawings by Asset Class
    - Marking method
    - Surface preparation
    - Training manuals
    - Photos w/ Label locations
    - Attachment methods
    - Fixed vs rotating assets



OBJECT TYPE	Exchangers & Condensers
PLAQUE REQUIRED	Yes

Monroe Energy

PHOTO

TAG TYPE 1	Monroe12	***TAG QTY***	1 Ea.
DESCRIPTION	0.032" x 2" x 3" Sunfast Gold MP - Screws/Rivets/Wire - Non-Rotating Location		
HUMAN READABLE	8-digit Maximo Asset # / P&ID / Description		
BARCODE	ECC200 Datamatrix - 8-digit Maximo Asset #		
TAG TYPE 2	Not Applicable	***TAG QTY***	Not Applicable
DESCRIPTION	Not Applicable		
HUMAN READABLE	Not Applicable		
BARCODE	Not Applicable		
TAG TYPE 3	Not Applicable	***TAG QTY***	Not Applicable
DESCRIPTION	Not Applicable		
HUMAN READABLE	Not Applicable		
BARCODE	Not Applicable		

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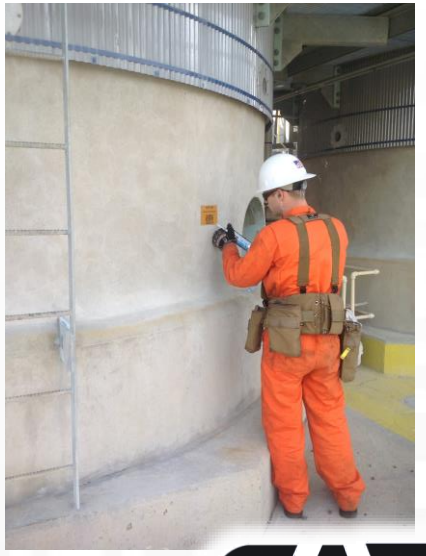
Label Installation

- What is the optimal plan for the most cost efficient installation?
- Plant layout (Grids/P&ID)
- Resource considerations vs. time/cost
  - Outsource labor or use internal



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Packaging

Faster installation of custom labels

- Use kitting…
- Organize them by P&ID or similar

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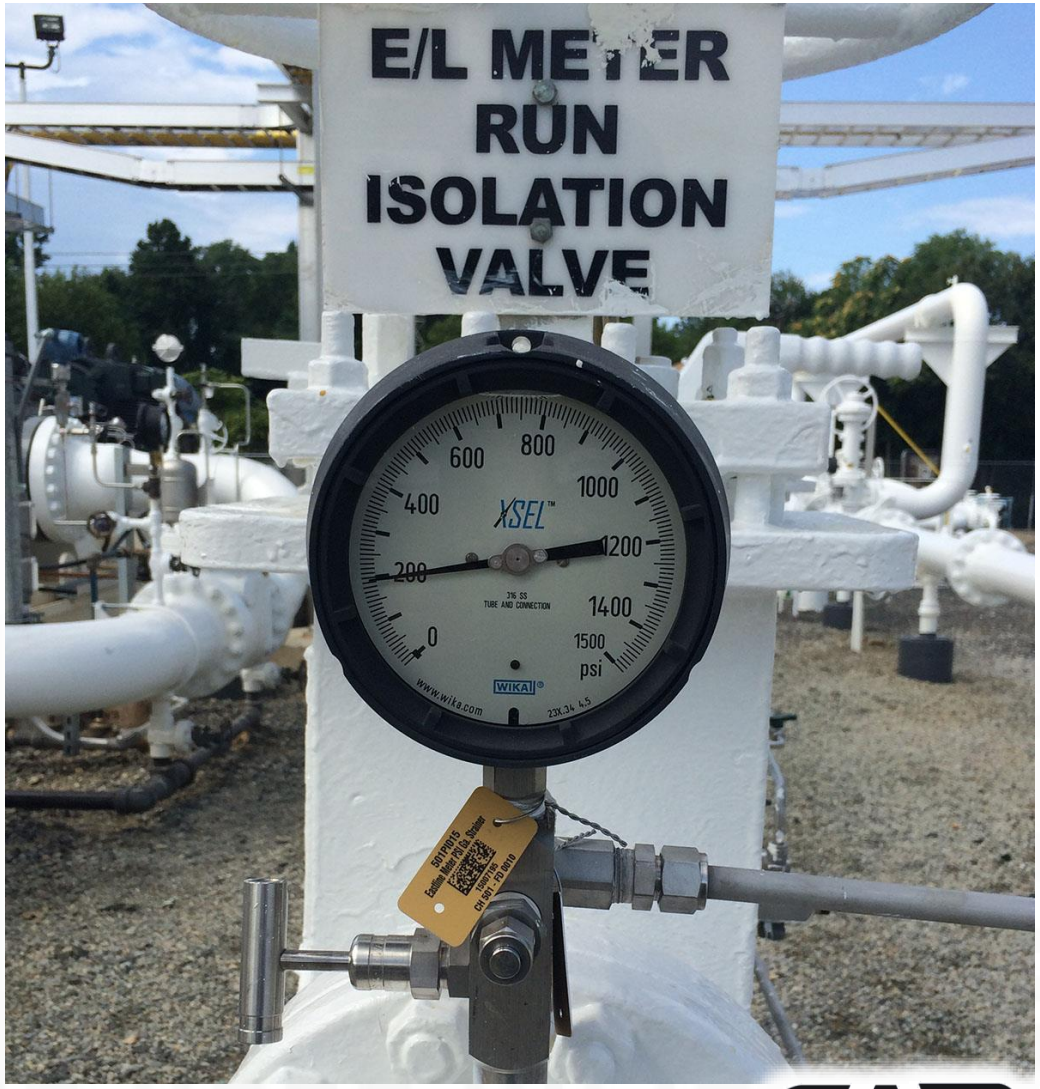
Camcode Core Markets

- Utility (water, electric, meters, poles)
- Energy (oil, gas, nuclear, renewables)
- Defense/Police/Fire
- Facilities (airports, hospitals, apartments, schools, retail, food service)
- Logistics/Transportation (rail, intermodal, on-road, warehouse)
- Civil Engineering/Public Spaces
- Extreme Environments (high heat, chemical exposure, outer space, etc.)



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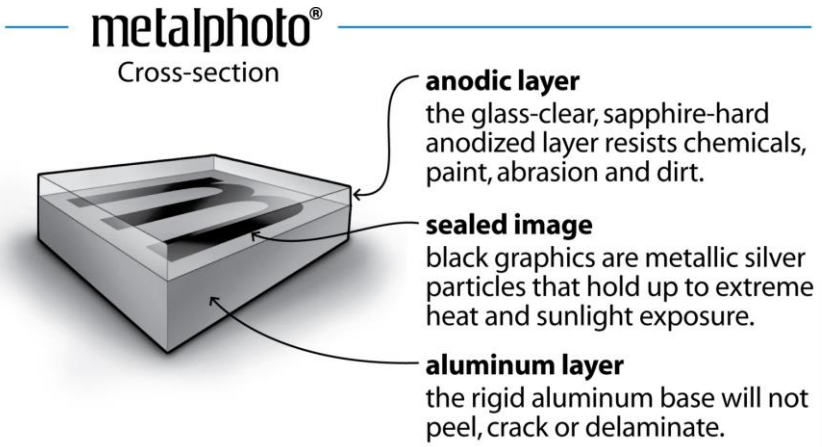
Metalphoto® Photosensitive Anodized Aluminum



Widest performance range, longest history of usage/specification and largest third-party testing documentation...

Australian Government
Department of Defence

BOEING

LOCKHEED MARTIN

BFGoodrich

Honeywell

Ministry of Defence

NASA

NATO

www.metalphoto.com

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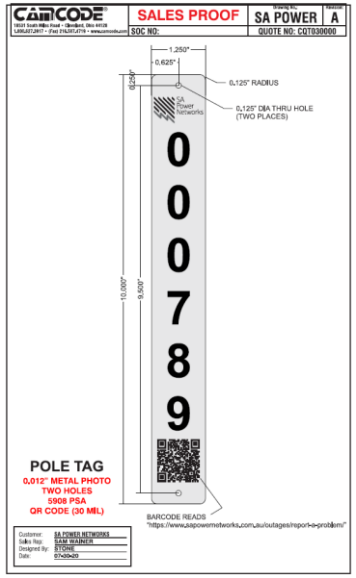
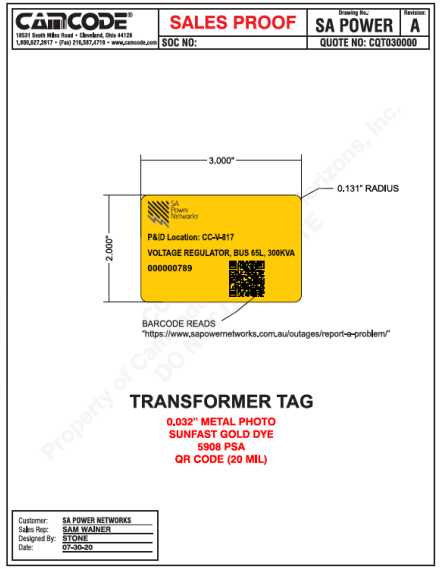
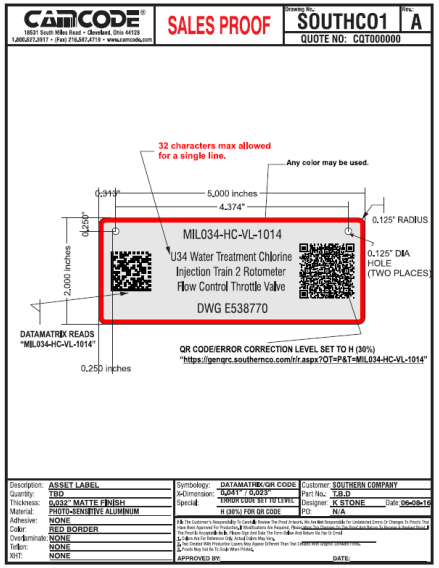
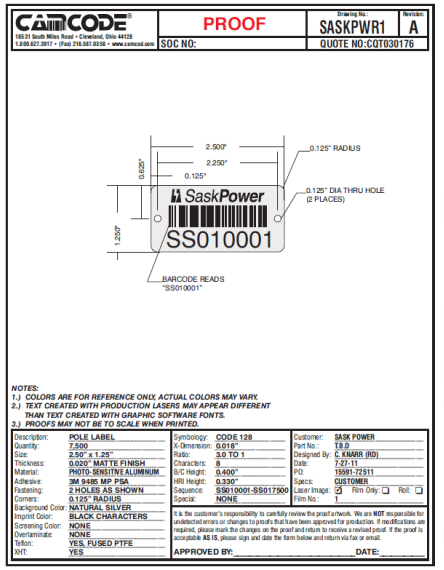
Unlimited Tag Customization









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Pole Tags ~ East Central Oklahoma Electric

Problem

- Missing number inventory in warehouse.
- Numbers falling out of brackets.
- Duplicates from manually creating tags with slide in numbers.

Solution

- Camcode Metalphoto pole tags saved thousands of dollars with one piece design.
- No duplication/150000 tags
- No letter/number inventory to carry.
- Lasts 30+ years.

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Facilities CMMS ~ Walmart

Problem

- Walmart needed to track over 300 critical assets / store for CMMS/maintenance purposes with a durable tag that will survive the rigors of being exposed to the public.

Solution

- 1.5 million Camcode Metalphoto labels are now installed in over 4700 Walmart locations.
- Each assets record is accessed by scanning a Camcode QR code with 100% accuracy.

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Kitting ~ Monroe Energy

Problem

- Maximo customer Monroe Energy used asset specific tags with Maximo generated asset numbers and custom description.
- Installing thousands of custom tags would have incurred thousands of additional dollars due to finding a specific asset for it's custom tag.

Solution

- Camcode used "Kitting" to organize tags in a binder. We created Excel data files and used a "key" that tied a specific asset to where it was in the binder for easy location of custom tags.

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Meter Badges ~ American Meter

Problem

- Gas customers wanted a way to capture meter test data and to better manage inventory.

Solution

- Working with American Meter, Camcode Meter Badges are installed on millions of gas meters.
- Bar coded meters shipped to end users allow end users to scan in and out of inventory.
- Test data for meters are now scanned with 100% accuracy.

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Utility/Energy Users

- Gas meters
- Intermountain Power
- Southern Co.
- DTE Minnesota power
- Exelon
- Alliant Energy
- Orlando Airport/Conv Ctr
- Chevron/Exxon
- Monroe Energy
- StarBucks
- Walmart
- Hydro Quebec
- Manitoba Hydro
- BC Hydro
- Sask Power
- Centurylink
- Flint Hills

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Conclusion

- 100% accurate database
  - No more keystroke mistakes
  - Assets are identified correctly 85% of the time.
- More easily find assets with bar code tag
  - Average time to find the asset information in Max and WO is 9 min.
- More accurate maintenance tracking
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Questions?

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CMMS Video (3 min.)

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Q&A

OVER TO YOU...

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Sarah Brady

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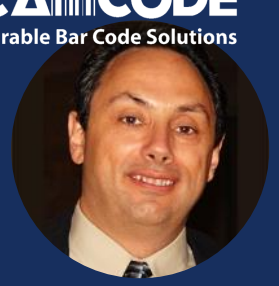

Lou Peeples

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THANK YOU FOR JOINING US!

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