

# Supply Chain Security

Tools for cargo security professionals

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### Goal:

Mitigate the risk of drugs smuggling, human trafficking, terrorism, theft.....

Two the most obvious Problems to secure shipment in Supply Chain:

1. Security seals can be open and close back with out any evidences of tempering.
2. No intelligent data for CBP to analyzing security breaches and anomalies.

### Solution:

1. Seal that you can trust. A seal that is both strong and tamper-resistant
2. Security Transit Management platform providing tools to a) track and manage cargo at micro-level seal movements and b) intelligent interpreting predicts and identifies anomalies and security breaches



## Opening Bolt without evidences by spinning method

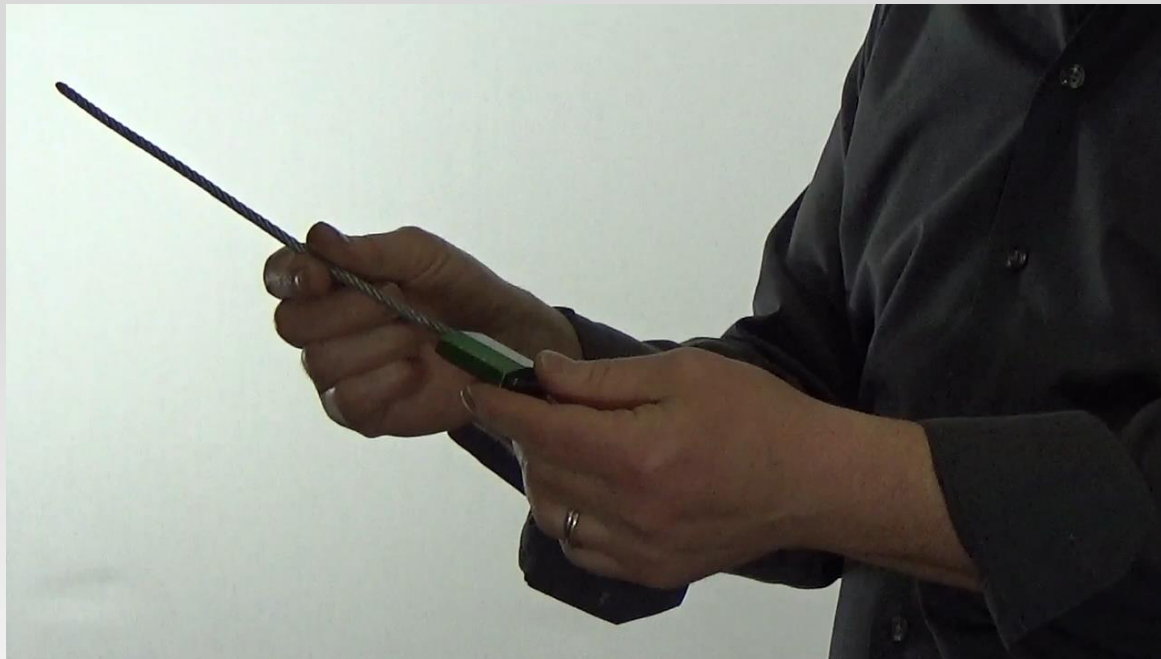


## Defeating Typical Cable Seals by Twist Out (Ratcheting) Method



Cable is twisted and pulled at the same time. The cable can be removed and later reinserted without evidence

## Defeating Typical Cable Seals by Picking



- Most seals have a space between the cable and the body
- A pick is inserted to release the mechanism.

# Independent Test by Dayton T. Brown Laboratory

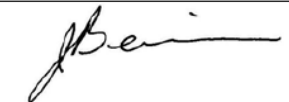
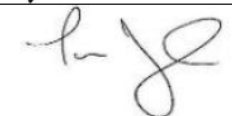
Test Name	Quantity of Seals Tested	Number of Seals Defeated without Evidence	Number of Seals Not Defeated	Pass/Fail
Ratcheting	5	0	5	Pass
Picking	5	0	5	Pass
Freezing	5	0	5	Pass
Replacing the Cable	5	0	5	Pass
Sleeving	5	0	5	Pass

For a passing grade, all seals tested must have not been defeated without leaving clear evidence of tampering.



**Results:** The above listed tests were completed with no discrepancies noted. Refer to Test Report No. 413971-01-04-R14-0598 for complete details and the Red Flag Statement of Work.

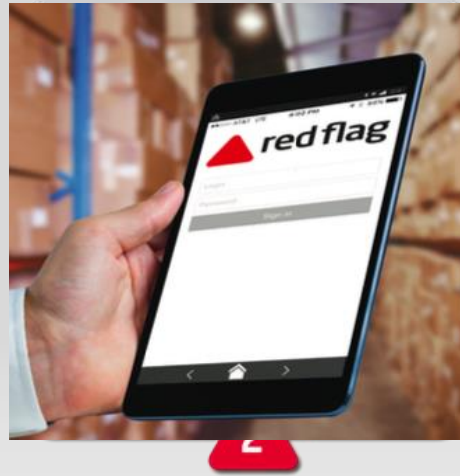
The test results contained herein pertain only to the specimens listed in this report. This report shall not be reproduced, except in full, without the written approval of Dayton T. Brown, Inc.

<b>Prepared by:</b>		J. Benincasa
<b>Engineer:</b>		T. Zimoulis

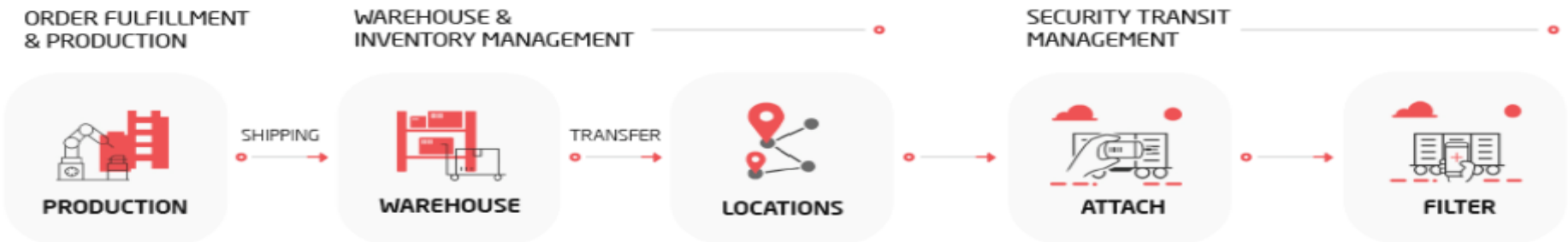


**James Benincasa**  
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 email=jbenincasa@dtbtest.com, o=Dayton T.  
 Brown, Inc., cn=James Benincasa  
 Date: 2014.06.19 08:28:04 -04'00'

# RED FLAG'S SECURITY TRANSIT MANAGEMENT PLATFORM



## RED FLAG'S STM PLATFORM WORKFLOW



## Data we collect:

- Which seal number belong to which company and companies multiple locations
- Inventory control on each location
- Active users on each location and user roll
- Seal number and cargo number
- User name who attached the seal to the cargo
- Time and location when seal was attached
- Pictures before container close and after with time stamp
- Driver information
- Seal status on each filter
- Coordinates on each filter
- User name who filtered the cargo
- For CBP replace the seal of origin with CBP seal
- Who received the cargo
- When and who received cargo
- Status of seal on receiving point



**As sensors become more accessible, smaller, and cost effective, the opportunities for increased data collection is limitless.**

- Light
- Temperature
- Door open, door close
- Radiation
- Weight
- Inside cargo Images
- Movement inside of the cargo
- .....

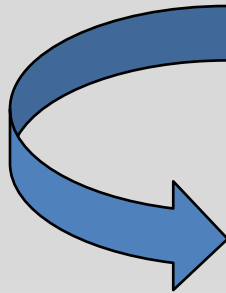
Seal that you can trust  
Seal management  
protocol



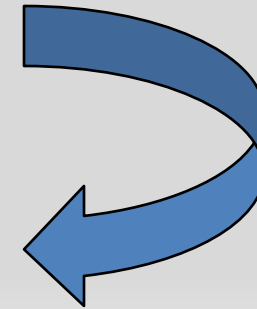
Attachment  
Pair your seal  
with a cargo



Filtering  
Understand where  
your problem begin



↓  
Intelligent data  
processing  
center.



↓  
Predictive Analytics (anomalies & security breaches)



**SOLUTION: MITIGATE THE RISK OF SECURITY BREACHES**