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## SUMMARY OF DYNAMIC DROP TESTING OF TOOL POUCHES AND TOOL HOLSTERS

### Ergodyne

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Respectfully submitted,

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## INTRODUCTION

This report presents the results of dynamic drop testing conducted on samples of tool holsters and pouches. The testing was authorized by Mr. Brent Velenchenko of Ergodyne on September 14, 2016.. The testing and data analysis were completed December 27, 2016.

## OBJECTIVE

The scope of our work was limited to performing the dynamic drop testing on the tool holsters and pouches as described below and providing a report of the results.

## CONCLUSIONS

See Test Results section for individual sample data.

## SAMPLE IDENTIFICATION

### Submitted on September 12 2016

Four (4) holsters were submitted. The following is a list of the supplied information about each bag.

One (1) Model #5561 – Small Tool/Radio Holster; labeled 5561

One (1) Model #5562 – Hammer Holster; labeled 5562

One (1) Model #5563 – Power Tool Holster; labeled 5563

One (1) Model #5564 – Water Bottle Holster; labeled 5564

Two (2) Topped Tool Pouches were submitted for testing.

One (1) Model #5517 – Premium Topped Tool Pouch; labeled 5517

One (1) Model #5527 – Premium Topped Tool Pouch; labeled 5527

### Submitted on October 25, 2016

Four (4) holsters were submitted. The following is a list of the supplied information about each bag.

One (1) Model #5561 – Small Tool/Radio Holster; labeled 5561 RD

One (1) Model #5562 – Hammer Holster; labeled 5562 RD

One (1) Model #5563 – Power Tool Holster; labeled 5563 RD

One (1) Model #5564 – Water Bottle Holster; labeled 5564 RD

Two (2) Topped Tool Pouches were submitted for testing.

One (1) Model #5517 – Premium Topped Tool Pouch; labeled 5517 RD

One (1) Model #5527 – Premium Topped Tool Pouch; labeled 5527 RD

### Submitted on November 29, 2016

Four (4) holsters were submitted. The following is a list of the supplied information about each bag.

One (1) Model #5561 – Small Tool/Radio Holster; labeled 5561 RD2

One (1) Model #5562 – Hammer Holster; labeled 5562 RD2

One (1) Model #5563 – Power Tool Holster; labeled 5563 RD2

Two (2) Topped Tool Pouches were submitted for testing.

One (1) Model #5517 – Premium Topped Tool Pouch; labeled 5517 RD2

One (1) Model #5527 – Premium Topped Tool Pouch; labeled 5527 RD2

Submitted on December 22, 2016

Two (2) holsters were submitted. The following is a list of the supplied information about each bag.

Two (2) Model #5563 – Power Tool Holster; labeled 5563 RD2

Two (2) Topped Tool Pouches were submitted for testing.

One (1) Model #5527 – Premium Topped Tool Pouch; labeled 5527 RD3

\* Note: Not all submitted bag were used in dynamic testing refer to test data for actual tested bags

## **TEST METHOD**

Drop testing on was conducted using the following methods. The Holster/Pouch was suspended from a ceiling anchor by the strap with buckle as it was intended to be worn. A non-shock lanyard was utilized; the anchor end of the lanyard was connected to the Holster/Pouch attached D-ring. The tool end of the lanyard was connected to the specified weight and suspended from a quick release hook anchored into the ceiling allowing for a 6 foot free fall. The weight was then dropped using a quick release hook and allowed to free fall. This was repeated two (2) times for a total of three (3) drops, or until failure. Following each drop, the lanyard and hoist bucket was inspected for visible damage.

## TEST RESULTS

The following is a list of specimens and corresponding drop loads and any failure modes. To get a passing result requires 3 drops that do not result in catastrophic failure in which the weight is not released to the ground.

Bag/Pouch Model	Rev	Date Submitted	Side	Drop 1/ Weight	Drop 2/ Weight	Drop 3/ Weight	Pass/Fail	Damage
#5562	NA	9/12/2016	1	pass/10 lb	pass/10 lb	Pass/10 lb	Pass	Ripping at seam
#5561	RD	10/25/2016	2	Pass/6 lb	Pass/3 lb	Pass/3 lb	Pass	Minor fraying
#5561	RD2	11/29/2016	1	Pass/10 lb	Pass/5 lb	Pass/5 lb	Pass	Damage to stitching
#5562	RD2	11/29/2016	1	Pass/10lb	Pass/5 lb	Pass/5 lb	Pass	Damage to stitching
#5517	RD2	11/29/2016	1	Pass/10 lb	Pass/5 lb	Pass/5 lb	Pass	No noticeable
#5527	RD2	11/29/2016	1	Pass/10 lb	Pass/5 lb	Pass/5 lb	Pass	Not noticeable
#5563	RD2	12/22/2016	1	Pass/10 lb	Pass/5 lb	Pass/5 lb	Pass	Damage to stitching

### Dynamic Test Results

**Note:** Product samples listed in this summary report represent passing samples only. One or more failing and/or invalid/incomplete results may have been removed from the summary as requested by Ergodyne to specifically summarize approved products according to Ergodyne standards. Please refer to the full test report ESP023875P.2 for details on all samples.