ERGONOMIC SAFETY The Next Generation of Premium Full Body Harnesses Honeywell Miller® Miller H700 Series **G....** 電影語

Honeywell MILLER®

SAFETY BACKED BY SCIENCE

We've taken a deep dive into robust scientific research to elevate our H-Series fall protection harnesses. We've analyzed the medical science behind suspension trauma, as well as the science behind ergonomic design and novel materials. We've conducted tests to examine breathability and pressure distribution. And then, we added state-of-the-art innovation to shape the all-new Honeywell Miller H700 Premium Harness Series.



The Honeywell Miller H700 full body harness helps ensure workers stay compliant, protected and productive when working at height thanks to scientifically-based technological advances that focus on comfort, safety and intuitiveness.

COMFORT

The Miller H700 harness features high-tech, multi-layered new-generation 3D movement-focused waist padding for prolonged work positioning, enhanced shock absorption, breathability and venting – helping to keep workers drier and cooler on the job. The webbing surface is water repellent and durable. Moreover, our new Pivot Strap Adjuster enables a variety of leg configurations for customizable comfort.

SAFETY

Harnesses help keep workers at height safe, but spending long hours in a restrictive, non-ergonomic heavy harness can lead to muscular fatigue and may even cause serious medical problems. Plus, when a worker falls and is suspended, time is of the essence. With the Miller H700, what's usually a complicated four-step process in providing trauma relief is now one easy step with the One-Pull Trauma Relief Steps accessory, which provides a quick auto-release. Suspension trauma is largely alleviated, blood flow continues to circulate and the worker is safer until help arrives.

INTUITIVENESS

Intuitive and easy-to-use adjustability options provide customizable comfort. The low-profile textile accessory interface straps enable workers to conveniently attach and move pouches around onto the Miller H700 harness. Tool tether anchor attachments and lanyard keepers are also positioned in several convenient locations and the integrated Personal Fall Limiter (PFL) connector enables the attachment of SRLs and carabiners. The dorsal wear protector accessory helps protect the dorsal webbing from damage.

ERGONOMICSAS A SCIENCE

The Honeywell Miller H700
Premium Series full body
harnesses aren't just comfortable,
they're ergonomically designed
for optimum fall protection.

A complete ergonomic assessment is typically based on a series of scientific data:

- Anthropometric data: height, weight, waist circumference
- Human anatomy, lumbar support, weight distribution, shoulder stabilization, musculoskeletal benchmarks
- Range of motion study: rotation, extension, lateral bending and flexion, movement-focused technology
- Heatmapping thermal comfort: body heat ventilation and evaporative cooling
- Pressure mapping: computerized clinical tool for assessing pressure distribution

Evidence-Driven Safety Features

As a global leader in fall protection, our legacy informs our future. We've learned that heavy fall protection makes it difficult to get through the day. To address that distress, we developed the following innovations, utilizing scientific findings to improve safety and comfort.



ENGINEERED WITH ADVANCED MATERIALS

1. USER-FRIENDLY LANYARD KEEPERS AND TOOL TETHER ANCHORS

These are all positioned in convenient locations throughout the harness.

2. ERGONOMICALLY-SUPERIOR CHEST DESIGN

The new construction helps to enhance freedom of upper-body movement.

3.HIGH-TECH 3D PADDING

New-generation 3D knitted movement-focused waist padding for prolonged work positioning at heights.

4. CONFIGURABLE LEG STRAP DESIGN

The Pivot Strap Adjusters allow for a variety of leg configurations for customizable comfort.



5. ONE-PULL TRAUMA RELIEF STEPS

These features provide a state-of-the-art solution for suspension trauma relief.

* This is an accessory sold separately



DESIGNED FOR ERGONOMIC SAFETY

6. PRACTICAL INTEGRATED SRL CONNECTOR

Conveniently-placed PFL integrated connector enables an easy attachment of personal single and/or twin SRLs and carabiners.

7. OPTIMIZED LABEL PROTECTION AND IDENTIFIABLE HARNESS SIZE

Each harness includes their own new protected name plate identification and QR code.

8. DORSAL WEAR PROTECTOR

This can be added to help protect the dorsal webbing from damage.

* This is an accessory sold separately

9. MODULAR LIGHTWEIGHT ACCESSORY STRAPS

These components help to enhance harness adjustability and increase user convenience.

MORE COMFORTABLE THAN EVER

The lightweight full-body harness offers less heft, more comfort and easier movability, reducing muscular fatigue, motion constraints and sweat.



FOUR CORE MODELS WITH A NEW MODERN DESIGN

The modern ergonomic design provides higher visibility, smarter features and safer, more comfortable functionality. Select from four models, available in four sizes.



CC7

- Next-generation 3D movement focused waist pad for prolonged work positioning at heights
- Highly breathable, lightweight, ergonomic shoulder/back padding
- Shoulder D-rings
- Belly D-ring
- Integrated SRL adaptor
- Pivot link leg strap adjuster



CC5

- Next-generation 3D movement focused waist pad for prolonged work positioning at heights
- Highly breathable, lightweight, ergonomic shoulder/back padding
- Integrated SRL adaptor
- Pivot link leg strap adjuster



CC3

- Next-generation 3D movement focused waist pad for prolonged work positioning at heights
- Highly breathable, lightweight, ergonomic shoulder/back padding
- Rotative belt

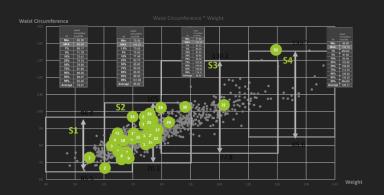


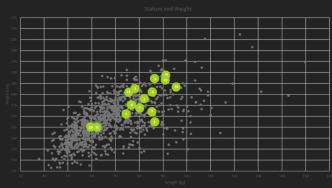
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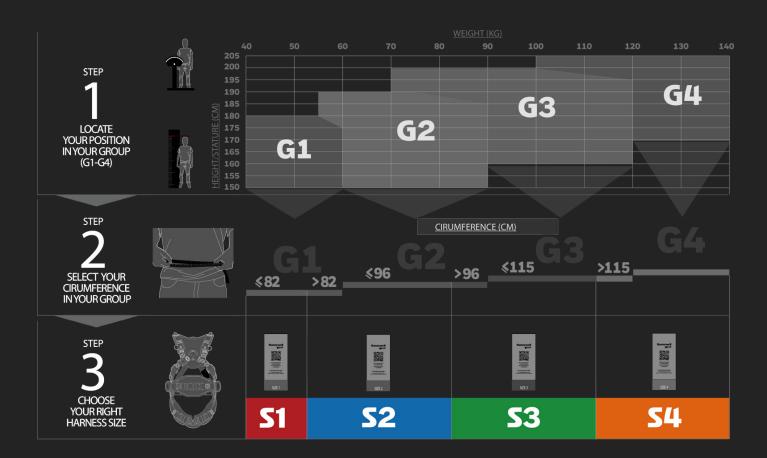
- Highly breathable, lightweight, ergonomic shoulder/back padding
- Integrated SRL adaptor
- Pivot link leg strap adjuster

REVOLUTIONARY SIZE CHART

Intuitive size selection. Redefined size chart for improved accuracy in harness size selection, beyond traditional height and weight.







PRESSURE DISTRIBUTION

PURPOSE OF THIS TEST

This internal test measures the pressure distribution around the waist padding of a worker wearing a harness at height positions. The more even the pressure distributes on the waist padding, the more comfortable it feels for the wearers.

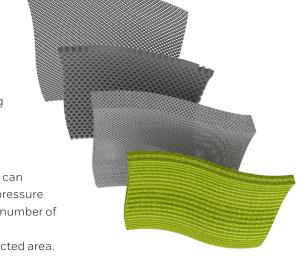
TEST RESULTS

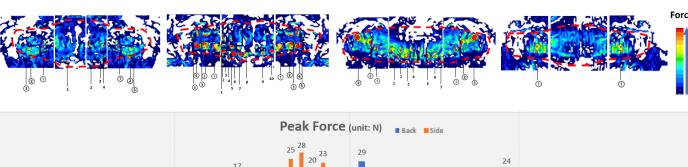
Among the four harnesses with waist padding, Miller H700 waist padding generates the most even pressure distribution and the lowest total force.

CONCLUSION

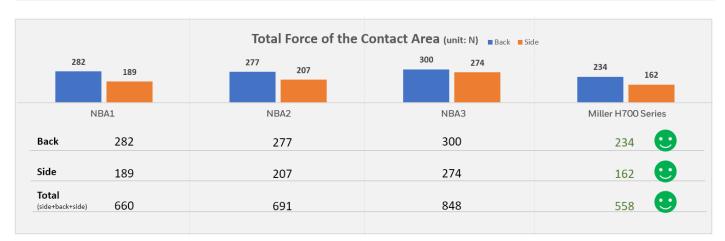
Miller H700 waist padding multi-layers materials with gradient hardness can support the prolonged work time to offer excellent user experience. The pressure distribution map shows the Miller H700 harness performs with the least number of peak forces and the lowest total force compared with its competitors.

Total force: The sum of all forces acting on the body from padding-contacted area. **Peak force:** The highest force value of a unit area among the entire contacting area.





5 6	5 9 15 11 8 5 4 1 2 3	Peak Force 25 28 23 20 11 11 11 11 11 11 11 11 11 11 11 11 11	29 29 15 16 14 9 5 7 4 9 1 1 2 3 4 5 6 7 1 2 3	<u>8</u> <u>(1)</u>
Back	# of point 4	10	7	0
	Force Sum 25	95	85	0
Side	# of point 3	5	3	1
	Force Sum 34	107	74	8
Total	# of point 10	20	13	2
(side+back+side)	Force Sum 93	309	233	16



BREATHABILITY

To be comfortable, harnesses must stay dry and breathable when subjected to sweat.

PURPOSE OF THIS TEST

The aim was to test* the padding material against water vapor resistance.

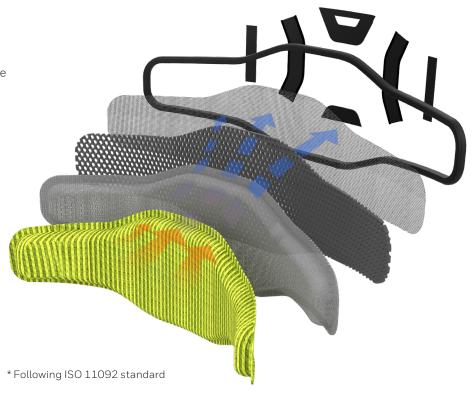
A lower water vapor resistance means a lower barrier to water vapor.

This proves the material is more breathable and more comfortable to wear.

*Test performed by a third party - SGS.

TEST METHOD

An electrically heated porous plate is covered by a liquid water-vapor permeable membrane. Water fed to the heated plate evaporates and passes through the membrane as vapor, so that no liquid water contacts the test specimen. With the test specimen placed on the membrane, the heat flux required to maintain a constant temperature at the plate level is a measure of the rate of water evaporation, and from this the water-vapor resistance of the test specimen is determined.



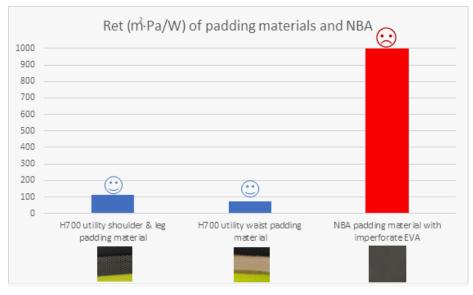
TEST RESULTS

SAMPLE NAME	RET
H700 utility shoulder & leg padding material	114
H700 utility waist padding material	72.4
NBA padding material with imperforate EVA	>1000

RET value = evaporative resistance of one unit area of a material. The lower the RET value, the cooler the material feel on the body.

CONCLUSION

The water vapor resistance of the Miller H700 waist, leg and shoulder padding materials is much better than NBA padding material.



NBA = Next Best Alternative on the market.

WHY YOU NEED THE MILLER H700

The dangerous world of working at height

MAIN HAZARDS FOR WORKERS AT HEIGHT

- Worker fatigue / muscular fatigue
- Suspension trauma / slow rescue response time
- Harness not "buckled up" and / or adjusted correctly
- Not anchored (anchor point, back D-ring, lanyard with rebar hook, fall arrester)

ROOT CAUSES OF FALLS

- Not keeping eyes and mind on task
- Fall protection equipment, tools are too heavy
- Poorly designed harness is heavy and constraining
- Harness / fall-protection equipment is counterintuitive

CAUSES OF WORKER FATIGUI

- Working at height
- Physically-demanding repetitive work
- Total weight of personal protective equipment (PPE) increasing due to higher safety standards
- Non-ergonomic PPE poor fit, constraining, non-breathable

PROFESSIONS WITH SIGNIFICANT FALL FATALITIES

- Telecom workers
- Power energy workers
- Wind turbine workers



HONEYWELL MILLER® H700 MODEL GUIDE													
MO	SKU	DE	SIZE	A E	P CH	D-RINGS				BZ	PIV STI	RO	
MODEL	C	DESCRIPTION	im	LEG BUCKLES	CHEST BUCKLE ALUM	ВАСК	FRONT	SIDE D	SHOULDER	VENTRAL D	INTEGRATED SRL ADAPTOR	PIVOT LINK LEG STRAP ADJUSTER	ROTATIVE BELT
	1036760	H700 IC2 ALUM QC FD	1	QC	QC	Alum	Alum	0	0	0	yes	yes	no
IC2	1036781	H700 IC2 ALUM QC FD	2	QC	QC	Alum	Alum	0	0	0	yes	yes	no
102	1036783	H700 IC2 ALUM QC FD	3	QC	QC	Alum	Alum	0	0	0	yes	yes	no
	1036784	H700 IC2 ALUM QC FD	4	QC	QC	Alum	Alum	0	0	0	yes	yes	no
	1036789	H700 CC3 ALUM QC FD/SD	1	QC	QC	Alum	Alum	2	0	0	no	no	yes
CC3	1036800	H700 CC3 ALUM QC FD/SD	2	QC	QC	Alum	Alum	2	0	0	no	no	yes
003	1036771	H700 CC3 ALUM QC FD/SD	3	QC	QC	Alum	Alum	2	0	0	no	no	yes
	1036773	H700 CC3 ALUM QC FD/SD	4	QC	QC	Alum	Alum	2	0	0	no	no	yes
	1036785	H700 CC5 ALUM QC FD/SD	1	QC	QC	Alum	Alum	2	0	0	yes	yes	no
CC5	1036793	H700 CC5 ALUM QC FD/SD	2	QC	QC	Alum	Alum	2	0	0	yes	yes	no
000	1036787	H700 CC5 ALUM QC FD/SD	3	QC	QC	Alum	Alum	2	0	0	yes	yes	no
	1036788	H700 CC5 ALUM QC FD/SD	4	QC	QC	Alum	Alum	2	0	0	yes	yes	no
	1036774	H700 CC7 ALUM QC FD/SD VD SHD	1	QC	QC	Alum	Alum	2	2	1	yes	yes	no
CC7	1036775	H700 CC7 ALUM QC FD/SD VD SHD	2	QC	QC	Alum	Alum	2	2	1	yes	yes	no
CCI	1036776	H700 CC7 ALUM QC FD/SD VD SHD	3	QC	QC	Alum	Alum	2	2	1	yes	yes	no
	1036777	H700 CC7 ALUM QC FD/SD VD SHD	4	QC	QC	Alum	Alum	2	2	1	yes	yes	no
	1036778	ONE PULL SUSPENSION TRAUMA STEPS (PAIR)											
	1036779	REMOVABLE LUMBAR PROTECTOR (EACH)											
	1036780	WATER-PROOF DUFFLE BAG (EACH)											

Standards: EN 361:2002, EN 358:2018, EN 1497:2007 Certified to 140 kg

Scan the QR code to learn more about the Honeywell Miller H700 Series.



For More Information

sps.honeywell.com

HONEYWELL SAFETY PRODUCTS UNITED KINGDOM

Honeywell Safety Products UK LTD Honeywell House, Skimped Hill Lane, Bracknell, Berkshire RG12 1EB United Kingdom

Phone: +44 (0) 1256 274938 Email: <u>info-uk.hsp@honeywell.com</u>

HONEYWELL SAFETY PRODUCTS NORDICS

Honeywell Safety Products Nordic AB Strandbadsvägen 15 SE-252 29 Helsingborg – Sverige Phone: +46 (0) 424480433

Email: info-nordic.hsp@honeywell.com

HONEYWELL SAFETY PRODUCTS BENELUX

Honeywell Safety Products Benelux BV
Lange Amerikaweg 55
7332 BP Apeldoorn, Nederland
Tel: +31 (0) 20 5656 988

Email: info-benelux.hsp@honeywell.com

