

# AIR FLOW

When people wear a harness, the contact area between body and padding can pose discomfort. Ergonomic design reduces body contact around the neck and lower back – reducing chaffing and irritation and improving air flow.

## PURPOSE OF TEST

Assess contact area under pressure measurement to minimize body contact area and create air flow.

## TEST METHOD

Applying pressure to a pressure measurement film positioned on top of the harness. The film turns pink when pressure is added to the contact area, simulating how people wearing the harness perceive pressure. A lower contact area ratio\* means workers will benefit from more airflow, less thermal storage (heating), and an overall cooling effect.

## TEST RESULTS

The H700 has a contact ratio of 38.7% around the shoulder, 34.7% around the waist and 51.1% around the legs.

		SHOULDER	WAIST	LEG
H700	Total Area	 891.0 cm <sup>2</sup>	 927.0 cm <sup>2</sup>	 244.2 cm <sup>2</sup>
	Contact Area	 344.7 cm <sup>2</sup>	 321.8 cm <sup>2</sup>	 124.8 cm <sup>2</sup>
	Contact Ratio	 38.7%	 34.7%	 51.1%
NBA1	Total Area	 732.9 cm <sup>2</sup>	 1254.8 cm <sup>2</sup>	 462.7 cm <sup>2</sup>
	Contact Area	 696.6 cm <sup>2</sup>	 892.2 cm <sup>2</sup>	 415.4 cm <sup>2</sup>
	Contact Ratio	 95.0%	 71.1%	 89.8%
NBA2	Total Area	 711.1 cm <sup>2</sup>	 1398.2 cm <sup>2</sup>	 195.9 cm <sup>2</sup>
	Contact Area	 400.8 cm <sup>2</sup>	 520.3 cm <sup>2</sup>	 164.8 cm <sup>2</sup>
	Contact Ratio	 56.4%	 37.2%	 84.1%

Contact area ratio = Contact Area/Total Area \* 100%

Contact area = Total surface to contact with body

NBA = Next Best Alternative on the market.

## CONCLUSION

Compared with NBA 1 and NBA 2, the H700 padding has the smallest contact area and contact ratio, allowing optimal air flow breathability.