

HARMONIC™

From a leader in advanced energy devices¹...

Experience precise energy delivery with HARMONIC™ 1100 Shears



Curved, tapered blade—for access to tight spaces and working next to critical structures.



Intelligent, energy managing algorithm —lower maximum blade temperature and shorter exposure on tissue.²

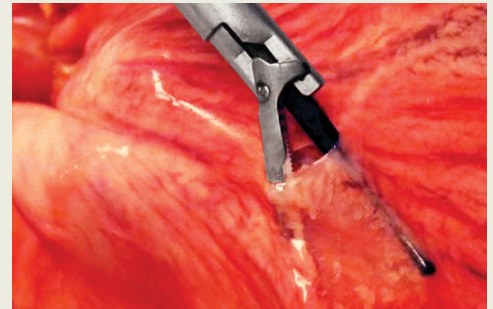


Ultrasonic technology—energy delivered through a single blade for dissecting, coagulating, cutting and sealing.

A curved, tapered tip for precise energy delivery^{3,4}

- The most tapered HARMONIC™ Shears device.
- A unique shape that mimics a mechanical dissector and may reduce the need to use a separate dedicated dissecting instrument.⁵
- More tapered and narrower at the distal tip than LigaSure™ Maryland.⁶

End effector profile differences (birds eye view):

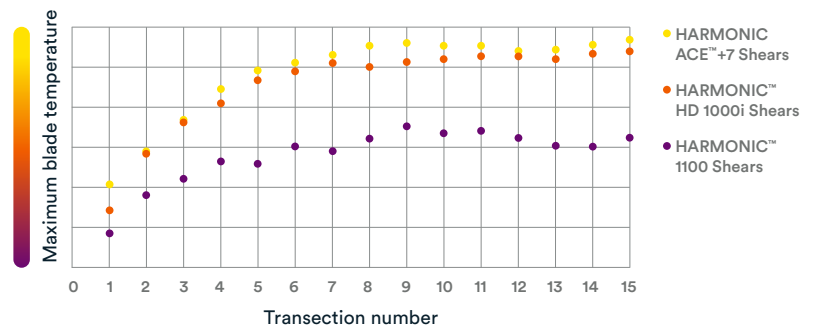


Unmatched precision⁷

More tapered jaw designed to enable precise access to tissue planes.⁸

Intelligent, energy managing Adaptive Tissue Technology algorithm for lower maximum blade temperature and shorter exposure on tissue.²

- Transection speeds 35% faster than HARMONIC™ ACE+7 Shears.⁹
- Precise cutting with minimal thermal damage may allow for safer dissection near vital structures compared with electrosurgery or lasers.¹⁰
- Intelligently maintains blade temperature when prolonged energy activation is required.^{11,12}
- Improved tissue pad life compared to HARMONIC™ HD1000i Shears for continued reliability throughout the procedure.¹³



HARMONIC™ 1100 Shears achieved results with lower maximum blade temperatures versus HARMONIC™ ACE+7 Shears and HARMONIC™ HD1000i Shears¹⁴

Ultrasonic Energy delivered precisely through the single blade versus in the tissue between jaws

- Significantly smaller thermal footprint compared to leading competitors.¹⁵
- Ultrasonic devices with Adaptive Tissue Technology do not deliver electricity through tissue, thus there is no risk of additional tissue damage due to stray or 'radiated' energy.^{16,17}
- Energy delivered through a single blade to allow for versatility in general dissection, back-scoring, sealing, creating otomies, mesentery marching or dissecting in tissue planes.¹⁸



Sealing equal to or better than other HARMONIC™ devices

	HARMONIC ACE™+7	HARMONIC™ HD 1000i	HARMONIC™ 1100
Strong sealing ¹⁹	●	●	●
Faster transection ⁹		●	●
Better tissue protection ²⁰			●

HARMONIC ACE™+7 Shears delivered greater first pass vessel sealing than LigaSure™ devices.²¹

Ordering Information

PRODUCT CODES	DESCRIPTION	QUANTITY/SALES UNIT
HAR1120	HARMONIC™ 1100 Shears, 20 cm length	6
HAR1136	HARMONIC™ 1100 Shears, 36 cm length	6

For ordering or other questions about HARMONIC™ 1100 Shears, contact your Ethicon representative

[Ethicon.com/Harmonic1100](https://www.ethicon.com/Harmonic1100)

Customer Support

For more information or product support, call 1-877-ETHICON or visit [Ethicon.com/Harmonic1100](https://www.ethicon.com/Harmonic1100)
See Instructions for Use for complete product details.

References

1. Ethicon, Inc. Advanced Energy Market Share Data, April 2022. 2. Compared to previous generations of Harmonic devices (140049-210108). 3. Based on preclinical evaluation. (138469-200427). 4. Device measurements based on a metrology study compared against Ligasure Maryland, Sonicision, and Thunderbeat. (057588-200427) 5. Based on a preclinical study. (057596-220317). 6. Taper defined as using distal jaw width divided by proximal jaw width. (median jaw taper 0.36 vs. 0.51 LigaSure Maryland (LF1737) (p=0.0061). (053080-220315). 7. Based on a PreClinical evaluation. (138469-200427). 8. Device measurements based on a metrology study compared to Harmonic ACE+7. (057588-200427). 9. Based on bench top study with porcine vessels 3-5 mm in diameter. (138458-200427). 10. (067379-220113). 11. (140051-200512). 12. (037741-210512). 13. Based on testing at Power Level 5. (140634-200518). 14. Based on benchtop study that showed Harmonic 1100 had significantly lower maximum blade temperature than Harmonic ACE+7 Shears and Harmonic HD 1000i Shears after 15 tip bite transections. (140050-200512). 15. In a preclinical study on 5-7mm goat carotids vs. LigaSure™ Blunt Tip (LF1637) and 5mm porcine carotids vs. Thunderbeat™ (TB- 0535FC) using Advanced Hemostasis mode, mean thermal damage was significantly different compared to HARMONIC ACE®+7 (p=0.003 and p=0.002, respectively). In a preclinical study on ≤5mm porcine carotids vs. LigaSure™ Blunt Tip (LF1637) (Power Level 2) and vs. Thunderbeat™ (TB- 0535FC) (Seal and Cut Mode), mean damage was compared and determined via histology (p<0.001). Footprint = Lateral thermal damage (right + left) + jaw width. (039890-210902) 16. Based on preclinical studies demonstrating decreased activation times and thermal damage vs. HARMONIC ACE® without Adaptive Tissue Technology. (044012-151130) 17. Based on preclinical studies of Adaptive Tissue Technology and GEM Technology. (169772-210308) 18. HARMONIC™ 1100 Shears Instructions for Use. Ethicon, Inc. 19. Based on a benchtop study with 5-7 mm porcine carotid arteries. (Burst pressure: 1878mmHg). (057616-200427). 20. Based on benchtop study that showed Harmonic 1100 had 35% faster transection speed and significantly lower maximum blade temperature post transection than Harmonic ACE+7 Shears for shorter heat exposure. (140047-200512). 21. In benchtop test on 5-7mm porcine carotids that compared seal leaks at transection, HARMONIC ACE®+7 in Advanced Hemostasis mode (2/152 failures) versus LigaSure™ 5mm Blunt Tip (LF1537) and LigaSure™ Advance (LF5544) (13/154 failures) (p=0.003) (013671-211014)