

ETHICON

PART OF THE *Johnson & Johnson* FAMILY OF COMPANIES

HARMONIC ACE® + Shears with Adaptive Tissue Technology

Greater precision through improved
energy delivery



HARMONIC ACE[®]+ Shears with Adaptive Tissue Technology

Enhanced precision vs HARMONIC ACE[®] Shears

- 23% less thermal spread¹ reduces tissue damage to surrounding vital structures
- 21% shorter transection times² with the same reliable hemostasis you expect from HARMONIC ACE[®]
- Refined blade design enables precision in dissection, sealing, transection, grasping, andotomy creation

Advanced energy delivery through Adaptive Tissue Technology

- New technology responds intelligently to tissue conditions for greater precision
 - Regulates energy delivery when needed for improved temperature management
 - A tone change signals when Adaptive Tissue Technology is regulating energy delivery, thereby improving efficiency with enhanced feedback
- The surgeon retains ultimate control over the device
 - Adaptive Tissue Technology provides the benefits of greater precision without compromising the surgeon's control of device function

HARMONIC ACE[®] Shears: The precision of advanced energy delivery



Refined Blade Design

- Finer, tapered tip designed for precision and versatility
- Nonstick coating added to titanium alloy blade

Available in 2 Shaft Lengths

- 23 cm and 36 cm

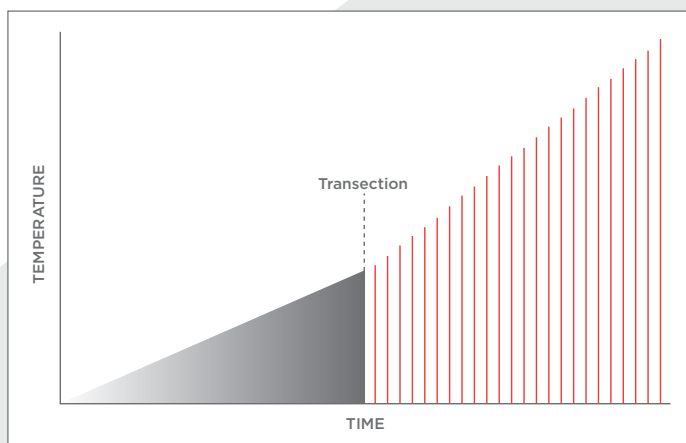
1. 23% less thermal spread exhibited in porcine histology vs HARMONIC ACE[®] Shears without Adaptive Tissue Technology (17mm vs 2.2mm; P<0.001).

2. 21% shorter transection times measured in porcine labs vs HARMONIC ACE[®] Shears without Adaptive Tissue Technology (4.5s vs 5.7s; P<0.001).

3. In a benchtop study on Power Level 5, HAR36 and HAR23 exhibited 30.1% and 34.2% lower mean (P=0.000) and median (P=0.000) blade heat, respectively, than HARMONIC ACE[®] Shears without Adaptive Tissue Technology.

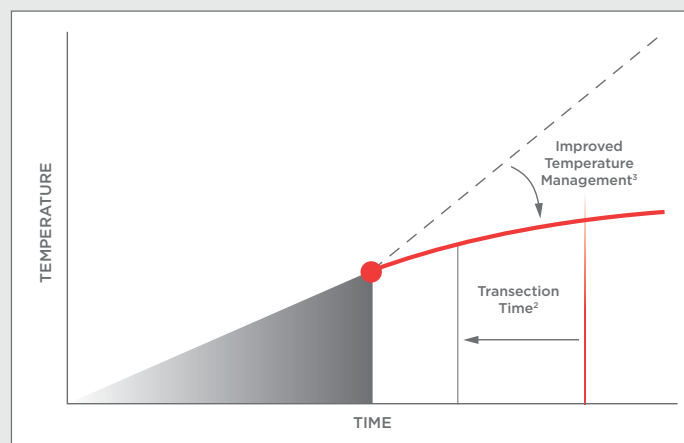
Improved temperature management and efficiency with Adaptive Tissue Technology

Conventional ultrasonic technology



Continued activation after transection can result in increased blade temperatures and inefficient energy delivery.

Adaptive Tissue Technology



Energy is delivered with greater precision, resulting in improved temperature management and shorter transection times.



Audible Feedback

- A tone change provides a cue to reduce activation time

Enhanced Energy Delivery

- Greater precision with 23% less thermal spread¹ and 21% shorter transection times² vs HARMONIC ACE[®] Shears

HARMONIC ACE[®]+ Shears with Adaptive Tissue Technology

Product code	Description
HAR36	HARMONIC ACE [®] Laparoscopic 5mm Diameter Shears 36cm Length + Adaptive Tissue Technology
HAR23	HARMONIC ACE [®] 5mm Diameter Shears 23cm Length + Adaptive Tissue Technology

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Please always refer to the Instructions for Use / Package Insert that come
with the device for the most current and complete instructions.

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