

Mako<sup>®</sup>

# Robotic-Arm Assisted Surgery



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# Mako. SmartRobotics™.

Mako SmartRobotics™ combines three key components: **3D CT-based planning, AccuStop™ haptic technology,** and insightful data analytics\*, into one platform that has demonstrated **better outcomes** for your total knee, total hip and partial knee patients.<sup>1,2,3</sup>



\*To date, the data analytics service is not yet fully available in Europe. Please check on the current availability status for your country prior to engaging in conversations with external customers on the data analytics offering.



# The evolution of Mako

## 2006 – MAKO Surgical Corporation

First generation MAKO System was launched with the partial knee application and the Stelkast UKA implant.



## 2009 – Restoris MCK multi-compartmental knee system

The second generation Mako System launched with the new Restoris MCK Implant System.



## 2010 – Mako THA

First Mako THA procedure performed.



## 2011 – Restoris Hip System

Mako total hip application is launched commercially with the Restoris Hip Implant System.



## 2013 – Stryker acquires MAKO Surgical Corporation

MAKO Surgical Corporation is purchased by Stryker.





## 2015 – Third generation Mako System

Stryker launches third generation Mako System. The launch of the upgraded Mako System included a next generation Total Hip application, which enables surgeons to use Stryker's hip implants on the Mako platform and continues to utilize the clinically successful<sup>4-6</sup> Partial Knee application and implants.



## 2016 – First Mako TKA Case

The addition of the Mako Total Knee application with Stryker's clinically proven<sup>7</sup> Triathlon Total Knee System expanded the Mako offering to provide a comprehensive solution in the robotic-arm assisted joint replacement service line.

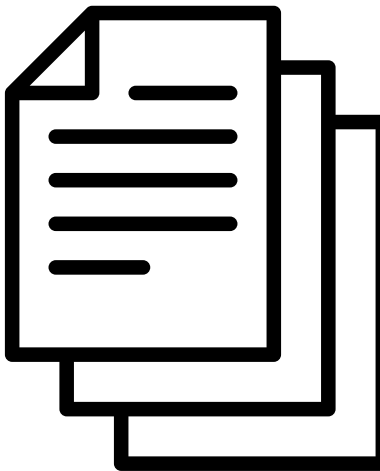




# Mako SmartRobotics™ stats


Worldwide, through 2019:

**14+**  
**years**   
robotic-arm assisted  
surgery experience

**145+**   
published, peer  
reviewed studies

 **850+**  
**Systems**  
have been installed across  
**26 countries and every state**  
in the contiguous U.S.\*

 **1,000+**  
U.S. and foreign patents  
and patent applications  
have been established

 **300K+**  
Mako procedures  
have been performed\*



\*Stryker's 2019 sales data

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# The Mako System



## Cutting instruments

### A. Total Hip Mako Integrated Cutting System (MICS)

- Next generation modular power tool that enables acetabular reaming

### B. Partial Knee Mako Integrated Cutting System (MICS)

- Next generation modular power tool that enables burring and planar saw cuts

### C. Total Knee Mako Integrated Cutting System (MICS)

- Next generation modular power tool that enables planar saw cuts

## Compatible implants

### A: Total Hip

- Femoral Stems: Accolade II, Secur-Fit Advanced, and Exeter
- Femoral Heads: BIOLOX delta V40, Universal BIOLOX delta, and V40 LFIT
- Acetabular Shells: Trident II and Trident Hemispherical, PSL, and Tritanium (solidback, cluster and multihole)
- Acetabular Liners: X3 Polyethylene, Trident Constrained, and MDM X3

### B: Partial Knee

- Restoris MCK Partial Knee Implant System

### C: Total Knee

- Triathlon Total Knee System



# Mako SmartRobotics™

## Know more.

It all starts with a CT scan that creates a 3D image of your patient's unique anatomy. This information you've never had before allows you to create your patient's plan and assess and balance the joint.

## Cut less.

Using everything the CT scan allows you to know about your patient, Mako's AccuStop™ haptic technology guides you to cut what you've planned... precisely for each patient. For some patients, that means preserving soft tissue;<sup>8,9</sup> for others, that means saving healthy bone.<sup>8-12</sup>





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