INR 1.5 - 2

Advanced Heart Valve Replacement Technology

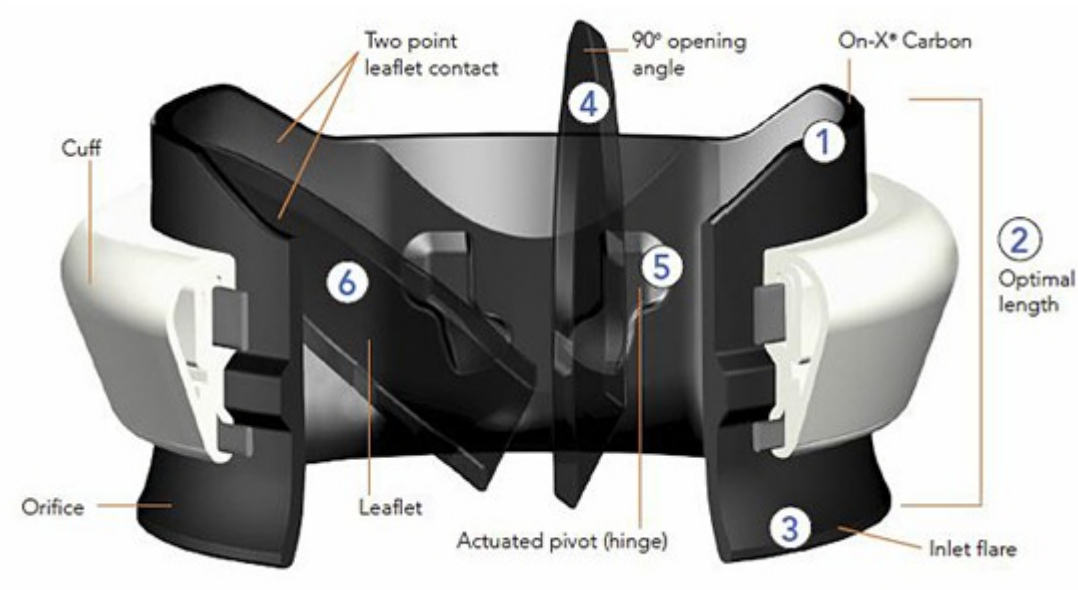
The On-X aortic heart valve is the only mechanical valve FDA approved and clinically proven to be safer with less anticoagulation. In a prospective randomized clinical trial, On-X aortic heart valve patients with a reduced warfarin dose (INR 1.5–2.0) had 65% fewer harmful bleeding events without an increase in stroke risk.

On-X aortic and mitral prosthetic valves have been safely implanted in approximately 200,000 patients worldwide.

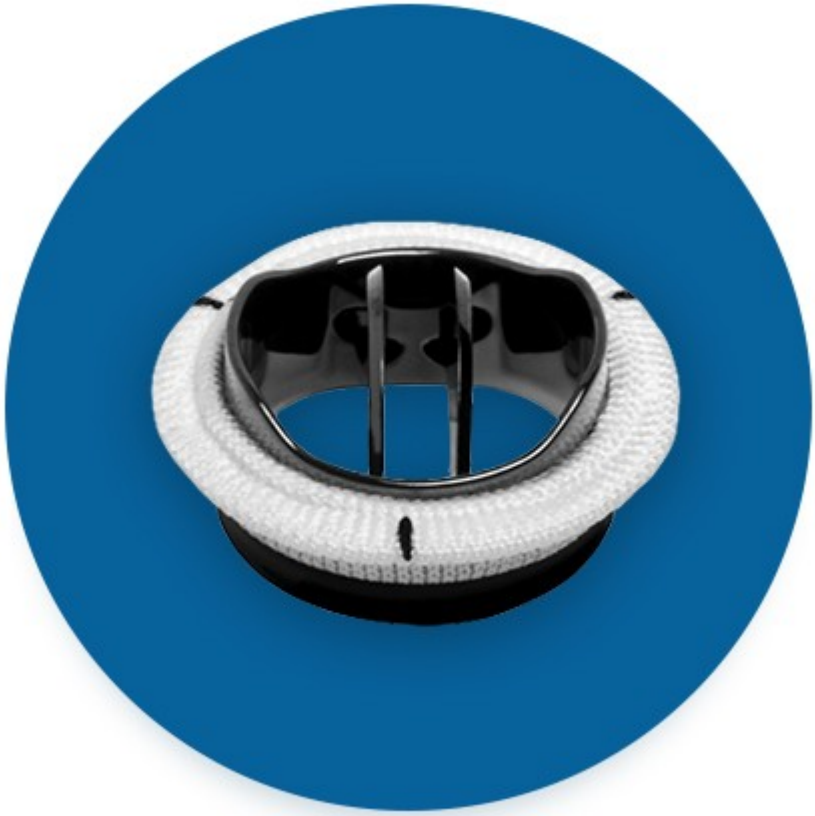
On-X mechanical heart valves are made with the most advanced material in the industry – pure pyrolytic carbon. The advanced design and materials make it the best lifelong heart valve replacement option available today.

On-X Life Technologies is a leading manufacturer of artificial heart valve replacement and repair products.

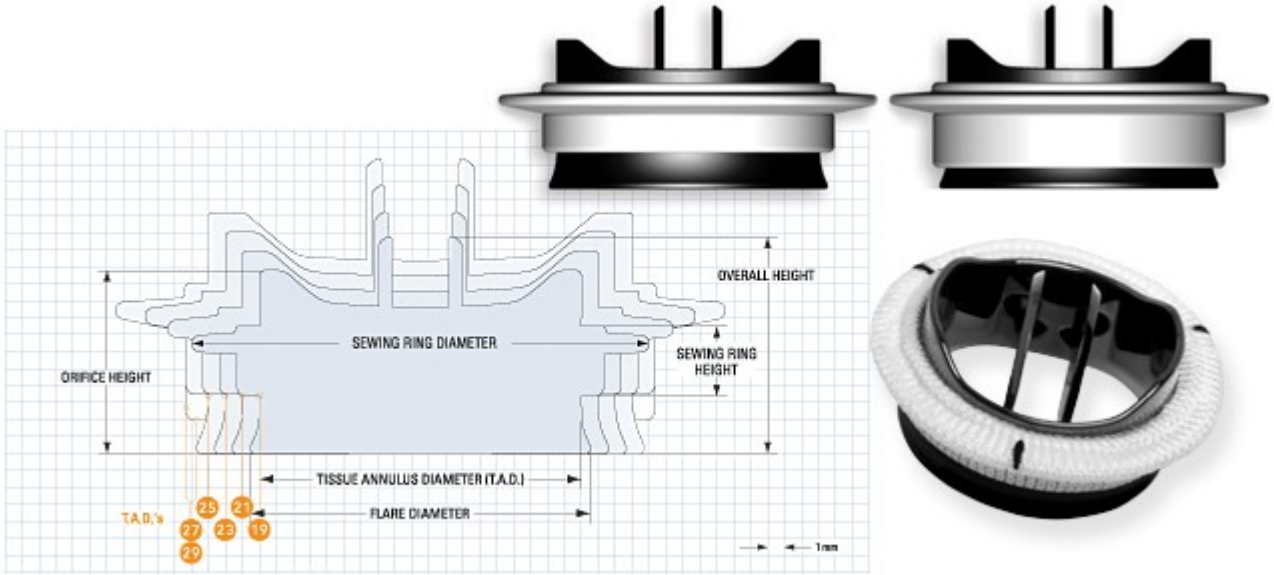
Find more about **On-X Heart Valves** here



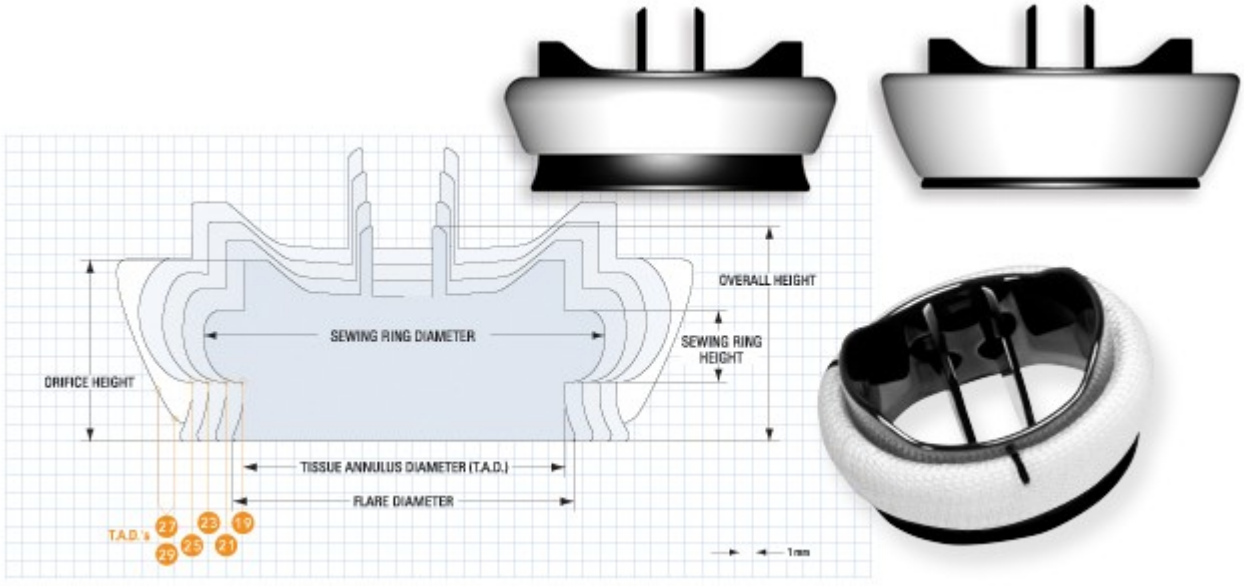
On-X Heart Valves



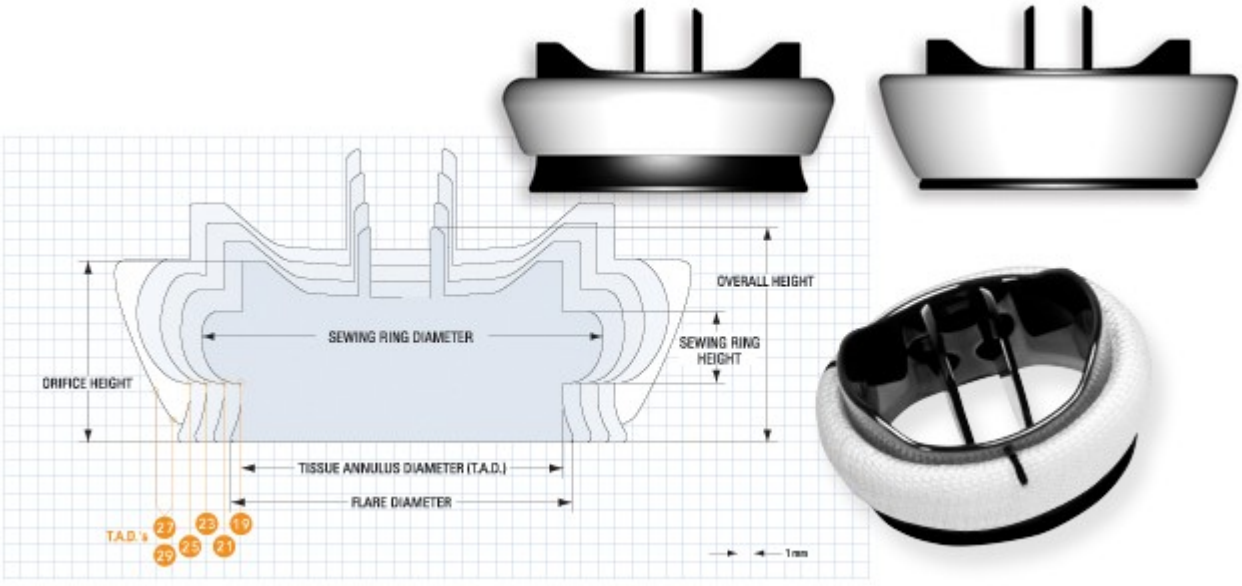
Aortic Heart Valve with Conform-X Sewing Ring

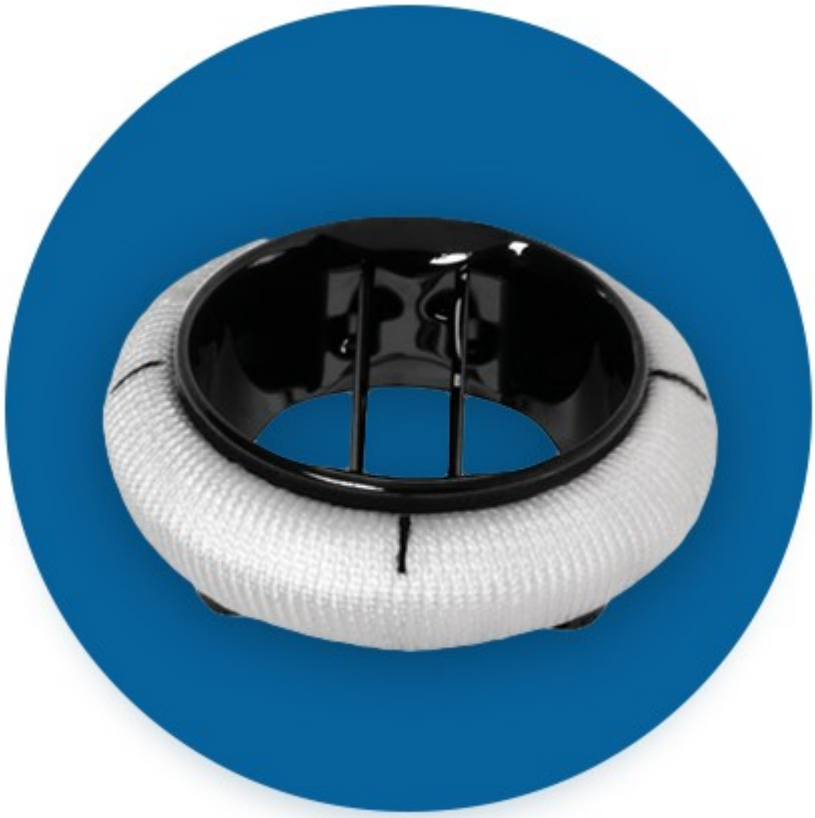


Aortic Heart Valve with Anatomic Sewing Ring

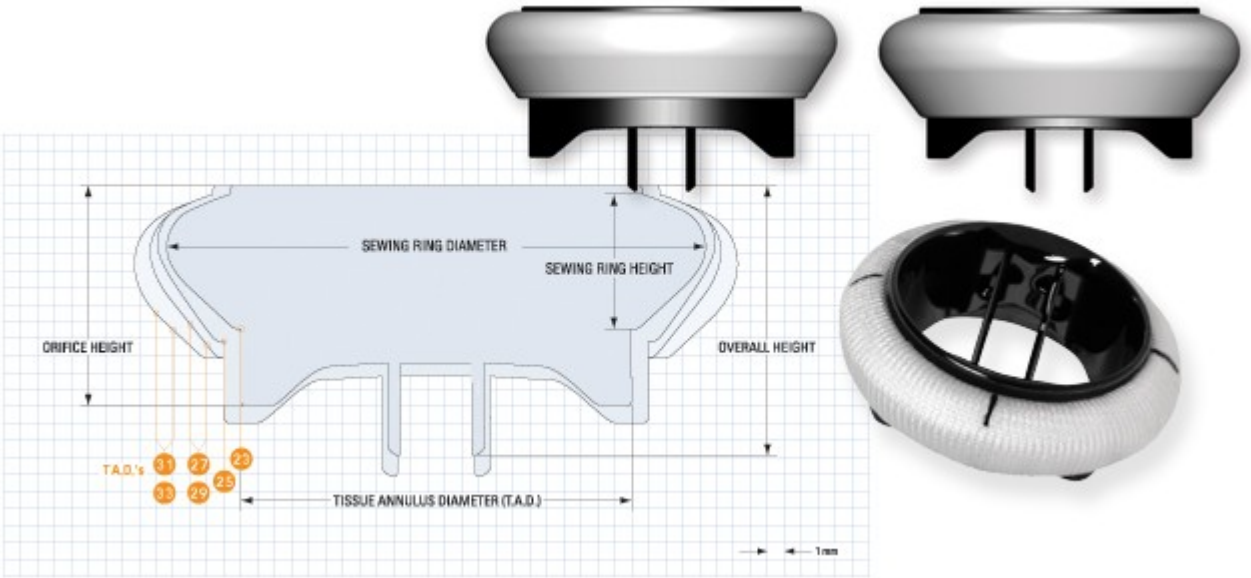


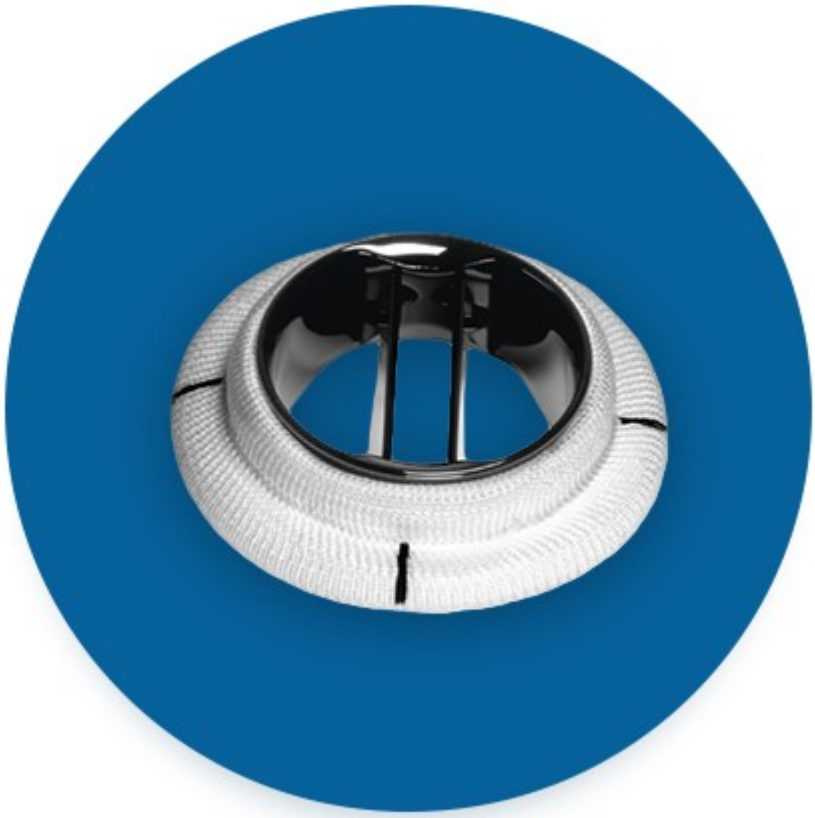
Aortic Heart Valve with Standard Sewing Ring



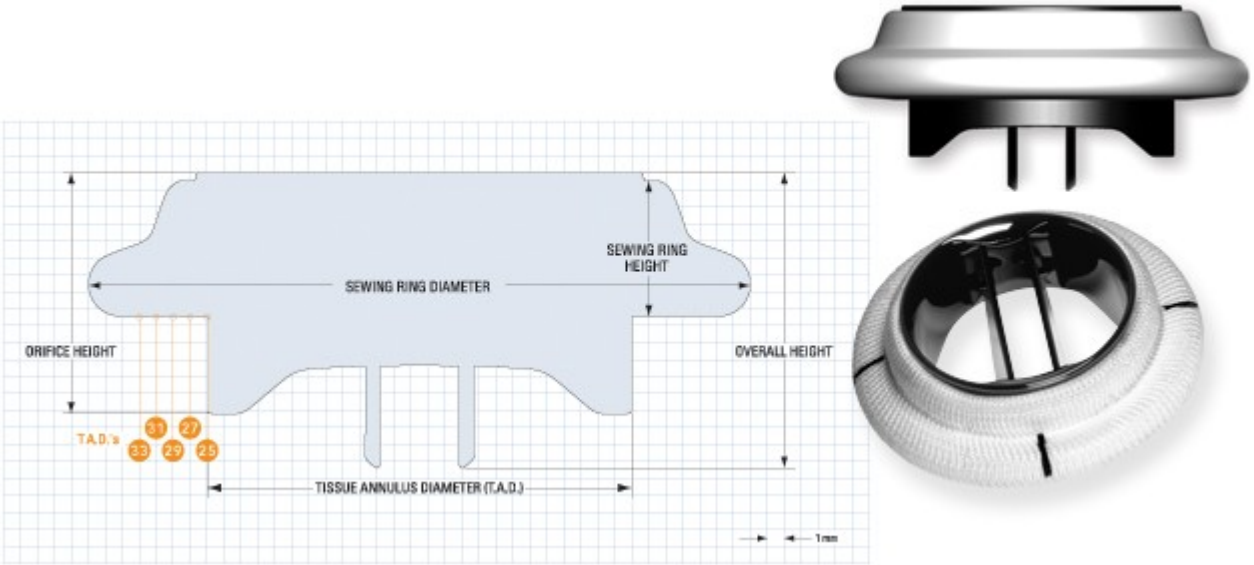


Mitral Heart Valve with Standard Sewing Ring





Mitral Heart Valve with Conform-X Sewing Ring



Advantages

Pure Carbon – Totally free of silicon. The purity and finish of On-X carbon coatings assures the greatest biocompatibility for the On-X valve design. The human body does not react against its pure carbon surfaces. Advanced processing technology yields highly polished and contoured features in the critical pivot area, which minimizes opportunities for clots to form or adhere.

Optimal Longer Length – The length-to-diameter ratio is similar to that of a native valve. Somewhat counter-intuitively, its greater length (or height) actually reduces turbulence and increases flow. It also allows for reduced leaflet excursion to reduce backflow losses, provides leaflet protection and protects the valve opening from tissue encroachment.

Inlet Flared Orifice – On-X valve is the first prosthetic heart valve to successfully incorporate a flared inlet, the well-known fluid dynamic principle for producing smooth, organized flow with reduced turbulence. The flare produces an increased volume of flow, comparable to that of a larger orifice. Because the inlet flare extends through the annulus, it is not compromised by encroaching annular tissue and thus maintains the favorable annular shape for a lifetime of consistently optimal flow.

Full 90º Leaflet Opening – On-X valve leaflets are free to follow the flow. Other valves must stop short of the fully open position to ensure that they will close reliably with backflow, which can increase obstruction and turbulence.

With the On-X valve's patented "actuated pivot design", closure is assured even when leaflets are open to the full 90°. Leaflet freedom reduces turbulence and its accompanying effects such as pressure loss and blood damage.

Stasis-Free Pivots – Complete non-hemolytic pivot purge. Pivots are a potential site of clot formation because of possible stasis (flow stagnation). The On-X design provides increased washing throughout the pivot to eliminate areas of potential flow stagnation

Two-Point Closure – Distributes and minimizes closing impact. The On-X valve has patented two-point "soft landing" leaflets to reduce blood stress in three ways.

- The two points are closer to the pivots so that the closing impact velocity is reduced by 40%
- The two-point landing distributes the closing impulse so that the impact is glancing rather than direct
- This "soft landing" minimizes the potential for cavitation that can damage blood

Ascending Aortic Prosthesis

On-X Ascending Aortic Prosthesis with the Vascutek Gelweave Valsalva™ Graft1

The On-X Ascending Aortic Prosthesis with the Vascutek Gelweave Valsalva Graft is the only valve/graft combination to offer:

- A generous PTFE sewing ring for ease of suturing
- The first coated valsalva graft for optimal coronary ostia reimplantation

Made by

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