

X3 System

Hip

**One-Piece Locking Mechanism**

As a pioneer in wear performance technologies, Stryker® Orthopaedics has been dedicated to offering bearing surface improvements.

Introduced in 1998, the clinical success of Crossfire Polyethylene has been highlighted in studies such as those presented by James D'Antonio, MD.

- Mean 5-year follow-up.
- No structural failures.
- 72% reduction in total annual wear thus far.

Robert Krushell, MD and Richard Fingerroth, MD also presented Crossfire data at the 2005 ORS.

- ORS mean 4-year follow-up.
- 58% reduction of linear head penetration compared with standard polyethylene.
- No oxidation related failures in retrievals up to 5 years.

Steve Kurtz, PhD, et al. presented a poster at the 2005 AAOS.

- Implanted for period of time between 0 and 4.8 years, with none retrieved for wear or osteolysis.
- Minimal creep and wear was observed in retrievals.

In 2005 Bo Nivbrant, MD and PhD, presented mean 4.5 years RSA data at the 51st annual ORS showing extremely low in vivo wear.

90% wear reduction over the 0.05mm/annum suggested as a clinically safe level.

Traditional crosslinking consists of a two-step process involving both irradiation and a subsequent heat treatment step. Stryker's patented highly crosslinked and annealing process provides wear reduction without compromising structural strength. Building upon the clinical success of Crossfire™ Polyethylene, Stryker developed a third generation annealing process with three sequential irradiation/annealing steps to create X3™ Polyethylene.

X3™ The Power of Technology

Preserving
Strength

Reducing
Wear

Resisting
Oxidation