

X3 Polyethylene

Knee



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

Most recent bearing technologies have focused on hip application. While these technologies have helped to improve hip bearings, they have not been widely applied to knee bearings as wear patterns and modes vary between hips and knees.

Most commercial crosslinking processes involve both irradiation and a subsequent remelting step, which decreases the strength of the polyethylene. Stryker’s patented annealing process provides wear reduction without compromising structural strength.

Wear performance technologies for knee applications cannot come at the expense of the structural strength of the polyethylene. Keeping this in mind, Stryker® developed a next generation process with three sequential irradiation/annealing steps to create X3 polyethylene.

The results...

- Preserved Strength
- Reduced Wear
- Oxidation Resistance

The X3 Process:

