

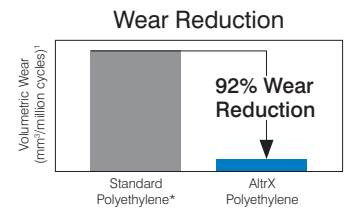


A BETTER ALTERNATIVE

AltrX™ is an ultra-low-wear polyethylene that offers a viable alternative to alternative bearings. The AltrX polyethylene uses a unique Altra-Link™ material enhancement process to optimize the balance between wear resistance and mechanical integrity. After moderate cross-linking, a remelting process eliminates all free radicals and oxidative potential and provides better overall mechanical integrity.

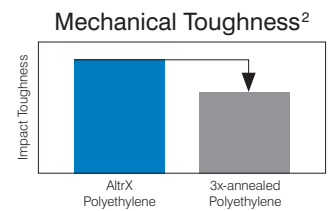
- **92% Wear Reduction¹**

AltrX material reduces wear by 92% compared to standard polyethylene without compromising mechanical integrity.¹



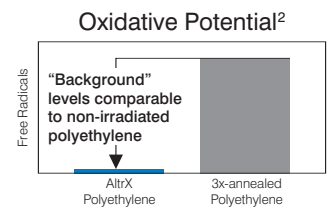
- **Mechanical Integrity**

Compared with a 3x-annealed polyethylene, AltrX material has superior toughness, which reduces the risk of failures due to impingement or rim loading.



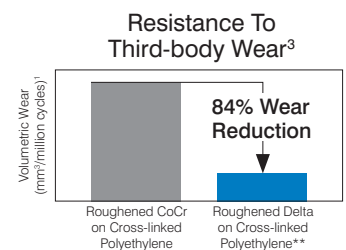
- **Eliminates Free Radicals**

AltrX material is remelted in an argon convection to eliminate free radicals and oxidative potential, which does not occur with 3x-annealed polyethylene.



- **An Alternative to Alternative Bearings**

Compared with cobalt chrome, Biolox Delta ceramic heads on cross-linked polyethylene reduce wear by 84% in wear simulators after being subjected to third-body debris.³



POLYETHYLENE INSERTS

Inserts	28 mm Polyethylene Inserts				32 mm Polyethylene Inserts				36 mm Polyethylene Inserts		
	Neutral	+4 Neutral	+4 10°	Lipped	Neutral	+4 Neutral	+4 10°	Lipped	Neutral	+4 Neutral	+4 10°
AltrX Altra-linked Polyethylene Insert Trial	44 mm 1221-28-044 2218-28-044	N/A	1221-28-144 2218-28-144	N/A	48 mm N/A	1221-32-448 2218-32-448	1221-32-148 2218-32-148	N/A	48 mm N/A	N/A	N/A
AltrX Altra-linked Polyethylene Insert Trial	46 mm 1221-28-046 2218-28-046	N/A	1221-28-146 2218-28-146	N/A	50 mm N/A	1221-32-450 2218-32-450	1221-32-150 2218-32-150	N/A	50 mm N/A	N/A	N/A
AltrX Altra-linked Polyethylene Insert Trial	48 mm 1221-28-048 2218-28-048	1221-28-448 2218-28-448	1221-28-148 2218-28-148	1221-28-248 2218-28-248	52 mm 1221-32-052 2218-32-052	1221-32-452 2218-32-452	1221-32-152 2218-32-152	1221-32-252 2218-32-252	52 mm N/A	1221-36-452 2218-36-452	1221-36-152 2218-36-152
AltrX Altra-linked Polyethylene Insert Trial	50 mm 1221-28-050 2218-28-050	1221-28-450 2218-28-450	1221-28-150 2218-28-150	1221-28-250 2218-28-250	54 mm 1221-32-054 2218-32-054	1221-32-454 2218-32-454	1221-32-154 2218-32-154	1221-32-254 2218-32-254	54 mm N/A	1221-36-454 2218-36-454	1221-36-154 2218-36-154
AltrX Altra-linked Polyethylene Insert Trial	52 mm 1221-28-052 2218-28-052	N/A	N/A	1221-28-252 2218-28-252	56 mm 1221-32-056 2218-32-056	N/A	N/A	1221-32-256 2218-32-256	56 mm 1221-36-056 2218-36-056	1221-36-456 2218-36-456	1221-36-156 2218-36-156
AltrX Altra-linked Polyethylene Insert Trial	54 mm 1221-28-054 2218-28-054	N/A	N/A	1221-28-254 2218-28-254	58 mm 1221-32-058 2218-32-058	N/A	N/A	1221-32-258 2218-32-258	58 mm 1221-36-058 2218-36-058	1221-36-458 2218-36-458	1221-36-158 2218-36-158
AltrX Altra-linked Polyethylene Insert Trial	56 mm N/A	N/A	N/A	N/A	60 mm N/A	N/A	N/A	1221-32-260 2218-32-260	60 mm 1221-36-060 2218-36-060	1221-36-460 2218-36-460	1221-36-160 2218-36-160
AltrX Altra-linked Polyethylene Insert Trial	58 mm N/A	N/A	N/A	N/A	62 mm N/A	N/A	N/A	1221-32-262 2218-32-262	62 mm 1221-36-062 2218-36-062	1221-36-462 2218-36-462	1221-36-162 2218-36-162
AltrX Altra-linked Polyethylene Insert Trial	60 mm N/A	N/A	N/A	N/A	64 mm N/A	N/A	N/A	1221-32-264 2218-32-264	64 mm 1221-36-064 2218-36-064	1221-36-464 2218-36-464	1221-36-164 2218-36-164
AltrX Altra-linked Polyethylene Insert Trial	62 mm N/A	N/A	N/A	N/A	66 mm N/A	N/A	N/A	1221-32-266 2218-32-266	66 mm 1221-36-066 2218-36-066	1221-36-466 2218-36-466	1221-36-166 2218-36-166

FEMORAL HEADS

Articul/eze® 12/14 "M" and Standard Heads

	Metal Head Cat. No.	Trial Head Cat. No.
+1.5	1365-11-500	2530-81-000
+5	1365-12-500	2530-82-000
+8.5	1365-13-500	2530-83-000
+1	1365-21-000	2530-91-000
+5	1365-22-000	2530-92-000
+9	1365-23-000	2530-93-000
+13	1365-24-000	2530-94-000
+17	1365-25-000	2530-95-000
-2	1365-50-000	2531-50-000
+1.5	1365-51-000	2531-51-000
+5	1365-52-000	2531-52-000
+8.5	1365-53-000	2531-53-000
+12	1365-54-000	2531-54-000
+15.5	1365-55-000	2531-55-000

S-ROM® 11/13 "M" Heads

	Metal Head Cat. No.	Trial Head Cat. No.
+0	1365-16-500	87-5920
+3	1365-17-500	87-5960
+6	1365-18-500	87-5926
+0	52-2032	87-5928
+3	87-5955	87-5962
+6	52-2033	87-5929
+9	87-5956	87-5963
+12	52-2034	87-5930
+0	1365-31-000	2365-31-500
+3	1365-32-000	2365-32-500
+6	1365-33-000	2365-33-500
+9	1365-34-000	2365-34-500
+12	1365-36-000	2365-36-500

Articul/eze® 12/14 Biolox® Delta Heads

	Biolox Delta Head Cat. No.	Trial Head Cat. No.
+1.5	1365-28-310	2530-81-000
+5	1365-28-320	2530-82-000
+8.5	1365-28-330	2530-83-000
+1	1365-32-310	2531-91-310
+5	1365-32-320	2531-92-000
+9	1365-32-330	2531-93-000
+1.5	1365-36-310	2531-51-000
+5	1365-36-320	2531-52-000
+8.5	1365-36-330	2531-53-000
+12	1365-36-340	2531-54-000

S-ROM® 11/13 Biolox® Delta Heads

	Biolox Delta Head Cat. No.	Trial Head Cat. No.
+0	1365-28-210	87-5920
+3	1365-28-220	87-5960
+6	1365-28-230	87-5926
+0	1365-32-210	87-5928
+3	1365-32-220	87-5962
+6	1365-32-230	87-5929
+0	1365-36-210	2365-31-500
+3	1365-36-220	2365-32-500
+6	1365-36-230	2365-33-500
+9	1365-36-240	2365-34-500

SHELLS

Pinnacle® Shells

	100	Sector	300	Multi-hole	Bantam
Shell	N/A	N/A	N/A	N/A	1217-20-044
Trial Shell	N/A	N/A	N/A	N/A	2217-01-044
Shell	N/A	N/A	N/A	N/A	1217-20-046
Trial Shell	N/A	N/A	N/A	N/A	2217-01-046
Shell	1217-01-048	1217-22-048	1217-03-048	1217-20-048	N/A
Trial Shell	2217-01-048	2217-01-048	2217-01-048	2217-01-048	N/A
Shell	1217-01-050	1217-22-050	1217-03-050	1217-20-050	N/A
Trial Shell	2217-01-050	2217-01-050	2217-01-050	2217-01-050	N/A
Shell	1217-01-052	1217-22-052	1217-03-052	1217-20-052	N/A
Trial Shell	2217-01-052	2217-01-052	2217-01-052	2217-01-052	N/A
Shell	1217-01-054	1217-22-054	1217-03-054	1217-20-054	N/A
Trial Shell	2217-01-054	2217-01-054	2217-01-054	2217-01-054	N/A
Shell	1217-01-056	1217-22-056	1217-03-056	1217-20-056	N/A
Trial Shell	2217-01-056	2217-01-056	2217-01-056	2217-01-056	N/A
Shell	1217-01-058	1217-22-058	1217-03-058	1217-20-058	N/A
Trial Shell	2217-01-058	2217-01-058	2217-01-058	2217-01-058	N/A
Shell	1217-01-060	1217-22-060	1217-03-060	1217-20-060	N/A
Trial Shell	2217-01-060	2217-01-060	2217-01-060	2217-01-060	N/A
Shell	1217-01-062	1217-22-062	1217-03-062	1217-20-062	N/A
Trial Shell	2217-01-062	2217-01-062	2217-01-062	2217-01-062	N/A
Shell	1217-01-064	1217-22-064	1217-03-064	1217-20-064	N/A
Trial Shell	2217-01-064	2217-01-064	2217-01-064	2217-01-064	N/A
Shell	1217-01-066	1217-22-066	1217-03-066	1217-20-066	N/A
Trial Shell	2217-01-066	2217-01-066	2217-01-066	2217-01-066	N/A

DuoFix™ HA option is available in 100 Series and Sector.

References

- Liao, Y.-S., K. Greer, et al. "Effects of Resin and Dose on Wear and Mechanical Properties of Cross-linked Thermally Stabilized UHMWPE." Society for Biomaterials, the 7th World Biomaterials Congress, Sydney, Australia, 2004.
 - Orthopaedic Research Society, 2007, P1784.
 - McKellop, H., Y.-S. Liao, et al. "Effect of Femoral Head Size, Material, Surface Roughness and Serum Concentration on the Wear of 5 Mrad Cross-linked Remelted UHMWPE Acetabular Cups." Society for Biomaterials, Pittsburgh, PA, 2006.
- * Enduron® polyethylene. ** Marathon® polyethylene.



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