

**The information contained in this document
is intended for healthcare professionals only.**

LFIT™

Low Friction Ion Treatment

C-Taper and V40™
LFIT™ Femoral Heads

- Ion Implanted CoCr Heads
- Improves Wettability¹
- Reduces Coefficient of Friction¹
- Now Available in 40mm and 44mm Diameters



Low Friction Ion Treatment (LFIT™) technology enhances the material properties of CoCr to reduce frictional forces against UHMWPE surfaces.

Wettability

The LFIT™ treatment improves wettability.¹ Wettability is a measurement of adhesion force between a liquid and a solid. It is determined by measuring the boundary angle formed by a liquid on a solid (Figures 1 & 2). The lower the angle, the more attraction exists between the liquid and the solid. More attraction creates a very thin layer of liquid (lubrication) between the implant and the polyethylene helping to reduce friction and wear.¹

The femoral head is cushioned by cartilage, which seeps lubrication into the joint (Figure 3). An LFIT™ treated head better simulates the joint by allowing increased lubrication between the components (Figure 4).

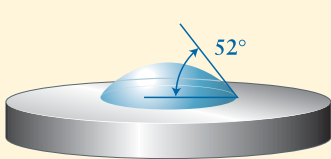


Figure 1
LFIT™ CoCr Wettability

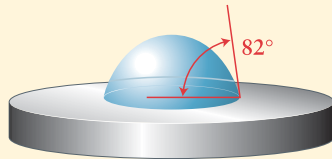


Figure 2
CoCr Wettability

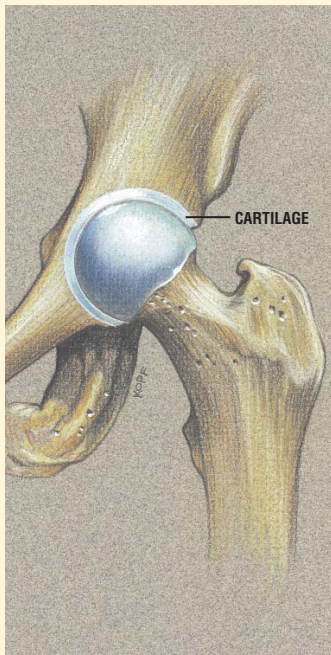


Figure 3
Anatomic Hip Naturally Lubricated

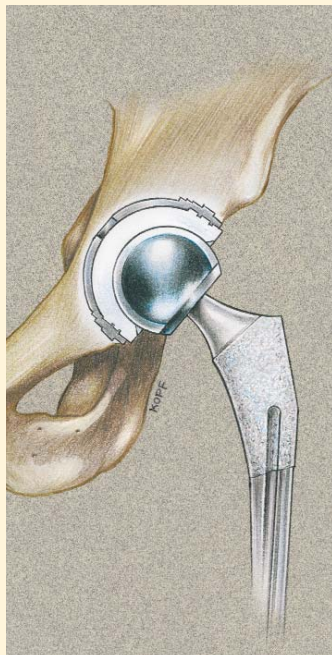
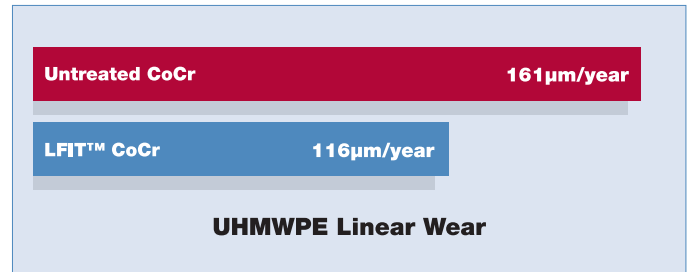


Figure 4
Hip Replacement Allowing Increased Lubrication

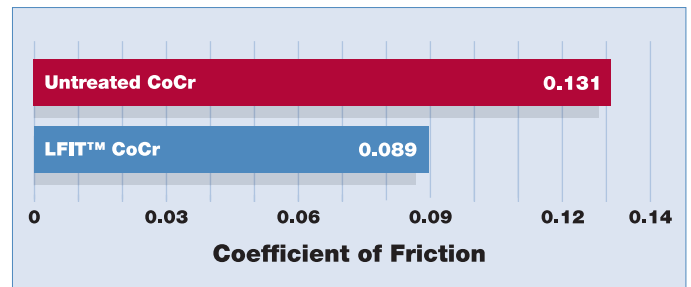
Clinical Experience with LFIT™

The LFIT™ heads demonstrated a 28% reduction in linear wear over CoCr heads in 110 patients at a minimum 3-year follow up.² “These results are encouraging... Nitrogen ion implanted femoral heads may be an effective way to decrease UHMWPE wear and increase implant longevity in THA.”²



Coefficient of Friction Reduced by 32%!¹

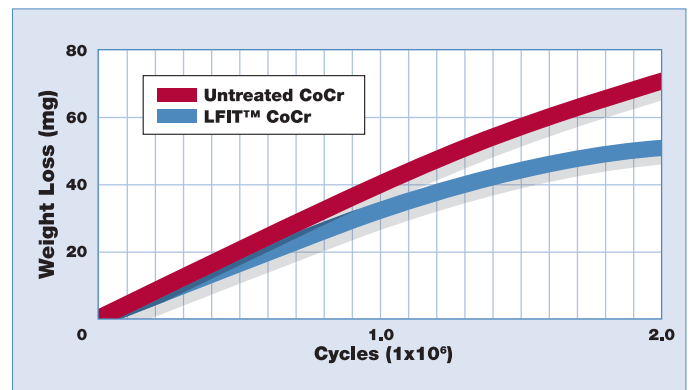
The LFIT™ treatment reduces the coefficient of friction between the metal implant and the polyethylene component thus reducing wear forces and heat to the polyethylene. Comparative measurements of the coefficient of friction, based upon Stryker® data, for test materials in bovine serum, is shown below.



Laboratory Experience with LFIT™

Laboratory studies at Stryker® yielded the following results:

- The LFIT™ process reduces the cup insert wear rate by 19% when compared to untreated CoCr within the first million cycles in bovine serum.³



C-Taper and V40™ LFIT™ CoCr Femoral Heads Catalog Information

C-Taper LFIT™ CoCr Heads

Catalog No.	Diameter (mm)	Offset (mm)	Trial Catalog No.
06-2200	22	+0	1100-2200A
S-1400-HH22	22	+2.5	1100-2225A
06-2205	22	+5	1100-2205A
06-2210	22	+10	1100-2210A
06-2600	26	+0	1100-2600A
S-1400-HH62	26	+2.5	1100-2625A
06-2605	26	+5	1100-2605A
S-1400-HH64	26	+7.5	1100-2675A
06-2610	26	+10	1100-2610A
06-2898	28	-3	1100-2897A
06-2800	28	+0	1100-2800A
S-1400-HH82	28	+2.5	1100-2825A
06-2805	28	+5	1100-2805A
S-1400-HH84	28	+7.5	1100-2875A
06-2810	28	+10	1100-2810A
06-3299	32	-5	1100-3299A
S-1400-HH31	32	-2.5	1100-3297A
06-3200	32	+0	1100-3200A
S-1400-HH32	32	+2.5	1100-3225A
06-3205	32	+5	1100-3205A
S-1400-HH34	32	+7.5	1100-3275A
06-3210	32	+10	1100-3210A

C-Taper LFIT™ Anatomic Heads

Catalog No.	Diameter (mm)	Offset (mm)	Trial Catalog No.
06-3699	36	-5	1100-3699A
06-3600	36	+0	1100-3600A
06-3605	36	+5	1100-3605A
06-3610	36	+10	1100-3610A
06-4099	40	-5	1100-4099A
06-4097	40	-2.5	1100-4097A
06-4000	40	+0	1100-4000A
06-4025	40	+2.5	1100-4025A
06-4005	40	+5	1100-4005A
06-4075	40	+7.5	1100-4075A
06-4010	40	+10	1100-4010A
06-4499	44	-5	1100-4499A
06-4400	44	+0	1100-4400A
06-4405	44	+5	1100-4405A

V40™ Taper LFIT™ CoCr Heads

Catalog No.	Diameter (mm)	Offset (mm)	Trial Catalog No.
6260-9-122	22	+0	6264-8-122
6260-9-222	22	+3	6264-8-222
6260-9-322	22	+8	6264-8-322
6260-9-026	26	-3	6264-8-026
6260-9-126	26	+0	6264-8-126
6260-9-226	26	+4	6264-8-226
6260-9-326	26	+8	6264-8-326
6260-9-426	26	+12	6264-8-426
6260-9-526	26	+16	6264-8-526
6260-9-028	28	-4	6264-8-028
6260-9-128	28	+0	6264-8-128
6260-9-228	28	+4	6264-8-228
6260-9-328	28	+8	6264-8-328
6260-9-428	28	+12	6264-8-428
6260-9-528	28	+16	6264-8-528
6260-9-032	32	-4	6264-8-032
6260-9-132	32	+0	6264-8-132
6260-9-232	32	+4	6264-8-232
6260-9-332	32	+8	6264-8-332
6260-9-432	32	+12	6264-8-432
6260-9-532	32	+16	6264-8-532

V40™ Taper LFIT™ Anatomic Heads

Catalog No.	Diameter (mm)	Offset (mm)	Trial Catalog No.
6260-9-036	36	-5	6264-8-036
6260-9-136	36	+0	6264-8-136
6260-9-236	36	+5	6264-8-236
6260-9-336	36	+10	6264-8-336
6260-9-040	40	-4	6264-8-040
6260-9-140	40	+0	6264-8-140
6260-9-240	40	+4	6264-8-240
6260-9-340	40	+8	6264-8-340
6260-9-440	40	+12	6264-8-440
6260-9-044	44	-4	6264-8-044
6260-9-144	44	+0	6264-8-144
6260-9-244	44	+4	6264-8-244

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1. Stryker Orthopaedics Technical Report: RD 910 301.
2. Maruyama, M, et al. "Effect of Low Friction Ion Treated Femoral Heads on Polyethylene Wear Rates," *CORR*, No. 370, pp. 183-191.
3. Taylor, S. "Reduction in Polyethylene Wear through Ion-Implantation into CoCr Alloy," Surface Modification Technologies VI, The Minerals, Metals & Materials Society, 1993.

The information presented in this brochure is intended to demonstrate the breadth of Stryker product offerings. Always refer to the package insert, product label and/or user instructions before using any Stryker product. Surgeons must always rely on their own clinical judgment when deciding which treatments and procedures to use with patients. Products may not be available in all markets. Product availability is subject to the regulatory or medical practices that govern individual markets. Please contact your Stryker representative if you have questions about the availability of Stryker products in your area.

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