



# U2™ PF+ Knee

## Total Knee System



## United Orthopedic Portfolio of Products –

The U2 Knee System is part of the United Orthopedic portfolio of arthroplasty and limb salvage products featuring the following shared benefits:

**Platform-based approach.** The consistent design philosophy allows a platform-based approach to provide surgeons flexibility for a wide range of procedures.

**Demand-matching.** Includes a wide range of product options for demand-matching to optimize solutions based on patient need.

**Advanced surgical technologies.** Builds on proven design philosophies with advanced surgical technologies to help deliver reproducible clinical outcomes and a streamlined procedure.



## U2™ PF+ Knee System –

The U2 PF+ Knee System is a comprehensive, advanced press-fit Total Knee Replacement (TKR) system designed to meet the needs of patients, surgeons, hospital and surgery centers globally.

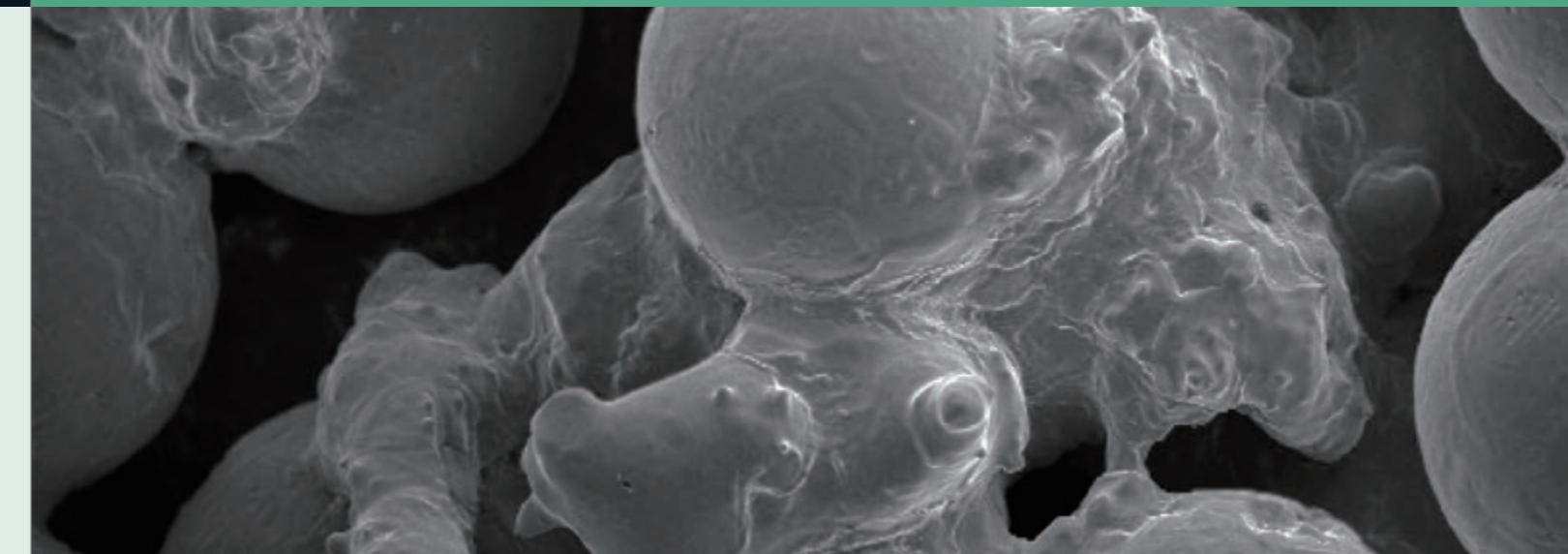
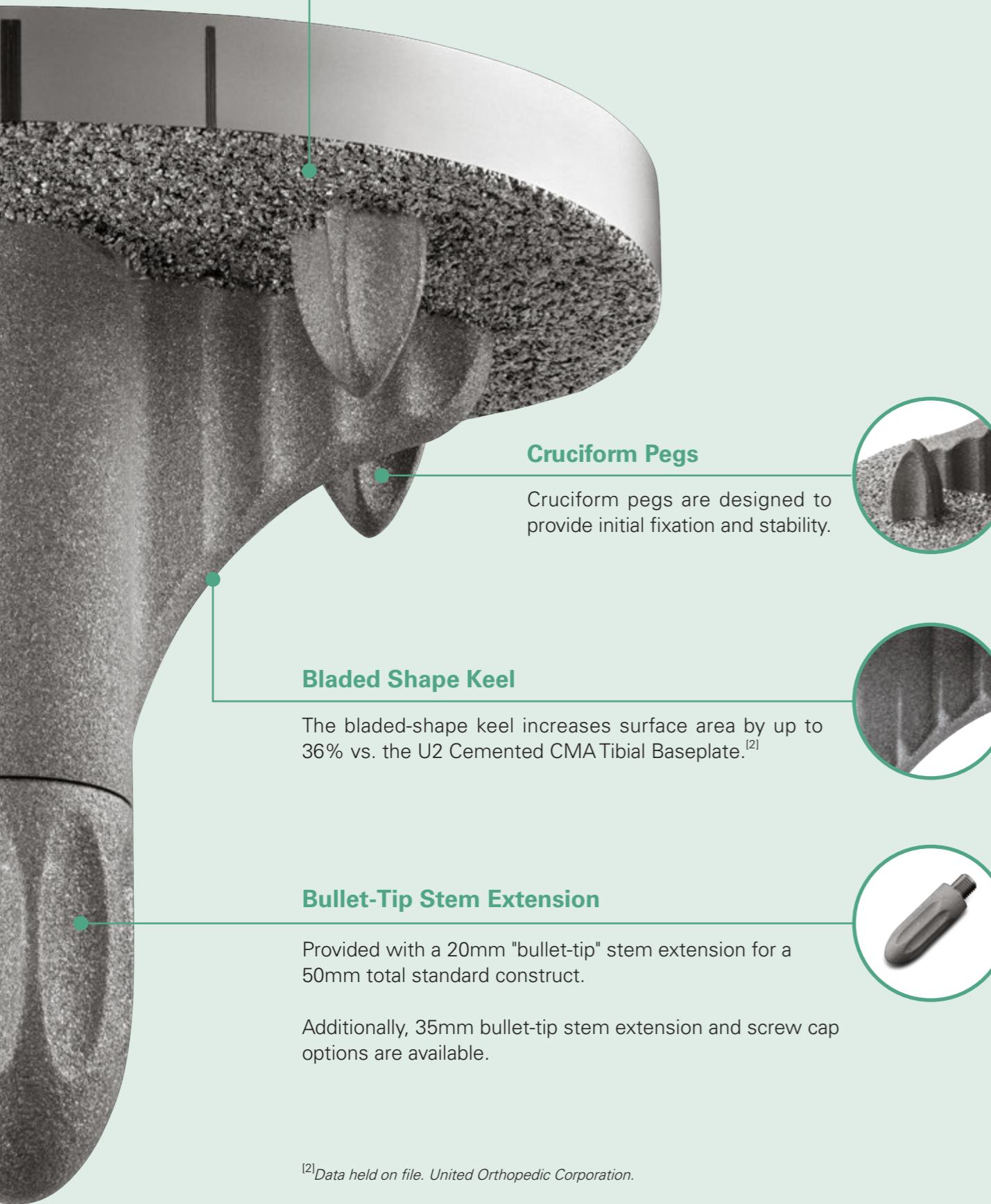
The U2 PF+ Knee System is designed to provide optimal initial stability for long-term biological fixation.

- Novel tibial baseplate design, including standard, long "bullet-tip" stem extension, and screw-cap options.
- Asymmetric Sintering Coating (ASC) Technology with optimal pore size and porosity was designed to improve biological fixation.
- Ability to convert from press-fit to cemented fixation intra-operatively if needed.
- Conforming femoral shape in 13 sizes with 2 mm A/P and M/L sizing increments.
- Unique box design and a consistent intercondylar box width.
- Full range of tibial articulating surface and multiple material options.

Since the launch of the U2 Cemented Knee system in 2005, hundreds of thousands of cases have been performed in over 45 countries around the world. The U2 Knee has demonstrated excellence in long-term clinical outcomes, with a survival rate of over 97% at minimum 10-year follow-up<sup>[1]</sup>.



<sup>[1]</sup>Chen IH, Yu TC, Liao JJ. An exploration of U2 total knee system at minimum ten-year follow-up. 21st EFORT Annual Congress. 2020.

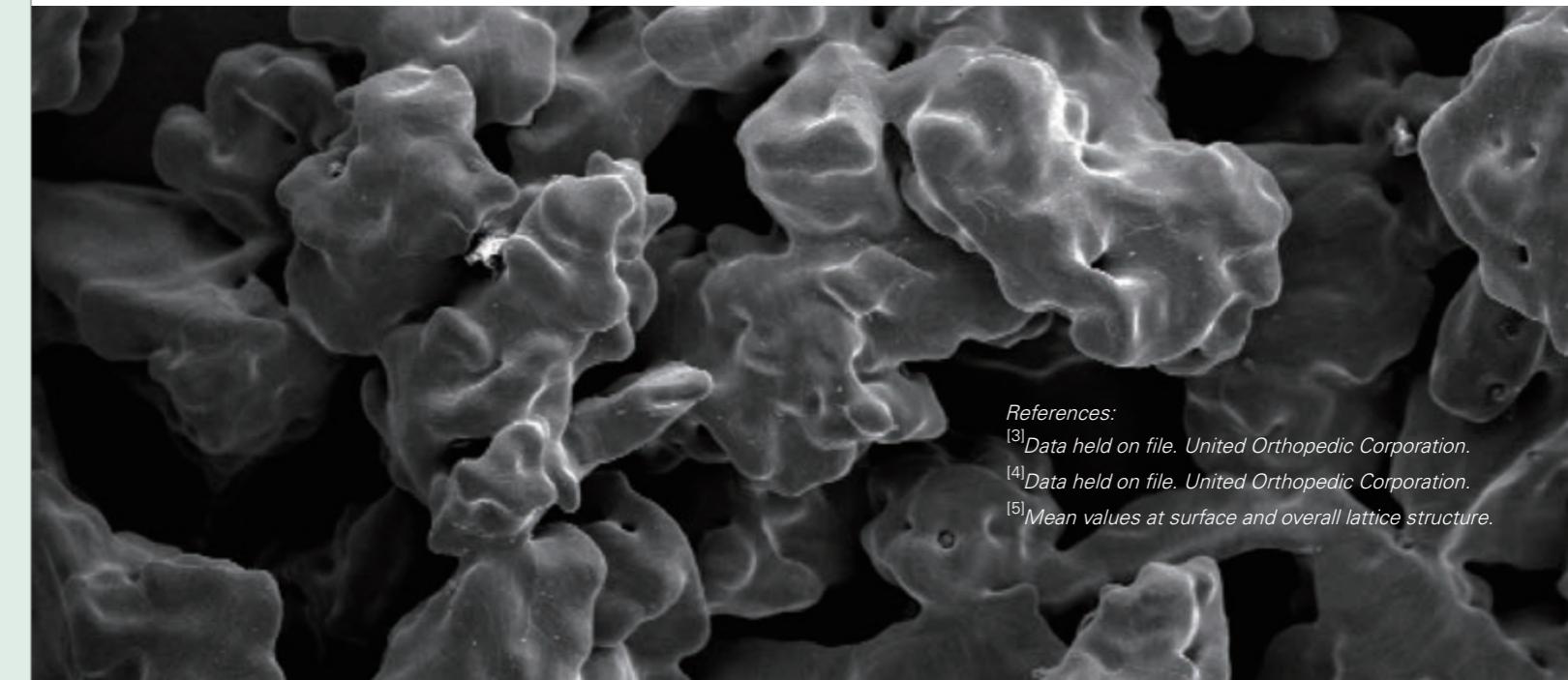


### UNITED Asymmetric Sintering Coating Technology

UNITED Asymmetric Sintering Coating (ASC) Technology creates a unique three-dimensional structural lattice of irregularly shaped shards to increase the average pore size more than traditional spherical beads. The irregularly shaped interconnecting pores maximize coverage on bone contacting surfaces to promote optimal bone growth and fixation to the implant.

ASC Technology is available with U2 PF+ Knee System to provide an excellent balance between material strength, pore sizes, and porosity for a reproducible press-fit fixation in total knee arthroplasty.

	Pore Size ( $\mu\text{m}$ ) <sup>[5]</sup>	Porosity (%) <sup>[5]</sup>	Coefficient of Friction	Thickness (mm)	Porous Structure
PF+ Femur <sup>[3]</sup>	948 (Surface) 430 (Overall)	85 (Surface) 56 (Overall)	0.99	0.56	CoCr irregular shards
PF+ Tibia <sup>[4]</sup>	530 (Surface) 246 (Overall)	84 (Surface) 64 (Overall)	0.95	0.42	Titanium irregular shards



#### References:

<sup>[3]</sup>Data held on file. United Orthopedic Corporation.

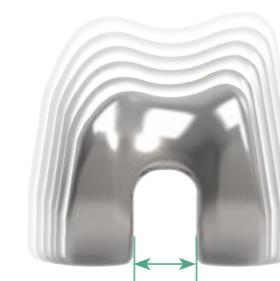
<sup>[4]</sup>Data held on file. United Orthopedic Corporation.

<sup>[5]</sup>Mean values at surface and overall lattice structure.

The PS (posterior stabilized) and CR (curcuate retaining) femoral components have the same design features, including 2 mm A/P and M/L increments, and consistent intercondylar width.



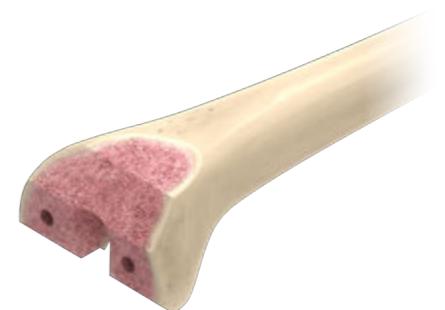
PS and CR femoral components are offered in 2 mm A/P and M/L increments to provide a more refined femoral sizing solution.



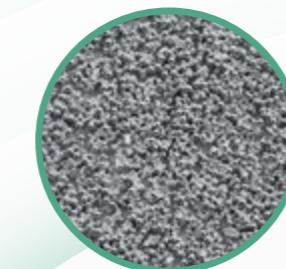
Consistent condylar curvature and intercondylar box width allow full size interchangeability between femoral and tibial components.



The extended patellar groove (in PS knee) is designed with increased contact area between the patellar and femoral implants to allow for optimal patellar tracking.



Smaller intercondylar bone removal together with rounded corners help avoid the risk of intercondylar fracture due to inadequate PS box preparation.



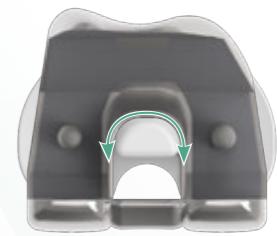
Asymmetric Sintering Coating (ASC) is designed with optimal pore size and porosity to improve biological fixation.



The consistent design philosophy allows a platform-based approach to provide surgeons flexibility for a wide range of procedures.



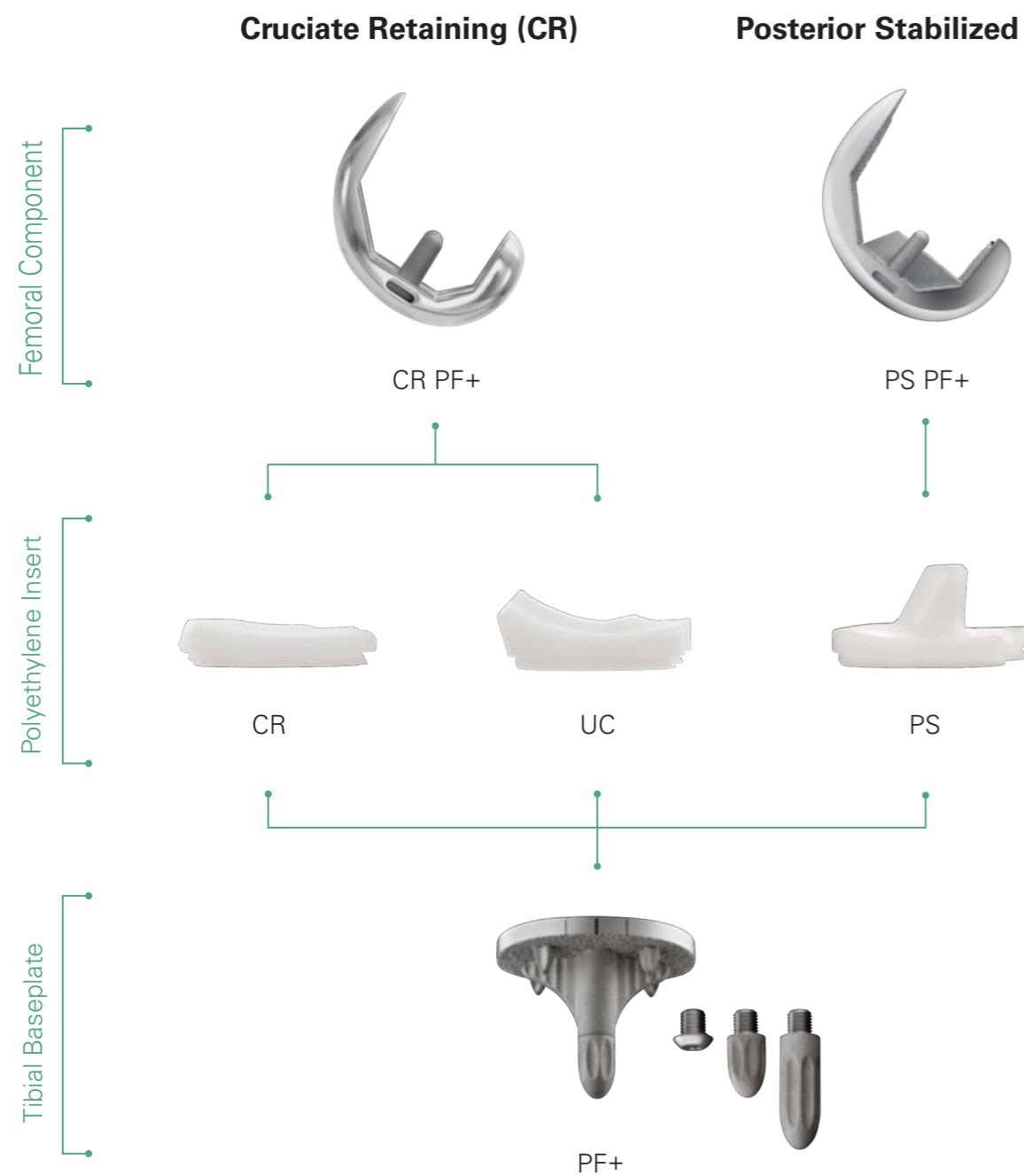
Includes a wide range of product options for demand-matching to optimize solutions based on patients' need.



The curved anterior insert post and anterior femoral cam of PS femoral component are designed to reduce potential for impingement, component failure and polyethylene wear.

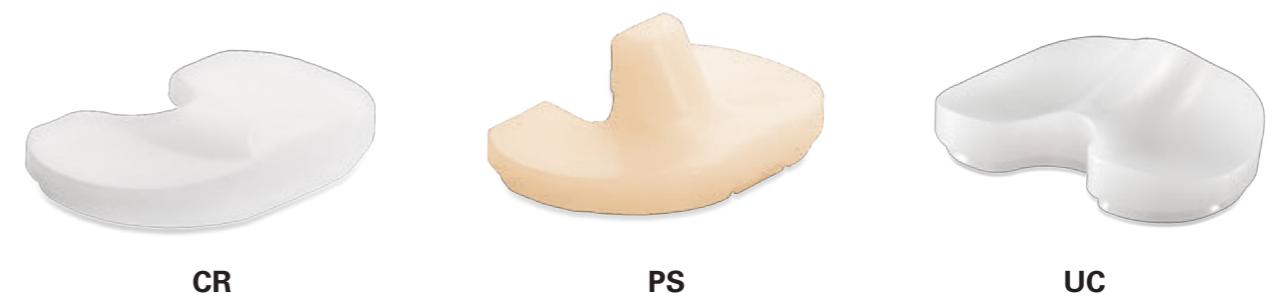
# U2™ PF+ Knee System

The U2 PF+ Knee System includes a wide range of product options for demand-matching to optimize solutions based on patients' need.



## U2 PF+ baseplate is compatible with CR, PS, UC inserts.

- CR and PS inserts are designed with 5 degrees of sagittal tibial slope built into the articulating surface to allow for a zero degree posterior slope, i.e. a tibial resection which is simply perpendicular to the tibial shaft axis.
- Ultra-Congruent (UC) inserts are compatible with the standard CR femoral components and are designed to facilitate a PCL sacrificing surgical technique for bone preservation vs. a standard PS technique and potential for a more streamlined surgical procedure. The articulating surface has an elevated anterior lip surface vs. standard CR systems up to 14.5 mm thick and a more conforming articulating surface to provide enhanced joint stability.
- All CR, PS, and UC inserts are available in XPE (Highly Cross-linked Polyethylene), and E-XPE (Vitamin E Highly Cross-linked Polyethylene).



# When Efficiency Matters

Designed with precision, simplicity, and reproducibility in mind

**U2 PF+ modular and universal instruments and tray layouts were designed to facilitate time savings.**



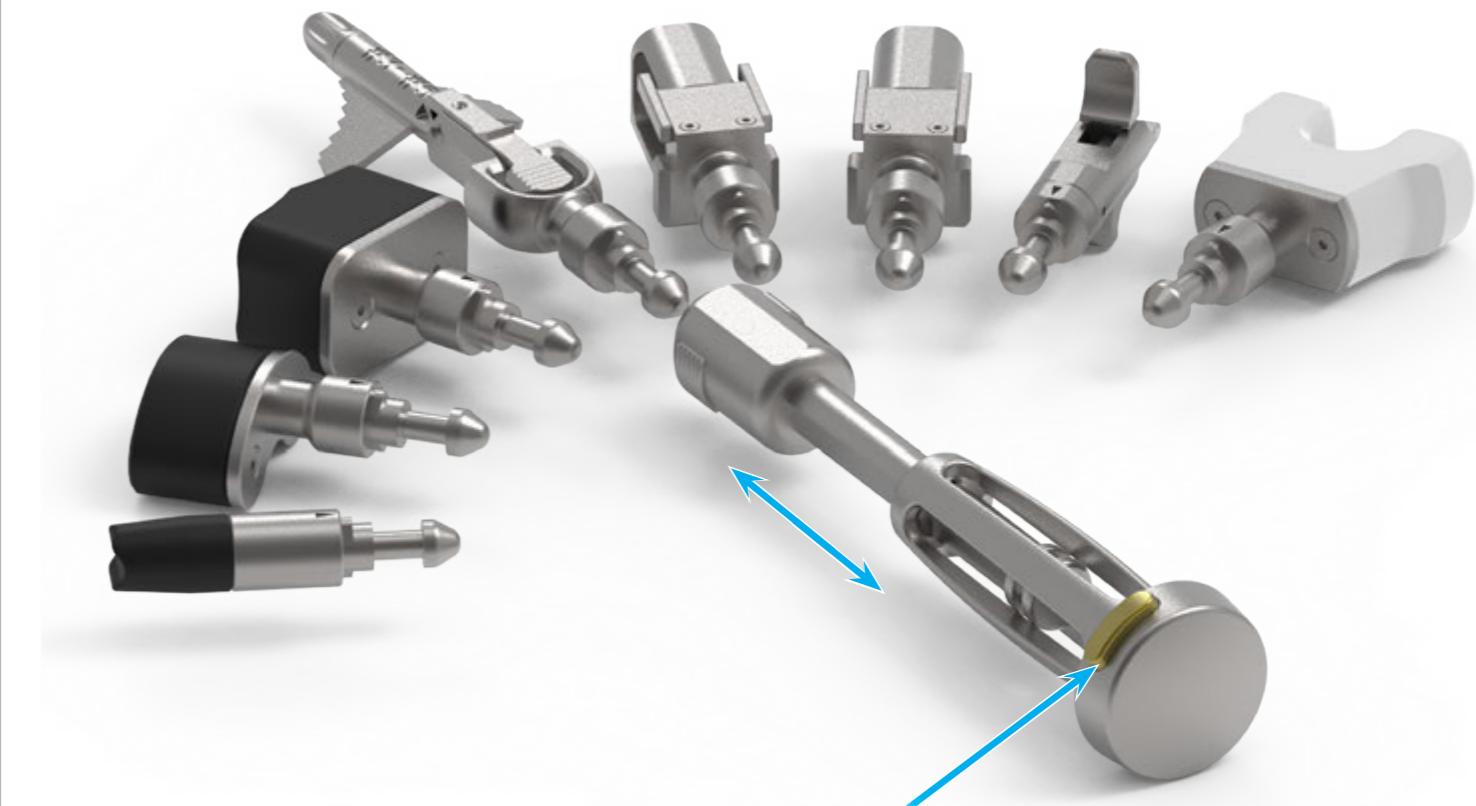
## Optimized Tibial Workflow

- Modern tibial instruments were designed for accuracy without compromising bone quality to ensure initial stability and long-term biological fixation of the tibial baseplate.



## Femoral Driver and Universal Sliding Handle

- Newly designed femoral driver helps securely hold the entire range of femoral components and offers enhanced controls during placement and impaction.
- With only one click, the handle can transition into a sliding hammer to extract implants and instruments.



Press the gold button to release the built-in sliding hammer

Universal Sliding Handle

# Order Information

## Femoral Component Options

Made with Cobalt Chromium (CoCr) Alloy.



CR



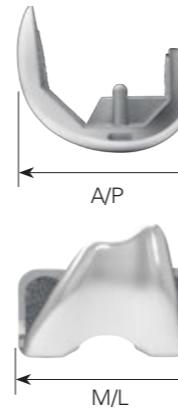
PS

	PF+	
	Left	Right
#1	2103-1510	2103-1610
#1.5	2103-1515	2103-1615
#2	2103-1520	2103-1620
#2.5	2103-1525	2103-1625
#3	2103-1530	2103-1630
#3.5	2103-1535	2103-1635
#4	2103-1540	2103-1640
#4.5	2103-1545	2103-1645
#5	2103-1550	2103-1650
#5.5	2103-1555	2103-1555
#6	2103-1560	2103-1660
#6.5	2103-1565	2103-1665
#7	2103-1570	2103-1670

	PF+	
	Left	Right
#1	2103-3510	2103-3610
#1.5	2103-3515	2103-3615
#2	2103-3520	2103-3620
#2.5	2103-3525	2103-3625
#3	2103-3530	2103-3630
#3.5	2103-3535	2103-3635
#4	2103-3540	2103-3640
#4.5	2103-3545	2103-3645
#5	2103-3550	2103-3650
#5.5	2103-3555	2103-3655
#6	2103-3560	2103-3660
#6.5	2103-3565	2103-3665
#7	2103-3570	2103-3670

Not all products are available in all geographies.  
Please contact your local sales representative for details.

Special Order Items



	A/P	M/L
#1	52	56
#1.5	54	58
#2	56	60
#2.5	58	62
#3	60	64
#3.5	62	66
#4	64	68
#4.5	66	70
#5	68	72
#5.5	70	74
#6	72	76
#6.5	74	78
#7	76	80

Unit: mm

## Tibial Baseplate Options

Each tibial baseplate is packaged with a 20mm "bullet-tip" stem extension for a 50mm total standard construct. Made with Titanium (Ti) Alloy.



	PF+	
	Left	Right
#1	2203-3710	
#2	2203-3720	
#3	2203-3730	
#4	2203-3740	
#5	2203-3750	
#6	2203-3760	
#7	2203-3770	

	A/P	M/L
#1	42	63
#2	44.5	66
#3	47	69
#4	49.5	72
#5	52.5	76
#6	55.5	80
#7	58.5	84

Unit: mm

Not all products are available in all geographies.  
Please contact your local sales representative for details.

# Order Information

## Stem Extension Options

Optional 35mm bullet-tip stem extension and screw cap options are available.

Made with Titanium (Ti) Alloy.



Straight Stem

Ø12.5 x 35 mm  
2703-7212



Plug

Ø12.5 x 3 mm  
2903-3000

Not all products are available in all geographies.  
Please contact your local sales representative for details.

Special Order Items

## CR Tibial Insert Options

Made with HXLPE (Highly Cross-linked Polyethylene) and E-XPE (Vitamin E Highly Cross-linked Polyethylene).



XCR	#1	#2	#3	#4	#5	#6	#7
XPE	9 mm	2303-1611	2303-1621	2303-1631	2303-1641	2303-1651	2303-1661
	10 mm	2303-1616	2303-1626	2303-1636	2303-1646	2303-1656	2303-1666
	11 mm	2303-1612	2303-1622	2303-1632	2303-1642	2303-1652	2303-1662
	12 mm	2303-1617	2303-1627	2303-1637	2303-1647	2303-1657	2303-1667
	13 mm	2303-1613	2303-1623	2303-1633	2303-1643	2303-1653	2303-1663
	14 mm	2303-1618	2303-1628	2303-1638	2303-1648	2303-1658	2303-1668
	15 mm	2303-1614	2303-1624	2303-1634	2303-1644	2303-1654	2303-1664
	16 mm	2303-1619	2303-1629	2303-1639	2303-1649	2303-1659	2303-1669
	17 mm	2303-1610	2303-1620	2303-1630	2303-1640	2303-1650	2303-1660
	18 mm	2303-1615	2303-1625	2303-1635	2303-1645	2303-1655	2303-1665



E-XCR	#1	#2	#3	#4	#5	#6	#7
E-XPE	9 mm	2303-1811	2303-1821	2303-1831	2303-1841	2303-1851	2303-1861
	10 mm	2303-1816	2303-1826	2303-1836	2303-1846	2303-1856	2303-1866
	11 mm	2303-1812	2303-1822	2303-1832	2303-1842	2303-1852	2303-1862
	12 mm	2303-1817	2303-1827	2303-1837	2303-1847	2303-1857	2303-1867
	13 mm	2303-1813	2303-1823	2303-1833	2303-1843	2303-1853	2303-1863
	14 mm	2303-1818	2303-1828	2303-1838	2303-1848	2303-1858	2303-1868
	15 mm	2303-1814	2303-1824	2303-1834	2303-1844	2303-1854	2303-1864
	16 mm	2303-1819	2303-1829	2303-1839	2303-1849	2303-1859	2303-1869
	17 mm	2303-1810	2303-1820	2303-1830	2303-1840	2303-1850	2303-1860
	18 mm	2303-1815	2303-1825	2303-1835	2303-1845	2303-1855	2303-1865

# Order Information

## UC Tibial Insert Options

Made with HXLPE (Highly Cross-linked Polyethylene) and E-XPE (Vitamin E Highly Cross-linked Polyethylene).



<b>XUC</b>		#1	#2	#3	#4	#5	#6	#7
<b>XPE</b>	9 mm	2303-1411	2303-1421	2303-1431	2303-1441	2303-1451	2303-1461	2303-1471
	10 mm	2303-1416	2303-1426	2303-1436	2303-1446	2303-1456	2303-1466	2303-1476
	11 mm	2303-1412	2303-1422	2303-1432	2303-1442	2303-1452	2303-1462	2303-1472
	12 mm	2303-1417	2303-1427	2303-1437	2303-1447	2303-1457	2303-1467	2303-1477
	13 mm	2303-1413	2303-1423	2303-1433	2303-1443	2303-1453	2303-1463	2303-1473
	14 mm	2303-1418	2303-1428	2303-1438	2303-1448	2303-1458	2303-1468	2303-1478
	15 mm	2303-1414	2303-1424	2303-1434	2303-1444	2303-1454	2303-1464	2303-1474
	16 mm	2303-1419	2303-1429	2303-1439	2303-1449	2303-1459	2303-1469	2303-1479
	17 mm	2303-1410	2303-1420	2303-1430	2303-1440	2303-1450	2303-1460	2303-1470
	18 mm	2303-1415	2303-1425	2303-1435	2303-1445	2303-1455	2303-1465	2303-1475



<b>E-XUC</b>		#1	#2	#3	#4	#5	#6	#7
<b>E-XPE</b>	9 mm	2303-1711	2303-1721	2303-1731	2303-1741	2303-1751	2303-1761	2303-1771
	10 mm	2303-1716	2303-1726	2303-1736	2303-1746	2303-1756	2303-1766	2303-1776
	11 mm	2303-1712	2303-1722	2303-1732	2303-1742	2303-1752	2303-1762	2303-1772
	12 mm	2303-1717	2303-1727	2303-1737	2303-1747	2303-1757	2303-1767	2303-1777
	13 mm	2303-1713	2303-1723	2303-1733	2303-1743	2303-1753	2303-1763	2303-1773
	14 mm	2303-1718	2303-1728	2303-1738	2303-1748	2303-1758	2303-1768	2303-1778
	15 mm	2303-1714	2303-1724	2303-1734	2303-1744	2303-1754	2303-1764	2303-1774
	16 mm	2303-1719	2303-1729	2303-1739	2303-1749	2303-1759	2303-1769	2303-1779
	17 mm	2303-1710	2303-1720	2303-1730	2303-1740	2303-1750	2303-1760	2303-1770
	18 mm	2303-1715	2303-1725	2303-1735	2303-1745	2303-1755	2303-1765	2303-1775

# Order Information

## PS Tibial Insert Options

Made with HXLPE (Highly Cross-linked Polyethylene) and E-XPS (Vitamin E Highly Cross-linked Polyethylene).



<b>XPS</b>		#1	#2	#3	#4	#5	#6	#7
<b>XPE</b>	9 mm	2303-3611	2303-3621	2303-3631	2303-3641	2303-3651	2303-3661	2303-3671
	10 mm	2303-3616	2303-3626	2303-3636	2303-3646	2303-3656	2303-3666	2303-3676
	11 mm	2303-3612	2303-3622	2303-3632	2303-3642	2303-3652	2303-3662	2303-3672
	12 mm	2303-3617	2303-3627	2303-3637	2303-3647	2303-3657	2303-3667	2303-3677
	13 mm	2303-3613	2303-3623	2303-3633	2303-3643	2303-3653	2303-3663	2303-3673
	14 mm	2303-3618	2303-3628	2303-3638	2303-3648	2303-3658	2303-3668	2303-3678
	15 mm	2303-3614	2303-3624	2303-3634	2303-3644	2303-3654	2303-3664	2303-3674
	16 mm	2303-3619	2303-3629	2303-3639	2303-3649	2303-3659	2303-3669	2303-3679
	17 mm	2303-3610	2303-3620	2303-3630	2303-3640	2303-3650	2303-3660	2303-3670
	18 mm	2303-3615	2303-3625	2303-3635	2303-3645	2303-3655	2303-3665	2303-3675



<b>E-XPS</b>		#1	#2	#3	#4	#5	#6	#7
<b>E-XPE</b>	9 mm	2303-3811	2303-3821	2303-3831	2303-3841	2303-3851	2303-3861	2303-3871
	10 mm	2303-3816	2303-3826	2303-3836	2303-3846	2303-3856	2303-3866	2303-3876
	11 mm	2303-3812	2303-3822	2303-3832	2303-3842	2303-3852	2303-3862	2303-3872
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	14 mm	2303-3818	2303-3828	2303-3838	2303-3848	2303-3858	2303-3868	2303-3878
	15 mm	2303-3814	2303-3824	2303-3834	2303-3844	2303-3854	2303-3864	2303-3874
	16 mm	2303-3819	2303-3829	2303-3839	2303-3849	2303-3859	2303-3869	2303-3879
	17 mm	2303-3810	2303-3820	2303-3830	2303-3840	2303-3850	2303-3860	2303-3870
	18 mm	2303-3815	2303-3825	2303-3835	2303-3845	2303-3855	2303-3865	2303-3875



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