

Implants

4.1.1 Mechaninio tvirtinimo

4.1.2 Medžiaga titano-aliuminio - vanadžio lydinys

4.1.5 Offset

POLARSTEM° cementless Material Ti-6Al-4V ISO 5832-3 Cone 12/14

Standard stem
CCD 135°

Lateral stem
CCD 126°

Valgus stem
CCD 145°



SAP No.	Size
75100462**	01
75100463*	0
75100464	1
75100465	2
75100466	3
75100467	4
75100468	5
75100469	6
75100470	7
75100471	8
75100472	9
75100473*	10
75100509*	11

Demo implant	Size
75100657	3



SAP No.	Size
75100474	1
75100475	2
75100476	3
75100477	4
75100478	5
75100479	6
75100480	7
75100481	8
75100482	9
75100483*	10
75100510*	11

Demo implant	Size
75100658	3



SAP No.	Size
75102072*	0
75102073*	1
75102074*	2
75102075*	3
75102076*	4
75102077*	5
75102078*	6
75102079*	7

Demo implant	Size
75102216	3

4.1.6 Dydžių variacija

POLARSTEM Collar

Standard stem with collar



SAP No.	Size
75018399**	01
75018400*	0
75018401	1
75018402	2
75018403	3
75018404	4
75018405	5
75018406	6
75018407	7
75018408	8
75018409	9
75018410*	10
75018411*	11

Demo implant	Size
75102217	3

*special sizes (optional) **not available in the US

Lateral stem with collar



SAP No.	Size
75018412	1
75018413	2
75018414	3
75018415	4
75018416	5
75018417	6
75018418	7
75018419	8
75102209	9
75102210*	10
75102211*	11

Dimensions

Specification

Size	Stem length I	Stem length II	Shoulder			Resection Level			Lateral Flair Peak			Mid level of stem	
			1 A/P	2 M/L	2 A/P	3 L > C	3 M/L	3 A/P	4 M/L	4 A/P			
01	119.5	101.5	14.2	25.6	11.9	6.8	16.7	9.5	10.0	8.1			
0	125.5	107.5	14.7	27.2	12.5	8.0	18.2	10.1	10.8	8.6			
1	131.5	113.5	15.2	28.7	13.0	8.7	19.7	10.7	11.9	9.1			
2	135.5	117.5	15.7	30.2	13.5	9.6	21.2	11.2	13.1	9.6			
3	139.5	121.5	16.4	31.5	14.2	10.2	22.2	11.9	14.4	10.4			
4	143.5	125.5	16.9	32.7	14.6	10.9	23.4	12.1	15.5	10.4			
5	147.5	129.5	17.5	33.9	15.1	11.5	24.5	12.3	16.6	10.4			
6	151.5	133.5	18.0	35.1	15.5	12.2	25.6	12.5	17.6	10.4			
7	155.5	137.5	18.4	36.2	15.9	12.8	26.6	12.6	18.6	10.4			
8	159.5	141.5	18.8	36.5	16.2	13.4	26.7	12.6	19.7	10.4			
9	163.5	145.5	19.3	37.3	16.9	13.9	28.1	13.6	20.7	11.6			
10	167.5	149.5	19.7	37.9	17.3	14.3	29.2	13.8	21.8	11.7			
11	171.5	153.5	20.1	38.5	17.6	15.2	30.7	14.4	22.8	11.7			

4.1.5. Kallo ilqo variacaja

Neck Offset in mm for Valgus (CCD 145°) Standard (CCD 135°) Lateral (CCD 126°) - based on a 32mm OXINIUM® head

Size	XS/-3			S/+0			M/+4			L/+8			XL/+12			XXL/+16		
01					37.2			40.0			42.8			45.7			48.5	
0	34.2	35.3		35.9	37.4		38.2	40.2		40.5	43.0		42.8	45.9		45.1	48.7	
1	35.0	37.9	40.8	36.7	40.0	43.2	39.0	42.8	46.4	41.3	45.6	49.7	43.6	48.4	52.9	45.9	51.3	56.1
2	35.7	38.5	41.5	37.3	40.6	43.8	39.6	43.4	47.0	41.9	46.2	50.3	44.2	49.1	53.5	46.5	51.9	56.7
3	36.5	39.3	42.3	38.1	41.4	44.6	40.4	44.2	47.8	42.7	47.0	51.1	45.0	49.9	54.3	47.3	52.7	57.5
4	37.1	40.0	42.9	38.8	42.0	45.3	41.1	44.9	48.5	43.4	47.7	51.7	45.7	50.5	55.0	48.0	53.3	58.2
5	37.7	40.6	43.5	39.4	42.6	45.9	41.7	45.5	49.1	44.0	48.3	52.3	46.3	51.1	55.6	48.6	54.0	58.8
6	38.3	41.2	44.1	40.0	43.3	46.5	42.3	46.1	49.7	44.6	48.9	53.0	46.9	51.7	56.2	49.2	54.6	59.4
7	39.0	41.8	44.7	40.6	43.9	47.1	42.9	46.7	50.3	45.2	49.5	53.6	47.5	52.3	56.8	49.8	55.2	60.0
8		42.3	45.3		44.4	47.6		47.2	50.8		50.0	54.1		52.9	57.3		55.7	60.5
9		43.0	46.0		45.1	48.3		47.9	51.6		50.8	54.8		53.6	58.0		56.4	61.3
10		43.7	46.6		45.7	48.9		48.5	52.2		51.4	55.4		54.2	58.6		57.0	61.9
11		44.3	47.2		46.3	49.5		49.1	52.8		52.0	56.0		54.8	59.3		57.6	62.5

Neck Length in mm for Valgus Standard Lateral

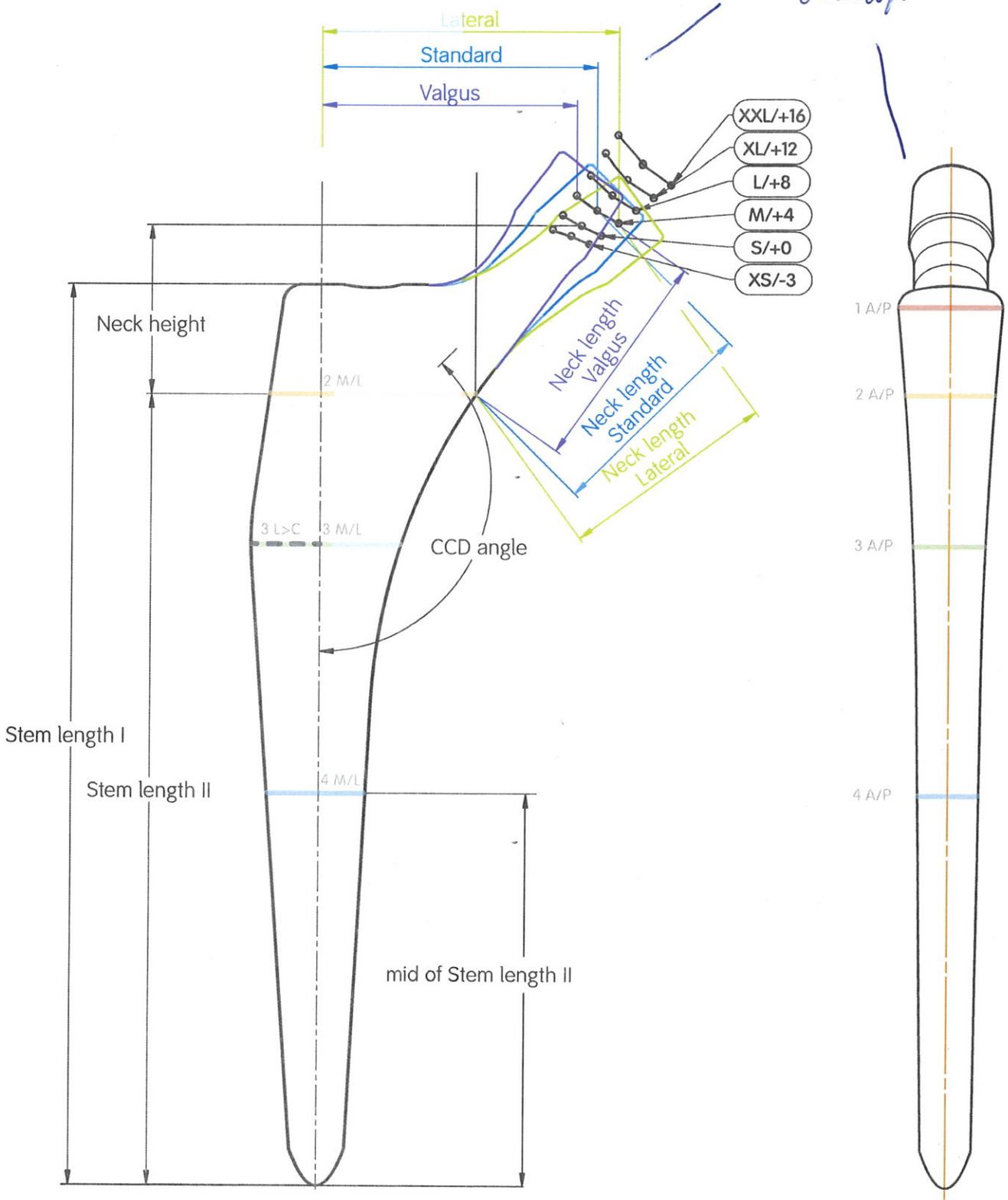
Size	XS/-3			S/+0			M/+4			L/+8			XL/+12			XXL/+16		
01					29.9			33.9			37.9			41.9			45.9	
0	29.9	27.0		32.8	29.9		36.8	33.9		40.8	37.9		44.8	41.9		48.8	45.9	
1-7	29.9	29.5	29.5	32.8	32.4	32.4	36.8	36.4	36.4	40.8	40.4	40.4	44.8	44.4	44.4	48.8	48.4	48.4
8-12		29.5	29.5		32.4	32.4		36.4	36.4		40.4	40.4		44.4	44.4		48.4	48.4

Neck Height in mm for Valgus Standard Lateral

Size	XS/-3			S/+0			M/+4			L/+8			XL/+12			XXL/+16		
01					26.4			29.3			32.1			34.9			37.8	
0	27.6	24.4		30.0	26.4		33.3	29.3		36.5	32.1		39.8	34.9		43.1	37.8	
1-7	27.6	26.2	24.7	30.0	28.2	26.4	33.3	31.0	28.8	36.5	33.9	31.2	39.8	36.7	33.5	43.1	39.5	35.9
8-12		26.2	24.7		28.2	26.4		31.0	28.8		33.9	31.2		36.7	33.5		39.5	35.9

2

4.1.5. Offset (hahlo ilgio) variacija



POLARSTEM[◇]

Designed for all anatomies

STEM

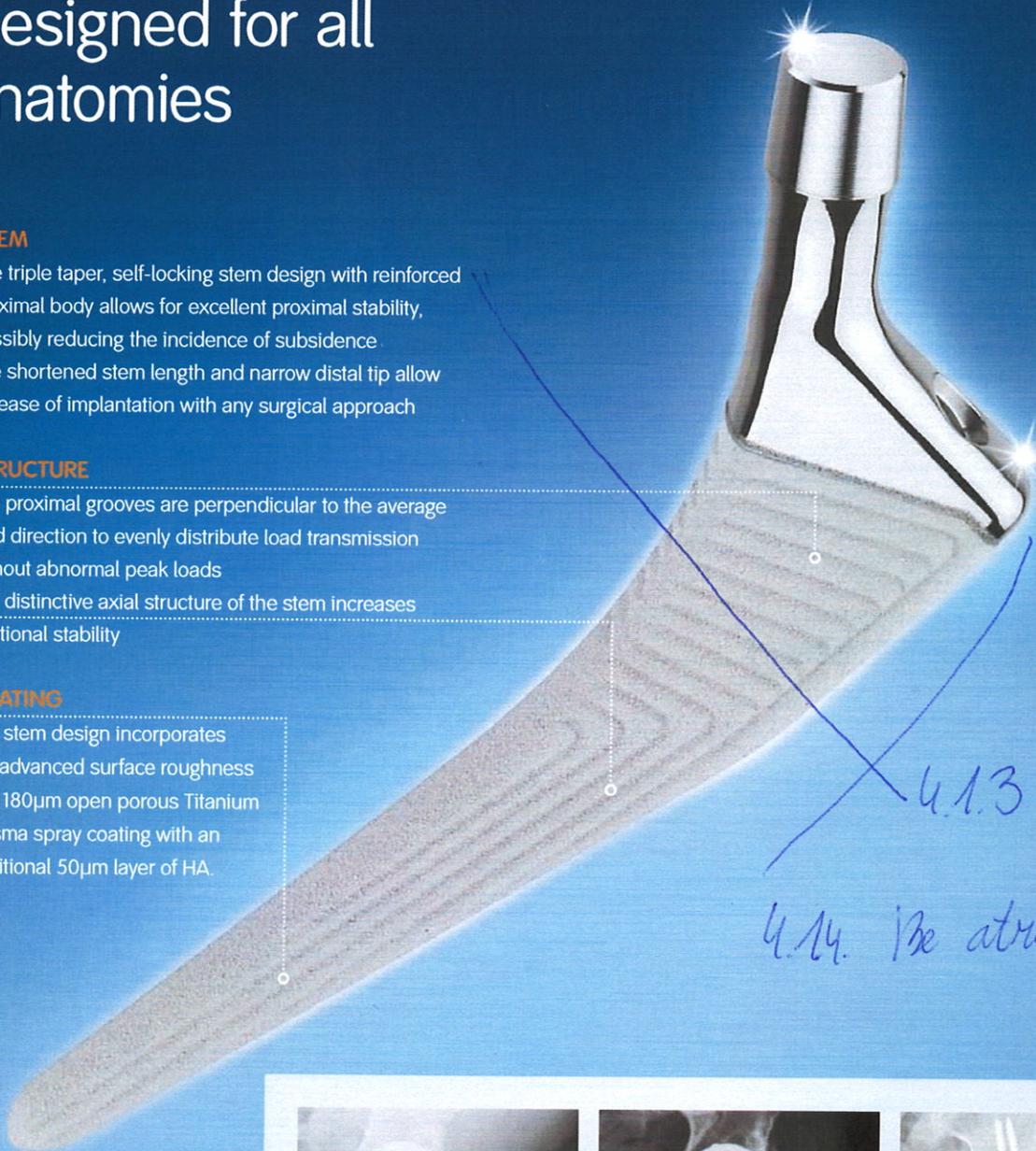
- The triple taper, self-locking stem design with reinforced proximal body allows for excellent proximal stability, possibly reducing the incidence of subsidence.
- The shortened stem length and narrow distal tip allow for ease of implantation with any surgical approach

STRUCTURE

- The proximal grooves are perpendicular to the average load direction to evenly distribute load transmission without abnormal peak loads
- The distinctive axial structure of the stem increases rotational stability

COATING

- The stem design incorporates the advanced surface roughness of a 180µm open porous Titanium Plasma spray coating with an additional 50µm layer of HA.



Dorr A femur



Dorr B femur



Dorr C femur

Third articulation



Optimized neck and cone geometry

- Slim neck (high head-neck ratio)
- Increased ROM
- Reduced risk of impingement

1

Impingement risk

No damage to the cup insert

- Smooth transition between the taper and the highly polished neck
- Optimized taper, completely enclosed by ball head
- No sharp rim on the lower end of the ball head

Surface structure

The stem is prevented from sinking

- Beveled, end-to-end grooves perpendicular to the load axis for optimum load distribution

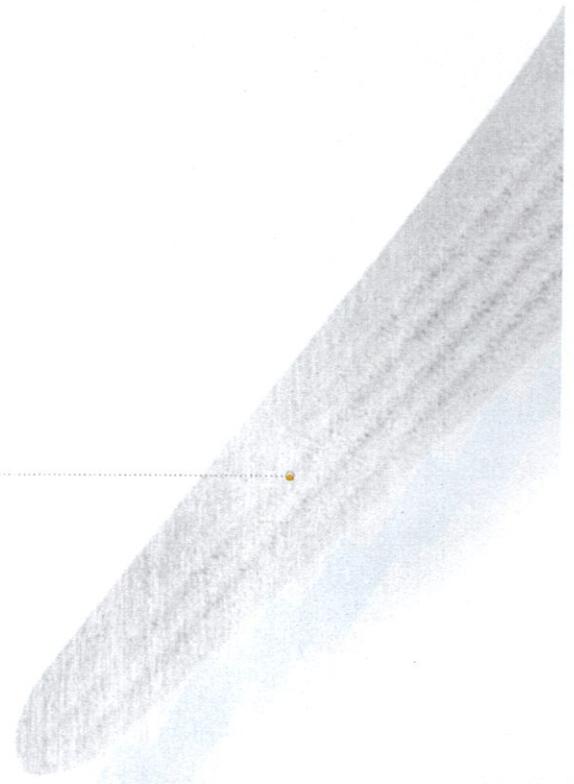
2

Increased rotational stability

- Distal grooves are in reverse to the rotational axis

3

4.1.3 *Stiolo forma*



Coating

4 Excellent primary stability and accelerated osteointegration

- Stem double-coated with a layer of porous titanium plasma ($150\ \mu\text{m} \pm 75\ \mu\text{m}$) for increased surface roughness combined with a layer of HA ($80\ \mu\text{m} \pm 20\ \mu\text{m}$)

4.1.2 stielb dangga

Design

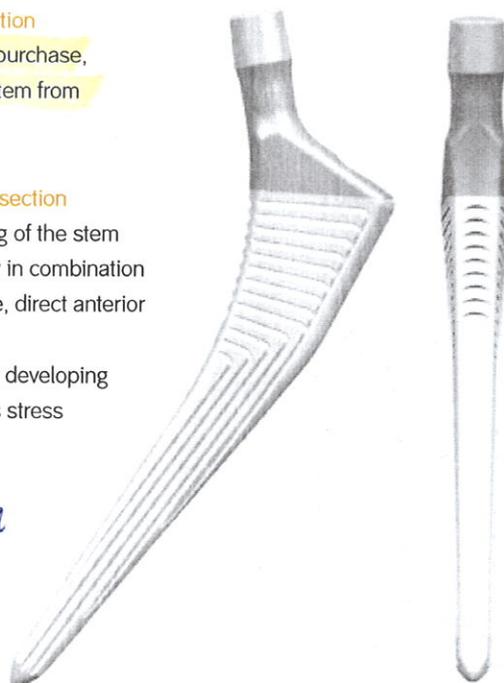
Reinforced proximal section

- Improved metaphyseal purchase, helping to prevent the stem from sinking

Short and narrow distal section

- Insertion and positioning of the stem is simplified, specifically in combination with a minimally invasive, direct anterior approach
- Reduces the risk of pain developing in the thigh and reduces stress shielding

4.1.3 stielb forma



Advanced bearing surfaces: OXINIUM[®] alloy-on-XLPE

4.18. Šlaimi kaulio galva įrengiama iš koriumizuoto metalo

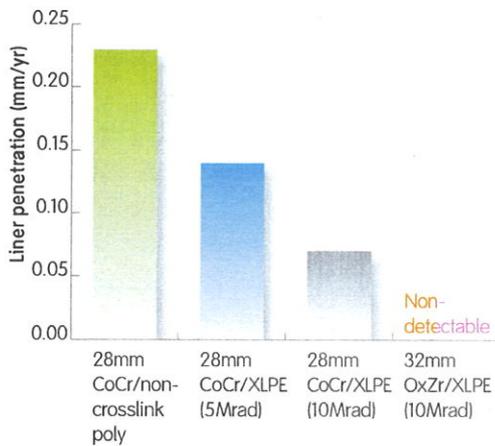
R3[°] system with OXINIUM alloy is the most advanced bearing option available

OXINIUM is an Oxidized Zirconium alloy (97.5% Zirconium and 2.5% Niobium) with a transformed ceramic surface providing the wear performance of ceramics and the strength of metals. This provides all of the benefits of ceramic and metal bearing technology without some of the potential risks. OXINIUM material is especially useful for nickel-sensitive patients. OXINIUM material is an award winning, clinically proven advanced bearing material that is designed for active patients.

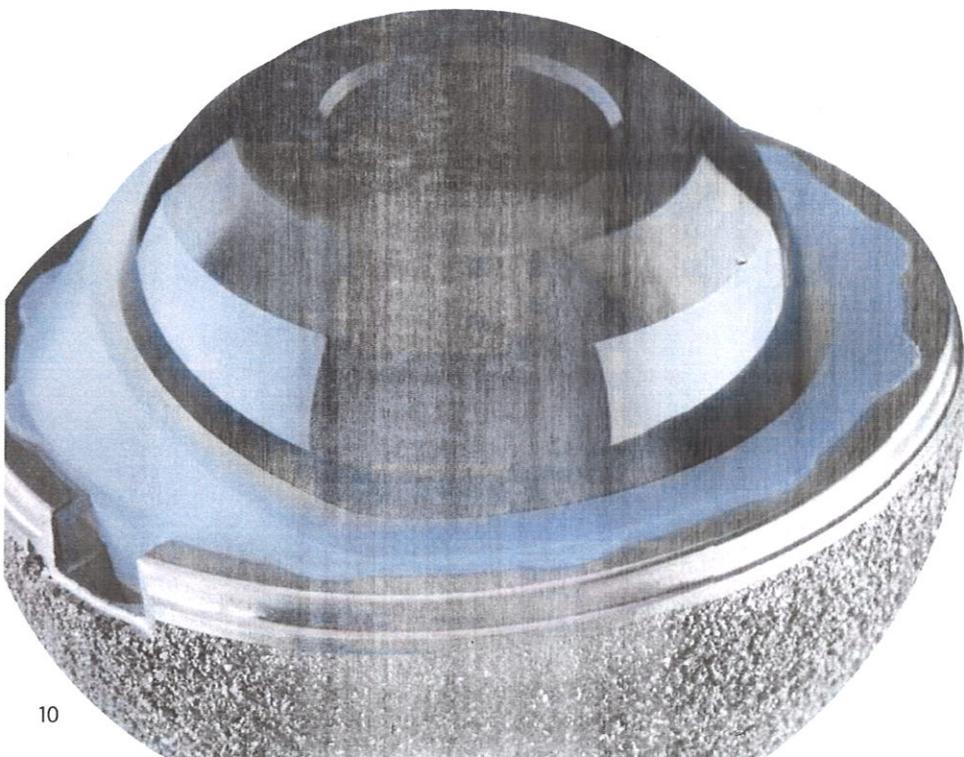
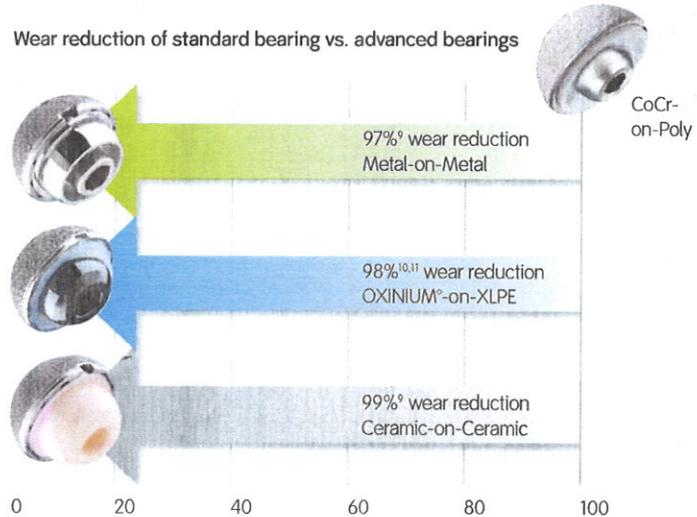
OXINIUM material along with 10 Mrad XLPE provides the wear performance of hard bearings along with the intraoperative options of hard-on-soft bearing.

OXINIUM material has a clinical history of more than 10 years. Over 190,000 components have been implanted successfully to date. Impressive clinical wear performance of OXINIUM heads was supported by an RSA clinical study from Dr. Bo Nivbrant.⁸

OXINIUM alloy with 10 Mrad XLPE shows superior wear characteristics for bearing couples with polyethylene.^{8,10}



Wear reduction of standard bearing vs. advanced bearings

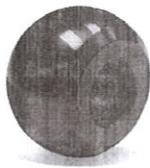


4.17.

4.1.9. Slavin kaulio galvos diametras

Catalog

12/14 Taper



4.1.10 Galvos kaulo ilgiai

OXINIUM® Femoral Heads: 12/14 Taper

Neck Length	22mm	26mm	28mm	32mm	36mm
-3	—	—	71342803	71343203	71343603
+0	71342200	71342600	71342800	71343200	71343600
+4	71342204	71342604	71342804	71343204	71343604
+8	71342208	71342608	71342808	71343208	71343608
+12	71342212	71342612	71342812	71343212	71343612
+16	—	—	71342816	71343216	—

* 71342340 OXINIUM 40mm Modular Femoral Head

* 71342344 OXINIUM 44mm Modular Femoral Head



CoCr (Cobalt Chromium) Femoral Heads: 12/14 Taper

Neck Length	22mm	26mm	28mm	32mm	36mm
-3	—	—	71302803	71303203	71303603
+0	71302200	71302600	71302800	71303200	71303600
+4	71302204	71302604	71302804	71303204	71303604
+8	71302208	71302608	71302808	71303208	71303608
+12	71302212	71302612	71302812	71303212	71303612
+16	—	—	71302816	71303216	—

* 71342640 CoCr 40mm Modular Femoral Head

* 71342644 CoCr 44mm Modular Femoral Head



Titanium Modular Head Sleeve 12/14 Taper

Neck Length	
-4	71344245
+0	71344247
+4	71344248
+8	71344249

* Use with 40mm and 44mm Oxinium and CoCr Modular Femoral Heads



BioloX™ forte Ceramic Femoral: Heads 12/14 Taper

Neck Length	22mm	26mm	28mm	32mm	36mm
S/+0 (short)	—	—	71330280	71330320	71332084
M/+4 (medium)	—	—	71330284	71330324	71332085
L/+8 (long)	—	—	71330288	71330328	71332086

Catalog

4.1.8.
Galvos medžiaga

4.1.9.
Šlankiančio galvos diametras



Biolox™ delta Ceramic Femoral Heads: 12/14 Taper

Neck Length	22mm	28mm	32mm	36mm	40mm
S/+0 (short)	—	—	76539160	76539165	71346004
M/+4 (medium)	—	—	76539161	76539166	71346005
L/+8 (long)	—	—	76539162	76539167	71346006



Global Femoral Trial Head: 12/14 Taper

Neck Length	22mm	26mm	28mm	32mm	36mm
XS/ -3	—	—	75100843	75100849	75100855
S/ +0	75100839	71352600	75100844	75100850	75100856
M/ +4	75100840	71352604	75100845	75100851	75100857
L/ +8	75100841	71352608	75100846	75100852	75100858
XL/ +12	75100842	71352612	75100847	75100853	75100859
XXL/ +16	—	—	75100848	75100854	—

Global Femoral Trial Head: 12/14 Taper

Neck length	40mm	44mm
XS/ -4	75100868	75100873
S/ +0	75100869	75100874
M/ +4	75100870	75100875
L/ +8	75100871	75100876

Femoral Head Impactor
Cat. No. 71360093



Replacement Tip
Cat. No. 71360484

Femoral Head Reducer
Cat. No. 71363076



Note: The femoral head reducer does not automatically ship with femoral heads.
The femoral head reducer must be ordered separately.

Note:

1. Do not reassemble previously assembled femoral head or neck sleeves
2. Do not assemble a ceramic femoral head onto a femoral taper that has previously been used
3. Do not implant the trial femoral head
4. Do not impact the femoral head reducer

We provide options. You build solutions.

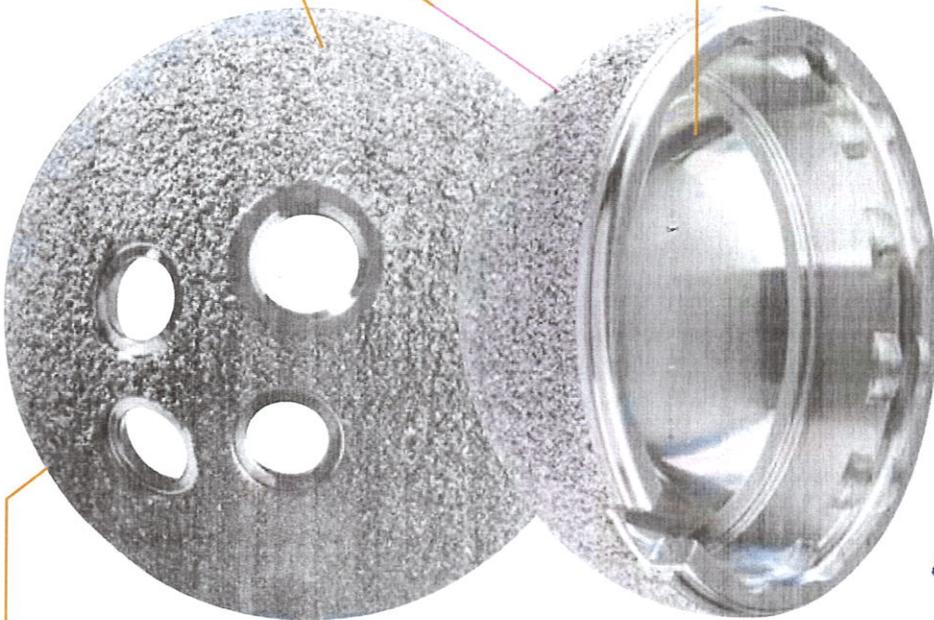
The R3° Acetabular System combined with the Smith & Nephew portfolio of hip stems provides an advanced hip replacement system with:

- Wide range of advanced bearing options
- Excellent primary stability
- Flexible instrumentation

General features

NO HOLE & THREE HOLE hemispherical shell offering

Polished inner surface to minimize backside wear



STIKTITE® Porous Coating for enhanced scratch-fit feel and enhanced initial fixation

4.1.12 Četrādubis komponentas neįsriegiamas

4.1.14 Četrādubis komponento tipai

Advanced bearing surfaces: OXINIUM[◇] alloy on XLPE

4.1.17

Intaryo
Medixia ga

R3° system with OXINIUM alloy on XLPE

The Smith & Nephew 10 Mrad, fully annealed XLPE is the only crosslinked polyethylene proven to produce less volume of wear debris particles in all size ranges.^{11,12} Less wear debris provides a reduced chance for osteolysis.

All currently marketed crosslinked poly indicates a significant improvement in the volume of wear debris, which would lead one to assume all crosslinked poly is the same. However, Smith & Nephew investigated more closely and found that not all crosslinked poly minimizes the amount of particles generated. Because the wear particles of crosslinked poly can be smaller in size than with UHMWPE, it is possible to reduce the volume but actually increase the number of particles.^{11,12} Even though there are questions about some crosslinked poly increasing the number of particles, many surgeons are adopting the use of these materials in most of their more active patients.

The Smith & Nephew crosslinked polyethylene significantly reduces the number of particles generated. The gravimetric wear rate of R3 XLPE is not measurable in a hip simulator, but the number of particles generated is reduced by 80% compared to traditional CoCr on conventional poly bearing.¹³

High magnification images of captured particles



Standard unirradiated polyethylene



5 Mrad irradiated crosslinked poly, showing an increase in the number of particles in conjunction with a decrease in average size



10 Mrad irradiated R3 XLPE showing a reduction in total number of particles

Stability: STIKTITE[®] Porous Coating

Enhanced stability and fixation
with STIKTITE Porous Coating

Utilizing STIKTITE coating on the R3[®] Acetabular Shells allows for a true scratch-fit feel during the shell seating and a clinically proven in-growth surface for long-term implant success.²⁰

4.1.11 Günstigste Komponente

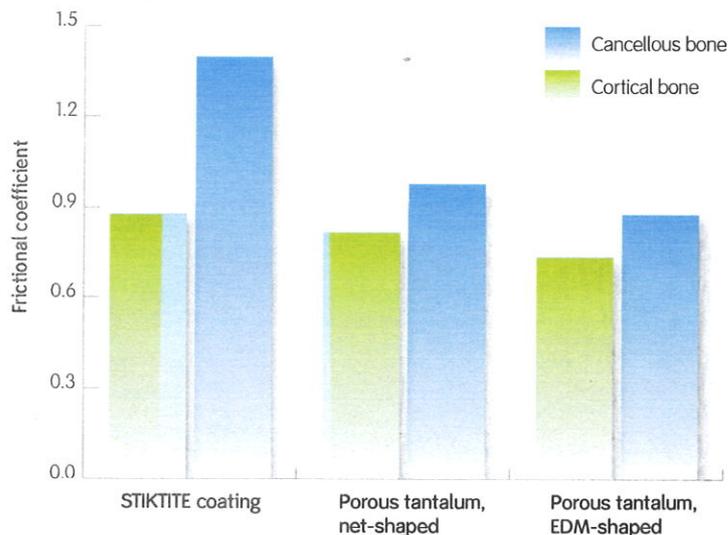


Not intended for use in the US

Stability: STIKTITE[®] Porous Coating

STIKTITE Porous Coating demonstrated a higher coefficient of friction compared to porous tantalum when tested by the same method.²¹ The mean coefficient of friction for STIKTITE coating was higher than that of porous tantalum against both cancellous and cortical bone. These results indicate that STIKTITE coating should have superior friction, scratch-fit feel and initial fixation stability as compared to porous tantalum.

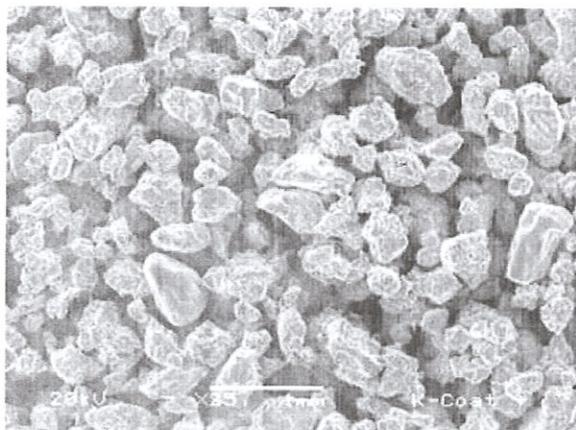
Frictional coefficients of bone ingrowth structures against cancellous and cortical bone (n=96 to 100)²¹



4.1.13

Pagaminitar
is titanium

STIKTITE coating is a sintered three-dimensional asymmetric titanium powder that has a porosity of about 60%. Increased porosity allows for potentially greater bone ingrowth, which can enhance long-term fixation and implant stability. STIKTITE coating provides enhanced initial mechanical stability, which is particularly important in damaged or less biologically active bone. The average pore size of STIKTITE coating (200 μm) is within the 100- to 500- μm range for optimal bone ingrowth.

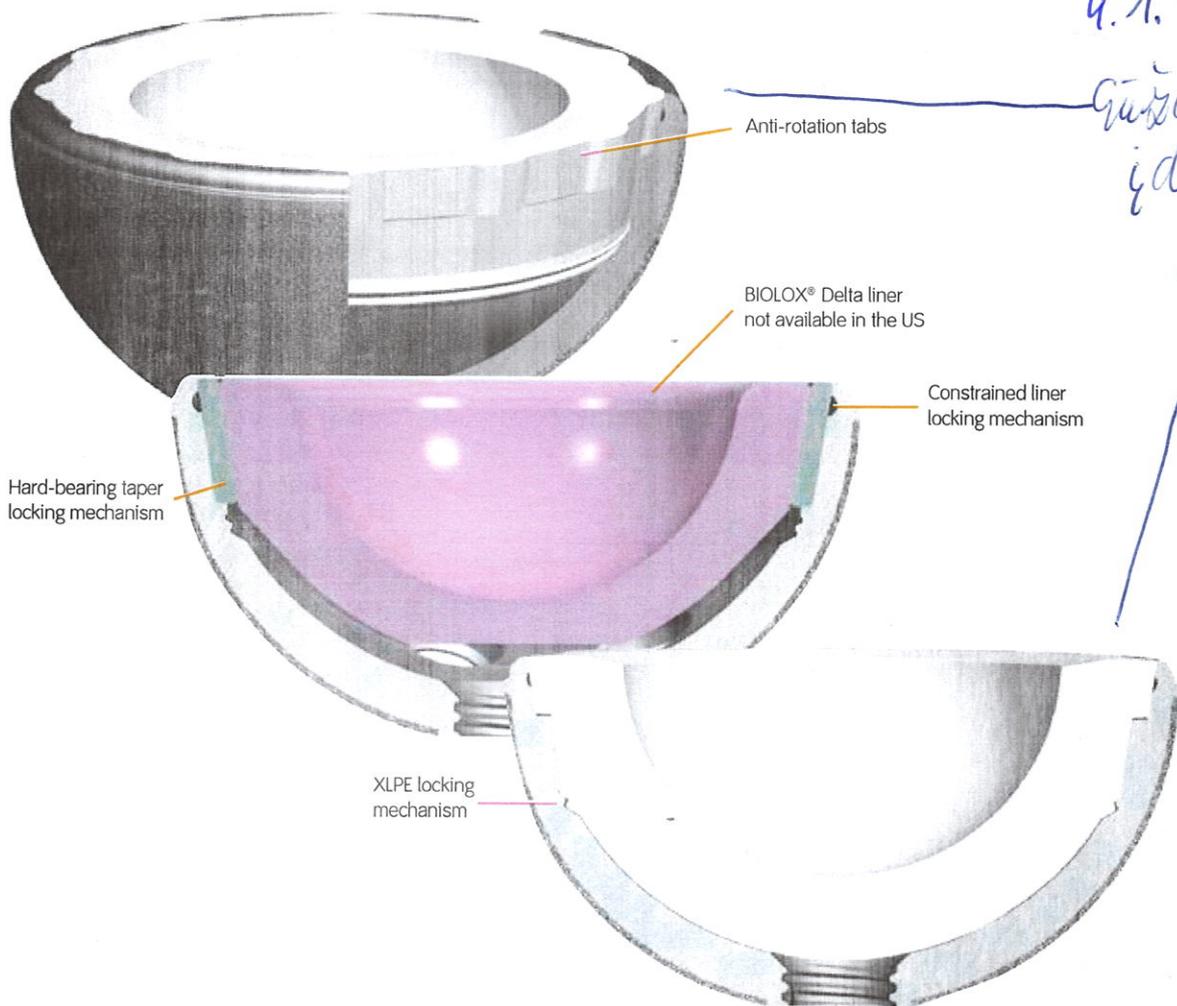


Stability: locking mechanism

R3° locking mechanism for secure liner stability

R3 locking mechanism design features:

- 12 large anti-rotational tabs on the poly liner that provide rotational stability
- Locking taper that supports metal and ceramic liners
- Double-channel lock design that provides axial stability for poly liners



Intraoperative adjustments to the liner position may be performed with true confidence. Independent researchers confirm that in some competitive locking designs, the liner can be significantly damaged by extraction, which prohibits liner repositioning.¹⁸ Laboratory tests of the R3 lock have shown it withstands consecutive insertions of the same liner without damaging its locking integrity.

4.1.14 Gužduobės komponentas
be angų

Catalog

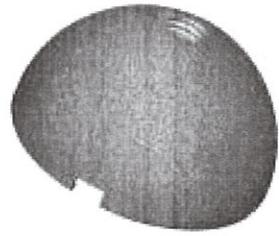
R3° NO HOLE Acetabular Shells

Standard size shells

Small size shells

Cat. no.	ODmm	Cat. no.	ODmm
7133-1846	46	7133-1840	40
7133-1848	48	7133-1842	42
7133-1850	50	7133-1844	44
7133-1852	52		
7133-1854	54	Large size shells	
7133-1856	56	Cat. no.	ODmm
7133-1858	58	7133-1866	66
7133-1860	60	7133-1868	68
7133-1862	62		
7133-1864	64		

4.1.15
Dydžiai



R3 NO HOLE HA Acetabular Shells

Standard size shells

Small size shells

Cat. no.	ODmm	Cat. no.	ODmm
7133-2246	46	7133-2240	40
7133-2248	48	7133-2242	42
7133-2250	50	7133-2244	44
7133-2252	52		
7133-2254	54	Large size shells	
7133-2256	56	Cat. no.	ODmm
7133-2258	58	7133-2266	66
7133-2260	60	7133-2268	68
7133-2262	62		
7133-2264	64		

4.1.14 Gužduobės komponentas
su 3 angomis

R3 THREE HOLE Acetabular Shells

Standard size shells

Small size shells

Cat. no.	ODmm	Cat. no.	ODmm
7133-5546	46	7133-5540	40
7133-5548	48	7133-5542	42
7133-5550	50	7133-5544	44
7133-5552	52		
7133-5554	54	Large size shells	
7133-5556	56	Cat. no.	ODmm
7133-5558	58	7133-5566	66
7133-5560	60	7133-5568	68
7133-5562	62		
7133-5564	64		

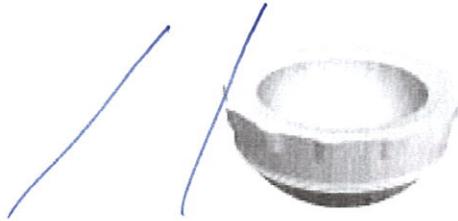
4.1.15
Dydžiai



4.1.16

4.1.18. Gūzduobės įdėklų tipai

4.1.17. XLPE
polietilenas



R3° XLPE Acetabular Liners

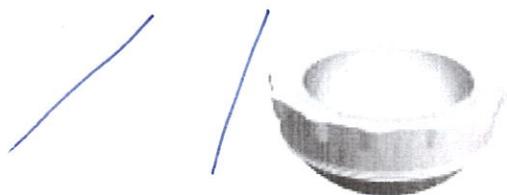
ID	OD	0° XLPE liner Cat. no.	20° XLPE liner Cat. no.	0° +4 XLPE liner Cat. no.	20°+4 XLPE liner Cat. no.
22	40	7133-4840	7133-4940	7133-5840	7133-7140
22	42	7133-4842	7133-4942	7133-5842	7133-7142
22	44	7133-4844	7133-4944	7133-5844	7133-7144

28	46	7133-7546	7133-4946	7133-5946	7133-7746
28	48	7133-7548	7133-4948	7133-5948	7133-7748
28	50	7133-7550	7133-4950	7133-5950	7133-7750
28	52	7133-7552	7133-4952	7133-5952	7133-7752
28	54	7133-7554	7133-4954	7133-5954	7133-7754
28	56	7133-7556	7133-4956	7133-5956	7133-7756
28	58	7133-7558	7133-4958	7133-5958	7133-7758
28	60	7133-7560	7133-4960	7133-5960	7133-7760

32	48	7133-9548	7133-7648	7133-6648	7133-7948
32	50	7133-9550	7133-7650	7133-6650	7133-7950
32	52	7133-9552	7133-7652	7133-6652	7133-7952
32	54	7133-9554	7133-7654	7133-6654	7133-7954
32	56	7133-9556	7133-7656	7133-6656	7133-7956
32	58	7133-9558	7133-7658	7133-6658	7133-7958
32	60	7133-9560	7133-7660	7133-6660	7133-7960
32	62	7133-9562	7133-7662	7133-6662	7133-7962

36	52	7133-2752	7133-5752	7133-6952	7133-8552
36	54	7133-2754	7133-5754	7133-6954	7133-8554
36	56	7133-2756	7133-5756	7133-6956	7133-8556
36	58	7133-2758	7133-5758	7133-6958	7133-8558
36	60	7133-2760	7133-5760	7133-6960	7133-8560
36	62	7133-2762	7133-5762	7133-6962	7133-8562
36	64	7133-2764	7133-5764	7133-6964	7133-8564
36	66-70	7133-0766	7133-1266	7133-1566	7133-2666
36	72-74	7133-8686	7133-8694	7133-8703	7133-8712
36	76-80	7133-1103	7133-1112	7133-1114	7133-8946

4.1.18. Güzəldüvələr içidəki tiplər



R3° XLPE Acetabular Liners (continued)

ID	OD	0° XLPE liner Cat. no.	20° XLPE liner Cat. no.	0° +4 XLPE liner Cat. no.	20°+4 XLPE liner Cat. no.
40	56	7133-8679	7133-8687	7133-8695	7133-8704
40	58	7133-8680	7133-8688	7133-8696	7133-8705
40	60	7133-8681	7133-8689	7133-8697	7133-8706
40	62	7133-8682	7133-8690	7133-8698	7133-8707
40	64	7133-8683	7133-8691	7133-8699	7133-8708
40	66-70	7133-8684	7133-8692	7133-8701	7133-8709
40	72-74	7133-8685	7133-8693	7133-8702	7133-8711
40	76-80	7133-1094	7133-1104	7133-1113	7133-1116

44	60	7133-1096	7133-1106	7133-0011	7133-1118
44	62	7133-1097	7133-1107	7133-0012	7133-1119
44	64	7133-1098	7133-1108	7133-0013	7133-1121
44	66-70	7133-1099	7133-1109	7133-0014	7133-1122
44	72-74	7133-1101	7133-1110	7133-0016	7133-1123
44	76-80	7133-1102	7133-1111	7133-0017	7133-1124

4.1.14. Ģūrdziesis angas
kaustis

R3°/REFLECTION® Threaded Hole Cover Cat. no. 7133-6500	
Spherical Head Screws	
Cat. no.	Length mm
7133-2515	15
7133-2520	20
7133-2525	25
7133-2530	30
7133-2535	35
7133-2540	40
7133-2545	45
7133-2550	50
7133-2555	55
7133-2560	60
7133-2565	65
7133-2570	70
R3 Screw Hole Cover Cat. no. 7136-9894	
Small Outer Case Cat. no. 7112-9401 (not shown)	
Lid for Outer Case Cat. no. 7112-9402 (not shown)	
R3 Trial Shell Tray Cat. no. 7136-2213 (not shown)	
R3 Main Instrument Tray Cat. no. 7136-2211 (not shown)	
R3 MIS Instrument Tray Cat. no. 7136-2219 (not shown)	
R3 Primary Reamer Dome Tray Cat. no. 7136-2212 (not shown)	
R3 CDH Trial Tray Cat. no. 7136-1077 (not shown)	



4.1.20
brauktai
ģūrdziesis
pi kravi mui
4.1.21