

# 1 Winquist III Universal IM Nail Extraction System

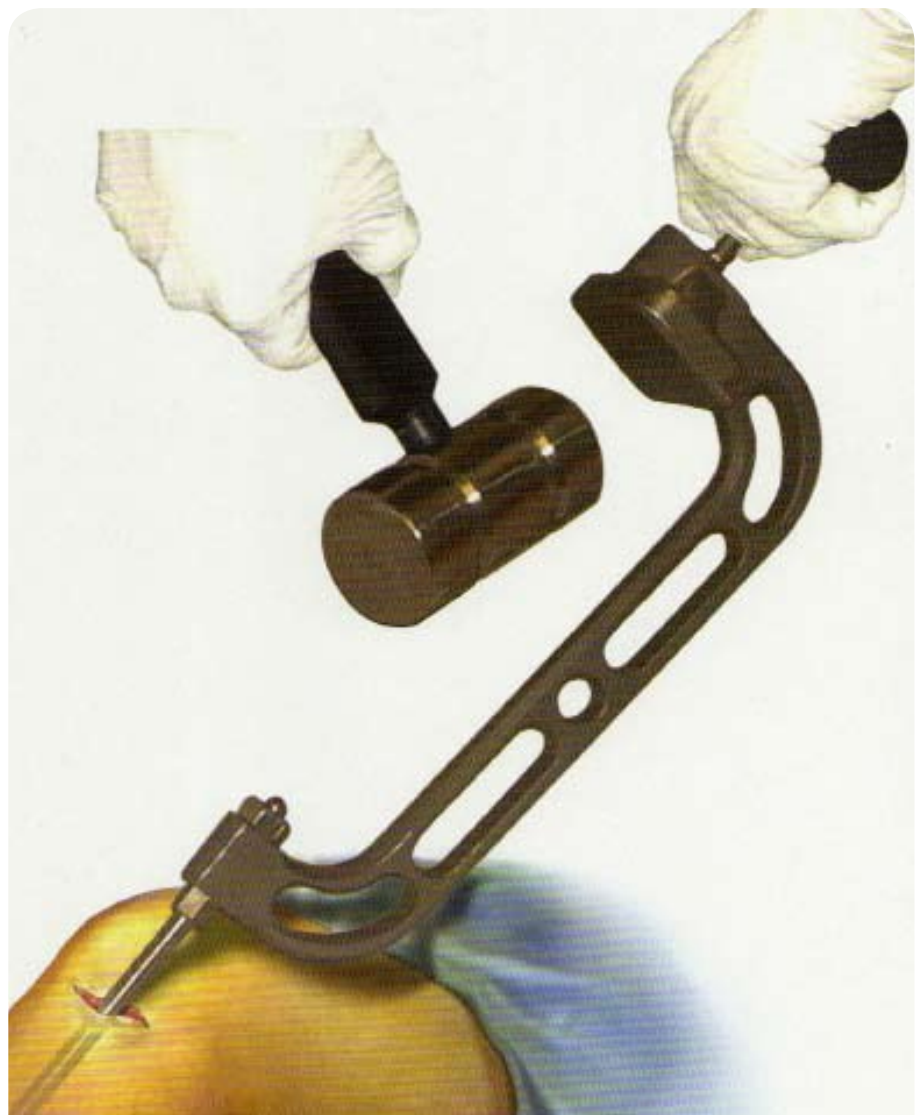
The SHUKLA™ 'Winquist' system is the leading IM nail extraction system available on the market today. Unlike many competitor systems the 'Winquist' is a truly universal system capable of removing any manufacturers nail, including broken nails up to mid shaft, giving the surgeon complete flexibility during trauma or revision surgery.

## Removes:

- Cannulated Nails
  - Threaded
  - Non Threaded
- Solid Nails
- Broken Nails  
(up to mid-shaft)

## Attachments include:

- 24 Extractors
  - 51 Single Use Extractor Tips
  - 5 Multi Use Extractors
- Bone Chisel
- Screwdriver Set
  - Including patented Reverse Captive Twist™ Heads
  - Straight & T Ratcheting Handles
  - 18 Blades
- 5lb. Mallet & Striking Frame



# 1. WINQUIST III UNIVERSAL IM NAIL EXTRACTION SYSTEM

## Surgical Technique Guide



<p><b>Step 1</b> - Determine size of bone screw &amp; select appropriate screwdriver shaft. Insert screwdriver shaft into ratcheting handle &amp; set ratchet to counter-clockwise.</p>			<p><b>Step 7</b> - Using the T-handle screw the extractor into the rod until the extractor is tight.</p>
<p><b>Step 2</b> - Remove all proximal &amp; distal screws.</p>			<p><b>Step 8</b> - Assemble the extraction frame (MIWE) on the extractor using a nut (MIWN).</p>
<p><b>Step 3</b> - Using the bone chisel, remove bone growth from around proximal neck of IM rod &amp; remove threaded cap.</p>			<p><b>Step 9</b> - Tighten the nut using the 11/16" wrench. It may be necessary to retighten during the extraction of the nail.</p>
<p><b>Step 4</b> - Select the appropriate size extractor tip to match the threads on the rod. Hooks and solid nail extractors may also be used.</p>			<p><b>Step 10</b> - Using the mallet (MMM5) to strike the frame plate, drive the rod out of the IM canal.</p>
<p><b>Step 5</b> - Tighten the tip into the extractor body (WIN19) using the 9/32" &amp; 11/16" wrench.</p>			<p><b>Note 1</b> - If the tip should break, use the socket wrench (WIN18) to remove the broken tip and start over at step 4.</p>
<p><b>Step 6</b> - Tighten the T-handle (MIWD) on the assembled extractor.</p>			<p><b>Note 2</b> - If the extractor is not long enough to attach to the frame, use the 6 inch extension extractor (WIN24 or MIWA22****)</p>

\*\*\* Applies to upgrade kits only

Book your **Demonstration** - Contact our **CUSTOMER SERVICE TEAM**

**Tel: +44(0)1527 559010**

# 1. WINQUIST III UNIVERSAL IM NAIL EXTRACTION SYSTEM CASE CONTENT

**Winquist III™ Case 1 Components – Case 1 Measurements: 19 1/4" x 8 3/4" x 4 3/4", Case 1 Complete Total Weight: 14.75 lbs**

Catalog No.	Description	Qty
MIWC	Bone Chisel	1
MIWD	7/16-20 UNF Tip, T-Handle Driver	1
MIWE	Extraction Frame	1
MIWN	Extractor Nut	3
MIWW	1/2" & 11/16" Double Open End Wrench	1
MIWWA	9/32" & 11/16" Double Open End Wrench	1
MMM5	5 lb. Mallet	1



## Winquist III™ Case 2/Upper Level – Nail Extraction Tips, Shank and Extractors

Catalog No.	Description	Qty	Catalog No.	Case Description	Qty
MDS030020	2.0mm Reverse Captive Twist™ Hex Driver	1	CA133	Case 1 Body- Winquist III (Case only - no lid)	1
MDS030025	2.5mm Reverse Captive Twist™ Hex Driver	1	CA134	Case 1 Lid- Winquist III	1
MDS030035	3.5mm Reverse Captive Twist™ Hex Driver	1	CA135	Case 2 Body- Winquist III (Case only - no lid)	1
MDS030040	4.0mm Reverse Captive Twist™ Hex Driver	1	CA136	Case 2 Lid- Winquist III	1
MDS030050	5.0mm Reverse Captive Twist™ Hex Driver	1	TR001	Winquist III Tray	1
MDS031562	5/32 Reverse Captive Twist™ Hex Driver	1	WIN18	Socket Wrench for Disposable Tips	1
MDS031875	3/16 Reverse Captive Twist™ Hex Driver	1	WIN19	Extractor Body	2
MDS060080	T-8 Reverse Captive Twist™ Hex Driver	1	WIN24	6 Inch Extension	1
MDS060150	T-15 Reverse Captive Twist™ Driver	1			
MDS060200	T-20 Reverse Captive Twist™ Torx Driver	1			
MDS060250	T-25 Reverse Captive Twist™ Torx Driver	1			
MDS07	#2 Posidrive® Shaft (Phillips® Style Point)	1			
MDS08	#2 Cruciform Shaft	1			
MDS09	Flat Blade Driver Shaft	1			
MDE19250	1/4 Square X 1/4 Square Drive Adapter	1			
MDA010006	6.0mm Hex Adapter (Stryker® T-2™)	2			
MDA011006	6.0mm Female Hex Socket Driver Adapter	1			
MDA010008	8.0mm Standard Hex Socket Driver Adapter	1			
HD233-M01	Asymm Ratcheting T- Handle	1			
MHRS0311	Cannulated Ratcheting Screwdriver Blue Silicone	1			



*For easier handling, the complete Winquist III™ Universal Extraction System is packaged in two (2) durable anodized aluminum sterilization cases. Both cases are fully autoclavable.*

## Winquist III™ Case 2/Lower Level – Screwdriver Shafts, Adapters and Handles - Case 2 Measurements: 19 1/4" x 18 3/4" x 4 1/4" Case 2 Complete Total Weight: 13 lbs.

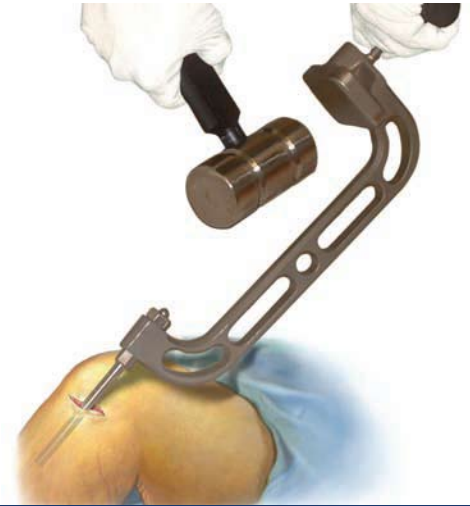
No.	Catalog No.	Extractor Size	Single Use	Qty	Nail Manufacturer	Intramedullary Nail	Screwdrivers/Driver Adapters Usage Chart
1	WIN1	1/4-20 Unc-2B Female Extractor Tip	✓	3	Zimmer®	Hansen-Street™, Harris®, Tibia®, Schneider®	2.5mm Hex
2	WIN2	M6X1-6g Male Extractor Tip	✓	3	Synthes®	Solid Tibial	2.5mm Hex
3	WIN3	1/4-20 UNC-2A Male Extractor Tip	✓	3	Acumed® Depuy® Ace® Depuy® Ace® Encore®  Stryker®-Howmedica®-Osteonics® Zimmer®	Polarus® Humeral AIM® Humeral AIM® Tibial True/Fix® Distal Femoral, Prox Humeral & True/Fix® Ankle Fusion Alta® Humeral ZMS®	2.5mm & 3.5mm Hex 2.5mm & 3.5mm Hex 3.5mm Hex 3.5mm Hex  T-20 Torx 5.0mm Hex
4	WIN4	1/4-28 UNF-2A Male Extractor Tip	✓	3	Depuy® Ace®	Chandler Tibial	N/A
5	WIN5	M8X1.25-6g/M7X1-6g Male Extractor Tip	✓	3	Synthes®	Solid Femoral, Recon & Supracondylar Cannulated Femoral, Recon & Suprecondylar Synthes®	2.5mm Hex 3.5mm Hex Cannulated Tibial
6	WIN6	5/16-18 UNC-2A Male Extractor Tip	✓	3	Depuy® Ace® Depuy® Ace® Zimmer®	AIM® Femoral, Supracondylar & A.R.T.® Retrograde Versanail™ Andle Fusion Nail M/DN® All	3.5mm & 5.0mm Hex 3.5mm Hex 3.5mm Hex
7	WIN7	5/16-24 UNF-2A Male Extractor Tip	✓	3	Biomet® Biomet® Smith + Nephew® Smith + Nephew® Stryker®-Howmedica®-Osteonics® Unknown	Ankle Arthrodesis & Uniflex® Tibial Retrograde Femoral Russell-Taylor® Tibial Trigen® ALL Alta® Femoral Zickel Nail	3.5mm Hex 5.0mm Hex 5/32" Hex 6.0mm Hex Socket & 1/4" x 1/4" Sq T-25 Torx 5/34" Hex
8	WIN8	M10X1.5-6g Male Extractor Tip	✓	3	Stryker®-Howmedica®-Osteonics®	Gross-Kemp® Femoral	3.5mm & 5.0mm Hex
9	WIN9	3/8-16-UNC-2A Male Extractor Tip	✓	3	Zimmer®	ZMS®	5.0mm Hex
10	WIN10	3/8-24-UNC-2A Male Extractor Tip	✓	3	Biomet®  Smith + Nephew®	Knee Arthrodesis, Holland® Femoral, Uniflex® Femoral & Uniflex® Reconstruction Russell-Taylor® Femoral & Recon	5.0mm Hex  3/16" or 5/32" Hex
11	WIN11	7/16-20 UNF-2A Male Extractor Tip	✓	3	Smith + Nephew®	Russell-Taylor® Humeral	3/16" Hex
12	WIN12	M5X0.8-6g Male Extractor Tip	✓	3	Synthes®	Flexible Humeral	2.5mm Hex
13	WIN13	M5.5X0.9-6g Male Extractor Tip	✓	3	Synthes®	Solid Humeral	2.5mm Hex
14	WIN14	M6X.75-6g Male Extractor Tip	✓	3	Stryker®-Howmedica®-Osteonics®	T-2™ Humeral	2.5mm Hex
15	WIN15	#8-32 UNC-2B Female Extractor Tip	✓	3	Encore®	True/Flex® Humeral & Forearm	3.5mm Hex
16	WIN16	M8X1-6g Male Extractor Tip	✓	3	Stryker®-Howmedica®-Osteonics® Stryker®-Howmedica®-Osteonics®	IC™ Nail Femoral, TIBIAL & T-2™ Tibial T-2™ Femoral Antegrade/Retrograde	3.5mm Hex 3.5mm Hex & 6.0mm Hex & 1/4" x 1/4" Sq
17	WIN17	3/8-32 UNEF-2B Female Extractor Tip	✓	3	Encore®	True/Flex® Tibial	3.5mm Hex & 8.0mm Hex & 1/4" x 1/4" Sq
20	WIN20	Solid Nail Extractor 12.5-15mm		1	Various	12.5 to 15mm Solid & Broken IM Nails	N/A
21	WIN21	Solid Nail Extractor 10-12.5mm		1	Various	10 to 12.5mm Solid & Broken IM Nails	N/A
22	WIN22	Solid Nail Extractor 8-10mm		1	Various	8 to 10mm Solid & Broken IM Nails	N/A
23	WIN23	Solid Nail Extractor 6-8 mm		1	Various	6 to 8mm Solid & Broken IM Nails	N/A
25	WIN25	Large Hook Extractor		1	Zimmer®	Neff Nail	N/A
26	WIN26	Small Hook Extractor		1	Smith + Nephew®	Ender Nail	N/A
27	WIN27	Conical Extractor		1	Synthes®	Universal Tibial & Femoral	3.5mm Hex

Legend: UNC - Unified National Coarse UNF - Unified National Fine UNEF - Unified National Extra Fine g - Medium Fit Thread

# 1. WINQUIST III UNIVERSAL IM NAIL EXTRACTION SYSTEM CROSS REFERENCE CHART

Innovators of  
**Xtract-All®**

## Winquist III Universal IM Nail Extraction System



### IM NAIL TO EXTRACTOR USAGE CHART

MANUFACTURER	NAIL	EXTRACTOR	TIP NO:	SINGLE USE	DRIVER ADAPTER
ACUMED®	POLARUS® HUMERAL	1/4-20 UNC-2A	WIN3-③	✓	2.5mm** Hex & 3.5mm** Hex
DEPUY/ACE®	AIM® HUMERAL	1/4-20 UNC-2A	WIN3-③	✓	2.5mm** Hex & 3.5mm** Hex
	AIM® TIBIAL	1/4-20 UNC-2A	WIN3-③	✓	3.5mm** Hex
	AIM® FEMORAL, SUPRACONDYLAR & A.R.T.® RETROGRADE	5/16-18 UNC-2A	WIN6-⑥	✓	3.5mm** Hex & 5.0mm** Hex
	CHANDLER TIBIAL	1/4- 28 UNF2A	WIN4-④	✓	Not Applicable
	VERSANAIL™ ANKLE FUSION NAIL	5/16-18 UNC-2A	WIN6-⑥	✓	3.5mm** Hex
SMITH + NEPHEW®	RUSSEL-TAYLOR® HUMERAL	7/16-20 UNF-2A	WIN11-⑪	✓	3/16" ** Hex
	RUSSEL-TAYLOR® FEMORAL & RECON	3/8-24 UNF-2A	WIN10-⑩	✓	3/16" ** Hex & 5/32" ** Hex
	RUSSEL-TAYLOR® TIBIAL	5/16-24 UNF-2A	WIN7-⑦	✓	5/32" ** Hex
	TRIGEN® ALL	5/16-24 UNF-2A	WIN7-⑦	✓	6mm Hex Socket & 1/4" x 1/4" SQ.
	ENDER NAIL	SMALL HOOK	WIN26 (MIWA14****)		Not Applicable
SYNTHES®	SOLID HUMERAL	M5.5x.9-6g	WIN13-⑬	✓	2.5mm** Hex
	SOLID TIBIAL	M6x1.0-6g	WIN2-②	✓	2.5mm** Hex
	SOLID FEMORAL, RECON & SUPRACONDYLAR	M8x1.25-6g / M7x1.0-6g	WIN5-⑤	✓	2.5mm** Hex
	UNIVERSAL TIBIAL & FEMORAL	CONICAL	WIN27 (MIWA13****)		3.5mm** Hex
	CANNULATED FEMORAL, RECON & SUPRACONDYLAR	M8x1.25-6g / M7x1.0-6g	WIN5-⑤	✓	3.5mm** Hex
	FLEXIBLE HUMERAL	M5x.8-6g	WIN12-⑫	✓	2.5mm** Hex
	CANNULATED TIBIAL	M8x1.25-6g / M7x1.0-6g	WIN5-⑤	✓	3.5mm** Hex
UNKNOWN	ZICKEL	5/16-24 UNF-2A	WIN7-⑦	✓	5/32" ** Hex
BIOMET®	ANKLE ARTHRODESIS & UNIFLEX® TIBIAL	5/16-24 UNF-2A	WIN7-⑦	✓	3.5mm** Hex
	KNEE ARTHRODESIS, HOLLAND FEMORAL, UNIFLEX® FEMORAL & UNIFLEX® RECONSTRUCTION	3/8-24 UNF-2A	WIN10-⑩	✓	5.0mm** Hex
	RETROGRADE FEMORAL	5/16-24 UNF-2A	WIN7-⑦	✓	5.0mm** Hex
	TRUEFLEX® HUMERAL & FOREARM	#8-32 UNC-2B	WIN15-⑮	✓	3.5mm** Hex
ENCORE®	TRUE/FIX® DISTAL FEMORAL, PROX HUMERAL & TRUE/FIX® ANKLE FUSION	1/4-20 UNC-2A	WIN3-③	✓	3.5mm** Hex
	TRUEFLEX® TIBIAL	3/8-32 UNEF-2B	WIN17-⑰	✓	3.5mm** Hex & 8.0mm Hex & 1/4" x 1/4" SQ.
STRYKER®-HOWMEDICA®-OSTEONICS®	T-2™ HUMERAL	M6x.75-6g	WIN14-⑭	✓	2.5mm** Hex
	GROSS/KEMPF® FEMORAL	M10x1.5-6g	WIN8-⑧	✓	3.5mm** Hex & 5.0mm** Hex
	IC™ NAIL FEMORAL, TIBIAL & T-2 TIBIAL	M8x1-6g	WIN16-⑯	✓	3.5mm** Hex
	T-2™ FEMORAL ANTEGRADE/RETROGRADE	M8x1-6g	WIN16-⑯	✓	3.5mm** Hex & 6.0mm Hex & 1/4" x 1/4" SQ.
	ALTA® HUMERAL	1/4-20 UNC-2A	WIN3-③	✓	T20 Torx
ZIMMER®	ALTA® FEMORAL	5/16-24 UNF-2A	WIN7-⑦	✓	T25 Torx
	M/DN® ALL	5/16-18 UNC-2A	WIN6-⑥	✓	3.5mm** Hex
	ZMS® TIBIAL & HUMERAL	1/4-20 UNC-2A	WIN3-③	✓	5.0mm** Hex
	ZMS® FEMORAL	3/8-16 UNC-2A	WIN9-⑨	✓	5.0mm** Hex
	HANSEN-STREET™, HARRIS®, TIBIA®, SCHNEIDER®	1/4-20 UNC-2B	WIN1-①	✓	2.5mm** Hex
UNKNOWN	NEFF NAIL	LARGE HOOK	WIN25 (MIWA15****)		Not Applicable
	DIAMETER 12.5 to 15mm SOLID & BROKEN* IM NAILS	Solid Nail Extractor 12.5-15mm	WIN20		Not Applicable
	DIAMETER 10 to 12.5mm SOLID & BROKEN* IM NAILS	Solid Nail Extractor 10-12.5mm	WIN21		Not Applicable
	DIAMETER 8 to 10mm SOLID & BROKEN* IM NAILS	Solid Nail Extractor 8-10mm	WIN22		Not Applicable
	DIAMETER 6 to 8mm SOLID & BROKEN* IM NAILS	Solid Nail Extractor 6-8 mm	WIN23		Not Applicable
UNKNOWN	KUNTSCHER DIAMETER 12.5 to 15mm	Solid Nail Extractor 12.5-15mm	WIN20		Not Applicable
	KUNTSCHER DIAMETER 10 to 12.5mm	Solid Nail Extractor 10-12.5mm	WIN21		Not Applicable
	KUNTSCHER DIAMETER 8 to 10mm	Solid Nail Extractor 8-10mm	WIN22		Not Applicable
	KUNTSCHER DIAMETER 6 to 8mm	Solid Nail Extractor 6-8 mm	WIN23		Not Applicable

\* BROKEN: NAILS BROKEN MIDSHAFT OR LESS \*\* REVERSE CAPTIVE TWIST \*\*\* APPLIES TO UPGRADE KITS ONLY