Park Dental
Mini Dental Implants

Lew™ MDI

o-ball

Quick Reference Guide

THE LEGACY CONTINUES WITH THE NEXT GENERATION OF MDI

PARK DENTAL RESEARCH CORPORATION

Lew™ MDI

Unique Features

The Lew MDI O-Ball collared implant offers refinements intended to address the ease of placement and the most common causes for mini implant failures.

Gold Anodized - O-Ball

This special coating is aesthetically pleasing, improves durability and frictional wear characteristics.

Reverse Buttress Threading

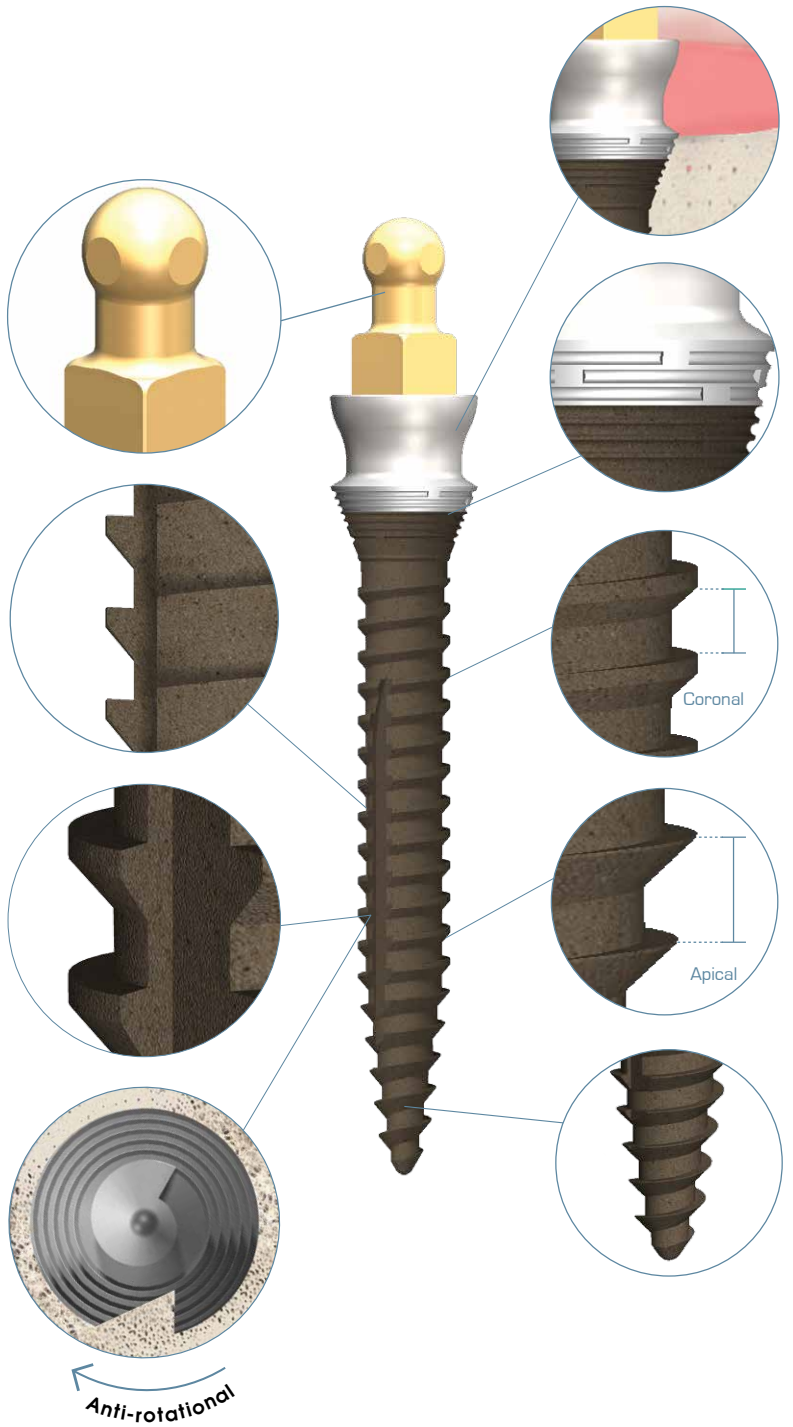
Allows ease of penetration into the bone and improves stability.

Cog Lock™ - thread view

Cog Lock™ Threading (Patent Pending)

Anti-rotation barbs for added stability.

Cog Lock™ - bottom view



Platform Switching Collar

Provides a smooth interface for the soft tissue, creating a better emergence profile as well as hindrance for bacterial migration.

Labyrinth Groove Banding (Patent Pending)

Hinders cellular migration as well as assisting in cortical maintenance.

Coronal = Less thread length

Progressive Compression Threading

Threads are gradually closer together along the length of the implant in order to provide a vertical compression effect and consequently added stability.

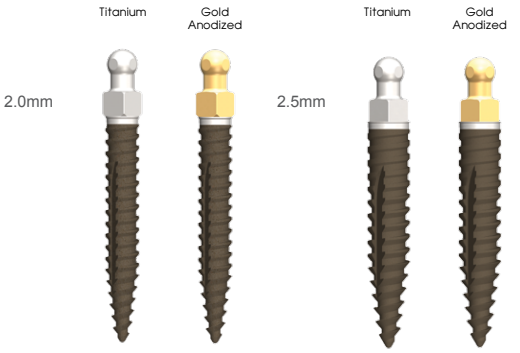
Apical = More thread length

Optimized Tip for tactile feedback

Lew™ MDI
Implants & Prosthetics Flowchart

Available in
2.0 & 2.5mm diameters

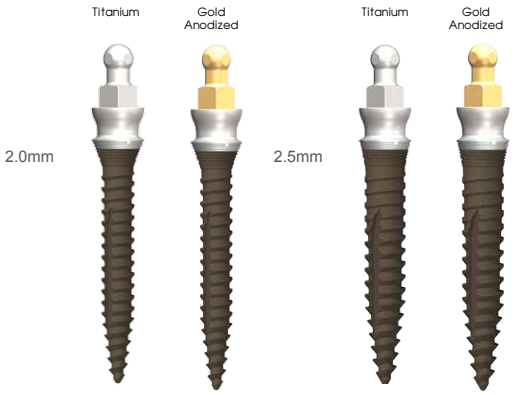
Mini Non-Collared O-Ball



Lengths	Product Code	Product Code	Lengths	Product Code	Product Code
10mm	2010-XO	2010-XOG	10mm	2510-XO	2510-XOG
11mm	2011-XO	2011-XOG	11mm	2511-XO	2511-XOG
13mm	2013-XO	2013-XOG	13mm	2513-XO	2513-XOG
15mm	2015-XO	2015-XOG	15mm	2515-XO	2515-XOG
17mm	2017-XO	2017-XOG	17mm	2517-XO	2517-XOG

OPTIONAL

Mini Collared O-Ball



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15mm	2015-CO	2015-COG	15mm	2515-CO	2515-COG
17mm	2017-CO	2017-COG	17mm	2517-CO	2517-COG

Analog - Non-Collared

OXAN-2

Impression Cap

OIC-1

Temporization Cap

OTC-1

Waxing Coping

OWC-1

Analog - Collared

OCAN-2

Block Out Shim

BOS-1

O-Ball Housings

OMH-1 OMHP-1

O-Ball Housings

OMH-2 OMHP-2 OMH-3 OMHP-3

O-Ring

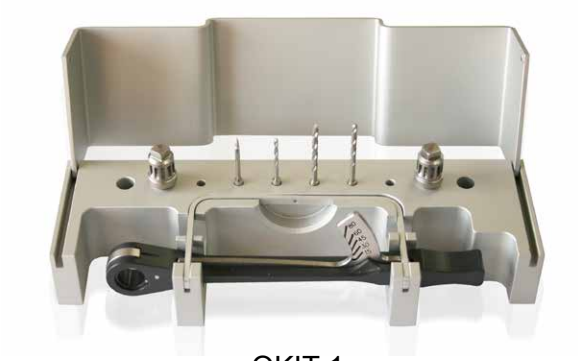
OR-1

Micro O-Ring

OR-2

Lew™ MDI
Mini O-Ball Surgical Kits

O-Ball Mini Surgical Kit



OKIT-1

O-Ball Mini Surgical Kit

Surgical marker	(1)	MARK-1
Tissue punch 1.5mm	(1)	TP-15
Tissue punch 2.0mm	(1)	TP-20
Marking Drill	(1)	MDT-11
1.2mm Surgical Drill	(1)	DRT-12
1.5mm Surgical Drill	(1)	DRT-15
2.0mm Surgical Drill	(1)	DRT-20
Mini Multi-Purpose Driver 1.65mm	(1)	DRVRT-165
Mini Multi-Purpose Driver Long 1.65mm	(1)	DRVRT-165L
Torque Wrench 15-80Ncm	(1)	RATC-80
Instrument Case	(1)	CASE-1

O-Ball Mini Surgical Kit Deluxe

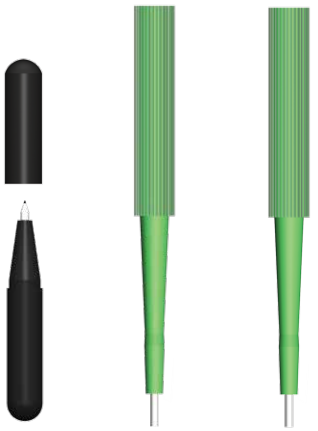
OKIT-2

O-Ball Mini Surgical Kit Deluxe

Bone Caliper	(1)	BNC-1
Surgical marker	(2)	MARK-1
Tissue punch 1.5mm	(2)	TP-15
Tissue punch 2.0mm	(2)	TP-20
Marking Drill	(1)	MDT-11
1.2mm Surgical Drill	(2)	DRT-12
1.5mm Surgical Drill	(2)	DRT-15
2.0mm Surgical Drill	(2)	DRT-20
Mini Multi-Purpose Driver 1.65mm	(1)	DRVRT-165
Mini Multi-Purpose Driver Long 1.65mm	(1)	DRVRT-165L
Torque Wrench 15-80Ncm	(1)	RATC-80
Block-out Shims	(1)	BOS-1
JUELL Cure - Hard	(1)	JCH-1
JUELL Cure - Soft	(1)	JCS-1
JUELL Cure - Hard Dispensing Gun	(1)	JGUN-1
Instrument Case Deluxe	(1)	CASE-1

Lew™ MDI
Instruments & Accessories

Site Preparation



MARK-1
Surgical Marker

TP-15
1.5mm Tissue Punch

TP-20
2.0mm Tissue Punch

Surgical Drills & Drill Extender

MDT-11
Marking Drill

DRT-12
1.2mm Surgical Drill

DRT-15
1.5mm Surgical Drill

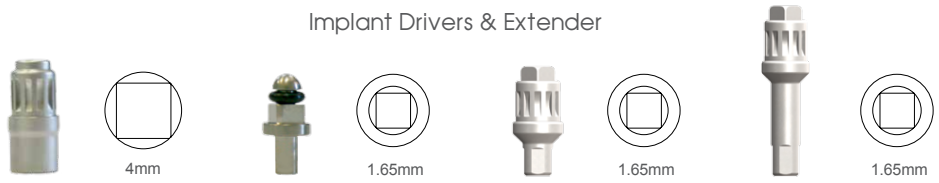
DRT-20
2.0mm Surgical Drill

Wrenches

RATC-00
Park Dental™ Ratchet Wrench

RATC-80
Continuous Feedback Torque Wrench 15-80 Ncm

Implant Drivers & Extender



CODRV-4
Torque Adapter/ Extender

DRVRTA-165
O-Ball Mini Ratchet Adapter

DRVRT-165
O-Ball Mini Multi-Purpose Driver

DRVRT-165L
O-Ball Mini Multi-Purpose Driver Long

Implant Accessories

BNC-1
Bone Caliper

JUELL™Cure — Premium Kits & Accessories

JCS-1

JUELL™Cure ◦ SOFT

CONTENTS

JUELL Cure Soft Kit
- 50ml Cartridge
- 10ml Adhesive
- 10ml Glazing Catalyst
- 10ml Glazing Base
- Mixing Tips & Accessories
- Insertion Tips

JCH-1

JUELL™Cure ◦ HARD

CONTENTS

JUELL Cure Hard Kit
- 85mg Cartridge
- 10 ml Adhesive mixing tips

Park Dental™ Dispensing Gun

JGUN-1

Model Lower Mandible Pink

DM-1

Lew™ MDI

O-Ball Surgical Procedure

1 Entry points & use of the Marking Drill

Entry points for each implant are marked on the patient's tissue with a **Surgical Marker**. (see fig. 1)

If utilizing a flapless technique, use the 2.0mm **Tissue Punch** to remove gingiva to the cortical bone. (see fig. 2)

The **Marking Drill** is delicately placed over the entry point and lightly pumped up and down until the cortical plate is penetrated. (see fig. 3)

2 Recommended Drilling Sequence for 2.0mm and 2.5mm implants

Bone Type	Implant	Tissue Punch	Marking Drill	Drill 1.2mm	Drill 1.5mm	Drill 2.0mm
Hard - I	2.0mm	1.5mm	•		•	
Medium - II	2.0mm	1.5mm	•	•		
Medium - II	2.5mm	2.0mm	•	•		•
Soft - III	2.5mm	2.0mm	•		•	

As a general rule the depth should not exceed one-third to one-half the threaded length of the chosen MDI. The desired depth is the minimal amount that allows one to begin the auto-advancement of the implant into bone.

3 Use of the Multi-Purpose Driver for implant insertion

Remove the vial containing the Lew MDI from the sealed pouch.

The vial cap and implant can then be removed, transported to the prepared entry site and inserted with rotational clockwise movement while applying slight pressure.

Remove the cap once resistance and advancement is met.

Then start with the **Multi-Purpose Driver** as a finger driver and rotate clockwise until noticeable bony resistance is encountered. (see fig. 4)

4 Use the Continuous Feedback Torque Wrench and Park Dental Ratchet to finalize the insertion process.

Grasp the **Continuous Feedback Torque Wrench** and place over the top of the **Multi-Purpose Driver**. Position the operator's fingers supportively under the patient's jaw, the thumb over the top of the Continuous Feedback Torque Wrench applying downward force upon the axis of the implant. Using a ¼ turn rotation with a 2 to 3 second pause will reduce the frictional heat that may be detrimental to the health of the bone. This pause allows the bone to expand during advancement of the implant. Verify that the implant at the final depth achieves 35 Ncm of resistance or greater. When making the final seating turns of placement, use caution when the torque of the MDI exceeds 45 Ncm. (see Fig. 5)

The ideal placement allows the abutment head to protrude from the gingival soft tissue at its full length. The smooth collar should be embedded in the gingiva with no threaded portions visible. (see fig. 6)

Surgical Marker - Fig 1

Tissue Punch - Fig 2

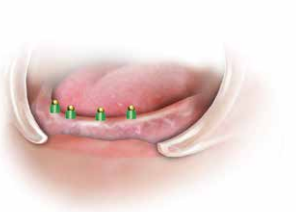
Marking Drill - Fig 3

Multi-Purpose Driver - Fig 4

Continuous Feedback Torque Wrench - Fig 5

Final Seat Placement - Fig 6

Lew™ MDI
Prosthetic Procedure

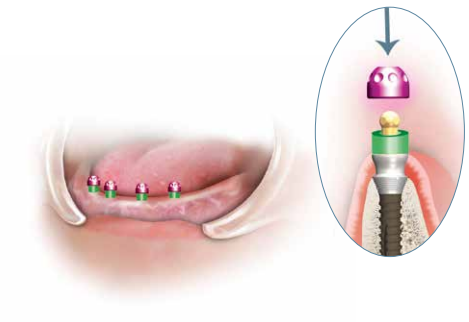


Block-out Shims - Fig 7

5 Lew™ MDI O-Ball Prosthetic Procedure

Intra-Oral Retrofitting of a lower denture using the Lew™ O-Ball implant and a Metal Housing

- Use an acrylic bur to relieve the denture where there is sufficient clearance for the selected **Metal Housing**.
- Cut the appropriate sized **Block-out Shim** and place over the implant O-Ball head. **IMPORTANT:** The Metal Housing must not interfere with the denture when patient bites firmly. Test the denture intra-orally to confirm seating of the denture while in centric relation. (see fig. 7)
- The **Metal Housing** must snap on O-Ball head and still easily rotate with the Block-out Shim attached. (see fig. 8)
- Apply petroleum jelly to all areas of the denture to be protected from bonding of **JUELL Cure** material.
- Fill the relieved area of the denture with **JUELL Cure - Hard** reline material. If no metal housing is used then reline the denture with **JUELL Cure - Soft** over the implants.
- Place the denture back in the patient's mouth and instruct patient to close bite gently. **IMPORTANT:** If Block-out Shim is not in place, the denture may be more difficult to remove. (see fig. 9)
- Allow 7 to 9 minutes for **JUELL Cure - Hard** to fully cure.
- Remove, clean, trim flash, and then fill any acrylic voids that may be present with reline material.
- Remember to always use the Block-out Shim during any soft or hard reline or pickup procedure.
- Finish denture borders, remove flash material, and then polish to a high luster. (see fig. 10)



Metal Housing - Fig 8

Finished Denture - Fig 10

Denture Placement - Fig 9

Continuous Feedback Torque Wrench

MDI Torque Recommendations:

- *Records of clinical trials, various university studies and clinician feedback when using mini dental implants 1.8mm – 3.0mm in diameter have demonstrated that the optimal resistance for final seating of a MDI implant is 35 Ncm.*
- *Any resistance beyond 45 Ncm could result in a fracture of the implant or over compression of surrounding bone.*

Park Dental Research Corporation is a pioneering dental implant company established to research, design, develop, manufacture and market high quality dental implantology devices. Over the past four decades Park Dental Research's product offerings have transformed the landscape of implant dentistry. Working directly with the preeminent minds in implantology, Park Dental Research is routinely recognized in the written history of innovation in this industry.

Jack Wimmer, founder of the company, is internationally renowned for his outstanding contribution to the field of implant dentistry. A former clinician and laboratory owner, Mr. Wimmer personally created countless custom implants, abutments and prosthetics for leading implantologists around the world. Wimmer's numerous dental implant systems have subsequently become standard for the industry.

Our President, Dr. Ron Bulard, the founder of IMTEC and later the CEO of 3M IMTEC, brings twenty-five years of experience and leadership to Park Dental Research. He shares Wimmer's vision to improve the lives of patients through innovation. As in his past endeavors, Bulard believes in the responsible advocacy of implantology science as an inclusive discipline in dentistry.

Park Dental Research has worked closely with the leading dental schools for over forty years and pioneered many implant solutions taught today. Let our experience and research in implant dentistry work for you.

The legacy continues with next generation of mini dental implants with the Lew™ MDI. The right company is important. The right MDI changes everything.

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