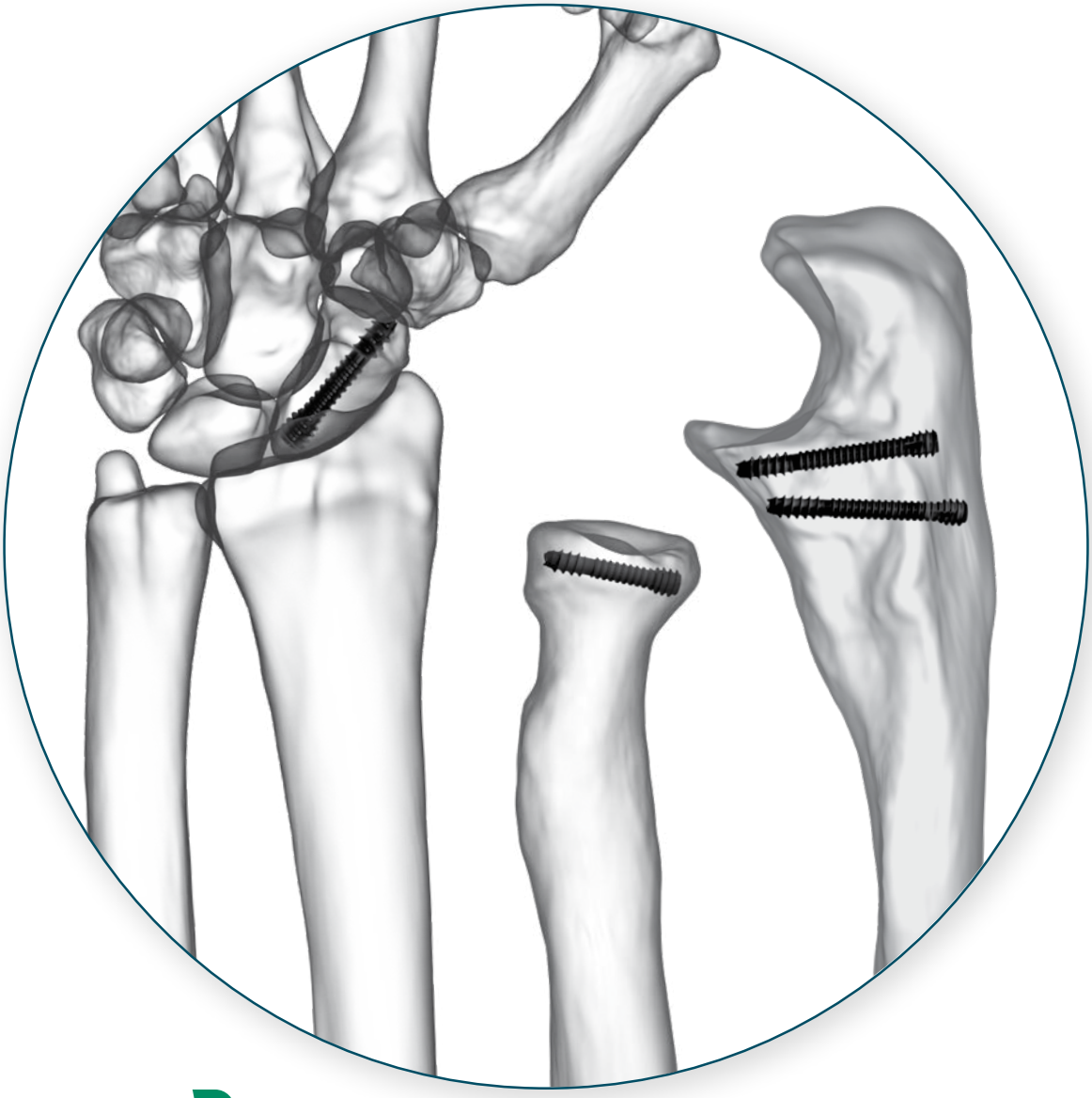
SURGICAL TECHNIQUE GUIDE

REDUCT®

headless compression screw



skeletal dynamics®

UNDERSTANDING THE UPPER EXTREMITY

As described by:
Jorge L. Orbay, M.D.
Miami Hand & Upper Extremity Institute

R E D U C T®

headless compression screw

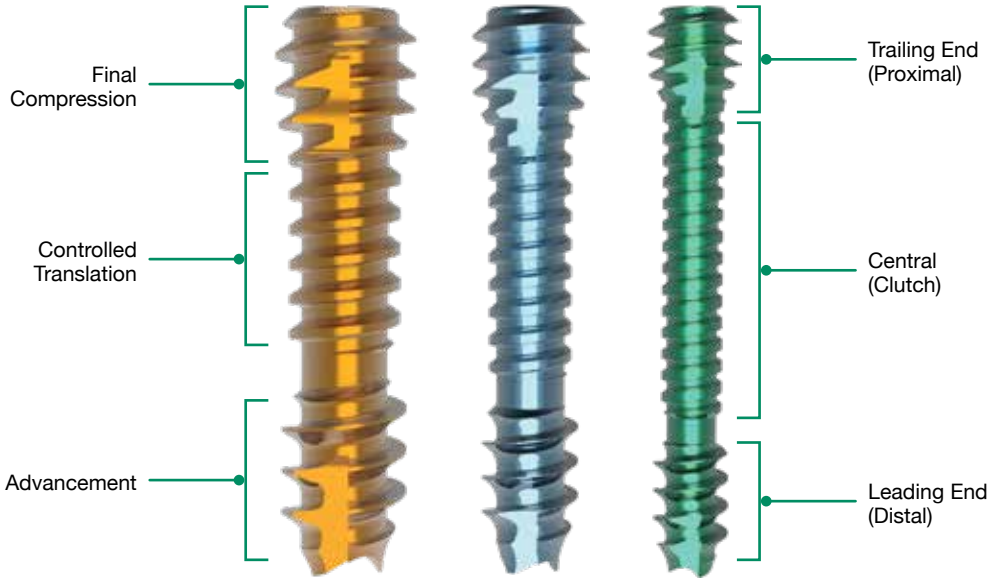
Description

The REDUCT® Headless Compression Screw (HCS) System consists of 2.5mm, 3.5mm, and 4.5mm cannulated titanium screws and specialized instrumentation.

- The 2.5mm screw is available in lengths between 10mm - 18mm, with increment of 1mm; 20mm - 30mm, with increments of 2mm
- The 3.5mm screw is available in lengths between 10mm - 18mm, with increment of 1mm; 20mm - 30mm, with increments of 2mm; 35mm - 45mm, with increments of 5mm
- The 4.5mm screw is available in lengths between 20mm - 30mm, with increments of 2mm; 35mm - 50mm, with increments of 5mm

Indications for Use

The Skeletal Dynamics REDUCT® Headless Compression Screw System is intended for fixation of osseous fragments or fractures, arthrodesis of small joints, and osteotomies, with the appropriately sized screw.



1 REDUCE AND INSERT K-WIRE



Insert the k-wire until the tip is at the far cortex. A k-wire needle is included to assist with initial k-wire insertion if needed. Use radiographic imaging to confirm the k-wire lies along the central axis in the A/P and LAT planes with the provided handle. A tissue protector drill guide has been provided in the REDUCT® HCS Set if needed.

Note:
The set includes instrumentation for each screw diameter. Select the appropriate k-wire for the selected screw diameter to ensure proper depth gauge reading. Additionally, a double barrel k-wire guide is also included in the set when insertion of parallel screws is desired.



Warning:
Handle double trocar k-wires carefully during insertion and removal to prevent unintended k-wire penetration or injury.



HCS-KWN: HCS K-Wire Needle



HCS-PWG-0X: HCS Parallel K-Wire Guide, X

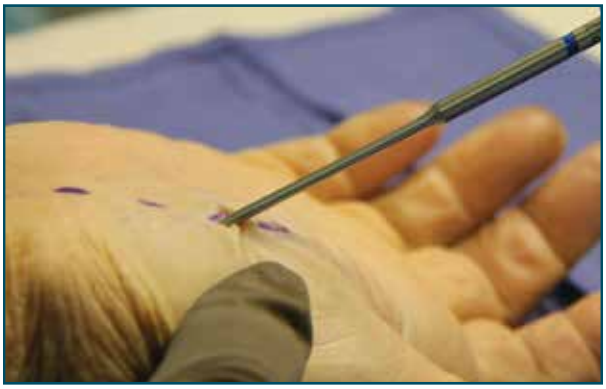
KWIR-ST-14165 : K-Wire, 1.4mm x 165mm, Single Trocar

KWIR-HCS-14165: K-Wire, 1.4mm x 165mm, Double Trocar



HCS-TPO: HCS Obturator

2 DRILL



The REDUCT® Headless Compression Screws are designed to be self-drilling and self-tapping. Predrilling is recommended to make it easier to insert the screw in dense bone. Predrill by passing the cannulated drill over the k-wire with the provided handle. A tissue protector drill guide has been provided for use if needed.

Note:
Remove the drill carefully to prevent backing out the k-wire. Remove the drill bit using the k-wire pusher or by hand once finished with drill.



Option:
The system includes countersink drills for drilling into hard cortical bone.



HNDL-SQC-FXD: Handle, Small QC, Fixed



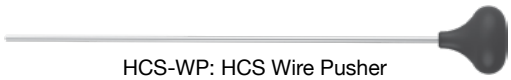
HCS-TPG: HCS Tissue Protector



DRLL-CDC-27: Drill, Quick Connect, 2.7mm Cannulated



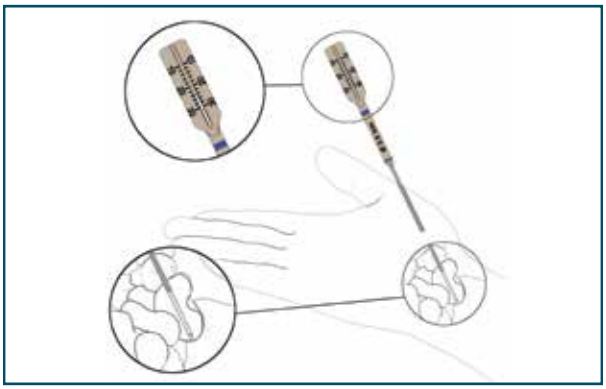
DRLL-CSK-35L: Drill, Countersink, 3.5mm Long, Cannulated



HCS-WP: HCS Wire Pusher

MEASURE SCREW LENGTH 3

To determine the screw length under radiographic guidance, pass the depth gauge over the k-wire to the intended position for the proximal end of the screw. The reading on the depth gauge at the end of the k-wire indicates the screw length needed to place the screw tip at the tip of the k-wire.



Note:
Select the appropriate depth gauge for the selected screw diameter to ensure proper depth gauge reading.

Option:
The system includes a universal depth gauge that can be helpful during open procedures with direct access to the bone surface.





DPGA-UNV-050: Depth Gauge, Universal, 50mm



VHCS-DGA-35L: HCS Depth Gauge, 3.5mm

INSERT SCREW & CONFIRM PLACEMENT 4

Insert the selected sized screw over the k-wire and thread into the bone. Verify proper reduction and screw placement with radiographic imaging. Remove the k-wire.

Confirm the proper placement of the screw using fluoroscopy.







DRVR-HCS-1420: HCS Driver, 3.5mm

REDUCT® 4.5mm HEADLESS COMPRESSION SCREW



K-Wire, Single Trocar, 1.4mm x 165mm

K-Wire, Double Trocar, 1.4mm x 165mm

Drill, Quick Disconnect, 3.7mm Cannulated



Drill, Countersink, 4.5mm, Cannulated



HCS Depth Gage, 4.5mm



HCS Driver, 4.5mm



REDUCT® 3.5mm HEADLESS COMPRESSION SCREW



K-Wire, Single Trocar, 1.4mm x 165mm

K-Wire, Double Trocar, 1.4mm x 165mm

Drill, Quick Connect, 2.7mm Cannulated



Drill, Countersink, 3.5mm Long, Cannulated



HCS Depth Gauge, 3.5mm



HCS Driver, 3.5mm



REDUCT® 2.5mm HEADLESS COMPRESSION SCREW



K-Wire, Single Trocar, 0.9mm x 152mm

K-Wire, Double Trocar, 0.9mm x 152mm

Drill, Quick Connect, 1.9mm Cannulated



Drill, Countersink, 2.7mm, Cannulated



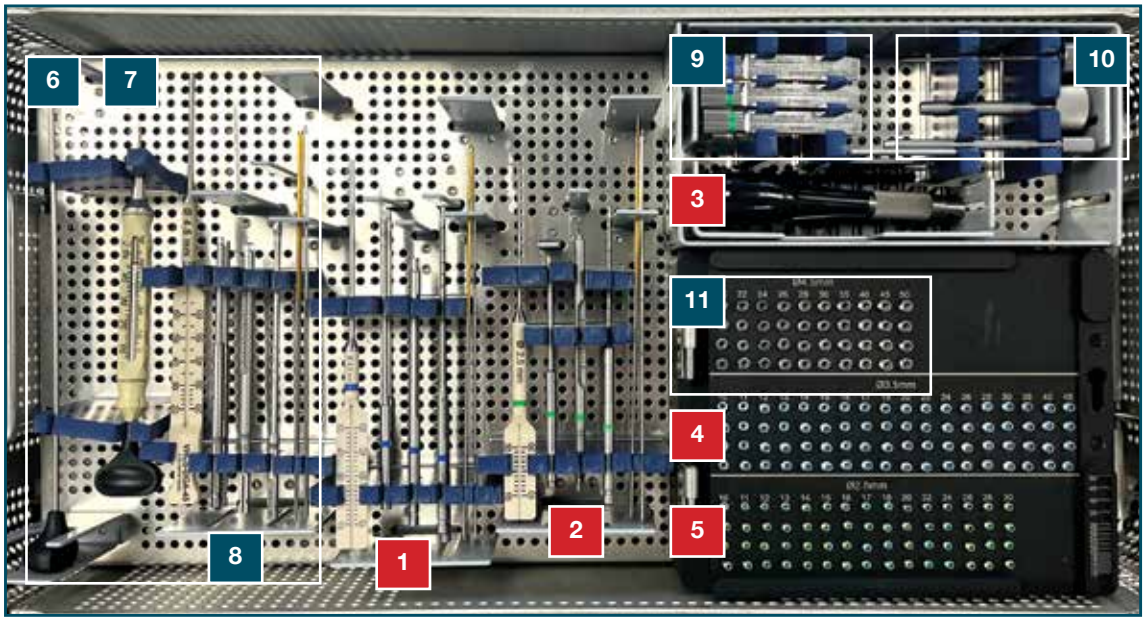
HCS Depth Gauge, 2.5mm



HCS Driver, 2.5mm



INSTRUMENT TRAY (Standard Configuration)



Loc#	Catalog#	Description
1	VHCS-DGA-35L	HCS Depth Gage, 3.5mm
	DRVR-HCS-1420	HCS Driver, 3.5mm
	DRLL-CSK-35L	Drill, Countersink, 3.5mm Long, Cannulated
	DRLL-CDC-27	Drill, Quick Connect, 2.7mm Cannulated
	KWIR-DT-09152	K-Wire, Double Trocar, 0.9mm x 152mm
	KWIR-ST-09152	K-Wire, Single Trocar, 0.9mm x 152mm
2	VHCS-DGA-25	HCS Depth Gage, 2.5mm
	DRVR-HCS-0915	HCS Driver, 2.5mm
	DRLL-CSK-27	Drill, Countersink, 2.7mm, Cannulated
	DRLL-CDC-19	Drill, Quick Connect, 1.9mm Cannulated
	KWIR-ST-14165	K-Wire, Single Trocar, 1.4mm x 165mm
	KWIR-DT-14165	K-Wire, Double Trocar, 1.4mm x 165mm
3	HNDL-SQC-FXD	Handle, Small QC, Fixed
4	HCS-35010	Screw, Headless Compression, 3.5mm x 10mm, Ti
	HCS-35011	Screw, Headless Compression, 3.5mm x 11mm, Ti
	HCS-35012	Screw, Headless Compression, 3.5mm x 12mm, Ti
	HCS-35013	Screw, Headless Compression, 3.5mm x 13mm, Ti
	HCS-35014	Screw, Headless Compression, 3.5mm x 14mm, Ti
	HCS-35015	Screw, Headless Compression, 3.5mm x 15mm, Ti
	HCS-35016	Screw, Headless Compression, 3.5mm x 16mm, Ti
	HCS-35017	Screw, Headless Compression, 3.5mm x 17mm, Ti
	HCS-35018	Screw, Headless Compression, 3.5mm x 18mm, Ti
	HCS-35020	Screw, Headless Compression, 3.5mm x 20mm, Ti
	HCS-35022	Screw, Headless Compression, 3.5mm x 22mm, Ti
	HCS-35024	Screw, Headless Compression, 3.5mm x 24mm, Ti
	HCS-35026	Screw, Headless Compression, 3.5mm x 26mm, Ti
	HCS-35028	Screw, Headless Compression, 3.5mm x 28mm, Ti
	HCS-35030	Screw, Headless Compression, 3.5mm x 30mm, Ti
	HCS-35035	Screw, Headless Compression, 3.5mm x 35mm, Ti
	HCS-35040	Screw, Headless Compression, 3.5mm x 40mm, Ti
	HCS-35045	Screw, Headless Compression, 3.5mm x 45mm, Ti
5	HCS-25010	Screw, Headless Compression, 2.5mm x 10mm, Ti
	HCS-25011	Screw, Headless Compression, 2.5mm x 11mm, Ti
	HCS-25012	Screw, Headless Compression, 2.5mm x 12mm, Ti
	HCS-25013	Screw, Headless Compression, 2.5mm x 13mm, Ti
	HCS-25014	Screw, Headless Compression, 2.5mm x 14mm, Ti
	HCS-25015	Screw, Headless Compression, 2.5mm x 15mm, Ti
	HCS-25016	Screw, Headless Compression, 2.5mm x 16mm, Ti
	HCS-25017	Screw, Headless Compression, 2.5mm x 17mm, Ti
	HCS-25018	Screw, Headless Compression, 2.5mm x 18mm, Ti
	HCS-25020	Screw, Headless Compression, 2.5mm x 20mm, Ti
	HCS-25022	Screw, Headless Compression, 2.5mm x 22mm, Ti
	HCS-25024	Screw, Headless Compression, 2.5mm x 24mm, Ti
	HCS-25026	Screw, Headless Compression, 2.5mm x 26mm, Ti
	HCS-25028	Screw, Headless Compression, 2.5mm x 28mm, Ti
	HCS-25030	Screw, Headless Compression, 2.5mm x 30mm, Ti

ONLY INCLUDED IN THE REDUCT® HCS SET

6	HCS-WP	HCS Wire Pusher
7	DPGA-UNV-050	Depth Gauge, Universal, 50mm
8	VHCS-DGA-45	HCS Depth Gage, 4.5
	DRVR-HCS-1425	HCS Driver, 4.5mm
	DRLL-CSK-45	Drill, Countersink, 4.5, Cannulated
	DRLL-CDC-37	Drill, Quick Disconnect, 3.7 Cannulated
	KWIR-DT-09152	K-Wire, Double Trocar, 0.9mm x 152mm
	KWIR-ST-09152	K-Wire, Single Trocar, 1.4mm x 165mm
9	HCS-PWG-01	HCS Parallel K-Wire Guide, 1
	HCS-PWG-02	HCS Parallel K-Wire Guide, 2
	HCS-PWG-03	HCS Parallel K-Wire Guide, 3
10	HCS-KWN	HCS K-Wire Needle
	HCS-TPO	HCS Obturator
	HCS-TPG	HCS Tissue Protector
11	HCS-45020	Screw, Headless Compression, 4.5mm x 20mm, Ti
	HCS-45022	Screw, Headless Compression, 4.5mm x 22mm, Ti
	HCS-45024	Screw, Headless Compression, 4.5mm x 24mm, Ti
	HCS-45026	Screw, Headless Compression, 4.5mm x 26mm, Ti
	HCS-45028	Screw, Headless Compression, 4.5mm x 28mm, Ti
	HCS-45030	Screw, Headless Compression, 4.5mm x 30mm, Ti
	HCS-45035	Screw, Headless Compression, 4.5mm x 35mm, Ti
	HCS-45040	Screw, Headless Compression, 4.5mm x 40mm, Ti
	HCS-45045	Screw, Headless Compression, 4.5mm x 45mm, Ti
	HCS-45050	Screw, Headless Compression, 4.5mm x 50mm, Ti

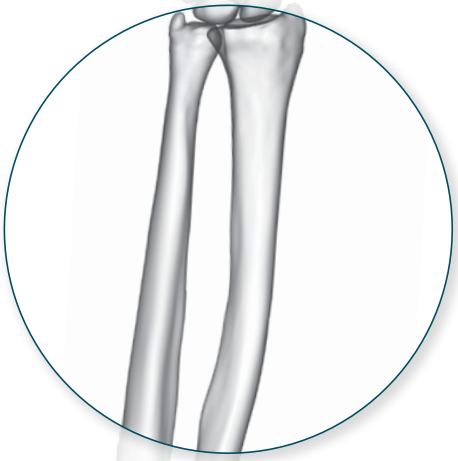
FRCP-BHL-RTP	Large Reduction Forceps *

* Not pictured

skeletal dynamics®

UNDERSTANDING THE UPPER EXTREMITY







CE 2797
MKT-00079-00RAI
December 2022

© 2022 Skeletal Dynamics

7300 North Kendall Drive, Suite 400, Miami, Florida 33156, 877-753-5396
Designed and Manufactured in the USA

EC REP
EMERGO EUROPE
Prinsessegracht 20
2514 AP The Hague
The Netherlands