

Zenex Multi & Plus Kit Zenex Simple Kit

Zenex Multi & Plus Kit

Zenex Simple Kit
All System

IZEN
I M P L A N T
Izenimplant Co.,Ltd.

IZ-CAT-05 Rev.00 (06/20)

HQ & Factory
1, 2Dong, 26-32, Suworam 4-gil, Seotan-myeon, Pyeongtaek-si,
Gyeonggi-do, Republic of Korea

Sales Office
#1013, #1014 Central-Tower II, 158, Magokseo-ro, Gangseo-gu, Seoul,
Republic of Korea
Tel. +82-2-3664-2882
Fax. +82-2-6455-0272

IZEN

www.izenimplant.com


IZEN
I M P L A N T
Izenimplant Co.,Ltd.

Z E N E X MULTI&PLUS K I T

012 Zenex Simple Kit I-System

024 Zenex Simple Kit T-System

036 Zenex Simple Kit R-System

A hand wearing a white surgical glove is holding a small, cylindrical dental implant component with a threaded top. The background is a light blue and white geometric pattern with diagonal lines.

IZEN Implant, innovative technology in pursuit of **bright smile**

Established in 2016 by developers and researchers who have spent more than 20 years on research and development in dental implants, IZEN Implant have working on developing innovative products to provide the best result to patients. We will continue to grow into a company that meets customers' needs with safe and excellent products made of trust and continuous research and development.

IZEN Implant provides more convenient, stable, and optimized implant system by building product line-up with high-end technology of Zenex Multi and Zenex Plus.

Certification



History & Global Network



2016. 03

Foundation of IZEN Implant

2016. 06

Acquisition of manufacturing licenses for medical devices
Report medical device items
(Screw driver for dental implant surgery)

2016. 12

Patent registration
(Driver holder and driver apparatus for dental engineering, No. 10-1684959)

2017. 03

Patent registration
(Driver holder for dental apparatus, No. 10-1714533, No. 10-1714541)

2018. 08

Venture Business Certificate
(No. 20180110278)

2018. 09

Foundation of Corporate
Affiliated Research Institute (No. 2018114470)

2019. 06

Acquisition of small businesses
technology development project
(Development of Dental implant abutments and scan body for dental digital system)

2019.12

Patent registration
(Abutment and dental implant, No. 10-2062575)



IZEN

IMPLANT

Your companion armed with active
and flexible ideas for your satisfaction.

2017. 09

Registration of medical devices
(Apparatus for dental implant
surgery)

2018. 03

Certification of medical
device items compliance with
manufacturing and quality
control standards (KGMP)

2018. 04

Medical Device Item Certification
(Dental implant abutments)

2018. 07

Acquisition of ISO 9001 : 2015

2020. 01

Medical Device Item
Certification
(Orthodontic Screw)

2020. 12

Medical Device Item
Certification
(Dental implant abutments)

2021. 01

Patent registration
(Implant Lab Analog,
No. 10-2209274)

2021.05

Acquisition of ISO13485:
2016 & CE MDD

Kit Contents

ZENEX
SIMPLE KIT
I-System
012



Guide
Drill
014



Lindemann
Drill
014



Drill
Extension
015



Twist
Drill
015



Drill
Stopper
016



Cortical
Drill
016



Direction
Pin
017



Parallel
Pin
017



Fixture
Driver
018



1.2 Hex
Driver
018



Torque
Wrench
019



Depth
Gauge
019



ZENEX
SIMPLE KIT
T-System
024



Guide
Drill
026



Lindemann
Drill
026



Drill
Extension
027



Twist
Drill
027



Drill
Stopper
028



Cortical
Drill
028



Direction
Pin
029



Parallel
Pin
029



Fixture
Driver
030



1.2 Hex
Driver
030



Torque
Wrench
031



Depth
Gauge
031



ZENEX
SIMPLE KIT
R-System
035



Guide
Drill
038



Lindemann
Drill
038



Drill
Extension
039



Twist
Drill
039



Drill
Stopper
040



Cortical
Drill
040



Direction
Pin
041



Parallel
Pin
041



Fixture
Driver
042



1.2 Hex
Driver
042



Torque
Wrench
043



Depth
Gauge
043



010 ZENEX
KIT

IZEN
I M P L A N T

ZENEX SIMPLE KIT I-SYSTEM

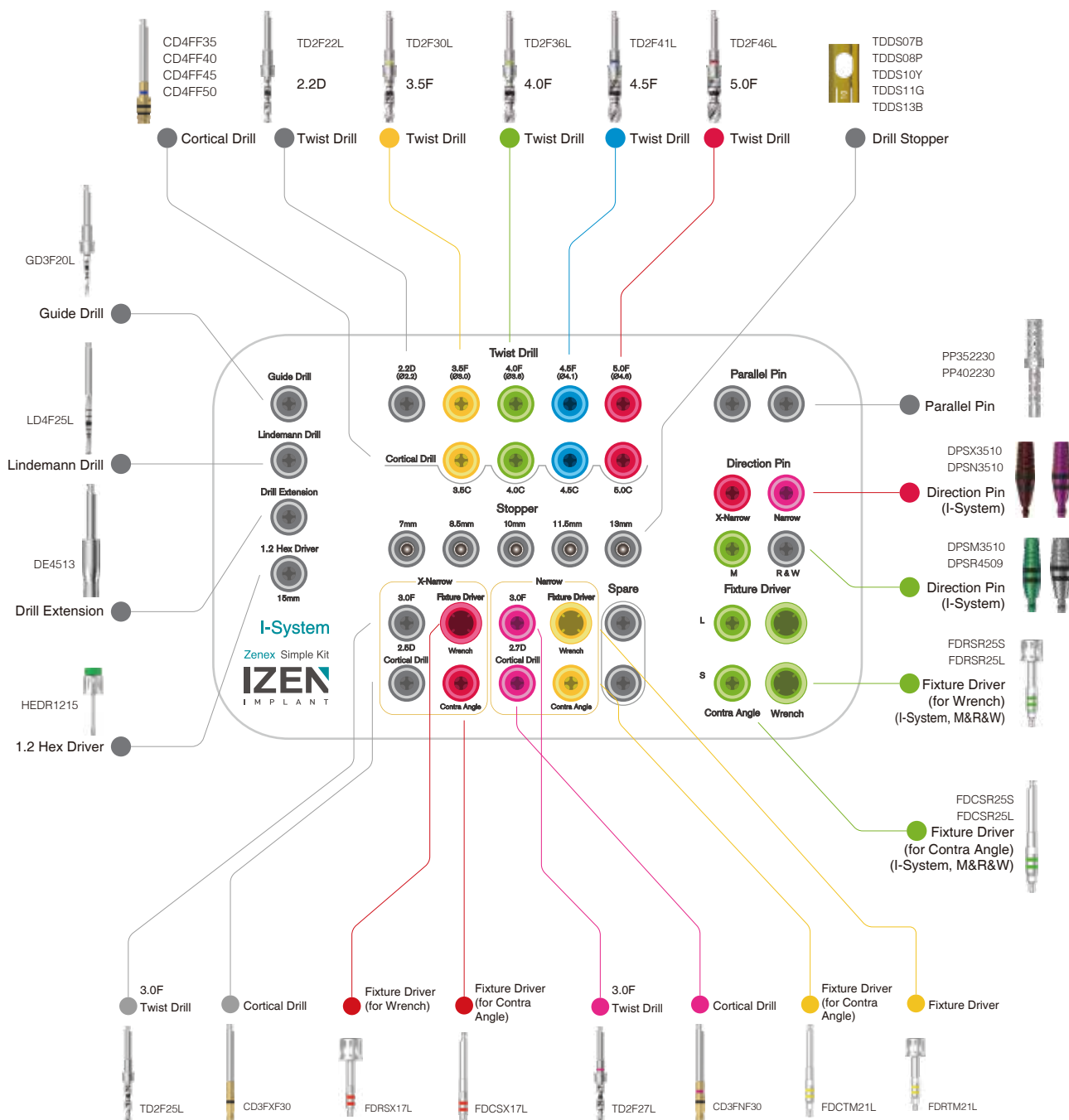
ZENEX SIMPLE KIT I-System



ZENEX SIMPLE KIT I-System

Note : All components are separately packed with kit tray

Composition on lower kit tray



013
ZENEX
KIT

ZENEX SIMPLE KIT I-System Instruments

Guide Drill

- Drill to mark base hole on the bone for easy initial drilling
- Available to control drilling depth by using with stopper
- Product Code in the Kit: GD3F20L

D
(mm) Ø1.5 / Ø2.0

Long

GD3F20L



014 ZENEX
KIT

Lindemann Drill

- Outward blades allow side cutting during drilling
- Available to use when removing ridge part of extraction socket
- Product Code in the Kit: LD4F25L

D
(mm) Ø2.0 / Ø2.5

Long

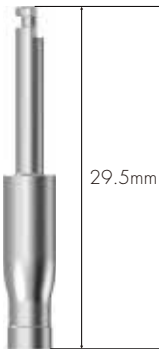
LD4F25L



Drill Extension

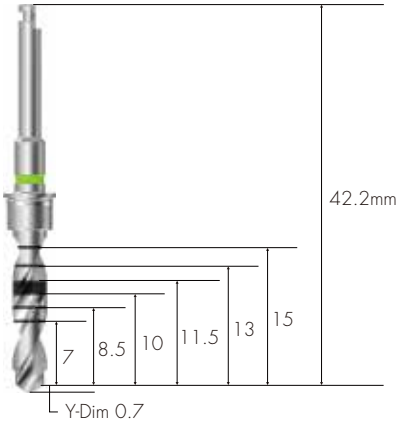
- Lengthen surgical instrument in use by connecting to drill and Implant motor
- Be sure to use after accurate connection to prevent product detachment or bending that connected to Drill Extension

DE4513



Twist Drill

- Straight drill to shorten surgery steps
- Available to drill to desired depth by attaching stopper (marking line matches with stopper connection)
- Be sure to use stopper since depth control may be difficult due to excellent cutting power.
- Drill of 3.0F (Ø2.2/ 2.5) is applied only for X-Narrow of ZENEX PLUS I-System. (Product code in the Kit : TD2F25L)
- Drill of 3.0F (Ø2.2/ 2.7) is applied only for Narrow of ZENEX MULTI I-System. (Product code in the Kit : TD2F27L)

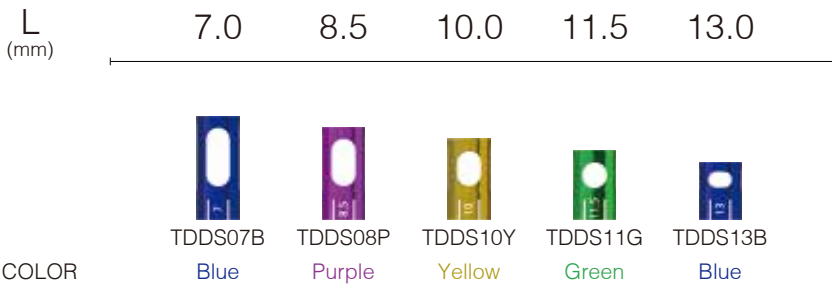


015
ZENEX
KIT

D (mm)	2.2D (Ø1.8/ Ø2.2)	3.0F (Ø2.2 / Ø2.5)	3.0F (Ø2.2 / Ø2.7)	3.5F (Ø2.2 / Ø3.0)
	TD2F22L	TD2F25L	TD2F27L	TD2F30L
	4.0F (Ø3.0 / Ø3.6)	4.5F (Ø3.0 / Ø3.6 / Ø4.1)	5.0F (Ø3.0 / Ø4.1 / Ø4.6)	
	TD2F36L	TD2F41L	TD2F46L	

Drill Stopper

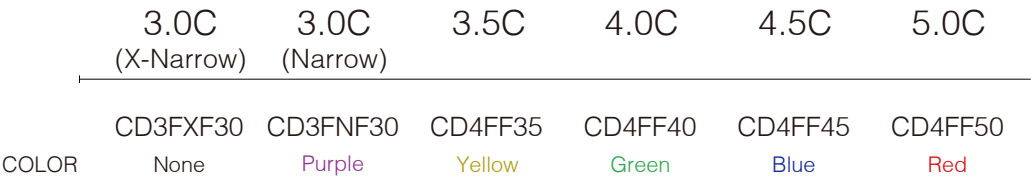
- Indicated number on each stopper means exposed length, excluding head of drill (Y-Dim) when connected to drill
- Differentiate color by length for easy identification



016 ZENEX KIT





Cortical Drill

- Drill used for removing cortical bone from hard bone
- Drill to the bottom of each marking line
- The lower marking line is for drilling on normal bone and the upper marking line is for drilling on hard bone



Direction Pin

- Confirm gingiva height and path after implant placement
- DPSR4509: Available to use in case of ZENEX I-System (Regular & Wide) and ZENEX T-System (Regular & Wide)

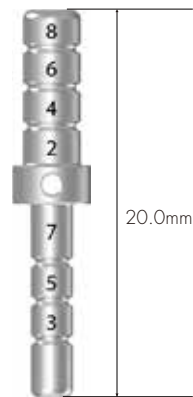
	X-Narrow (Ø3.5)	Narrow (Ø3.5)	Mini (Ø3.5)	R/W (Ø4.5)
				
	DPSX3510	DPSN3510	DPSM3510	DPSR4509
COLOR	Red	Purple	Green	Metal

- For ZENEX MULTI I-System (based on connection): Narrow, Mini, Regular & Wide
- For ZENEX PLUS I-System (based on connection): X-Narrow, Mini, Regular & Wide

Parallel Pin

- Used for confirmation of drilling depth and path
- Available to use after drilling with Ø2.2 Drill and Ø3.0 drill
- Composition in the kit: PP352230 (1 ea) + PP402230 (1 ea)

D (mm)	Ø3.5	Ø4.0
	PP352230	PP402230



ZENEX SIMPLE KIT I-System Instruments

Fixture Driver

- For Contra Angle: Directly attached to fixture by connecting to handpiece when using Implant motor
- For Wrench: Directly attached to fixture by using Torque Wrench
- Two-staged coloring enables measurement up to 5mm height at 1mm intervals
- Be sure to use after accurate connection because once used with incorrectly connected driver, it is impossible to remove fixture.
- Be sure to use accurate fixture driver according to the system of fixture.
- ※ Fixture Driver for Narrow of ZENEX MULTI I-System: Same with Mini of ZENEX T-System (Optional)
- ※ Code not included in the FDCSX17S, FDRSX17S, All four drivers for Narrow of ZENEX MULTI I-System (FDCTM21S, FDCTM21L, FDRTM21S, FDRTM21L)

Contra Angle



X-Narrow Narrow M/R/W

Wrench



X-Narrow Narrow M/R/W

Short

Long

COLOR

FDCSX17L

Red

FDCTM21L

Yellow

FDCSR25S

FDCSR25L

Green

FDRSX17L

Red

FDRTM21L

Yellow

FDRSR25S

FDRSR25L

Green

- For ZENEX MULTI I-System (based on connection): Narrow, Mini, Regular & Wide
- For ZENEX PLUS I-System (based on connection): X-Narrow, Mini, Regular & Wide

1.2 Hex Driver

- Driver for connecting with Torque Wrench
- Used for connecting to cover screw and surgical instrument with 1.2 Hex
- Follow recommended tightening torque calculation value
- Be sure to check transformation of Hex tip before use

L
(mm)

15.0

HEDR1215



Torque Wrench

- Used for placing fixture and tightening implant abutments and screws
- Confirm torque calculation value by pulling the bar to be aligned with the marked line
- Recommended to use by pressing head to prevent detachment of Torque Wrench and surgical instruments



TW60B

Depth Gauge

- Measuring drilling depth
- Measurable depth: 6~20mm

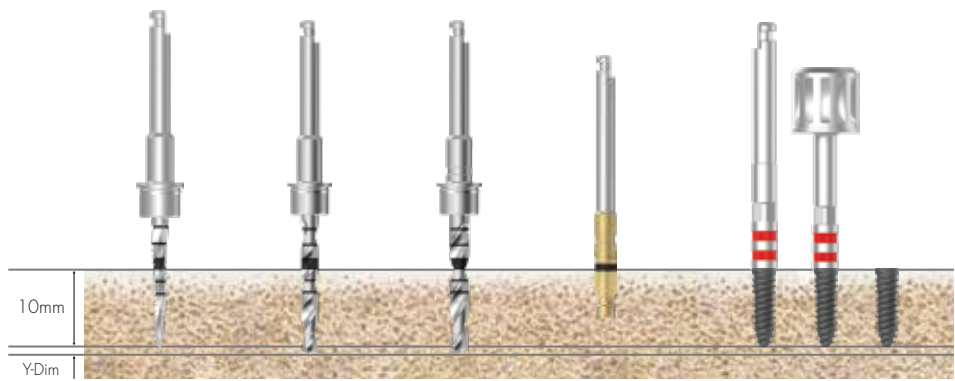


DG1720

Drilling Sequence

Ø 3.0mm Fixture

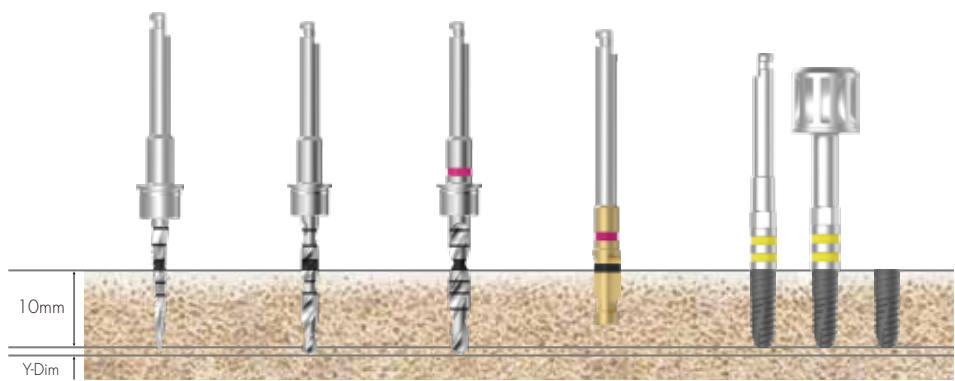
(ZENEX PLUS I-System X-Narrow)



Bone Quality	Guide Drill	Twist Drill (Ø2.2)	Twist Drill (Ø2.5)	Cortical Drill	Ø3.0 Fixture
Soft	▶	▶			Implant Placement
Normal	▶	▶	▶		
Hard	▶	▶	▶	▶	

Ø 3.0mm Fixture

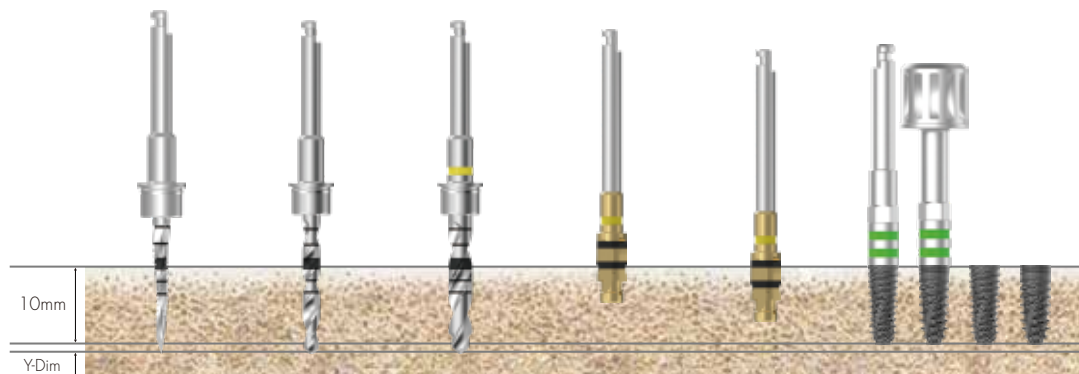
(ZENEX MULTI I-System Narrow)



Bone Quality	Guide Drill	Twist Drill (Ø2.2)	Twist Drill (Ø2.7)	Cortical Drill	Ø3.0 Fixture
Soft	▶	▶			Implant Placement
Normal	▶	▶	▶		
Hard	▶	▶	▶	▶	

Ø 3.5mm Fixture

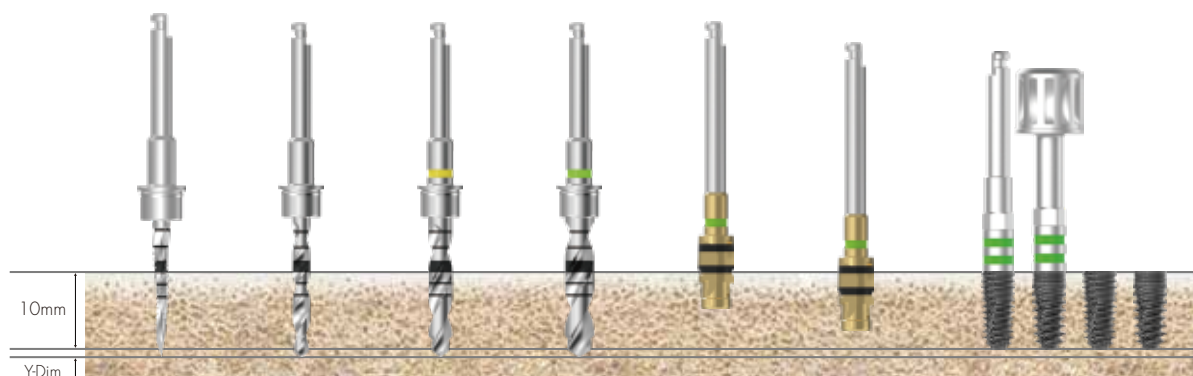
(ZENEX MULTI & PLUS I-System Mini)



Bone Quality	Guide Drill	Twist Drill (Ø2.2)	Twist Drill (Ø3.0)	Cortical Drill (Lower Line)	Cortical Drill (Upper Line)	Ø3.5 Fixture
Soft	▶	▶	▶			Implant Placement
Normal	▶	▶	▶	▶		
Hard	▶	▶	▶		▶	

Ø 4.0mm Fixture

(ZENEX MULTI & PLUS I-System Regular)

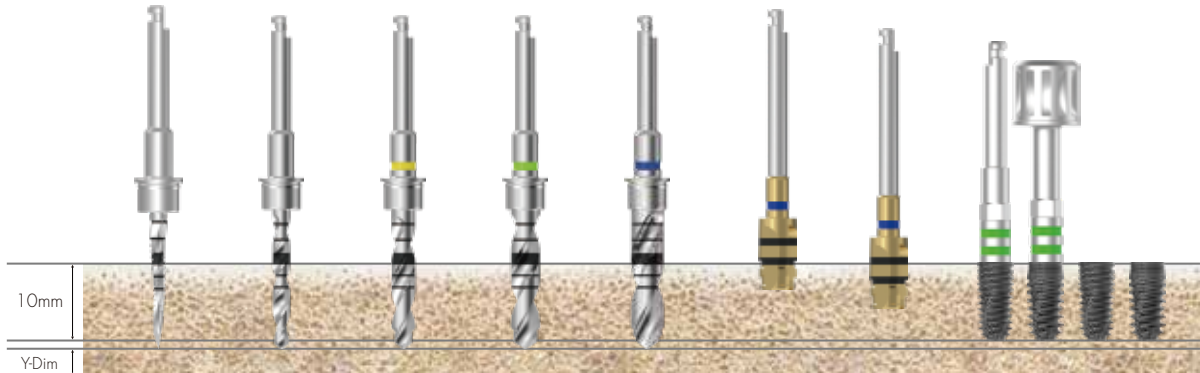


Bone Quality	Guide Drill	Twist Drill (Ø2.2)	Twist Drill (Ø3.0)	Twist Drill (Ø3.6)	Cortical Drill (Lower Line)	Cortical Drill (Upper Line)	Ø4.0 Fixture
Soft	▶	▶	▶	▶			Implant Placement
Normal	▶	▶	▶	▶	▶		
Hard	▶	▶	▶	▶		▶	

Drilling Sequence

Ø 4.5mm Fixture

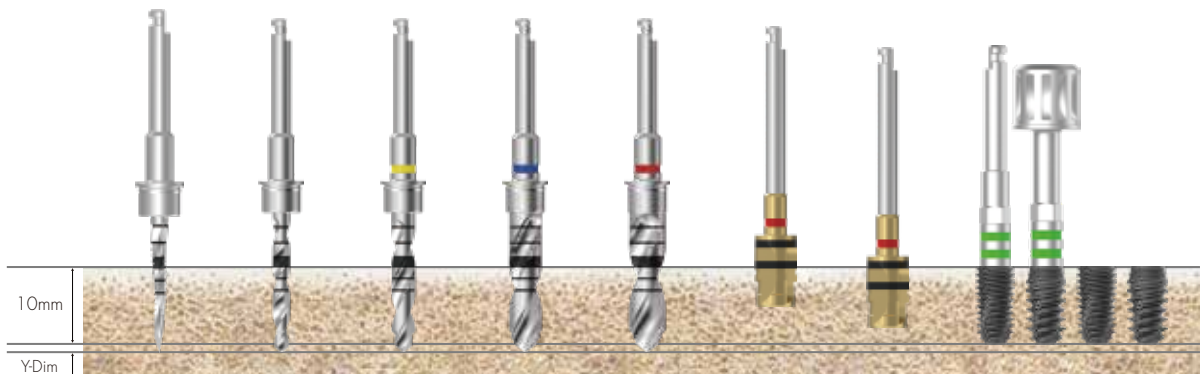
(ZENEX MULTI & PLUS I-System Regular)



Bone Quality	Guide Drill	Twist Drill (Ø2.2)	Twist Drill (Ø3.0)	Twist Drill (Ø3.6)	Twist Drill (Ø4.1)	Cortical Drill (Lower Line)	Cortical Drill (Upper Line)	Ø4.5 Fixture
Soft	▶	▶	▶	▶	▶			Implant Placement
Normal	▶	▶	▶	▶	▶	▶		
Hard	▶	▶	▶	▶	▶		▶	

Ø 5.0mm Fixture

(ZENEX MULTI & PLUS I-System Wide)



Bone Quality	Guide Drill	Twist Drill (Ø2.2)	Twist Drill (Ø3.0)	Twist Drill (Ø4.1)	Twist Drill (Ø4.6)	Cortical Drill (Lower Line)	Cortical Drill (Upper Line)	Ø5.0 Fixture
Soft	▶	▶	▶	▶	▶			Implant Placement
Normal	▶	▶	▶	▶	▶	▶		
Hard	▶	▶	▶	▶	▶		▶	

ZENEX SIMPLE KIT T-SYSTEM

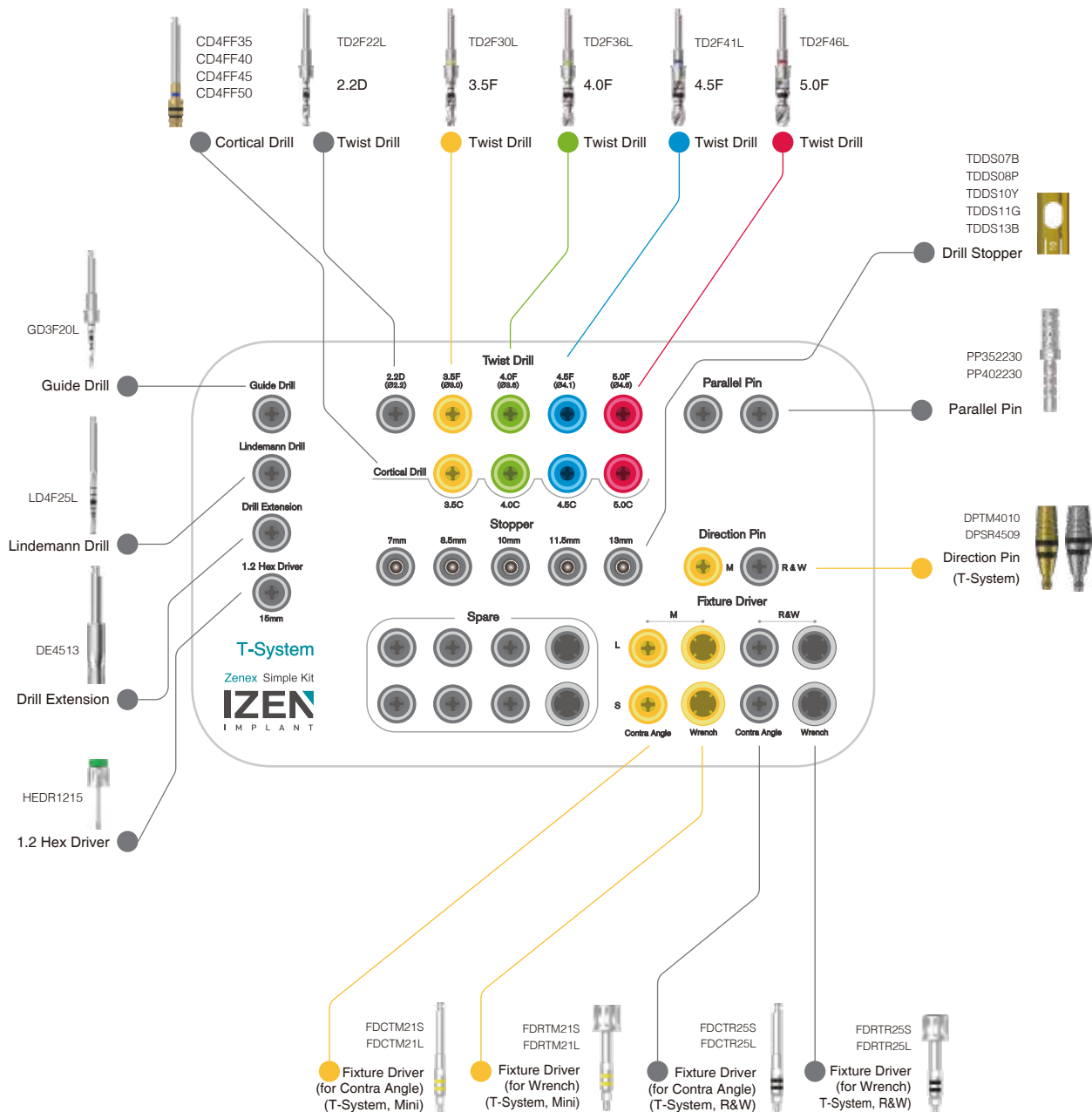
ZENEX SIMPLE KIT T-System

024 ZENEX
KIT

ZENEX SIMPLE KIT T-System

Note : All components are separately packed with kit tray

Composition on lower kit tray



025
ZENEX
KIT

ZENEX SIMPLE KIT T-System Instruments

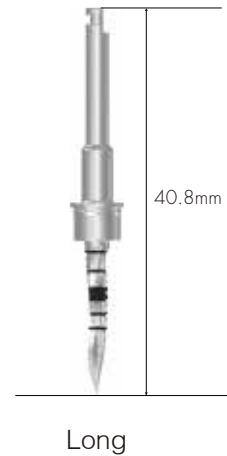
Guide Drill

- Drill to mark base hole on the bone for easy initial drilling
- Available to control drilling depth by using with stopper
- Product Code in the Kit: GD3F20L

D
(mm) Ø1.5 / Ø2.0

Long

GD3F20L



026 ZENEX
KIT

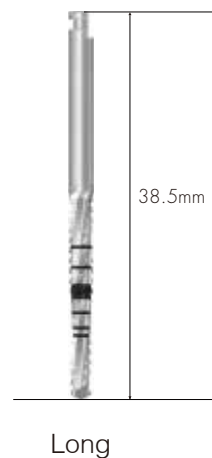
Lindemann Drill

- Outward blades allow side cutting during drilling
- Available to use when removing ridge part of extraction socket
- Product Code in the Kit: LD4F25L

D
(mm) Ø2.0 / Ø2.5

Long

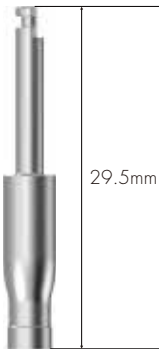
LD4F25L



Drill Extension

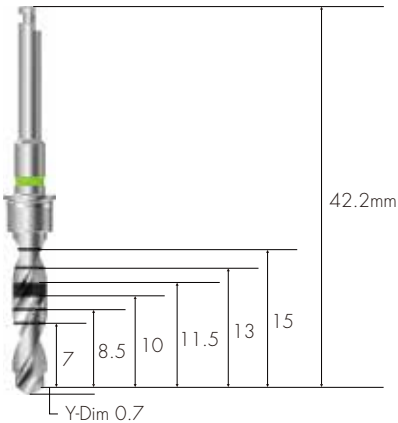
- Lengthen surgical instrument in use by connecting to drill and Implant motor
- Be sure to use after accurate connection to prevent product detachment or bending that connected to Drill Extension

DE4513



Twist Drill

- Straight drill to shorten surgery steps
- Available to drill to desired depth by attaching stopper (marking line matches with stopper connection)
- Be sure to use stopper since depth control may be difficult due to excellent cutting power.



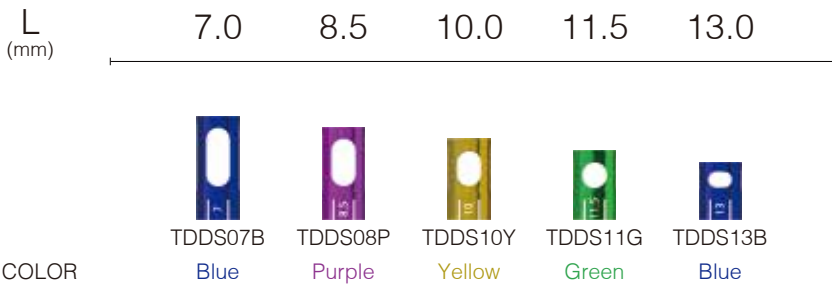
027
ZENEX
KIT

D (mm)	2.2D (Ø1.8/ Ø2.2)	3.5F (Ø2.2 / Ø3.0)	4.0F (Ø3.0 / Ø3.6)
	TD2F22L	TD2F30L	TD2F36L

D (mm)	4.5F (Ø3.0 / Ø3.6 / Ø4.1)	5.0F (Ø3.0 / Ø4.1 / Ø4.6)
	TD2F41L	TD2F46L

Drill Stopper

- Indicated number on each stopper means exposed length, excluding head of drill (Y-Dim) when connected to drill
- Differentiate color by length for easy identification



028
ZENEX
KIT

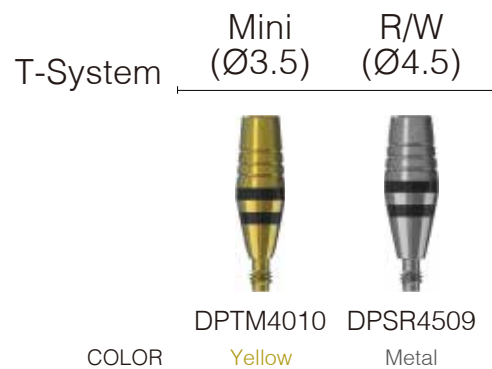
Cortical Drill

- Drill used for removing cortical bone from hard bone
- Drill to the bottom of each marking line
- The lower marking line is for drilling on normal bone and the upper marking line is for drilling on hard bone



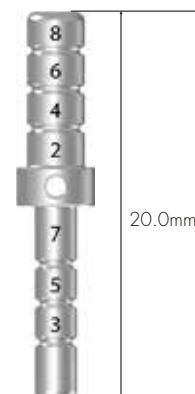
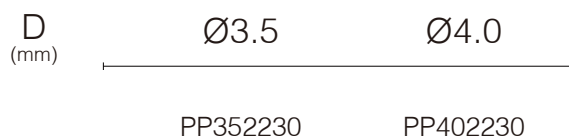
Direction Pin

- Confirm gingiva height and path after implant placement
- DPSR4509: Available to use in case of ZENEX I-System (Regular & Wide) and ZENEX T-System (Regular & Wide)



Parallel Pin

- Used for confirmation of drilling depth and path
- Available to use after drilling with Ø2.2 Drill and Ø3.0 drill
- Composition in the kit: PP352230 (1 ea) + PP402230 (1 ea)



Fixture Driver

- For Contra Angle: Directly attached to fixture by connecting to handpiece when using Implant motor
- For Wrench: Directly attached to fixture by using Torque Wrench
- Two-staged coloring enables measurement up to 5mm height at 1mm intervals
- Be sure to use after accurate connection because once used with incorrectly connected driver, it is impossible to remove fixture.
- Be sure to use accurate fixture driver according to the system of fixture.

T-System

Contra Angle



Mini

R/W

Wrench



Mini

R/W

Short

Long

COLOR

FDCTM21S

FDCTR25S

FDCTM21L

FDCTR25L

Yellow

Black

FDRTM21S

FDRTR25S

FDRTM21L

FDRTR25L

Yellow

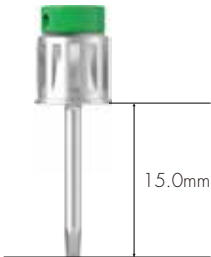
Black

1.2 Hex Driver

- Driver for connecting with Torque Wrench
- Used for connecting to cover screw and surgical instrument with 1.2 Hex
- Follow recommended tightening torque calculation value
- Be sure to check transformation of Hex tip before use

L
(mm) 15.0

HEDR1215



Torque Wrench

- Used for placing fixture and tightening implant abutments and screws
- Confirm torque calculation value by pulling the bar to be aligned with the marked line
- Recommended to use by pressing head to prevent detachment of Torque Wrench and surgical instruments



TW60B

Depth Gauge

- Measuring drilling depth
- Measurable depth: 6~20mm

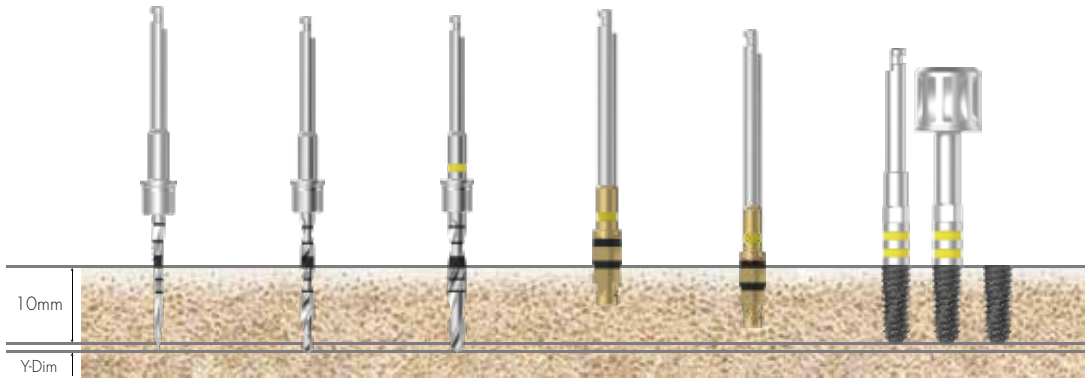


DG1720

Drilling Sequence

Ø 3.5mm Fixture

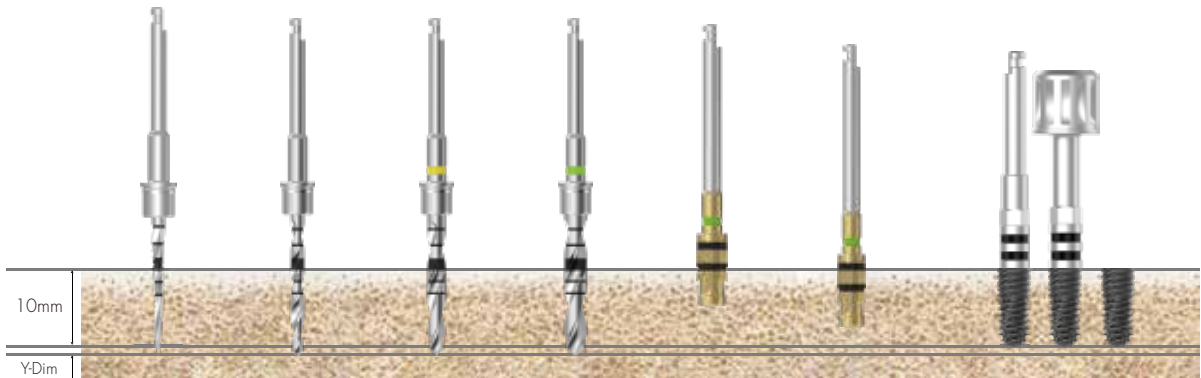
(ZENEX MULTI T-System Mini)



Bone Quality	Guide Drill	Twist Drill (Ø2.2)	Twist Drill (Ø3.0)	Cortical Drill (Lower Line)	Cortical Drill (Upper Line)	Ø3.5 Fixture
Soft	▶	▶	▶			Implant Placement
Normal	▶	▶	▶	▶		
Hard	▶	▶	▶		▶	

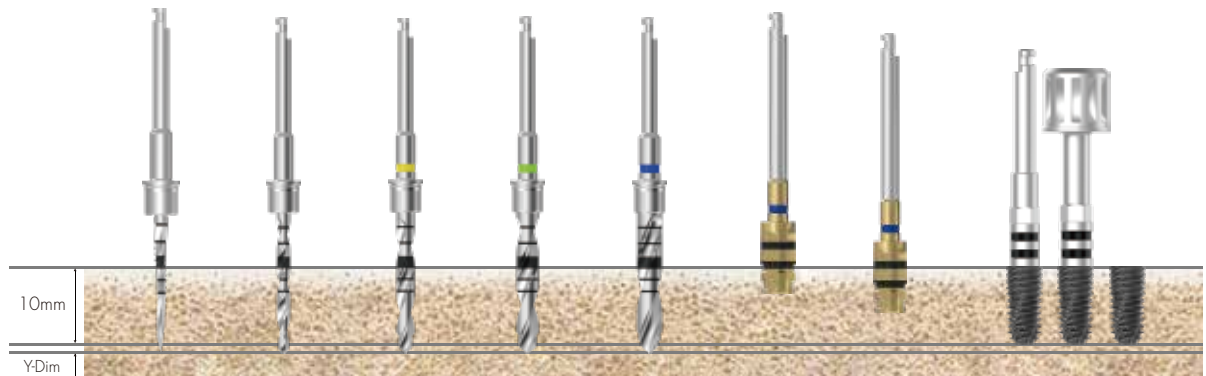
Ø 4.0mm Fixture

(ZENEX MULTI T-System Regular)



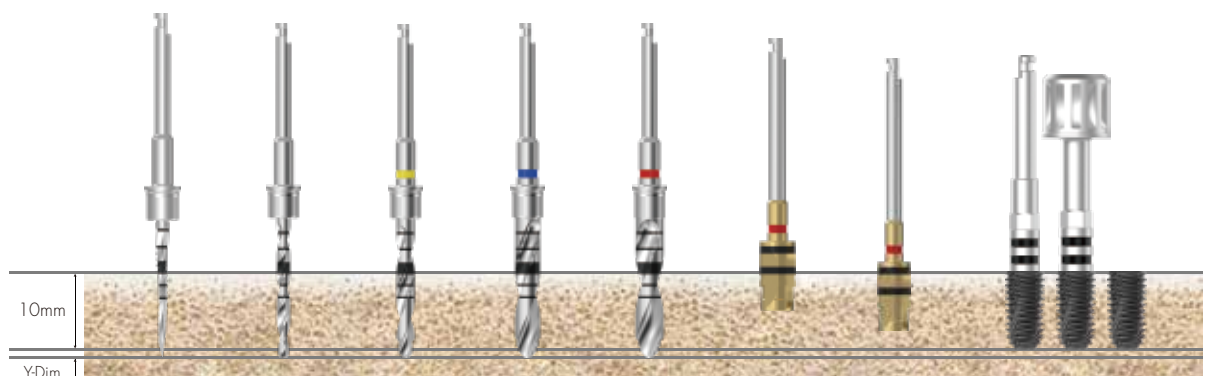
Bone Quality	Guide Drill	Twist Drill (Ø2.2)	Twist Drill (Ø3.0)	Twist Drill (Ø3.6)	Cortical Drill (Lower Line)	Cortical Drill (Upper Line)	Ø4.0 Fixture
Soft	▶	▶	▶	▶			Implant Placement
Normal	▶	▶	▶	▶	▶		
Hard	▶	▶	▶	▶		▶	

Ø 4.5mm Fixture (ZENEX MULTI T-System Regular)



Bone Quality	Guide Drill	Twist Drill (Ø2.2)	Twist Drill (Ø3.0)	Twist Drill (Ø3.6)	Twist Drill (Ø4.1)	Cortical Drill (Lower Line)	Cortical Drill (Upper Line)	Ø4.5 Fixture
Soft	▶	▶	▶	▶	▶			Implant Placement
Normal	▶	▶	▶	▶	▶	▶		
Hard	▶	▶	▶	▶	▶		▶	

Ø 5.0mm Fixture (ZENEX MULTI T-System Wide)



Bone Quality	Guide Drill	Twist Drill (Ø2.2)	Twist Drill (Ø3.0)	Twist Drill (Ø4.1)	Twist Drill (Ø4.6)	Cortical Drill (Lower Line)	Cortical Drill (Upper Line)	Ø5.0 Fixture
Soft	▶	▶	▶	▶	▶			Implant Placement
Normal	▶	▶	▶	▶	▶	▶		
Hard	▶	▶	▶	▶	▶		▶	

IZEN

I M P L A N T

ZENEX SIMPLE KIT R-SYSTEM

ZENEX SIMPLE KIT R-System

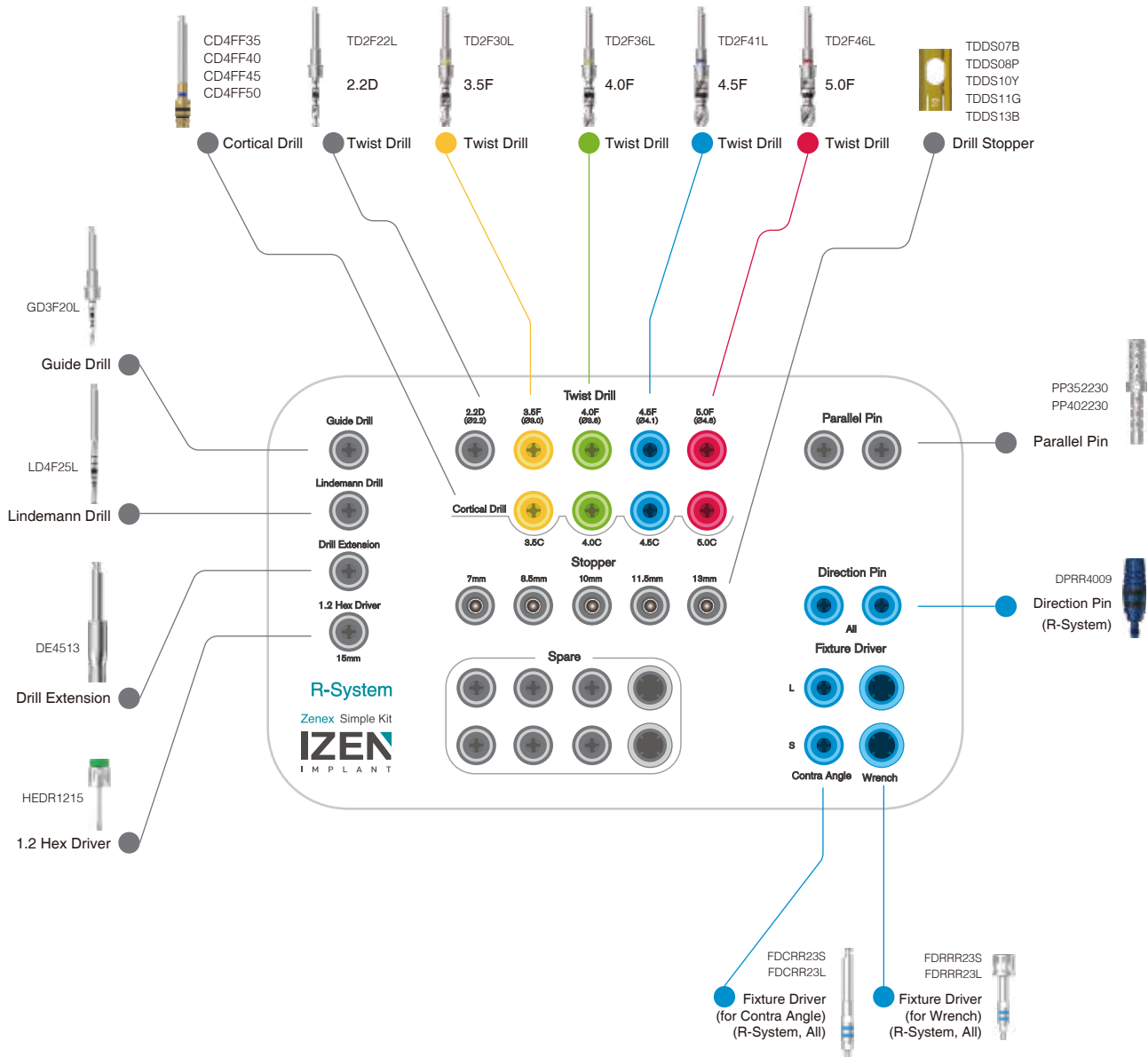
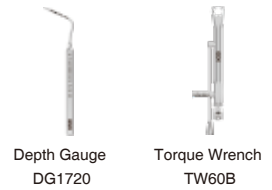


036 ZENEX
KIT

ZENEX SIMPLE KIT R-System

Note : All components are separately packed with kit tray

Composition on lower kit tray



037
ZENEX
KIT

ZENEX SIMPLE KIT R-System Instruments

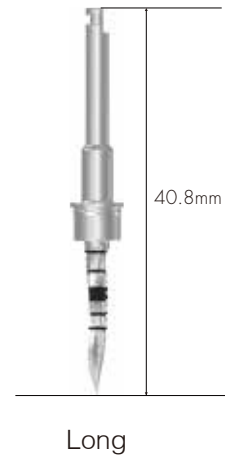
Guide Drill

- Drill to mark base hole on the bone for easy initial drilling
- Available to control drilling depth by using with stopper
- Product Code in the Kit: GD3F20L

D
(mm) Ø1.5 / Ø2.0

Long

GD3F20L



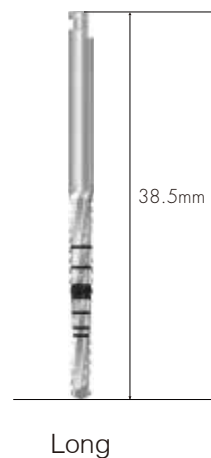
Lindemann Drill

- Outward blades allow side cutting during drilling
- Available to use when removing ridge part of extraction socket
- Product Code in the Kit: LD4F25L

D
(mm) Ø2.0 / Ø2.5

Long

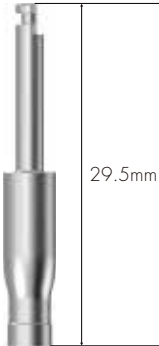
LD4F25L



Drill Extension

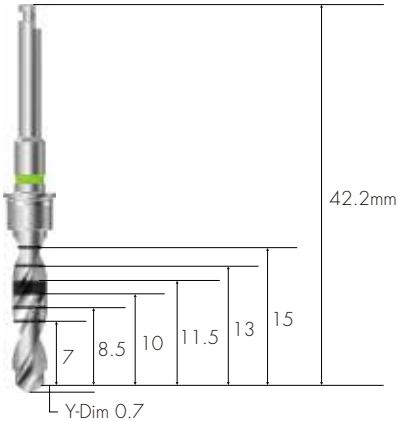
- Lengthen surgical instrument in use by connecting to drill and Implant motor
- Be sure to use after accurate connection to prevent product detachment or bending that connected to Drill Extension

DE4513



Twist Drill

- Straight drill to shorten surgery steps
- Available to drill to desired depth by attaching stopper (marking line matches with stopper connection)
- Be sure to use stopper since depth control may be difficult due to excellent cutting power.



039
ZENEX
KIT

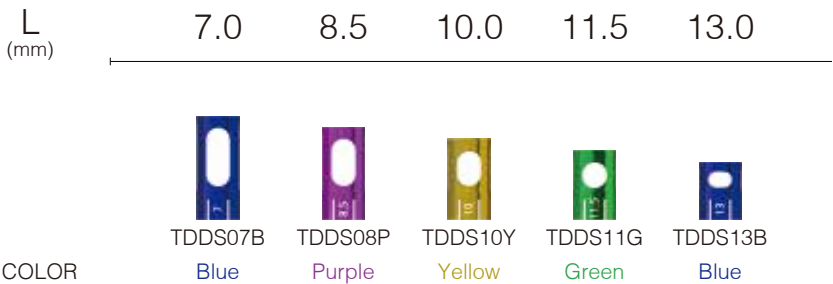
D (mm)	2.2D (Ø1.8/ Ø2.2)	3.5F (Ø2.2 / Ø3.0)	4.0F (Ø3.0 / Ø3.6)
	TD2F22L	TD2F30L	TD2F36L

D (mm)	4.5F (Ø3.0 / Ø3.6 / Ø4.1)	5.0F (Ø3.0 / Ø4.1 / Ø4.6)
	TD2F41L	TD2F46L

ZENEX SIMPLE KIT R-System Instruments

Drill Stopper

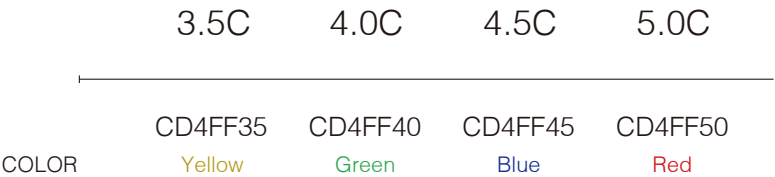
- Indicated number on each stopper means exposed length, excluding head of drill (Y-Dim) when connected to drill
- Differentiate color by length for easy identification



040 ZENEX KIT

Cortical Drill

- Drill used for removing cortical bone from hard bone
- Drill to the bottom of each marking line
- The lower marking line is for drilling on normal bone and the upper marking line is for drilling on hard bone



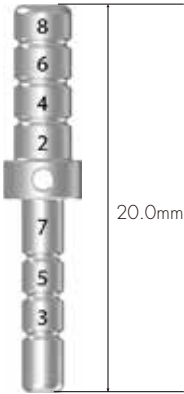
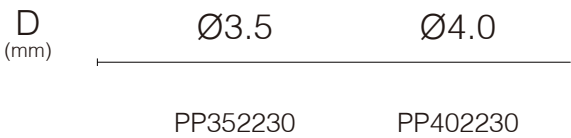
Direction Pin

- Confirm gingiva height and path after implant placement



Parallel Pin

- Used for confirmation of drilling depth and path
- Available to use after drilling with Ø2.2 Drill and Ø3.0 drill
- Composition in the kit: PP352230 (1 ea) + PP402230 (1 ea)



ZENEX SIMPLE KIT R-System Instruments

Fixture Driver

- For Contra Angle: Directly attached to fixture by connecting to handpiece when using Implant motor
- For Wrench: Directly attached to fixture by using Torque Wrench
- Two-staged coloring enables measurement up to 5mm height at 1mm intervals
- Be sure to use after accurate connection because once used with incorrectly connected driver, it is impossible to remove fixture.
- Be sure to use accurate fixture driver according to the system of fixture.

R-System

Contra Angle



M/R/W

Short
Long

COLOR

FDCRR23S

FDCRR23L

Blue

Wrench



M/R/W

FDRRR23S

FDRRR23L

Blue

042
ZENEX
KIT

1.2 Hex Driver

- Driver for connecting with Torque Wrench
- Used for connecting to cover screw and surgical instrument with 1.2 Hex
- Follow recommended tightening torque calculation value
- Be sure to check transformation of Hex tip before use

L
(mm) 15.0

HEDR1215



Torque Wrench

- Used for placing fixture and tightening implant abutments and screws
- Confirm torque calculation value by pulling the bar to be aligned with the marked line
- Recommended to use by pressing head to prevent detachment of Torque Wrench and surgical instruments



TW60B

Depth Gauge

- Measuring drilling depth
- Measurable depth: 6~20mm

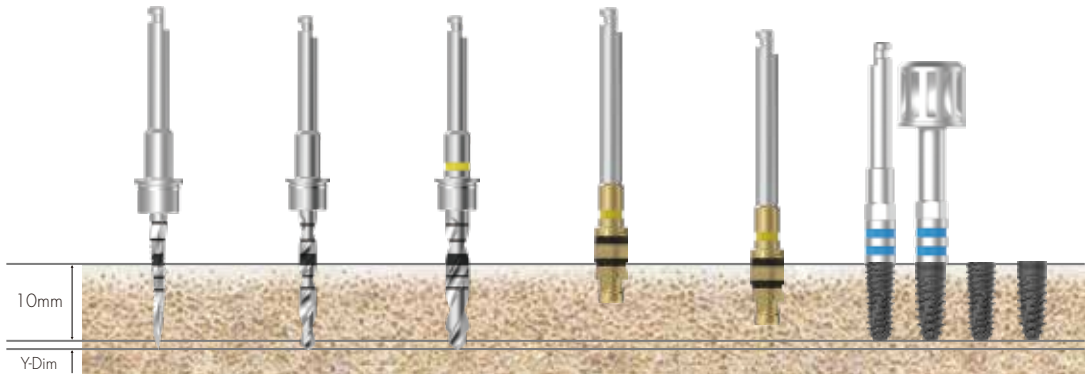


DG1720

Drilling Sequence

Ø 3.5mm Fixture

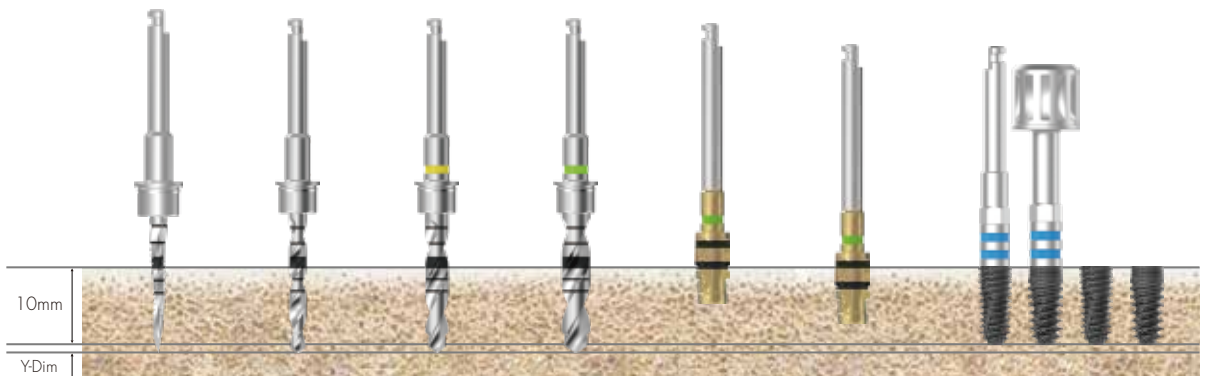
(ZENEX MULTI & PLUS R-System Mini)



Bone Quality	Guide Drill	Twist Drill (Ø2.2)	Twist Drill (Ø3.0)	Cortical Drill (Lower Line)	Cortical Drill (Upper Line)	Ø3.5 Fixture
Soft	▶	▶	▶			Implant Placement
Normal	▶	▶	▶	▶		
Hard	▶	▶	▶		▶	

Ø 4.0mm Fixture

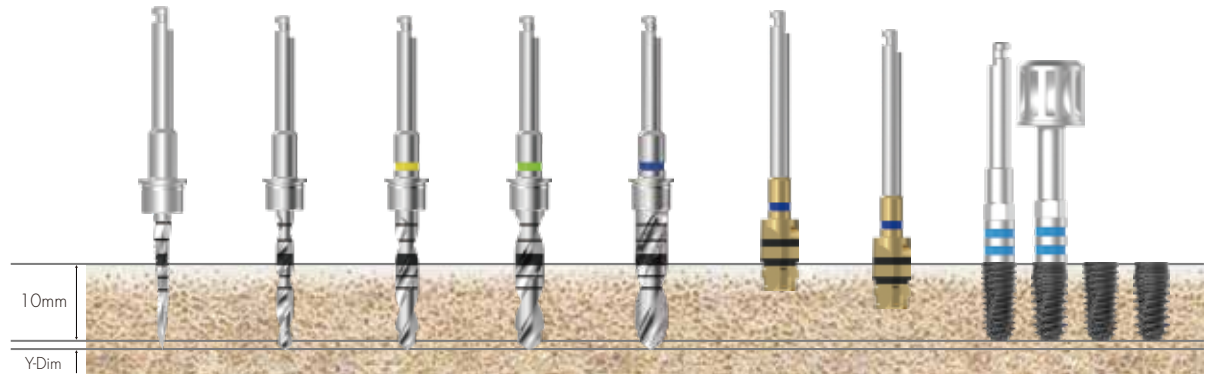
(ZENEX MULTI & PLUS R-System Regular)



Bone Quality	Guide Drill	Twist Drill (Ø2.2)	Twist Drill (Ø3.0)	Twist Drill (Ø3.6)	Cortical Drill (Lower Line)	Cortical Drill (Upper Line)	Ø4.0 Fixture
Soft	▶	▶	▶	▶			Implant Placement
Normal	▶	▶	▶	▶	▶		
Hard	▶	▶	▶	▶		▶	

Ø 4.5mm Fixture

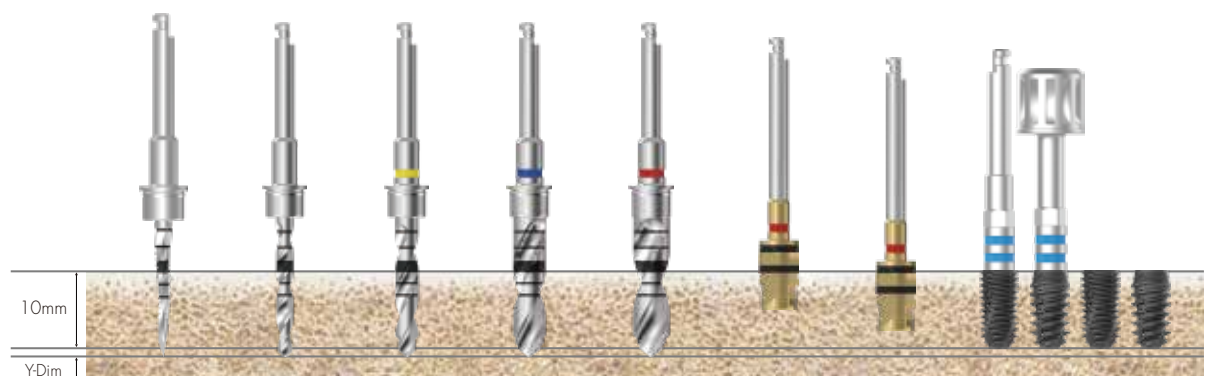
(ZENEX MULTI & PLUS R-System Regular)



Bone Quality	Guide Drill	Twist Drill (Ø2.2)	Twist Drill (Ø3.0)	Twist Drill (Ø3.6)	Twist Drill (Ø4.1)	Cortical Drill (Lower Line)	Cortical Drill (Upper Line)	Ø4.5 Fixture
Soft	▶	▶	▶	▶	▶			Implant Placement
Normal	▶	▶	▶	▶	▶	▶		
Hard	▶	▶	▶	▶	▶		▶	

Ø 5.0mm Fixture

(ZENEX MULTI & PLUS R-System Wide)



Bone Quality	Guide Drill	Twist Drill (Ø2.2)	Twist Drill (Ø3.0)	Twist Drill (Ø4.1)	Twist Drill (Ø4.6)	Cortical Drill (Lower Line)	Cortical Drill (Upper Line)	Ø5.0 Fixture
Soft	▶	▶	▶	▶	▶			Implant Placement
Normal	▶	▶	▶	▶	▶	▶		
Hard	▶	▶	▶	▶	▶		▶	