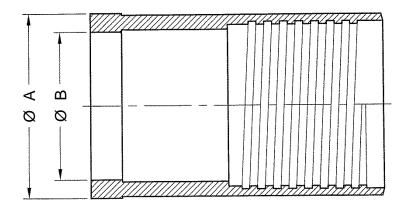
## Nominal Set Diameters for Casing/Rod Shoes and Product Availability by Cutting Media Type



Casing Shoes, Rod Shoes, Casing Bits and Rod Bits with Internal Thread Connections

#### **Notes**

- 1. The dimensions given in this document are nominal. That is, they represent the mid-point dimension onto which a manufacturing tolerance is applied. This tolerance varies by tool size and conforms to established industry standards.
- 2. Dimatec is capable of manufacturing any casing shoe, rod shoe, casing bit or rod bit listed in the following tables. Product sizes that are not listed or products with non-standard set diameters may be available on request. Note that some types of cutting media may not be available on some sizes of core bits due to the physical dimensional limitations of the casing shoe/rod shoe crown.

Key to product availability cutting media codes:

- "D-Series Impregnated" represents: Impregnated synthetic diamond ("D-Series" design)
- "Super Duty Impregnated" represents: Impregnated synthetic diamond ("Super Duty" design)
- "Carbide Chip" represents: Tungsten-carbide granular chips
- "Carbide S/T" represents: Saw-tooth tungsten-carbide elements

**Standard Casing Shoes** 

Casina Chas	Nominal Set Diam	eters (See Note 1)	Product Availability (See Note 2)			
Casing Shoe Sizes	Ø A	ØВ	D-Series Impregnated	Super Duty Impregnated	Carbide Chip	Carbide S/T
<b>RW</b> DCDMA Standard	37.34 mm 1.470 inch	30.10 mm 1.185 inch	✓	✓	×	×
<b>EW</b> DCDMA Standard	47.63 mm 1.875 inch	37.97 mm 1.495 inch	✓	✓	✓	×
<b>AW</b> DCDMA Standard	59.56 mm 2.345 inch	48.26 mm 1.900 inch	✓	✓	✓	<b>√</b>
BW	75.31 mm	60.25 mm	<b>√</b>	<b>√</b>	✓	<b>√</b>

DCDMA Standard	2.965 inch	2.372 inch				
<b>NW</b> DCDMA Standard	91.82 mm 3.615 inch	76.00 mm 2.992 inch	<b>√</b>	✓	✓	✓
HW CDDA Standard	117.48 mm 4.625 inch	99.70 mm 3.925 inch	✓	✓	✓	✓

**Standard Casing Shoes (Continued)** 

Casina Chas	Nominal Set Diam	eters (See Note 1)	Product Availability (See Note 2)				
Casing Shoe Sizes	Ø A	ØВ	D-Series Impregnated	Super Duty Impregnated	Carbide Chip	Carbide S/T	
<b>HW</b> DCDMA Standard	117.48 mm 4.625 inch	100.97 mm 3.975 inch	✓	✓	✓	✓	
HWT	117.48 mm 4.625 inch	99.70 mm 3.925 inch	✓	✓	✓	<b>√</b>	
<b>PW</b> CDDA Standard	143.51 mm 5.650 inch	123.39 mm 4.858 inch	✓	✓	$\checkmark$	<b>√</b>	
PWT	143.51 mm 5.650 inch	123.39 mm 4.858 inch	✓	✓	✓	<b>√</b>	
<b>SW</b> DCDMA Standard	172.47 mm 6.790 inch	150.88 mm 5.940 inch	✓	✓	✓	✓	
<b>UW</b> DCDMA Standard	198.12 mm 7.800 inch	175.41 mm 6.906 inch	<b>√</b>	<b>√</b>	$\checkmark$	✓	
<b>ZW</b> DCDMA Standard	223.77 mm 8.810 inch	202.62 mm 7.977 inch	✓	✓	✓	✓	

**Metric Casing Shoes** 

	Nominal Set Diam	eters (See Note 1)	Product Availability (See Note 2)				
Casing Shoe Sizes	Ø A	ØВ	D-Series Impregnated	Super Duty Impregnated	Carbide Chip	Carbide S/T	
46mm	46.00 mm 1.811 inch	37.00 mm 1.457 inch	✓	×	×	×	
56mm	56.00 mm 2.205 inch	47.00 mm 1.850 inch	✓	×	$\checkmark$	×	
66mm	66.00 mm 2.598 inch	57.00 mm 2.244 inch	✓	×	$\checkmark$	$\checkmark$	
76mm	76.00 mm 2.992 inch	67.00 mm 2.638 inch	$\checkmark$	×	$\checkmark$	$\checkmark$	
86mm	86.00 mm 3.386 inch	77.00 mm 3.032 inch	$\checkmark$	×	$\checkmark$	$\checkmark$	
101mm	101.00 mm 3.976 inch	87.68 mm 3.452 inch	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$	
116mm	116.00 mm 4.567 inch	103.00 mm 4.055 inch	<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>	
131mm	131.00 mm 5.157 inch	119.20 mm 4.693 inch	✓	<b>✓</b>	✓	<b>√</b>	
146mm	146.00 mm 5.748 inch	133.00 mm 5.236 inch	✓	✓	✓	✓	

## **Standard Casing Bits**

For use with DCDMA and CDDA standard casing

Cooing Bit	Nominal Set Diameters (See Note 1)		Product Availability (See Note 2)			
Casing Bit Sizes	Ø A	ØВ	D-Series Impregnated	Super Duty Impregnated	Carbide Chip	Carbide S/T

BW	75.31 mm 2.965 inch	56.26 mm 2.215 inch	✓	✓	✓	✓
NW	91.82 mm 3.615 inch	72.14 mm 2.840 inch	✓	✓	✓	✓
HW	117.48 mm 4.625 inch	95.94 mm 3.777 inch	✓	✓	✓	✓

### **Wide-Kerf Casing Bits**

For use with DCDMA and CDDA standard casing

Cooing Bit	Nominal Set Diameters (See Note 1)		Product Availability (See Note 2)			
Casing Bit Sizes	Ø A	ØВ	D-Series Impregnated	Super Duty Impregnated	Carbide Chip	Carbide S/T
BW (NWL) See Note A below	75.31 mm 2.965 inch	47.62 mm 1.875 inch	✓	✓	✓	✓
NW (HWL) See Note B below	95.55 mm 3.762 inch	63.50 mm 2.500 inch	✓	$\checkmark$	$\checkmark$	✓
HW (PWL) See Note C below	122.05 mm 4.805 inch	84.96 mm 3.345 inch	✓	✓	✓	✓
HWT (PWL) See Note D below	122.05 mm 4.805 inch	84.96 mm 3.345 inch	✓	$\checkmark$	$\checkmark$	✓

Note A: The BW(NWL) Casing Bit is supplied with a BW Casing Box thread connection.

Note B: The NW(HWL) Casing Bit is supplied with an NW Casing Box thread connection.

Note C: The HW(PWL) Casing Bit is supplied with an HW Casing Box thread connection.

Note D: The HWT(PWL) Casing Bit is supplied with an HWT Casing Box thread connection.

### **Rod Shoes**

For use with wireline drill rods

Rod Shoe	Nominal Set Diam	eters (See Note 1)	Product Availability (See Note 2)			
Sizes	Ø A	ØВ	D-Series Impregnated	Super Duty Impregnated	Carbide Chip	Carbide S/T
BWL	59.56 mm 2.345 inch	45.21 mm 1.780 inch	✓	✓	✓	✓
ВТ	59.56 mm 2.345 inch	45.21 mm 1.780 inch	$\checkmark$	$\checkmark$	$\checkmark$	✓
NWL	75.31 mm 2.965 inch	60.25 mm 2.372 inch	$\checkmark$	$\checkmark$	$\checkmark$	✓
NT	75.31 mm 2.965 inch	60.25 mm 2.372 inch	$\checkmark$	$\checkmark$	$\checkmark$	✓
HWL	91.82 mm 3.615 inch	76.00 mm 2.992 inch	✓	$\checkmark$	$\checkmark$	✓
HT	91.82 mm 3.615 inch	76.00 mm 2.992 inch	<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>
PWL	118.82 mm 4.678 inch	101.22 mm 3.985 inch	<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>

**British Standard BS879 Water Well Casing Shoes** 

Casing Shoe Sizes	Nominal Set Diameters (See Note 1)		Product Availability (See Note 2)			
	Ø A	ØВ	D-Series Impregnated	Super Duty Impregnated	Carbide Chip	Carbide S/T
4 Inch	117.48 mm 4.625 inch	96.93 mm 3.816 inch	✓	✓	✓	✓
5 Inch	143.51 mm 5.650 inch	122.50 mm 4.823 inch	<b>√</b>	<b>√</b>	✓	<b>✓</b>

#### Dimatec Inc. • Nominal Set Diameters for Casing/Rod Shoes and Product Availability by Cutting Media Type

6 Inch	172.47 mm 6.790 inch	147.96 mm 5.825 inch	✓	✓	✓	✓
8 Inch	224.16 mm 8.825 inch	198.76 mm 7.825 inch	✓	✓	✓	✓
10 Inch	277.62 mm 10.930 inch	249.30 mm 9.815 inch	✓	✓	✓	✓

# Technical Data Sheet TD103 Revision 4 Document Release Date: March 6, 2013 ~ Reviewed: June 24, 2019

The technical application data in this document is intended as a basic guideline for the selection of the appropriate tools for your job. As drilling conditions and the capabilities of drilling equipment vary considerably from site to site, it is impossible to define absolute parameters for the application of our drilling tools. Some experimentation on the part of the end user may be required as parameters outside of those recommended in Dimatec's product literature may be applicable. Every effort has been made to ensure the accuracy of the data contained in this document. Dimatec Inc. cannot accept any liability due to errors or omissions in the data that we provide. Dimatec Inc. is constantly working to improve our products and therefore reserve the right to make changes to materials, specifications, prices and technical data without prior notice.