

CORE BIT CONFIGURATION AND DIMENSIONS

Fordia offers a wide range of waterway configurations to provide you with the best drilling performance, no matter what type of work needs to be done. All of our configurations are available with different waterway widths and come in all matrix heights.

STANDARD



- Can be used on most impregnated core bits
- Great fluid circulation from the inside to the outside
- Available with wider and/or larger waterway configurations

CYCLONE



- Designed with specific angled waterways
- Greater ejection of drilling fluids
- Works best in broken ground

TURBO PIE SHAPED (TPS)



- Greater ejection of fluids and cuttings
- Reduced contact area with the same flushing performance
- Recommended for higher rotation speeds
- Available with wider and/or larger waterway configurations

PIE SHAPE



- Configuration designed with specific wedged waterways
- Pie-shaped openings ensure greater ejection of cuttings that may block waterways
- Recommended for higher rotation speed

DIAMOND CORE BITS

SIZE	CORE DIAMETER			HOLE DIAMETER			HOLE VOLUME	
	DECIMAL	FRACTIONAL	MM	DECIMAL	FRACTIONAL	MM	US GALLONS/100 FT	LITERS/100M
AWL, AWL-U	1.062	1 1/16	27.0	1.890	1 57/64	48.0	14.60	181.0
BWL, BWL-U	1.432	1 7/16	36.5	2.360	2 23/64	60.0	22.70	282.2
NWL, NWL-U	1.875	1 7/8	47.6	2.980	2 63/64	75.7	36.30	451.0
HWL, HWL-U	2.500	2 1/2	63.5	3.782	3 25/32	96.0	58.30	724.4
PWL	3.345	3 11/32	85.0	4.827	4 53/64	122.5	95.10	1180.4
BWL-3	1.320	1 5/16	33.5	2.360	2 23/64	60.0	22.70	282.2
NWL-3	1.775	1 25/32	45.0	2.980	2 63/64	75.7	36.30	451.0
HWL-3	2.406	2 13/32	61.1	3.782	3 25/32	96.0	58.30	724.4
PWL-3	3.270	3 9/32	83.0	4.827	4 53/64	122.6	95.10	1180.4
ATW	1.185	1 3/16	30.1	1.890	1 57/64	48.0	14.60	181.0
BTW	1.656	1 21/32	42.0	2.360	2 23/64	60.0	22.70	282.2
NTW	2.205	2 13/64	56.0	2.980	2 63/64	75.7	36.30	451.0
NWL-2	1.990	1 63/64	50.5	2.980	2 63/64	75.7	36.30	451.0

CASING SHOES

SIZE	OUTSIDE DIAMETER		INSIDE DIAMETER		HOLE DIAMETER		HOLE VOLUME	
	MM	INCHES	MM	INCHES	MM	INCHES	US GALLONS/100 FT	LITERS/100M
EW	47.60	1.88	37.85	1.49	47.75	1.88	12.0	54.6
AW	59.69	2.35	48.26	1.90	59.69	2.35	28.8	85.3
BW	75.44	2.97	60.20	2.37	75.40	2.97	30.0	136.2
NW	91.95	3.62	75.95	2.99	91.95	3.62	44.5	202.4
HW	117.60	4.63	99.82	3.93	117.60	4.63	72.8	331.1
PW	143.76	5.66	122.94	4.84	143.80	5.66	108.8	494.8

REAMING SHELLS

OUTSIDE DIAMETER TOLERANCE

SIZE	MILIMETERS		INCHES	
	MINIMUM	MAXIMUM	MINIMUM	MAXIMUM
AWL	47.88	49.13	1.995	1.895
BWL	59.92	60.07	2.355	2.365
NWL	75.57	75.82	2.975	2.965
HWL	95.89	96.27	3.775	3.790
PWL	122.43	122.81	4.820	4.835
ATW	47.88	48.13	1.895	1.895
BTW	59.82	60.07	2.355	2.365
NTW	75.57	75.82	2.975	2.985
AWLTK	47.88	48.13	1.885	1.895
BWLTK	59.82	60.07	2.355	2.365

OPERATING PARAMETERS

SIZE	NORMAL RECOMMENDED BIT LOAD RANGE	NORMAL RECOMMENDED RPM	NORMAL RECOMMENDED FLUID CIRCULATION RATES	ESTIMATED PENETRATION RATES	
				150 rev/in drilled 60 rev/cm drilled	250 rev/in drilled 100 rev/cm drilled
AWL	2 000 to 4 000 lbs 8.9 to 18 kN	800 to 2 000 RPM	1.5 to 3.5 US Gal/min 5.7 to 13 Liter/min	5.3 to 13.2 in/min 13 to 34 cm/min	3.2 to 7.9 in/min 8.1 to 20 cm/min
AWL THIN KERF	2 000 to 3 500 lbs 7.9 to 16 kN				
BWL	3 000 to 5 500 lbs 13 to 24 kN	650 to 1 600 RPM	2 to 5.5 US Gal/min 7.6 to 21 Liter/min	4.2 to 10.6 in/min 11 to 27 cm/min	2.5 to 6.4 in/min 6.4 to 16 cm/min
BWL THIN KERF	2 500 to 5 000 lbs 11 to 21 kN				
NWL	4 500 to 8 500 lbs 20 to 38 kN	500 to 1 250 RPM	3.5 to 9 US Gal/min 13 to 34 Liter/min	3.4 to 8.4 in/min 8.6 to 21 cm/min	2.0 to 5.0 in/min 5.1 to 13 cm/min
NWL THIN KERF	4 000 to 8 000 lbs 19 to 35 kN				
HWL	6 500 to 13 000 lbs 29 to 58 kN	400 to 1 000 RPM	5 to 14 US Gal/min 19 to 53 Liter/min	2.6 to 6.6 in/min 6.6 to 17 cm/min	1.6 to 4.0 in/min 4.1 to 10 cm/min
PWL	10 000 to 19 000 lbs 44 to 84 kN	300 to 800 RPM	7.5 to 20 US Gal/min 28 to 76 Liter/min	2.1 to 5.2 in/min 5.3 to 13 cm/min	1.2 to 3.1 in/min 3.0 to 7.9 cm/min