

SANDVIK ALPHATM 340 ASYMMETRIC DRILLING TOOLS FOR MINING AND TUNNELING



A (R)EVOLUTION IN TOP HAMMER DRILLING

The new Sandvik Alpha™ Asymmetric drilling tools are the latest innovation in Top Hammer drilling for mine development and tunneling. Inspired by the force of evolution and powered for a successful drilling operation.



THE POWER OF INNOVATION

Innovating for tomorrow is in our DNA. The power and durability of the evolution are a source of inspiration for the asymmetric thread in the new Sandvik AlphaTM 340. We call it a (r)evolution and the future of mine development and tunneling.

"When we develop new drilling tools, our aim is always to reduce the stress levels in the product since lower stress levels equal longer fatigue life. We were thrilled to learn that our field test results were an instant success."

John Hammargren Senior Engineer, Top Hammer Tools



SANDVIK ALPHA[™] ASYMMETRIC DRILLING TOOLS THREAD

Compared with the Sandvik Alpha[™] 330, the Sandvik Alpha[™] 340 Asymmetric drilling tools provide a more robust design, ready for even more demanding challenges.



+50%

The new Sandvik Alpha™ Asymmetric drilling tools have a rod life that lasts up to 50% longer than the industry standard R32.

MADE TO LAST LONG AND DRILL STRAIGHT

The short, robust asymmetric thread design and strong guide create rigidity and accurate hole drilling. This also increases the product's service life and lowers the cost per meter.

POWERCARBIDE™ GRADE

Our innovative PowerCarbide™ grades enable our buttons to retain their shape as long as possible. This ensures longer grinding intervals, fewer bit changes, and improved safety.

EXACT COLLARING

High-precision collaring in complex rock formations and against uneven surfaces.

IMPROVED FLUSHING

For higher drill speed and reduced risk of jamming.

STRONG, ASYMMETRIC THREAD PROFILE

A stronger geometry which reduce stress levels in the contact flank of the thread.

SIMPLE UNCOUPLING

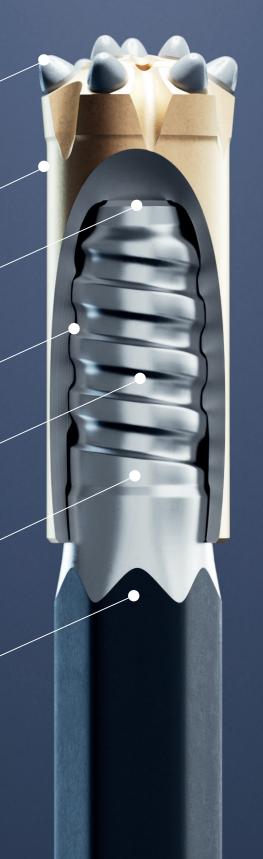
Uncoupling drill bits has never been easier. This removes a source of frustration, and reduce tensile stresses in the drill string.

SUPERIOR HOLE ACCURACY

Drilling accuracy is crucial to ensure desired direction and profile in the tunnel. Straight holes mean higher rate of advance and reduced overbreak.

LOWER COST PER METER

Higher ROP, less overbreak, and prolonged product life for increased profit and higher productivity.



PROVED EFFICIENCY WITH THE NEW SANDVIK ALPHA™ ASYMMETRIC DRILLING TOOLS

ROD LIFE COST PER METER Sandvik Alpha™ 340 drilling tools Sandvik Alpha™ 340 drilling tools Sandvik Alpha™ 330 drilling tools Sandvik Alpha™ 330 drilling tools R32 R32



"Our customers liked the old Sandvik Alpha™ 330 drilling tools and didn't see any reason to change them. That was until they tried the new Sandvik Alpha™ Asymmetric drilling tools....
The results coming back from our users are astonishing."

Robert Grandin Product Manager, Top Hammer Tools

POWERCARBIDE™ FOR OPTIMIZED DRILLING

PowerCarbide[™] is our most advanced materials technology and can optimize any drilling application. In the Sandvik Alpha[™] Asymmetric drilling tools, we use three types of PowerCarbide[™] – SH70, GC81, and XT49.

SH70 is a "self-hardening" grade that become more wear-resistant and tougher as drilling progresses.

The GC81 carbide has a hardness gradient grade with high wear-resistant on the outside, while the center provides the needed toughness.

The XT49 grade is more resilient against breakages, enabling more button protrusion and a sharper geometry for faster drilling.

TECHNICAL SPECIFICATIONS

SANDVIK ALPHA™ 340 BIT THREAD

BITS	ММ	MM MM			D			DIMENSIONS BIT CLASSI- FICATIO		7580-6043-F49 7580-6043-F49 7580-6043-F49 7580-6051-F49 7580-5143A-S81 7580-5145A-S81 7580-5145A-S81 7580-5243A-S70 7580-5245A-S70 7580-5245A-S70 7580-5245A-S70 7580-5345A-R48 7580-4345A-S78	
	Front No Size	Gauge No Size	Front No Size	Gauge No Size	Fron	t	mm	in			
Speedy bit, type 60											
	3×4,5	_	3×8	6×9	10°	35°	43	1 11/16"	•	7580-6043-F49	
	3×5	-	3×8	6×10	10°	35°	45	1 3/4"	•	7580-6043-F49	
	3×5	-	3×9	6×10	10°	35°	48	1 7/8"	•	7580-6048-F49	
	3×6	-	3×9	6×10	10°	40°	51	2"	•	7580-6051-F49	
Top center bit, type 51	2×5	1×5	2×9	7×10	10°	30°	43	1 11/16"	•	7580-5143A-S8	
GAPP	2×6	1×6	2×9	7×10	10°	30°	45	1 3/4"	•		
	2×6	1×6	2×9	7×10	10°	30°	45	1 3/4"	•		
	3×5	1×5	3×9	8×10	10°	30°	48	1 7/8"	•		
Button bit, type 52											
30	1×5	2×6	2×9	5×10	0°	35°	43	1 11/16"	•	7580-5243A-S7	
	1×5	2×6	2×9	5×11	0°	30°	45	1 3/4"	•	7580-5245A-S7	
9	1×6	2×7.5	2×9	5×11	0°	35°	48	1 7/8"	•	7580-5248A-S7	
Button bit, type 43/53/16											
	3×4	1×4	3×8	6×10	10°	35°	43	1 11/16"	•		
	3×4.5	1×4.5	3×8	6×10	0°	30°	45	1 3/4"	0		
	3×4.5	1×4.5	3×8	6×10	0°	25°	45	1 3/4"	0		
	3×4.5 3×4.5	1×4.5 1×4.5	3×8 3×8	6×10 6×10	5° 5°	30°	45 45	1 3/4" 1 3/4"	•	7580-4345A-S7	
	3×4.5 3×5	1×4.5 1×5	3×8 3×9	6×10	5°	35°	45 48	1 7/8"	0	7580-4345A-S6 7580-4348A-R4	
	3×5	1×5	3×9	6×10	5°	35°	48	1 7/8"	•	7580-4348A-S7	
	3×6	1×6	3×9	6×11	10°	35°	51	2"	•	7580-4351A-S7	
	3×7	-	3×11	6×12	0°	30°	64	2 1/2"	•	7580-1664-S70	
Button bit, type 54											
	<u>2×6</u>)	1×6	9	9	0°	35°	44*	1 47/64"	•	7580-54440A-S4	
No oversize on bit diameter											
Button bit, type 18	<u>4×7</u>	-	5×11	8×12	O°	35°	76	3"	•	7580-1876-S70	
Button bit, Retrac											

7580-4651A-S70

RODS	DIMEN	DIMENSIONS						
		L			D			
		mm	ft	in	mm	in		
Drifter rod, T38 – Hex 35 – α3	340							
Hex D-35 → II		2475	8'	1 1/2"	35	1 3/8"	7324-8024-20	
	- Camp	3090	10'	1 1/2"	35	1 3/8"	7324-8031-20	
T 38	α340	3700	12'	1 1/2"	35	1 3/8"	7324-8037-20	
		4305	14'	1 1/2"	35	1 3/8"	7324-8043-20	
		4915	16'	1 1/2"	35	1 3/8"	7324-8049-20	
		5525	18'	1 1/2"	35	1 3/8"	7324-8055-20	

Flushing hole Ø 11.0 mm.

Drifter rod, T38 – Round 39 – α 340

	*		4915	16	1 1/2"	39	1 1/2"	7324-7949-20
		G3	5525	18	1 1/2"	39	1 1/2"	7324-7955-20
T 38	↑ D	L α340	6135	20	1 1/2"	39	1 1/2"	7324-7961-20
			6440	21	1 1/2"	39	1 1/2"	7324-7964-20

Flushing hole Ø 12.3 mm.

COUPLING SLEEVES	DIMEN	DIMENSIONS					
		L			D		
		mm	ft	in	mm	in	
Coupling sleeve, T38, α340							
_	T38-T38	191	-	7 1/2"	52	2"	7314-3652
manana manama	Τ38-α340	188	-	7 3/8"	52	2"	7314-8052

REAMING BIT	FLUSHING HOLE, MM		BUTTONS, MM		ANGLE	DIMENSIONS D		PART NO.
	Front No Size	Gauge No Size	Front No Size	Gauge No Size		mm	in	
Reaming tools for cut holes / Reaming bit, α 340								
	3×7	1×7	3×13	12×13	35°	102	4"	7580-5602P-S70
200 S	3×7	1×7	3×13	16×13	35°	127	5"	7580-5627P-S70

PILOT ADAPTER 12° TAPER	THREAD	DIMEN	SIONS				PART NO.
		L			D		
		mm	ft	in	mm	in	
Reaming tools for cut holes / Pilot adapter, 12° taper							
<u> </u>	α340	278	-	11"	40	1 37/64"	7821-8040
234B							
· · ·							

REAMING BIT 12° TAPER	BUTTON MM	IS,	ANGLE	DIMENS D	SIONS	PART NO.
	Front No Size	Gauge No Size		mm	in	
Reaming tools for cut holes / Reaming bit, 12° taper						
	4×10	8×12	35°	89	3 1/2"	7721-4889-S48
	4×13	8×13	35°	102	4"	7721-4802-S48
0 00 00	8×13	8×13	35°	127	5"	7721-4827-S48