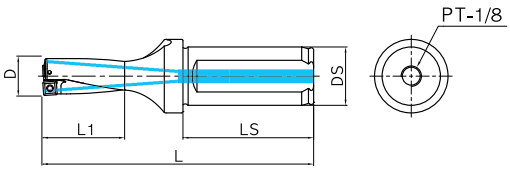
HIGH SPEED DRILL
STD-V 2×D



● Shank ISO9766, Parallel with clamping flat

Code No.	치수 Dimension(mm)					인서트 Insert	부품 Component	
	D	L1	L	Ds	Ls		Screw	T-Driver
STD-V13020D S20	13.0	29	99	20	50	SPMX050204	TSB-20045	TXL-6
STD-V13520D S20	13.5	30	100					
STD-V14020D S20	14.0	31	101					
STD-V14520D S20	14.5	32	102					
STD-V15020D S20	15.0	33	103					
STD-V15520D S25	15.5	34	115	25	56	SPMX060204	TSB-22052	
STD-V16020D S25	16.0	35	116					
STD-V16520D S25	16.5	36	117					
STD-V17020D S25	17.0	37	118					
STD-V17520D S25	17.5	38	119					
STD-V18020D S25	18.0	39	120					
STD-V18520D S25	18.5	40	121					
STD-V19020D S25	19.0	41	122					
STD-V19520D S25	19.5	42	123					
STD-V20020D S25	20.0	43	124					
STD-V20520D S25	20.5	44	125					
STD-V21020D S25	21.0	45	126					
STD-V21520D S25	21.5	46	127					

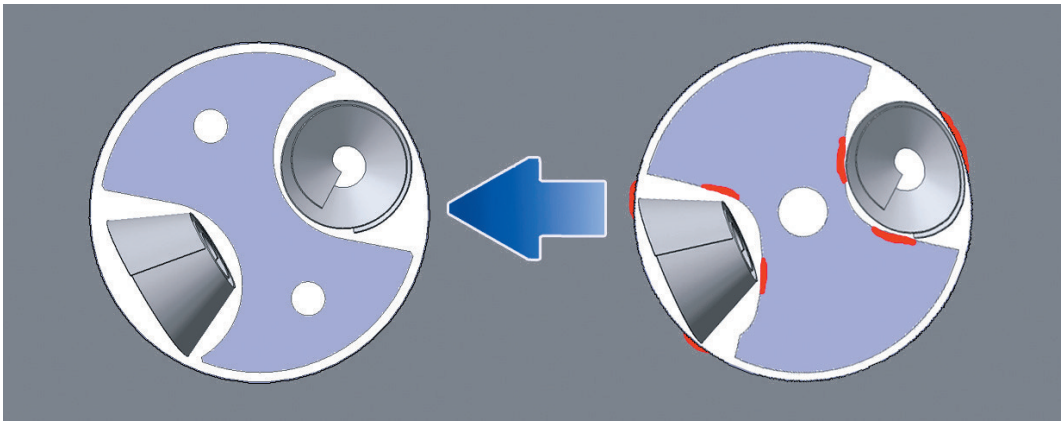
● STD-V 소구경 드릴의 특징

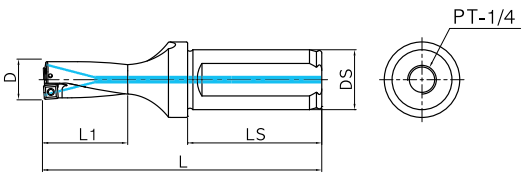
- STD-V 소구경(ø13 ~ ø21.5)드릴은 절삭유 홀을 11자 타입으로 설계변경하여 드릴바디의 강성이 향상되고, 칩 배출 공간을 대폭 확장 시켰습니다.
- 최적의 설계로 절삭성능이 뛰어나고, 표면조도가 매우 우수합니다.

● The characteristic of STD-V small drill

- Small dia drills are designed oil holes to 11 types so the hardness of the drill body is improved and the space of chip break is greately extended.
- The drilling performance and the surface roughless are excellent by the best design.

- 넓어진 칩 배출 공간 The widen chip discharging space





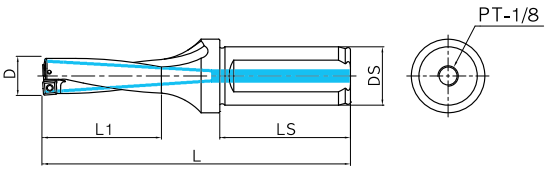
● Shank ISO9766, Parallel with clamping flat

Code No.	치수 Dimension(mm)					인서트 Insert	부품 Component	
	D	L1	L	Ds	Ls		Screw	T-Driver
STD-V22020D S32	22.0	47	137	32	60	SPMX07T308	TSB-25065	TXL-6
STD-V22520D S32	22.5	48	138					
STD-V23020D S32	23.0	49	139					
STD-V23520D S32	23.5	50	140					
STD-V24020D S32	24.0	51	141					
STD-V24520D S32	24.5	52	142					
STD-V25020D S32	25.0	53	143					
STD-V25520D S32	25.5	54	144					
STD-V26020D S32	26.0	55	145					
STD-V26520D S32	26.5	56	146					
STD-V27020D S32	27.0	57	147					
STD-V27520D S32	27.5	58	148					
STD-V28020D S32	28.0	59	149			SPMX090408	TSB-35090	TXL-15
STD-V28520D S32	28.5	60	150					
STD-V29020D S32	29.0	61	151					
STD-V29520D S32	29.5	63	153					
STD-V30020D S32	30.0	65	155					
STD-V31020D S32	31.0	67	157					
STD-V32020D S32	32.0	69	159					
STD-V33020D S32	33.0	71	161					
STD-V34020D S40	34.0	73	178	40	70	SPMX110408	TSB-40100	
STD-V35020D S40	35.0	75	180					
STD-V36020D S40	36.0	77	182					
STD-V37020D S40	37.0	79	184					
STD-V38020D S40	38.0	81	186					
STD-V39020D S40	39.0	83	188					
STD-V40020D S40	40.0	85	190					
STD-V41020D S40	41.0	87	192					
STD-V42020D S40	42.0	89	194			SPMX140512	TSB-50125	TXL-20
STD-V43020D S40	43.0	91	196					
STD-V44020D S40	44.0	93	198					
STD-V45020D S40	45.0	95	200					
STD-V46020D S40	46.0	97	202					
STD-V47020D S40	47.0	99	204					
STD-V48020D S40	48.0	101	206					
STD-V49020D S40	49.0	103	208					
STD-V50020D S40	50.0	105	210					

※ 가공경 ø40 이상을 범용선반에서 가공할 경우 센터붙이 타입 드릴(VLT, FXD, VMD) 사용을 권장합니다.
STD-V드릴과 체결되는 툴 홀더는 '사이드락 아버'(78페이지~90페이지)입니다.
※ 불규칙한 면을 가공할 경우에는 이송속도를 30%~50% 줄여 가공하여 주시기 바랍니다.

※ If you are working on the lathe, diameter ø40 or higher, we recommend using the VLT, FXD, VMD
The tool holder that locks with STD-V is Side Lock Arbor.(P.78~P.90)
※ When working on irregular (uneven) surfaces, please reduce the feed rate by 30~50%.

HIGH SPEED DRILL
STD-V 3×D



● Shank ISO9766, Parallel with clamping flat

Code No.	치수 Dimension(mm)					인서트 Insert	부품 Component	
	D	L1	L	Ds	Ls		Screw	T-Driver
STD-V13030D S20	13.0	42	112	20	50	SPMX050204	TSB-20045	TXL-6
STD-V13530D S20	13.5	44	114					
STD-V14030D S20	14.0	45	115					
STD-V14530D S20	14.5	47	117					
STD-V15030D S20	15.0	48	118					
STD-V15530D S25	15.5	50	131	25	56	SPMX060204	TSB-22052	
STD-V16030D S25	16.0	51	132					
STD-V16530D S25	16.5	53	134					
STD-V17030D S25	17.0	54	135					
STD-V17530D S25	17.5	56	137					
STD-V18030D S25	18.0	57	138					
STD-V18530D S25	18.5	59	140					
STD-V19030D S25	19.0	60	141					
STD-V19530D S25	19.5	62	143					
STD-V20030D S25	20.0	63	144					
STD-V20530D S25	20.5	65	146					
STD-V21030D S25	21.0	66	147					
STD-V21530D S25	21.5	68	149					

● STD-V 중 · 대구경 드릴의 특징

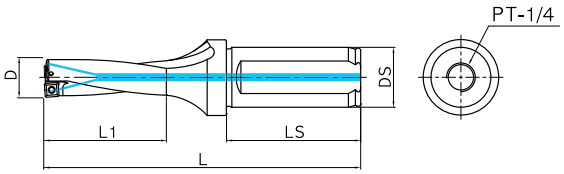
- STD-V 중 · 대구경(ø22~ø80)드릴은 최적의 설계로 칩 배출 공간을 대폭 확장 시켰습니다.
  깊은 홀 가공에서도 드릴링이 안정되고, 표면조도가 우수합니다.
- 최적의 결과물을 위해, 절삭조건표(125페이지)와 절삭유 적정 압력을 확인해 주세요.
  (절삭유 적정압력은, STD-V 2×D,3×D일때 4kg/㎠이상, 4×D일때 5kg/㎠이상)

● The characteristic of STD-V middle and big diameter drills

- The chip discharging space for STD-V middle dia and big dia drill(ø22~ø80)was greately extended.
  These drills are stable and surface roughness are excellent in the deep hole drilling also.
- Please make sure the proper oil pressure and the cutting data(page 125)for the best performance.
  (The proper pressure for STD-V 2×D,3×D is over 4kg/㎠, the proper pressure for 4×D is over 5kg/㎠)

- STD-V 드릴용 인서트(SPMX)는 108페이지를 참조해주세요.
- Please refer to the page 108 regarding STD-V inserts.(SPMX)

- SPMX
  내측 + 외측
  Peripheral + Central Insert



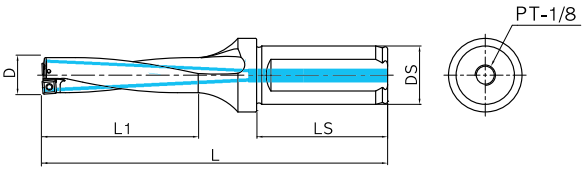
● Shank ISO9766, Parallel with clamping flat

Code No.	치수 Dimension(mm)					인서트 Insert	부품 Component	
	D	L1	L	Ds	Ls		Screw	T-Driver
STD-V22030D S32	22.0	69	159	32	60	SPMX07T308	TSB-25065	TXL-6
STD-V22530D S32	22.5	71	161					
STD-V23030D S32	23.0	72	162					
STD-V23530D S32	23.5	74	164					
STD-V24030D S32	24.0	75	165					
STD-V24530D S32	24.5	77	167					
STD-V25030D S32	25.0	78	168					
STD-V25530D S32	25.5	80	170					
STD-V26030D S32	26.0	81	171					
STD-V26530D S32	26.5	83	173					
STD-V27030D S32	27.0	84	174					
STD-V27530D S32	27.5	86	176					
STD-V28030D S32	28.0	87	177			SPMX090408	TSB-35090	TXL-15
STD-V28530D S32	28.5	89	179					
STD-V29030D S32	29.0	90	180					
STD-V29530D S32	29.5	93	183					
STD-V30030D S32	30.0	95	185					
STD-V31030D S32	31.0	98	188					
STD-V32030D S32	32.0	101	191					
STD-V33030D S32	33.0	104	194					
STD-V34030D S40	34.0	107	212	40	70	SPMX110408	TSB-40100	
STD-V35030D S40	35.0	110	215					
STD-V36030D S40	36.0	113	218					
STD-V37030D S40	37.0	116	221					
STD-V38030D S40	38.0	119	224					
STD-V39030D S40	39.0	122	227					
STD-V40030D S40	40.0	125	230					
STD-V41030D S40	41.0	128	233					
STD-V42030D S40	42.0	131	236			SPMX140512	TSB-50125	TXL-20
STD-V43030D S40	43.0	134	239					
STD-V44030D S40	44.0	137	242					
STD-V45030D S40	45.0	140	245					
STD-V46030D S40	46.0	143	248					
STD-V47030D S40	47.0	146	251					
STD-V48030D S40	48.0	149	254					
STD-V49030D S40	49.0	152	257					
STD-V50030D S40	50.0	155	260					

※ 가공경 ø40 이상을 범용선반에서 가공할 경우 센터붙이 타입 드릴(VLT, FXD, VMD) 사용을 권장합니다.
STD-V드릴과 체결되는 툴 홀더는 '사이드락 아버'(78페이지~90페이지)입니다.
※ 불규칙한 면을 가공할 경우에는 이송속도를 30%~50% 줄여 가공하여 주시기 바랍니다.

※ If you are working on the lathe, diameter ø40 or higher, we recommend using the VLT, FXD, VMD
The tool holder that locks with STD-V is Side Lock Arbor.(P.78~P.90)
※ When working on irregular (uneven) surfaces, please reduce the feed rate by 30~50%.

HIGH SPEED DRILL
STD-V 4×D



● Shank ISO9766, Parallel with clamping flat

Code No.	치수 Dimension(mm)					인서트 Insert	부품 Component	
	D	L1	L	Ds	Ls		Screw	T-Driver
STD-V13040D S20	13.0	55	125	20	50	SPMX050204	TSB-20045	TXL-6
STD-V13540D S20	13.5	57	127					
STD-V14040D S20	14.0	59	129					
STD-V14540D S20	14.5	61	131					
STD-V15040D S20	15.0	63	133					
STD-V15540D S25	15.5	65	146	25	56	SPMX060204	TSB-22052	
STD-V16040D S25	16.0	67	148					
STD-V16540D S25	16.5	69	150					
STD-V17040D S25	17.0	71	152					
STD-V17540D S25	17.5	73	154					
STD-V18040D S25	18.0	75	156					
STD-V18540D S25	18.5	77	158					
STD-V19040D S25	19.0	79	160					
STD-V19540D S25	19.5	81	162					
STD-V20040D S25	20.0	83	164					
STD-V20540D S25	20.5	85	166					
STD-V21040D S25	21.0	87	168					
STD-V21540D S25	21.5	89	170					

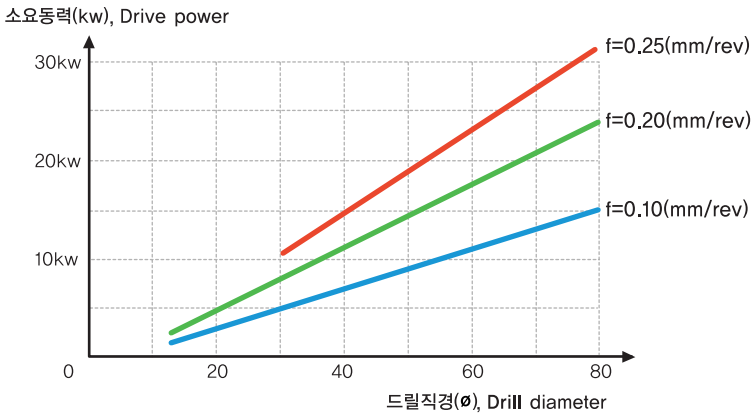
※ 최고의 결과물을 위해서는 절삭조건표(125페이지)와 절삭유 적정 압력을 확인해 주세요.(절삭유 적정압력은 5kg/㎠ 이상입니다.)
※ Please make sure the proper oil pressure and the cutting date(P.125)for the best performance.(The proper pressure is over 5kg/㎠)

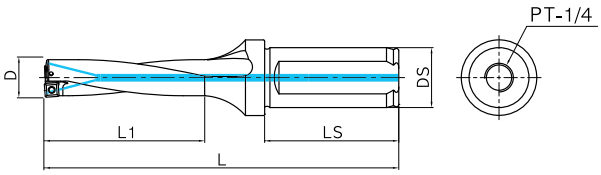
● STD-V 드릴 구멍공차 The hole tolerance of STD-V drill

Diameter	2×D	3×D	4×D
ø13 ~ø21.5	−0.10 ~ +0.15	−0.10 ~ +0.18	−0.15 ~ +0.20
ø22 ~ø50	−0.10 ~ +0.15	−0.12 ~ +0.20	−0.15 ~ +0.25
ø50 ~ø80	−0.15 ~ +0.20	−0.15 ~ +0.25	−0.15 ~ +0.30

※ 홀 공차는 드릴의 길이, 피삭재, 장비, 가공조건 등에 따라 차이가 생길 수 있습니다.
※ The length of drill, kind of workpiece, machine stability, and cutting condition could affect the hole tolerance.

● 소요동력 Power Requirements





● Shank ISO9766, Parallel with clamping flat

Code No.	치수 Dimension(mm)					인서트 Insert	부품 Component	
	D	L1	L	Ds	Ls		Screw	T-Driver
STD-V22040D S32	22.0	91	181	32	60	SPMX07T308	TSB-25065	TXL-6
STD-V22540D S32	22.5	93	183					
STD-V23040D S32	23.0	95	185					
STD-V23540D S32	23.5	97	187					
STD-V24040D S32	24.0	99	189					
STD-V24540D S32	24.5	101	191					
STD-V25040D S32	25.0	103	193					
STD-V25540D S32	25.5	105	195					
STD-V26040D S32	26.0	107	197					
STD-V26540D S32	26.5	109	199					
STD-V27040D S32	27.0	111	201					
STD-V27540D S32	27.5	113	203					
STD-V28040D S32	28.0	115	205			SPMX090408	TSB-35090	TXL-15
STD-V28540D S32	28.5	117	207					
STD-V29040D S32	29.0	120	210					
STD-V29540D S32	29.5	123	213					
STD-V30040D S32	30.0	125	215					
STD-V31040D S32	31.0	129	219					
STD-V32040D S32	32.0	133	223					
STD-V33040D S32	33.0	137	227					
STD-V34040D S40	34.0	141	246	40	70	SPMX110408	TSB-40100	
STD-V35040D S40	35.0	145	250					
STD-V36040D S40	36.0	149	254					
STD-V37040D S40	37.0	153	258					
STD-V38040D S40	38.0	157	262					
STD-V39040D S40	39.0	161	266					
STD-V40040D S40	40.0	165	270					
STD-V41040D S40	41.0	169	274					
STD-V42040D S40	42.0	173	278			SPMX140512	TSB-50125	TXL-20
STD-V43040D S40	43.0	177	282					
STD-V44040D S40	44.0	181	286					
STD-V45040D S40	45.0	185	290					
STD-V46040D S40	46.0	189	294					
STD-V47040D S40	47.0	193	298					
STD-V48040D S40	48.0	197	302					
STD-V49040D S40	49.0	201	306					
STD-V50040D S40	50.0	205	310					

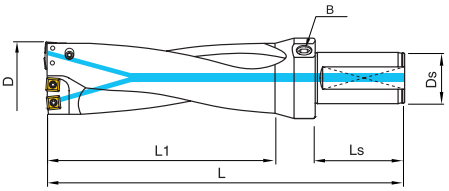
※ 가공경 ø40 이상을 범용선반에서 가공할 경우 센터붙이 타입 드릴(VLT, FXD, VMD) 사용을 권장합니다.
STD-V드릴과 체결되는 툴 홀더는 '사이드락 아버'(78페이지~90페이지)입니다.
※ 불규칙한 면을 가공할 경우에는 이송속도를 30%~50% 줄여 가공하여 주시기 바랍니다.

※ If you are working on the lathe, diameter ø40 or higher, we recommend using the VLT, FXD, VMD
The tool holder that locks with STD-V is Side Lock Arbor.(P.78~P.90)
※ When working on irregular (uneven) surfaces, please reduce the feed rate by 30~50%.

HIGH SPEED DRILL

STD-V BIG DIAMETER DRILL(CARTRIDGE TYPE)

STD-V 대구경 드릴(카트리지 타입)



● Shank ISO9766, Parallel with clamping flat

▶ STD-V 2×D (CARTRIDGE TYPE)

Code No.	치수 Dimension(mm)					카트리지 Cartridge		인서트 Insert	부품 Component	
	D	L1	L	Ds	Ls	내측 Inner	외측 Outer		Screw	T-Driver
STD-V505520D S40	50-55	110	220	40	70	STC-V5055N	STC-V5055T	SPMX090408	TSB-35090	TXL-15
STD-V556020D S40	55-60	120	230			STC-V5560N	STC-V5560T			
STD-V606520D S40	60-65	130	240			STC-V6065N	STC-V6065T	SPMX110408	TSB-40100	
STD-V657020D S40	65-70	140	260			STC-V6570N	STC-V6570T			
STD-V707520D S40	70-75	150	265			STC-V7075N	STC-V7075T			
STD-V758020D S40	75-80	160	268			STC-V7580N	STC-V7580T	SPMX140512	TSB-50125	TXL-20

▶ STD-V 3×D (CARTRIDGE TYPE)

Code No.	치수 Dimension(mm)					카트리지 Cartridge		인서트 Insert	부품 Component	
	D	L1	L	Ds	Ls	내측 Inner	외측 Outer		Screw	T-Driver
STD-V505530D S40	50-55	165	275	40	70	STC-V5055N	STC-V5055T	SPMX090408	TSB-35090	TXL-15
STD-V556030D S40	55-60	180	290			STC-V5560N	STC-V5560T			
STD-V606530D S40	60-65	195	305			STC-V6065N	STC-V6065T	SPMX110408	TSB-40100	
STD-V657030D S40	65-70	210	320			STC-V6570N	STC-V6570T			
STD-V707530D S40	70-75	225	335			STC-V7075N	STC-V7075T			
STD-V758030D S40	75-80	240	348			STC-V7580N	STC-V7580T	SPMX140512	TSB-50125	TXL-20

▶ STD-V 4×D (CARTRIDGE TYPE)

Code No.	치수 Dimension(mm)					카트리지 Cartridge		인서트 Insert	부품 Component	
	D	L1	L	Ds	Ls	내측 Inner	외측 Outer		Screw	T-Driver
STD-V505540D S40	50-55	220	330	40	70	STC-V5055N	STC-V5055T	SPMX090408	TSB-35090	TXL-15
STD-V556040D S40	55-60	240	350			STC-V5560N	STC-V5560T			
STD-V606540D S40	60-65	260	370			STC-V6065N	STC-V6065T	SPMX110408	TSB-40100	
STD-V657040D S40	65-70	280	390			STC-V6570N	STC-V6570T			
STD-V707540D S40	70-75	300	410			STC-V7075N	STC-V7075T			
STD-V758040D S40	75-80	320	428			STC-V7580N	STC-V7580T	SPMX140512	TSB-50125	TXL-20

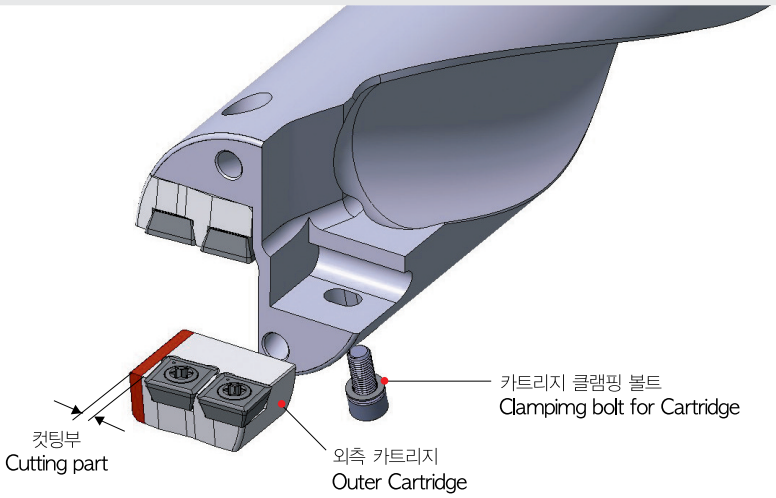
※ 범용선반 작업할 경우, 가공직경 ø40 이상이면 VLT나, VMD 사용을 권장합니다.
STD-V드릴과 체결되는 툴 홀더는 '사이드락 아버'(78페이지~90페이지)입니다.

※ If you are working on the lathe, diameter ø40 or higher, we recommend using the VLT, FXD, VMD
The tool holder that locks with STD-V is Side Lock Arbor.(P.78~P.90)

• STD-V 드릴 가공 동영상을 보시려면, 오른쪽 QR코드를 스캔하세요.
• Please scan the QR code if you want to see STD-V drill testing sample video.

STD-V VIDEO

STD-V 대구경 드릴(카트리지 타입)셋팅 방법
THE SETTING PROCEDURES FOR THE BIG DIA DRILL(CARTRIDGE TYPE)



1) 외측카트리지를, 카트리지 클램핑 볼트를 풀어 바디에서 이탈시킨다.
Loosen the clamping bolt of the outer cartridge and remove it from the drill body.

2) 외측카트리지의 측면 밀착부를, 가공하려는 직경을 계산하여 밀링작업을한다.
Cut off the inside part, the comtacted side of the outer cartridge by milling after calculating the drilling diameter.

3) 컷팅된 외측카트리지의 날카로운 모서리면을 모따기 처리한다.
Slick the sharp corner of the cut cartridge.

4) 외측카트리지를 틈이 발생되지 않도록 바디에 밀착시키면서 카트리지 클램핑 볼트로 단단히 고정한다.
Adhere the cartridge closely to the drill body not happen gap and fix the cartridge with bolt tightly.

Example

STD-V606530D를 ø61로 셋팅한다면,
기본 직경은 ø65이므로 ø65-ø61=4→4÷2=2(반지름으로 계산), 2.0mm를 컷팅한다.

If you set STD-V606530D to ø61
The standard drill diameter is ø65 so ø65-ø61=4→4÷2=2(calculation by semidiameter), 2.0mm is cut off

Notice!

STD-V 대구경과 STD 대구경은 셋팅방법이 다르며, 카트리지 호환이 안됩니다.

The setting procedures is different from the big dia STD-V drill and STD drill and the cartridges is not interchangeable.