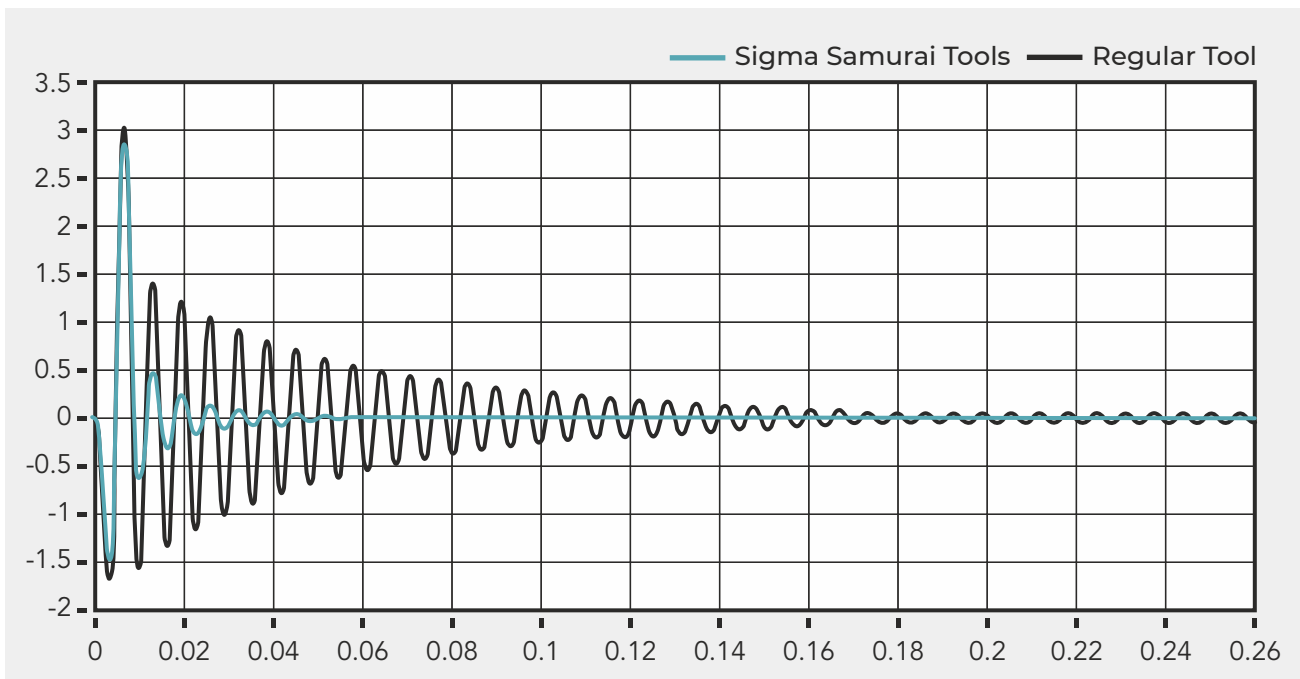


SAMURAI (侍)
TOOLS
(ANTIVIBRATION TOOLS)



Vibration is often the limiting parameter in gaining high output during machining of deep holes and complex work piece. While using extra-long tools where L/D ratio is greater than 5, the usual cause of vibrations during machining is the dynamic interaction between the cutting process & machine tool structure. Vibration are critical for a tool to perform well at all designed speed, feed and depth of cuts, to overcome this problem **Sigma** has introduced **Samurai Tools**.

By using Samurai tools you can increase the cutting parameters & at the same time get more secure & vibration free process with close tolerances, good surface & much higher material removal rate, which results into lower cost per component.



Precisely, it can be explained more effectively with the help of following example.

- Regular alloy steel machining boring bar can perform only up to 3.5 L/D to 4 L/D.
- If we try boring operation over and above 4 L/D, there are higher chances of vibration and chatter marks.
- Hence, to do boring above L/D 4, Antivibration tools are recommended.

By using Sigma Antivibration tools you can achieve vibration free machining process, higher cutting parameters, close tolerances, good surface finish and higher metal removal rate, which results into lower cost per component.

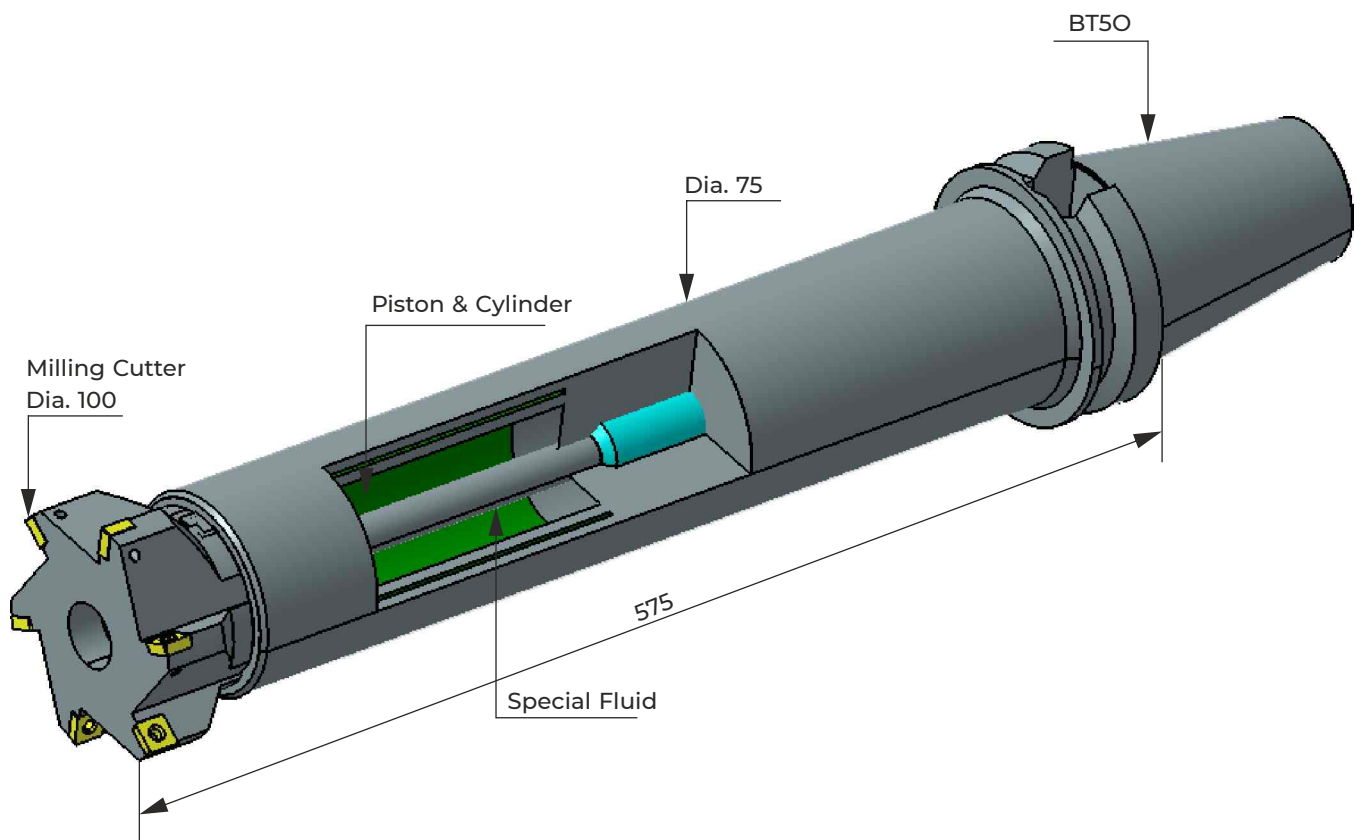
Sigma Samurai tools has piston and cylinder mechanism with the cylinder filled with a special fluid. The piston acts as a damper, which dampens the vibration generated while machining the component and the special fluid absorbs the vibration, thus providing steady machining, great rigidity and high stability at complex and extreme condition.

Sigma has developed this Samurai Antivibration tool by using special high tensile steel which provides greater strength and rigidity, whereas the piston and cylinder mechanism gives dynamic stability. This tool performs at complex conditions where normal steel & conventional Antivibration boring tools does not work satisfactorily

Sigma makes AVT mechanism which is having dampening characteristics increased by as much as 18 to 24 X. In AVT system vibration mechanism is placed where deflection is highest. This mechanism will start absorbing vibration, thus it immediately neutralizes vibration and gives consistent steady result.

These tools can be used for all types of application such as drilling, boring, milling, tapping, parting & grooving.

With the help of customized modular clamping system, the front modular head can be changed within minimum setting time resulting into improvised cycle time.



A. Stationary Samurai Tools for - CNC & Lathe Machines

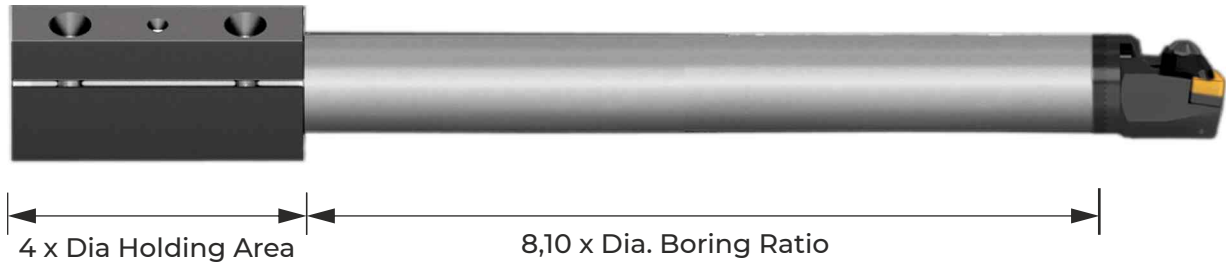


B. Rotary Samurai Tools for - VMC & HMC Machines

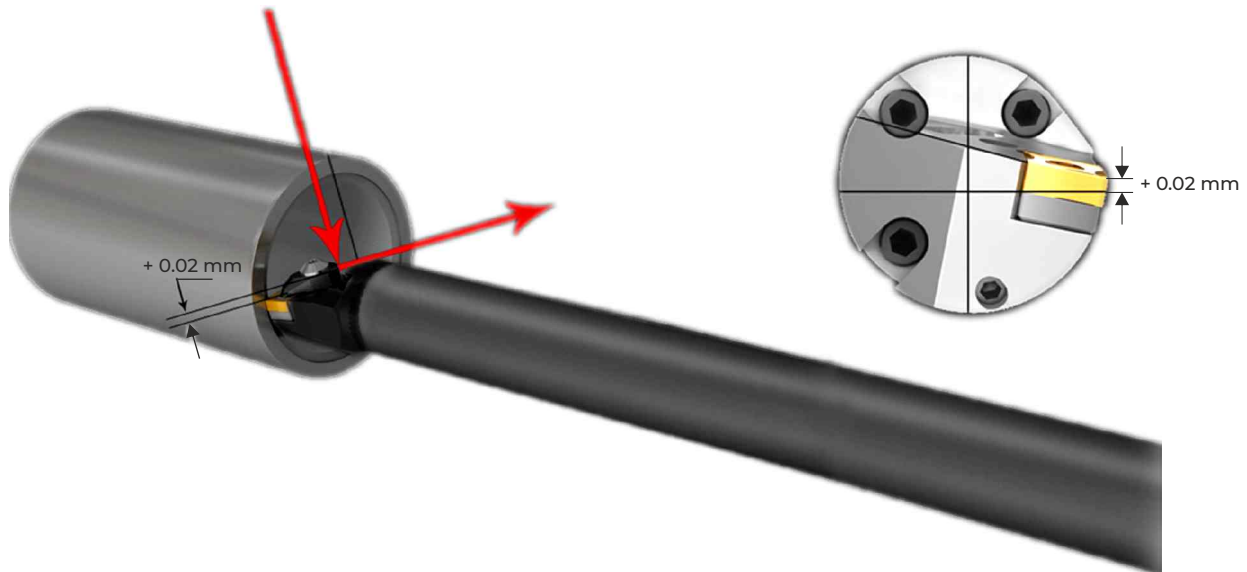


Stationary Tool

- A. Holding Should be upto $L/D = 4$
(For achieving sufficient holding strength)

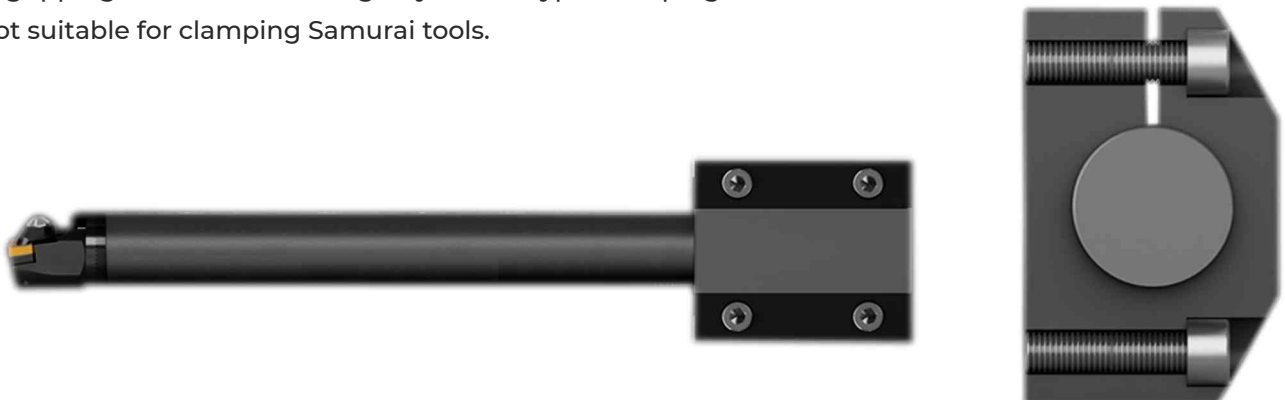


- B. Cutting Point Should be + 0.02 mm above Center height of cutting tool



C. Clamping

Use gripping sleeves for more rigidity as bolt type Clamping is not suitable for clamping Samurai tools.



Precautions

- › Before starting operation, ensure there is no filler gap in holding area.
- › Proper coolant flow arrangement at cutting point should be ensured.
- › Minimum coolant pressure required is 4 bar.
- › Always place the Antivibration/Samurai tools in horizontal position.
- › Do not clamp the Antivibration tools over and above the clamping point.

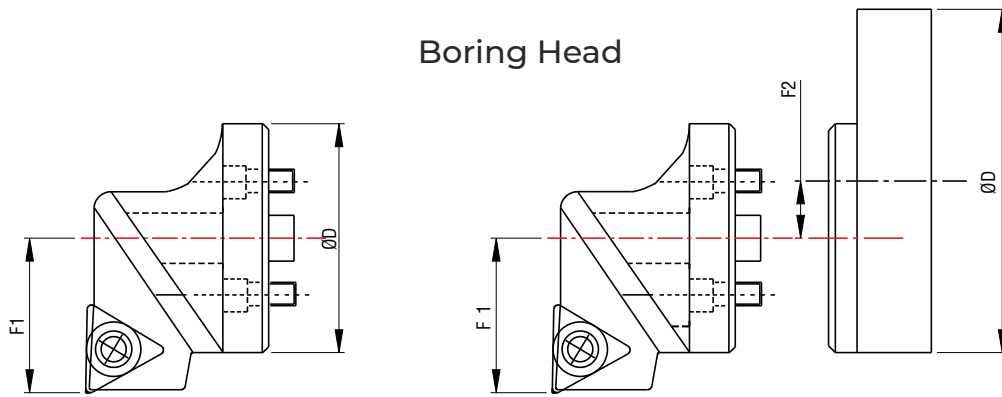
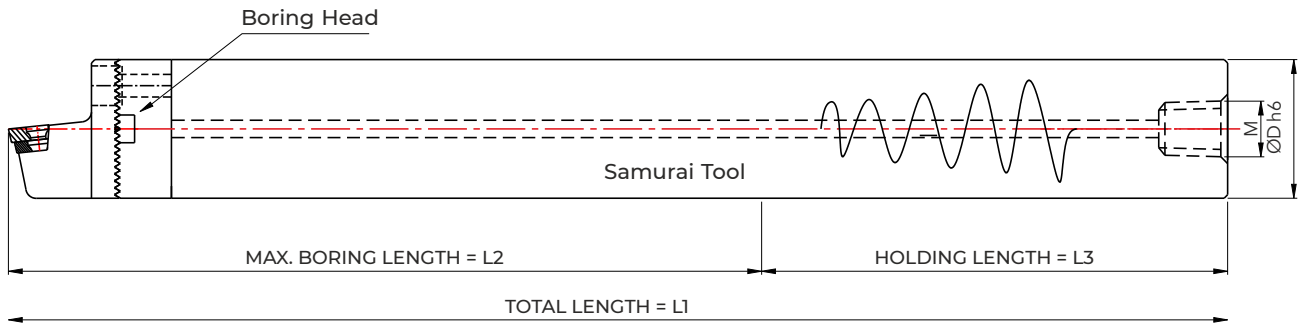
Parameters

- › These Antivibration/Samurai tools can be used at 0.1 feed rate and VC = 80-100.
- › Corner radius for finishing = 0.4, Corner radius for roughing = 0.8.
- › For roughing max depth of cut is 1.5 mm radially.
- › For finishing depth of cut is 0.25 to 0.3 radially.
- › Cutting speed of Antivibration tools should be between 80 - 100 meters material per minute. while feed rate should be 0.1 mm per tooth.
- › Cutting parameters may vary according to the machine, material and cutting conditions.
- › For roughing application maximum depth of cut applied at one time can be 5 mm.
- › Above L/D 8, it may vary.

Life and Reliability

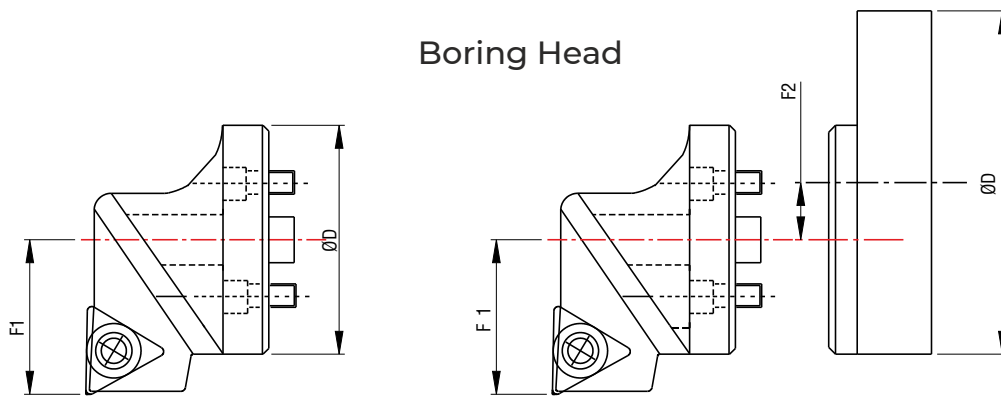
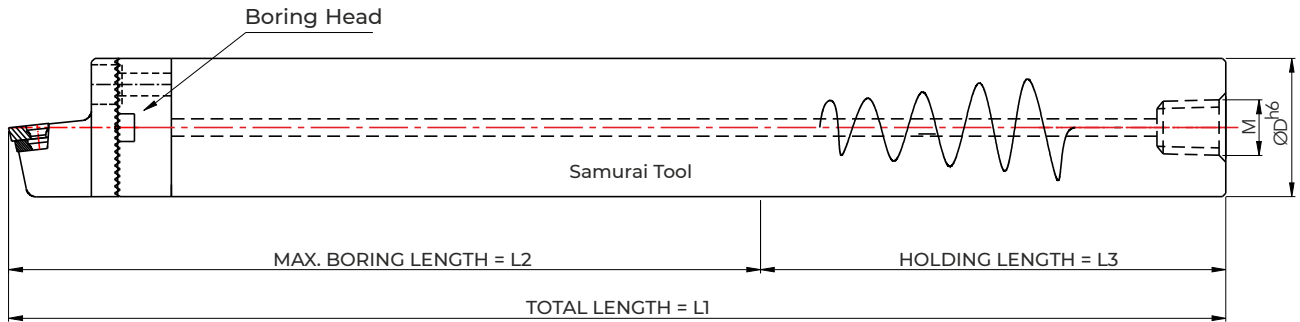
- › The Antivibration/Samurai tools are filled with special compressed fluid.
- › Each and every tool is tried & tested in house.
- › No need of setting or arranging person for trial at customers end.

Samurai Tool L/D-6



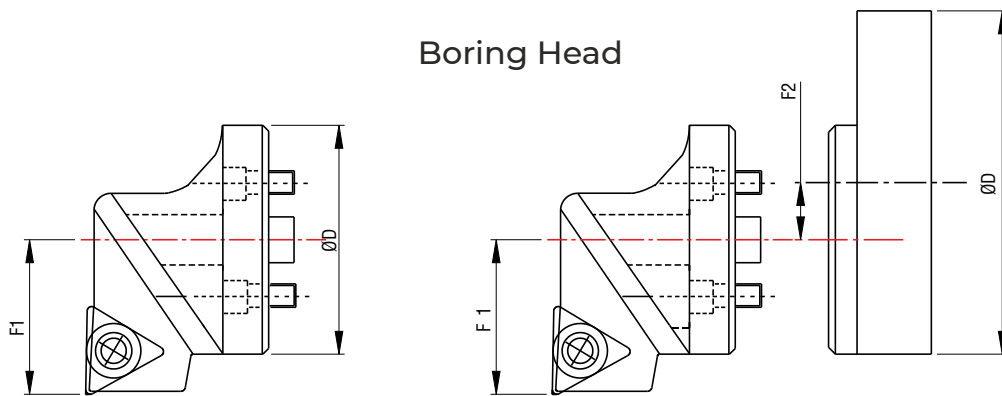
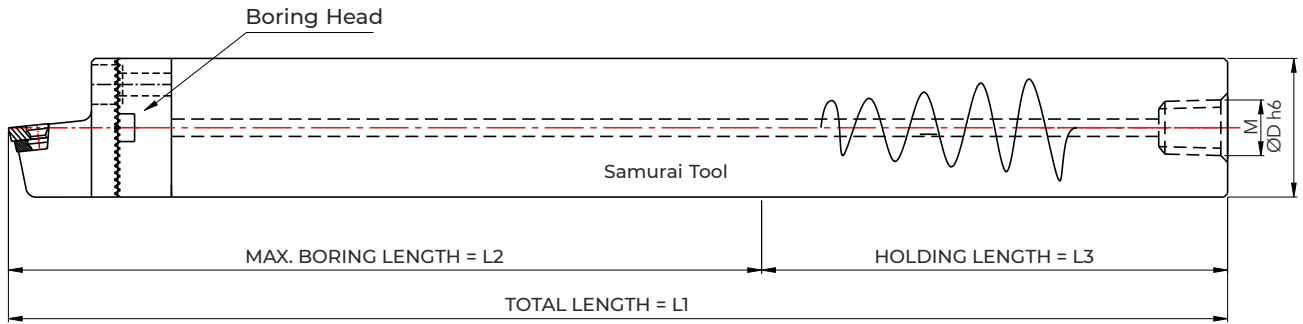
SR. NO.	CODE	ØDh6	F1	F2	L1	L2	L3	M
1	ABB06-25	Ø25	20	—	250	150	100	¼ BSP
2	ABB06-32	Ø32	22	—	325	195	130	3/8 BSP
3	ABB06-40	Ø40	27	—	400	240	160	½ BSP
4	ABB06-50	Ø50	27	5	530	330	200	½ BSP
5	ABB06-60	Ø60	27	10	600	360	240	¾ BSP
6	ABB06-80	Ø80	35	20	800	480	320	¾ BSP
7	ABB06-100	Ø100	35	32	1000	600	400	¾ BSP

Samurai Tool L/D-8



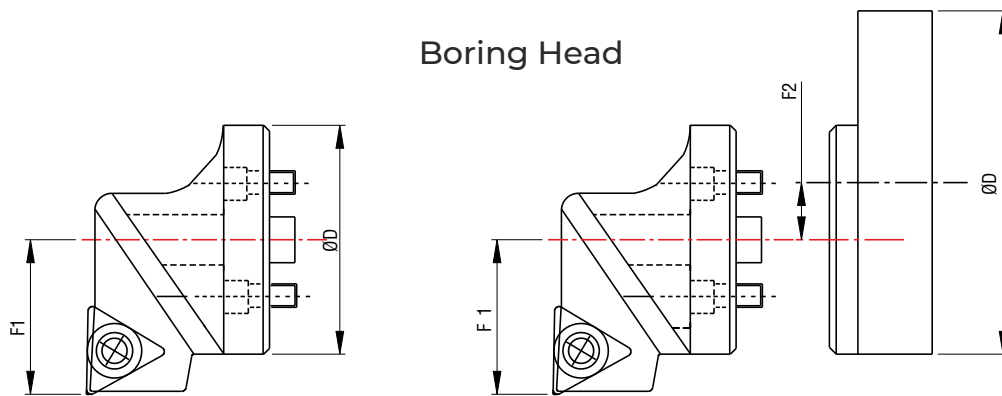
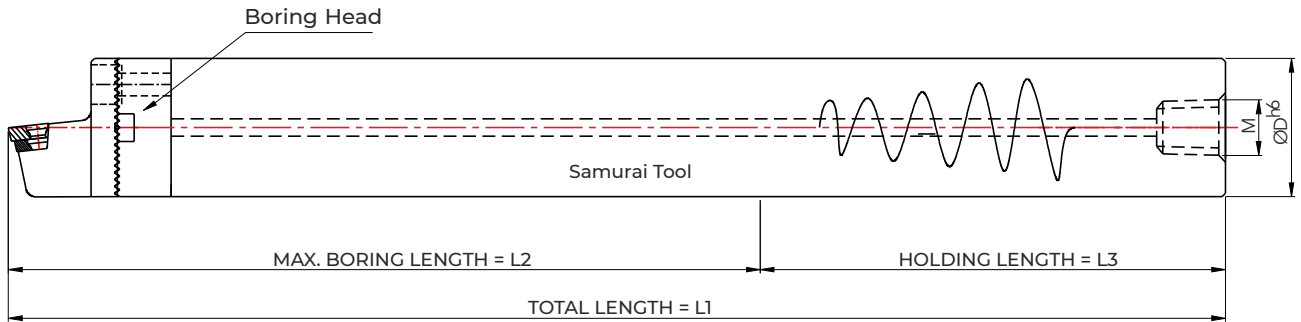
SR. NO.	CODE	ØDh6	F1	F2	L1	L2	L3	M
1	ABB08-25	Ø25	20	—	300	200	100	¼ BSP
2	ABB08-32	Ø32	22	—	390	260	130	3/8 BSP
3	ABB08-40	Ø40	27	—	480	320	160	½ BSP
4	ABB08-50	Ø50	27	5	600	400	200	½ BSP
5	ABB08-60	Ø60	27	10	720	480	240	¾ BSP
6	ABB08-80	Ø80	35	20	960	640	320	¾ BSP
7	ABB08-100	Ø100	35	32	1200	800	400	¾ BSP

Samurai Tool L/D-10



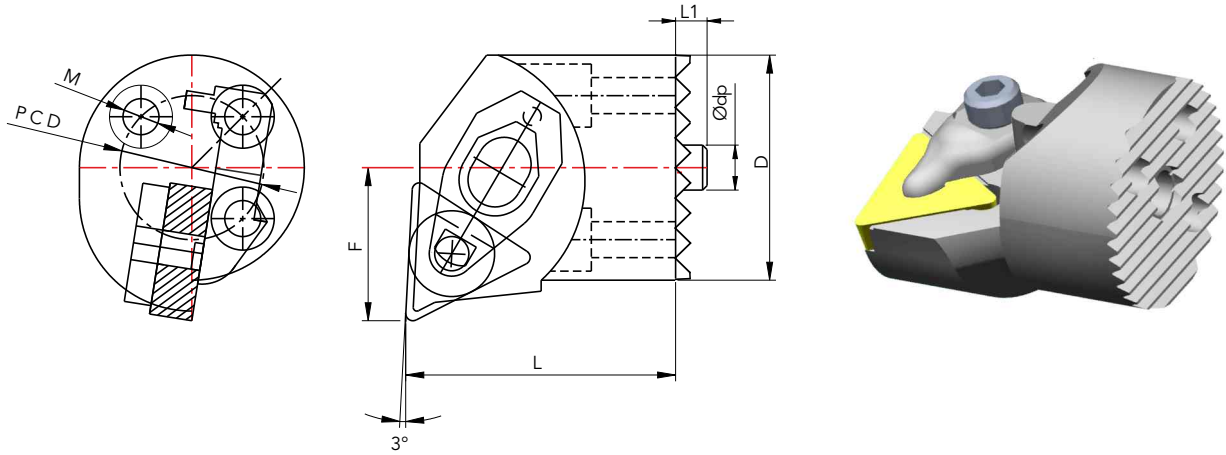
SR. NO.	CODE	$\varnothing D$ h6	F1	F2	L1	L2	L3	M
1	ABB10-25	$\varnothing 25$	20	—	350	250	100	¼ BSP
2	ABB10-32	$\varnothing 32$	22	—	450	320	130	3/8 BSP
3	ABB10-40	$\varnothing 40$	27	—	560	400	160	½ BSP
4	ABB10-50	$\varnothing 50$	27	5	700	500	200	½ BSP
5	ABB10-60	$\varnothing 60$	27	10	840	600	240	¾ BSP
6	ABB10-80	$\varnothing 80$	35	20	1120	800	320	¾ BSP
7	ABB10-100	$\varnothing 100$	35	32	1400	1000	400	¾ BSP

Samurai Tool L/D-14

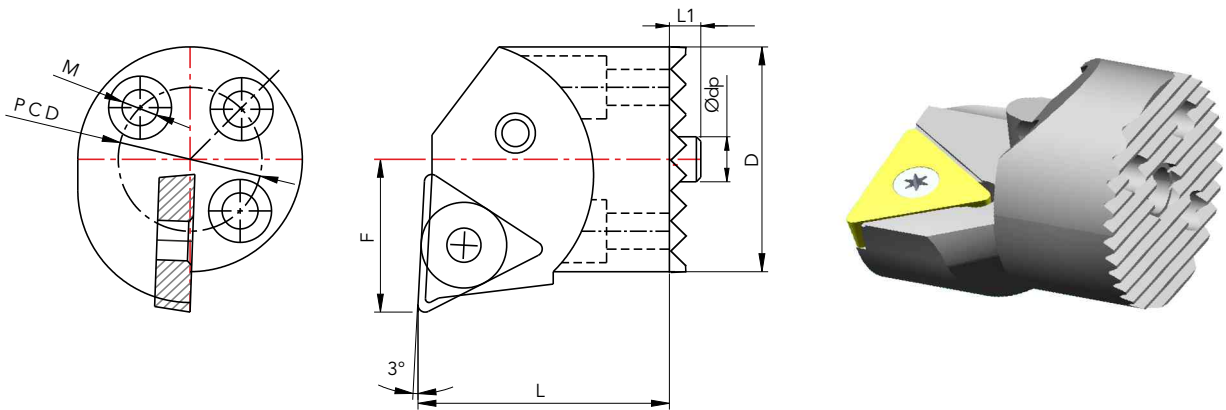


SR. NO.	CODE	ØDh6	F1	F2	L1	L2	L3	M
1	ABB14-25	Ø25	20	—	450	350	100	¼ BSP
2	ABB14-32	Ø32	22	—	580	450	130	3/8 BSP
3	ABB14-40	Ø40	27	—	720	560	160	½ BSP
4	ABB14-50	Ø50	27	5	900	700	200	½ BSP
5	ABB14-60	Ø60	27	10	1080	840	240	¾ BSP
6	ABB14-80	Ø80	35	20	1440	1120	320	¾ BSP
7	ABB14-100	Ø100	35	32	1800	1400	400	¾ BSP

Boring Heads

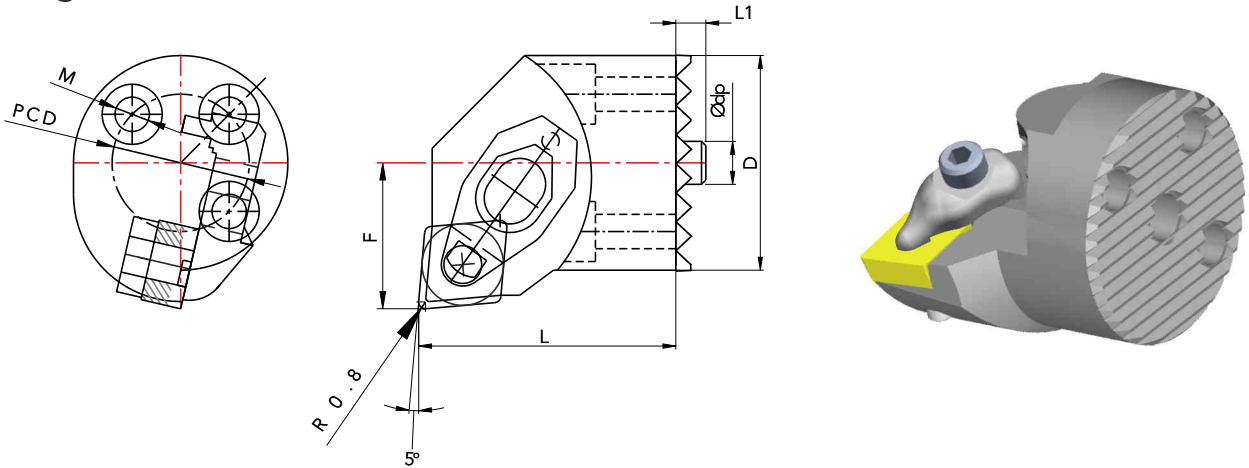


DESIGNATION RIGHT HAND	D DIA.	L OAL	F	PCD	dp	L1	ALLEN HEAD" M"	INSERT	SHIM	SHIM PIN	CLAMP	CLAMP SCREW	SPRING	WRENCH
SMDTUNR/L16 25	Ø25.0	30.0	17.2	Ø5.0	3.5	M4	TNMG 1604	STS 23	SG 400851	DCL 3	DLS 3	SPG3	W-2.5	5008
SMDTUNR/L20 32	Ø32.0	30.0	22.0	Ø6.0	4.0	M5		STS 23	SG 400851	DCL 3	DLS 3	SPG3	W-2.5	5008
SMDTUNR/L24 40	Ø40.0	40.0	27.0	Ø8.0	6.0	M6		---	---	---	---	---	---	---
SMDTUNR/L28 50	Ø50.0	---	---	---	---	---	TNMG 2204	---	---	---	---	---	---	---
SMDTUNR/L32 60	Ø60.0	---	---	---	---	---		---	---	---	---	---	---	---
SMDTUNR/L40 80	Ø80.0	---	---	---	---	---		---	---	---	---	---	---	---
---	Ø100.0	---	---	---	---	---		---	---	---	---	---	---	---

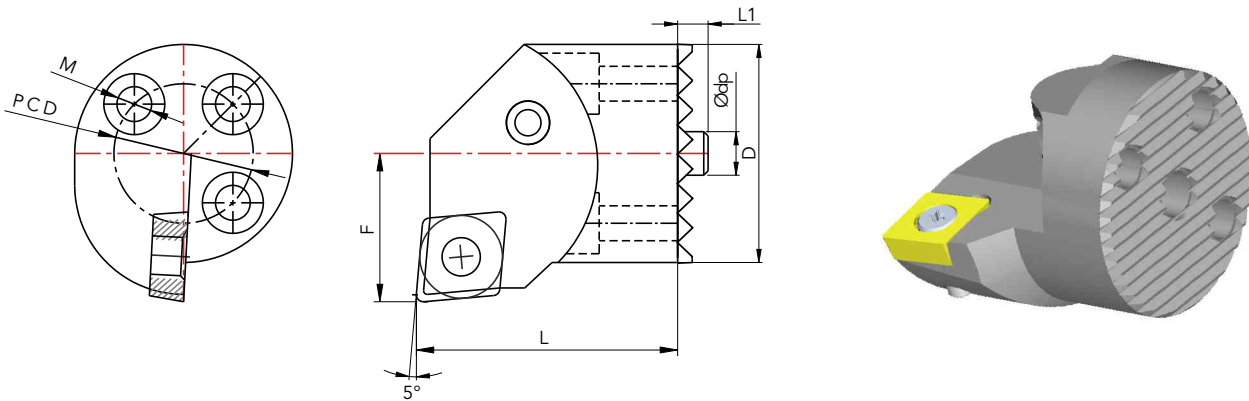


DESIGNATION RIGHT HAND	D DIA.	L OAL	F	PCD	dp	L1	ALLEN HEAD" M"	INSERT	INSERT SCREW	KEY
SMSTUCR/L16 25	Ø25.0	30.0	17.2	Ø16	Ø5.0	3.5	M4	TCMT 16T3	403508	5015
SMSTUCR/L20 32	Ø32.0	30.0	22.0	Ø22.5	Ø6.0	4.0	M5		403508	5015
SMSTUCR/L24 40	Ø40.0	40.0	27.0	Ø28.0	Ø8.0	6.0	M6	TCMT 22 04	404512	5020
SMSTUCR/L28 50	Ø50.0	---	---	---	---	---	---		404512	5020
SMSTUCR/L32 60	Ø60.0	---	---	---	---	---	---		404512	5020
SMSTUCR/L40 80	Ø80.0	---	---	---	---	---	---		404512	5020
---	Ø100.0	---	---	---	---	---	---		404512	5020

Boring Heads

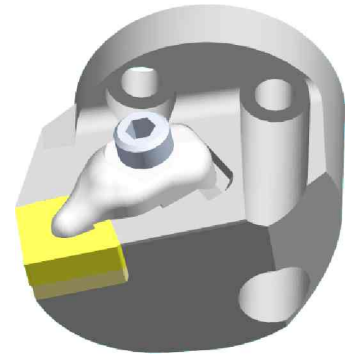
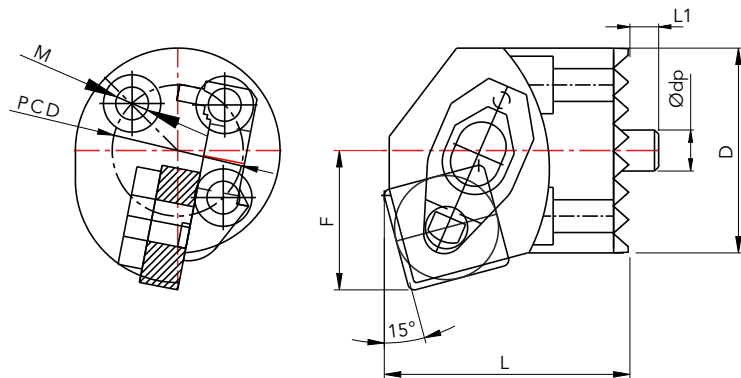


DESIGNATION RIGHT HAND	D DIA.	L OAL	F	PCD	dp	L1	ALLEN HEAD" M"	INSERT	SHIM	SHIM PIN	CLAMP	CLAMP SCREW	SPRING	WRENCH
SMDCLNR/L16 25	Ø25.0	30.0	17.2	Ø16	Ø5.0	3.5	M4	CNMG 0904	STS 33	SG 40085I	DCL 3-NH	DLS 3	SPG 3	W-2.5 5015
SMDCUNR/L20 32	Ø32.0	30.0	22.0	Ø22.5	Ø6.0	4.0	M5		STS 33	SG 40085I	DCL 3-NH	DLS 3	SPG 3	W-2.5 5015
SMDCUNR/L24 40	Ø40.0	40.0	27.0	Ø28.0	Ø8.0	6.0	M6		STS 44	SG 50A105I	DCL 4	DLS 4	SPG 4	W-3 5015
SMDCUNR/L28 50	Ø50.0	----	----	----	----	----	----	CNMG 1204	STS 44	SG 50A105I	DCL 4	DLS 4	SPG 4	W-3 5015
SMDCUNR/L32 60	Ø60.0	----	----	----	----	----	----		STS 44	SG 50A105I	DCL 4	DLS 4	SPG 4	W-3 5015
SMDCUNR/L40 80	Ø80.0	----	----	----	----	----	----		STS 44	SG 50A105I	DCL 4	DLS 4	SPG 4	W-3 5015
----	Ø100.0	----	----	----	----	----	----		STS 44	SG 50A105I	DCL 4	DLS 4	SPG 4	W-3 5015

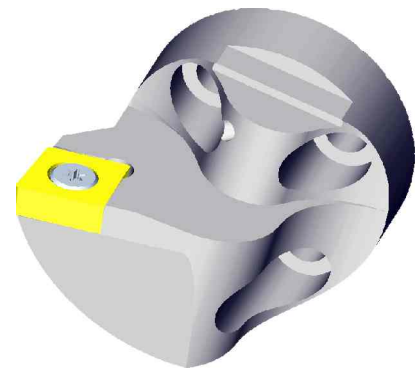
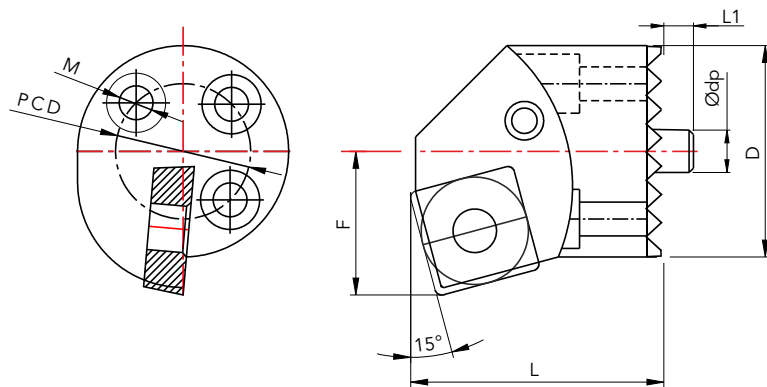


DESIGNATION RIGHT HAND	D DIA.	L OAL	F	PCD	dp	L1	ALLEN HEAD" M"	INSERT	INSERT SCREW	KEY
SMSCUCR/L16 25	Ø25.0	30.0	17.2	Ø16	Ø5.0	3.5	M4	CCMT 09T3	403508	5015
SMSCUCR/L20 32	Ø32.0	30.0	22.0	Ø22.5	Ø6.0	4.0	M5		403508	5015
SMSCUCR/L24 40	Ø40.0	40.0	27.0	Ø28.0	Ø8.0	6.0	M6	CCMT 1204	404510	5020
SMSCUCR/L28 50	Ø50.0	----	----	----	----	----	----		404510	5020
SMSCUCR/L32 60	Ø60.0	----	----	----	----	----	----		404510	5020
SMSCUCR/L40 80	Ø80.0	----	----	----	----	----	----		404510	5020
----	Ø100.0	----	----	----	----	----	----		404510	5020

Boring Heads

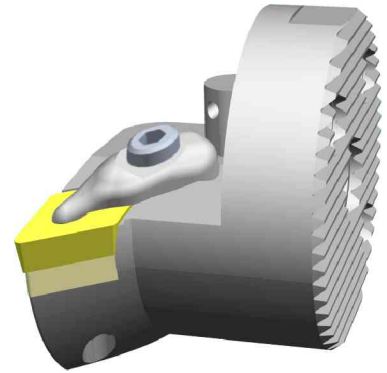
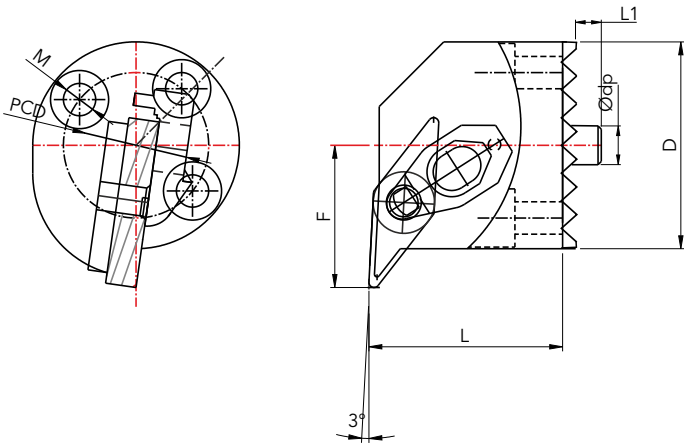


DESIGNATION RIGHT HAND	D DIA.	L OAL	F	PCD	dp	L1	ALLEN HEAD" M"	INSERT	SHIM	SHIM PIN	CLAMP	CLAMP SCREW	SPRING	WRENCH
SMDSKNR/L16 25	Ø25.0	30.0	17.2	Ø16	Ø5.0	3.5	M4	SNMG 1204	STS 44	SG 400501	DCL 4	DLS 4	SPG 4	W-3 5015
SMDSKNR/L20 32	Ø32.0	30.0	22.0	Ø22.5	Ø6.0	4.0	M5		STS 44	SG 400501	DCL 4	DLS 4	SPG 4	W-3 5015
SMDSKNR/L24 40	Ø40.0	40.0	27.0	Ø28.0	Ø8.0	6.0	M6		STS 44	SG 400501	DCL 4	DLS 4	SPG 4	W-3 5015
SMDSKNR/L28 50	Ø50.0	----	----	----	----	----	----		STS 44	SG 400501	DCL 4	DLS 4	SPG 4	W-3 5015
SMDSKNR/L32 60	Ø60.0	----	----	----	----	----	----		STS 44	SG 400501	DCL 4	DLS 4	SPG 4	W-3 5015
SMDSKNR/L40 80	Ø80.0	----	----	----	----	----	----		STS 44	SG 400501	DCL 4	DLS 4	SPG 4	W-3 5015
----	Ø100.0	----	----	----	----	----	----		STS 44	SG 400501	DCL 4	DLS 4	SPG 4	W-3 5015

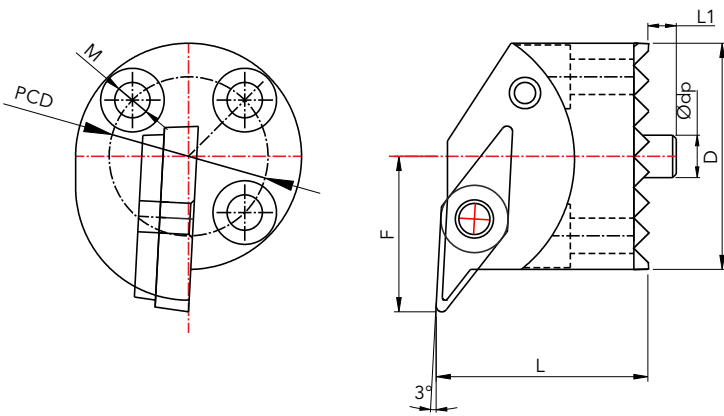


DESIGNATION RIGHT HAND	D DIA.	L OAL	F	PCD	dp	L1	ALLEN HEAD" M"	INSERT	INSERT SCREW	KEY
SMSSKCR/L16 25	Ø25.0	30.0	17.0	Ø16	Ø5.0	3.5	M4	SCMT 1204	404510	5020
SMSSKCR/L20 32	Ø32.0	30.0	22.0	Ø22.5	Ø6.0	4.0	M5		404510	5020
SMSSKCR/L24 40	Ø40.0	40.0	27.0	Ø28.0	Ø8.0	6.0	M6		404510	5020
SMSSKCR/L28 50	Ø50.0	----	----	----	----	----	----		404510	5020
SMSSKCR/L32 60	Ø60.0	----	----	----	----	----	----		404510	5020
SMSSKCR/L40 80	Ø80.0	----	----	----	----	----	----		404510	5020
----	Ø100.0	----	----	----	----	----	----		404510	5020

Boring Heads

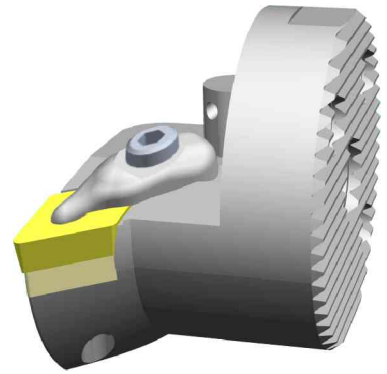
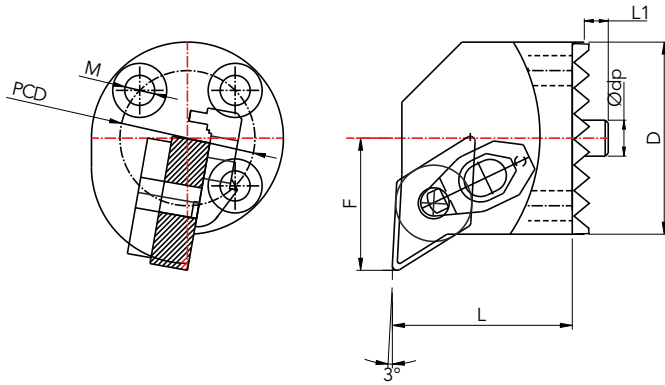


DESIGNATION RIGHT HAND	D DIA.	L OAL	F	PCD	dp	L1	ALLEN HEAD" M"	INSERT	SHIM	SHIM PIN	CLAMP	CLAMP SCREW	SPRING	WRENCH	
SMDVUNR/L20 32	Ø32.0	30.0	22.0	Ø22.5	Ø6.0	3.5	M5	VNMG 1604	STS 33	SG 400501	DCL 3	DLS 5	SPG 5	W-4	5015
SMDVUNR/L24 40	Ø40.0	40.0	27.0	Ø28.0	Ø8.0	4.0	M6		STS 33	SG 400501	DCL 3	DLS 5	SPG 5	W-4	5015
SMDVUNR/L28 50	Ø50.0	---	---	---	---	---	---		STS 33	SG 400501	DCL 3	DLS 5	SPG 5	W-4	5015
SMDVUNR/L32 60	Ø60.0	---	---	---	---	---	---		STS 33	SG 400501	DCL 3	DLS 5	SPG 5	W-4	5015
SMDVUNR/L40 80	Ø80.0	---	---	---	---	---	---	VNMG 2204	---	---	---	---	---	---	---

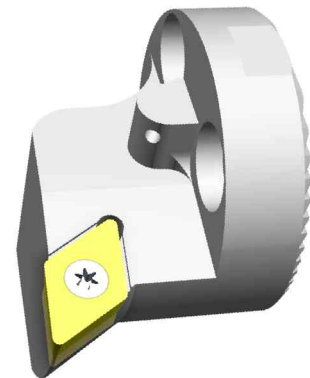
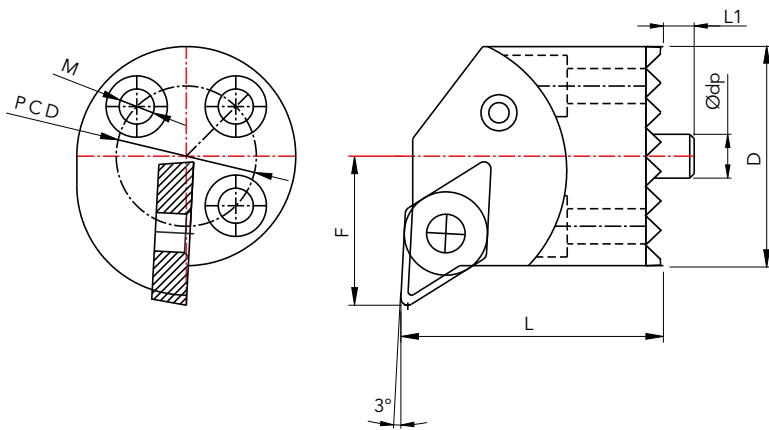


DESIGNATION RIGHT HAND	D DIA.	L OAL	F	PCD	dp	L1	ALLEN HEAD" M"	INSERT	INSERT SCREW	SHIM	SHIM SCREW	WRENCH
SMSVUCR/L20 32	Ø32.0	30.0	22.0	Ø22.5	Ø6.0	4.0	M5	VCMT 1204	SG 350801	STS 32	SG 50090S	5015
SMSVUCR/L24 40	Ø40.0	40.0	27.0	Ø28.0	Ø8.0	6.0	M6		SG 350801	STS 32	SG 50090S	5015
SMSVUCR/L28 50	Ø50.0	---	---	---	---	---	---		SG 350801	STS 32	SG 50090S	5015
SMSVUCR/L32 60	Ø60.0	---	---	---	---	---	---		SG 350801	STS 32	SG 50090S	5015
SMSVUCR/L40 80	Ø80.0	---	---	---	---	---	---		SG 350801	STS 32	SG 50090S	5015
---	Ø100.0	---	---	---	---	---	---		SG 350801	STS 32	SG 50090S	5015

Boring Heads

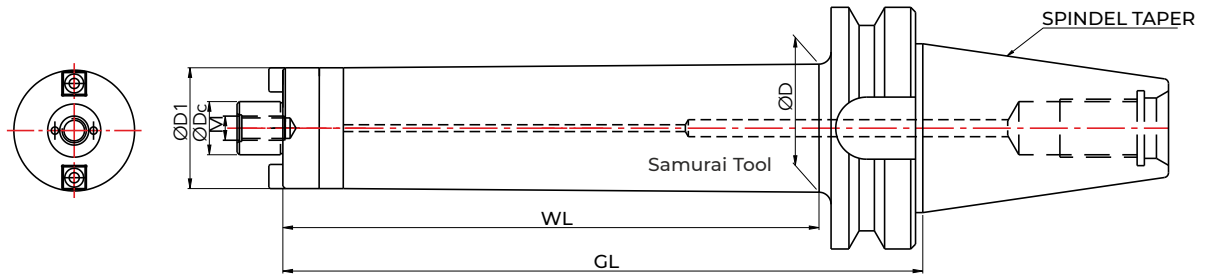


DESIGNATION RIGHT HAND	D DIA.	L OAL	F	PCD	dp	L1	ALLEN HEAD "M"	INSERT	SHIM	SHIM PIN	CLAMP	CLAMP SCREW	SPRING	WRENCH
SMDDUNR/L 20 32	Ø32.0	30.0	22.0	Ø22.5	Ø6.0	3.5	M5	DNMG 1506	STS 43	SG 50A105I	DCL 4	DLS 4	SPG 4	W-3 5015
SMDDUNR/L 24 40	Ø40.0	40.0	27.0	Ø28.0	Ø8.0	4.0	M6		STS 43	SG 50A105I	DCL 4	DLS 4	SPG 4	W-3 5015
SMDDUNR/L 28 50	Ø50.0	----	----	----	----	----	----		STS 43	SG 50A105I	DCL 4	DLS 4	SPG 4	W-3 5015
SMDDUNR/L 32 60	Ø60.0	----	----	----	----	----	----		STS 43	SG 50A105I	DCL 4	DLS 4	SPG 4	W-3 5015
SMDDUNR/L 40 80	Ø80.0	----	----	----	----	----	----		STS 43	SG 50A105I	DCL 4	DLS 4	SPG 4	W-3 5015
----	Ø100.0	----	----	----	----	----	----		STS 43	SG 50A105I	DCL 4	DLS 4	SPG 4	W-3 5015



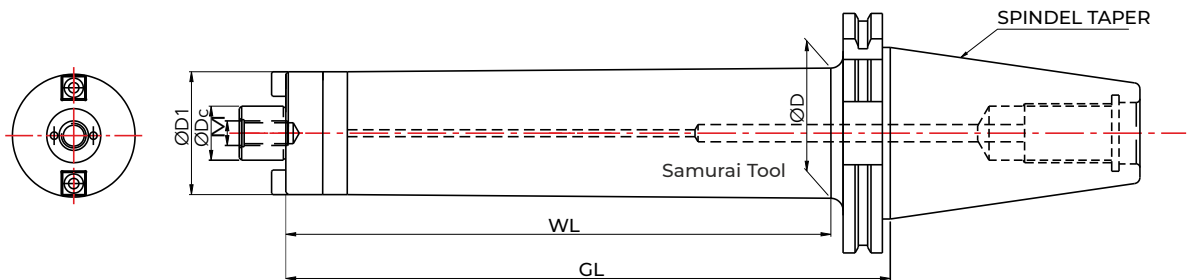
DESIGNATION RIGHT HAND	D DIA.	L OAL	F	PCD	dp	L1	ALLEN HEAD "M"	INSERT	INSERT SCREW	KEY
SMSDUCR/L16 25	Ø25.0	30.0	17.0	Ø16	Ø5.0	3.5	M4	DCMT 11T3	403508	5015
SMSDUCR/L20 32	Ø32.0	30.0	22.0	Ø22.5	Ø6.0	4.0	M5		403508	5015
SMSDUCR/L24 40	Ø40.0	40.0	27.0	Ø28.0	Ø8.0	6.0	M6		403508	5015
SMSDUCR/L28 50	Ø50.0	----	----	----	----	----	----		403508	5015
SMSDUCR/L32 60	Ø60.0	----	----	----	----	----	----		403508	5015
SMSDUCR/L40 80	Ø80.0	----	----	----	----	----	----		403508	5015
----	Ø100.0	----	----	----	----	----	----		403508	5015

BT 40 & BT 50 L/D-6 Samurai Milling Adaptor



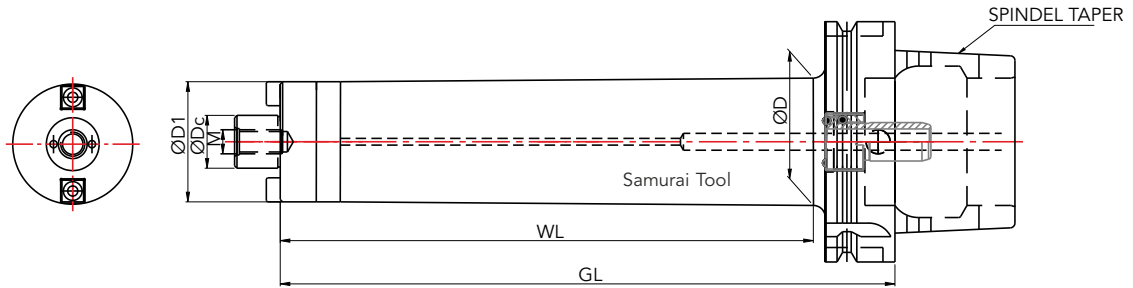
SR. NO.	PART CODE	SPINDEL TAPER	D1	Dc	D	M	WL	GL
01	ABB06-MLD22-BT40-240	BT40	48	22	50	M10	240	272
02	ABB06-MLD22-BT50-250	BT50	50	22	50	M10	250	293
03	ABB06-MLD27-BT50-310	BT50	60	27	63	M12	310	355
04	ABB06-MLD32-BT50-350	BT50	66	32	70	M16	350	395

SK 40 & SK50 L/D-6 Samurai Milling Adaptor



SR. NO.	PART CODE	SPINDEL TAPER	D1	Dc	D	M	WL	GL
01	ABB06-MLD22-SK40-240	SK 40	48	22	50	M10	240	265
02	ABB06-MLD22-SK50-250	SK 50	50	22	50	M10	250	275
03	ABB06-MLD27-SK50-310	SK 50	60	27	63	M12	310	335
04	ABB06-MLD32-SK50-350	SK 50	66	32	70	M16	350	375

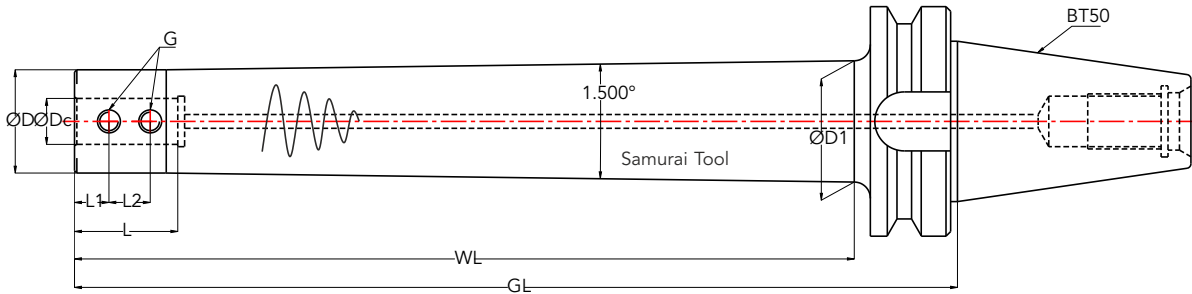
HSK A-63 & HSK A-100 L/D-6 Samurai Milling Adaptor



SR. NO.	PART CODE	SPINDEL TAPER	D1	Dc	D	M	WL	GL
01	ABB06-MLD22-HSK63-240	HSK A-63	48	22	50	M10	240	265
02	ABB06-MLD22-HSK100-250	HSK A100	50	22	50	M10	250	285
03	ABB06-MLD27-HSK100-310	HSK A100	60	27	63	M12	310	345
04	ABB06-MLD32-HSK100-350	HSK A100	66	32	70	M16	350	385

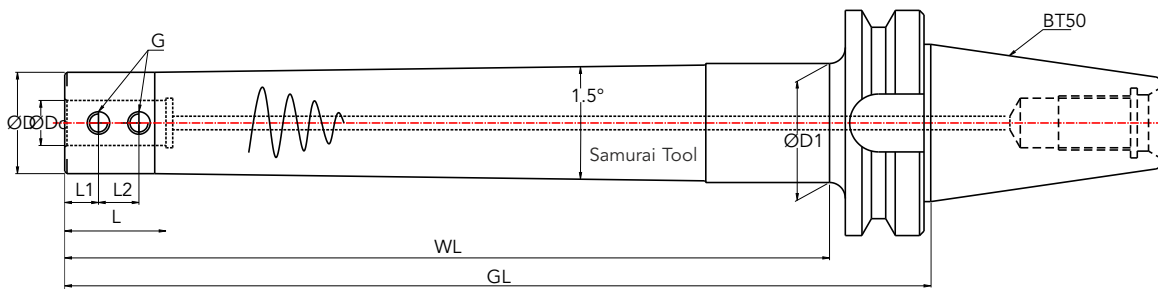


BT 50 L/D-8 Samurai Side Lock Adaptor



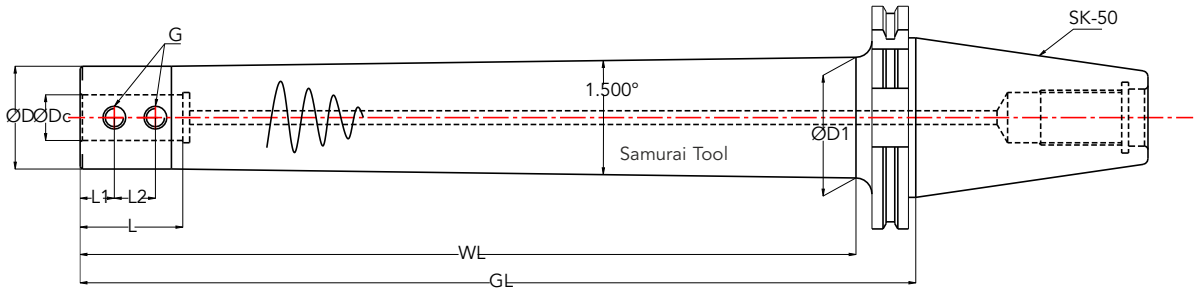
SR. NO.	PART CODE	$\varnothing D_c$	D	D1	L	L1	L2	WL	GL	G
01	ABB08-SLA20-BT50-340	20	50	52.9	45	15	18	340	385	M10
02	ABB08-SLA25-BT50-375	25	55	63.6	55	20	22	375	420	M12
03	ABB08-SLA32-BT50-420	32	62	71.5	60	25	20	420	465	M14

BT 50 L/D-10 Samurai Side Lock Adaptor



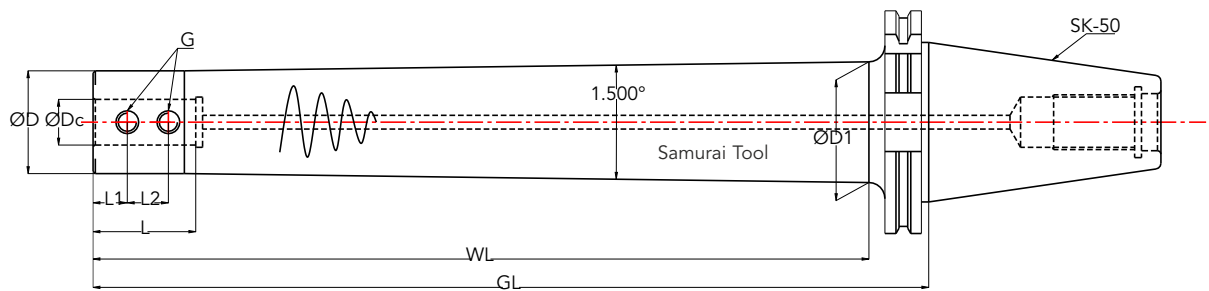
SR. NO.	PART CODE	$\varnothing D_c$	D	D1	L	L1	L2	WL	GL	G
01	ABB10-SLA20-BT50-440	20	50	60.5	45	15	18	440	485	M10
02	ABB10-SLA25-BT50-485	25	55	66.5	55	20	22	485	530	M12
03	ABB10-SLA32-BT50-545	32	62	75	60	25	20	545	590	M14

SK 50 L/D-8 Samurai Side Lock Adaptor



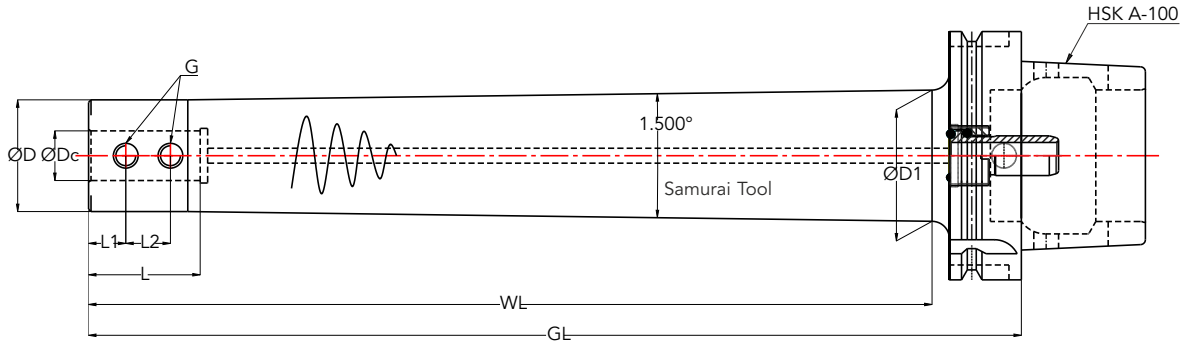
SR. NO.	PART CODE	ØDc	D	D1	L	L1	L2	WL	GL	G
01	ABB08-SLA20-SK50-340	20	50	52.9	45	15	18	340	366	M10
02	ABB08-SLA25-SK50-375	25	55	63.6	55	20	22	375	401	M12
03	ABB08-SLA32-SK50-420	32	62	71.5	60	25	20	420	446	M14

SK 50 L/D-10 Samurai Side Lock Adaptor



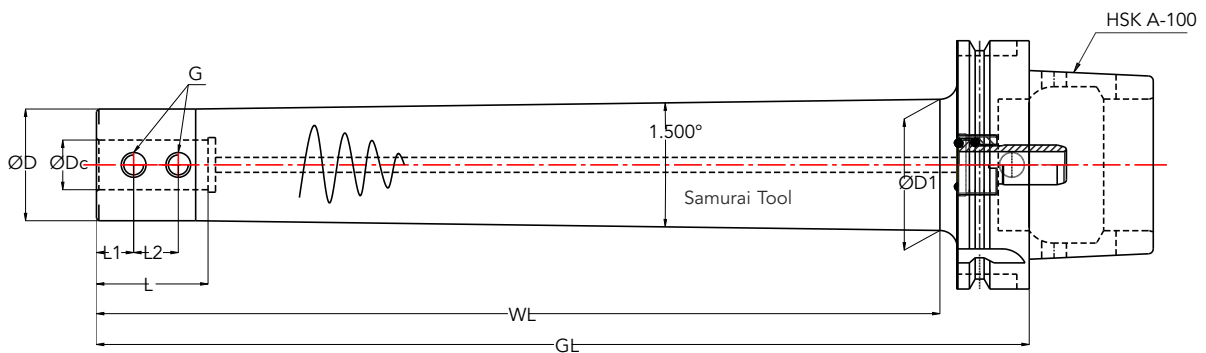
SR. NO.	PART CODE	ØDc	D	D1	L	L1	L2	WL	GL	G
01	ABB10-SLA20-SK50-440	20	50	60.5	45	15	18	440	466	M10
02	ABB10-SLA25-SK50-485	25	55	66.5	55	20	22	485	511	M12
03	ABB10-SLA32-SK50-545	32	62	75	60	25	20	545	571	M14

HSK A-100 L/D-8 Samurai Side Lock Adaptor



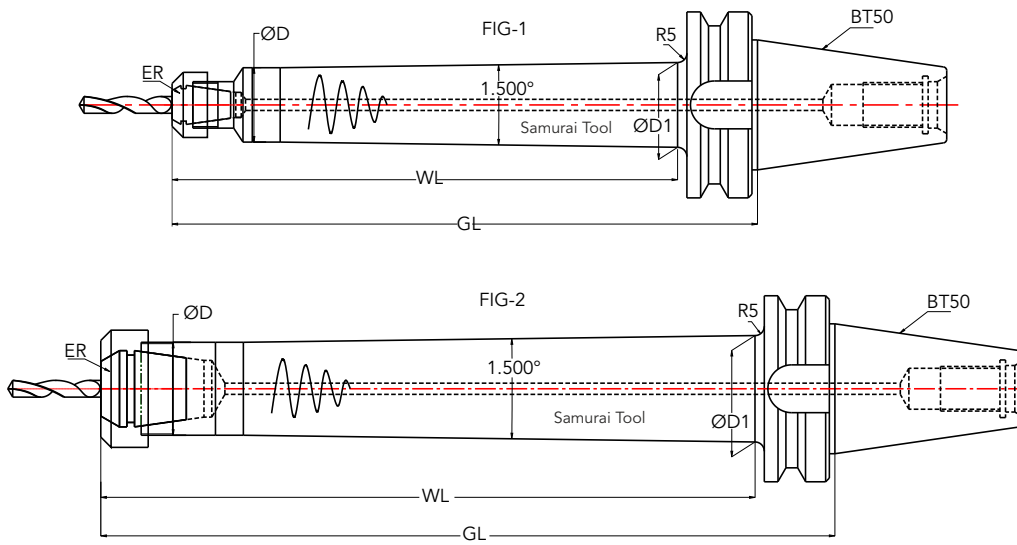
SR. NO.	PART CODE	ØDc	D	D1	L	L1	L2	WL	GL	G
01	ABB08-SLA20-HSK100-340	20	50	52.9	45	15	18	340	376	M10
02	ABB08-SLA25-HSK100-375	25	55	63.6	55	20	22	375	411	M12
03	ABB08-SLA32-HSK100-420	32	62	71.5	60	25	20	420	456	M14

HSK A-100 L/D-10 Samurai Side Lock Adaptor



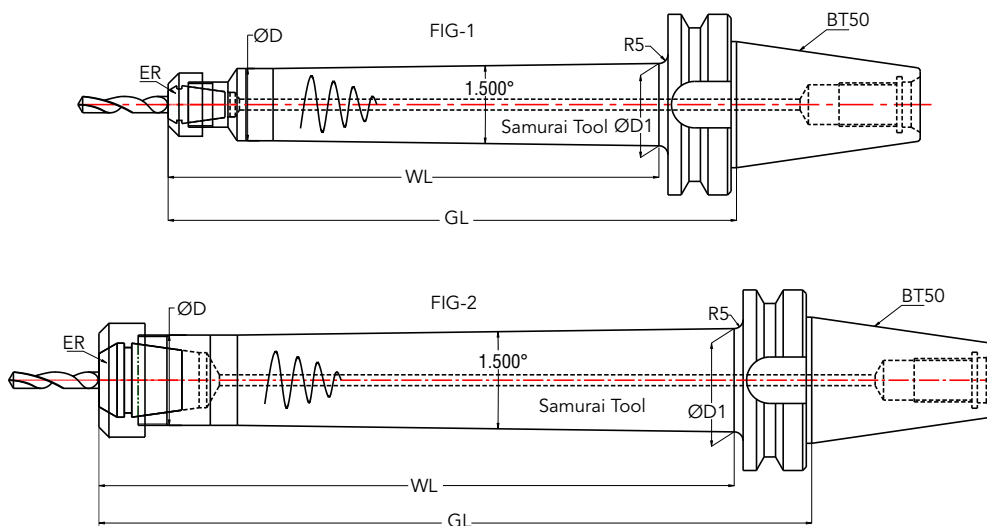
SR. NO.	PART CODE	ØDc	D	D1	L	L1	L2	WL	GL	G
01	ABB10-SLA20-HSK100-440	20	50	60.5	45	15	18	440	476	M10
02	ABB10-SLA25-HSK100-485	25	55	66.5	55	20	22	485	521	M12
03	ABB10-SLA32-HSK100-545	32	62	75	60	25	20	545	581	M14

BT 50 L/D-8 Samurai Drill Collet Adaptor



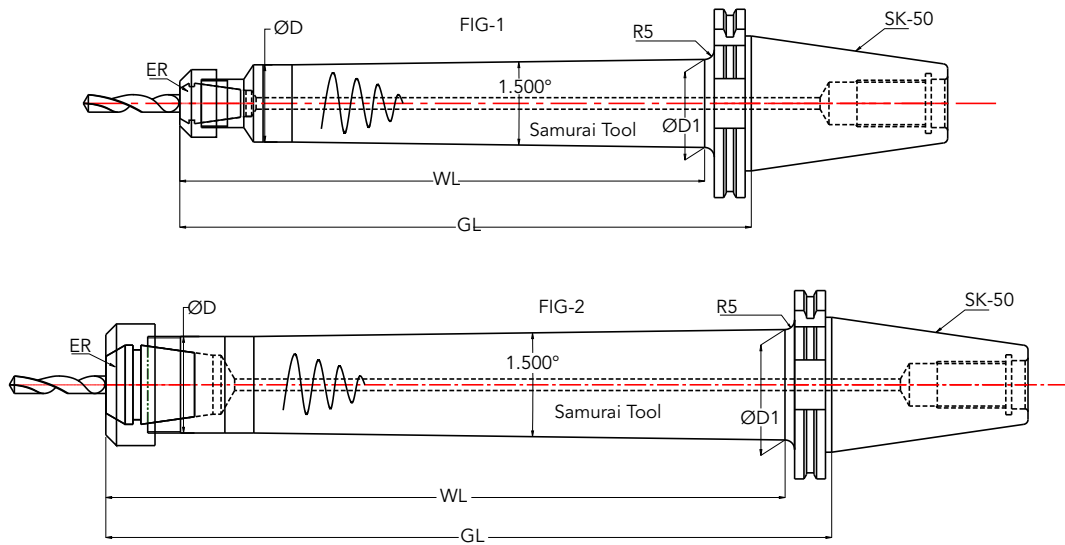
SR. NO.	PART CODE	ER	D	D1	WL	GL	FIG.
01	ABB08-DER20-BT50-272	ER20	40	45	272	315	1
02	ABB08-DER40-BT50-352	ER40	50	57.2	352	395	2

BT 50 L/D-12 Samurai Drill Collet Adaptor



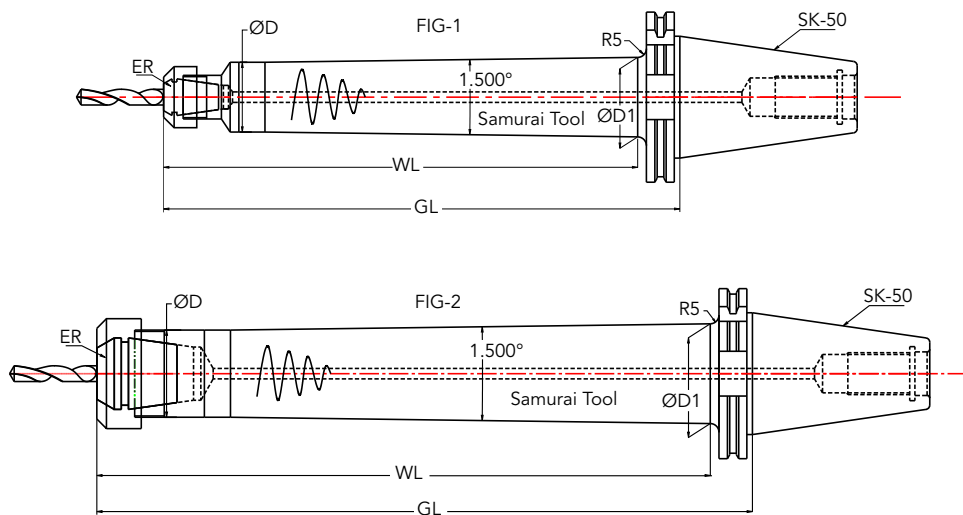
SR. NO.	PART CODE	ER	D	D1	WL	GL	FIG.
01	ABB12-DER20-BT50-430	ER20	40	50	430	473	1
02	ABB12-DER40-BT50-550	ER40	50	62.4	550	593	2

SK 50 L/D-8 Samurai Drill Collet Adaptor



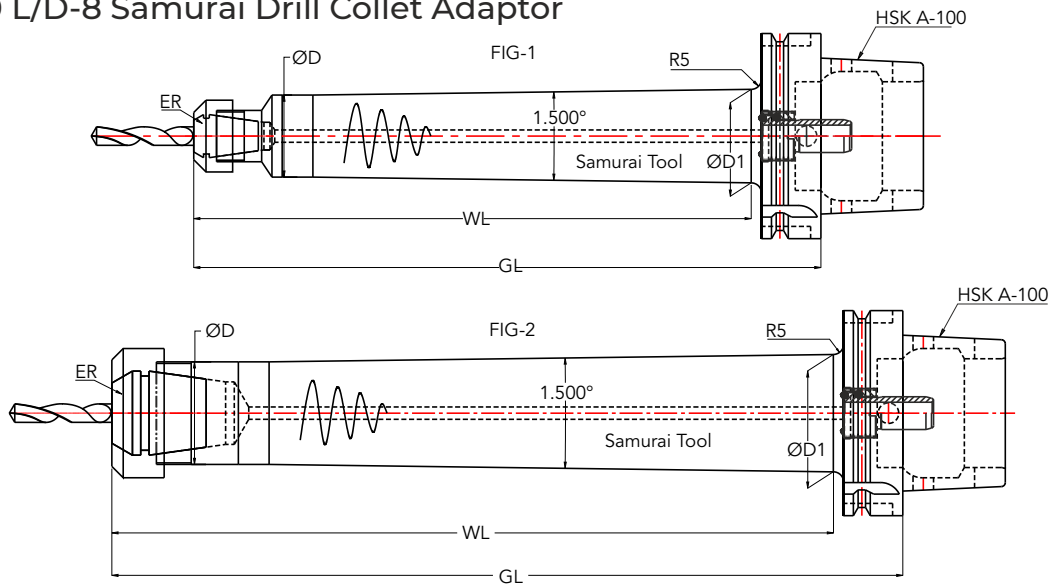
SR. NO.	PART CODE	ER	D	D1	WL	GL	FIG.
01	ABB08-DER20-SK50-272	ER20	40	45	272	296	1
02	ABB08-DER40-SK50-352	ER40	50	57.2	352	376	2

SK 50 L/D-12 Samurai Drill Collet Adaptor



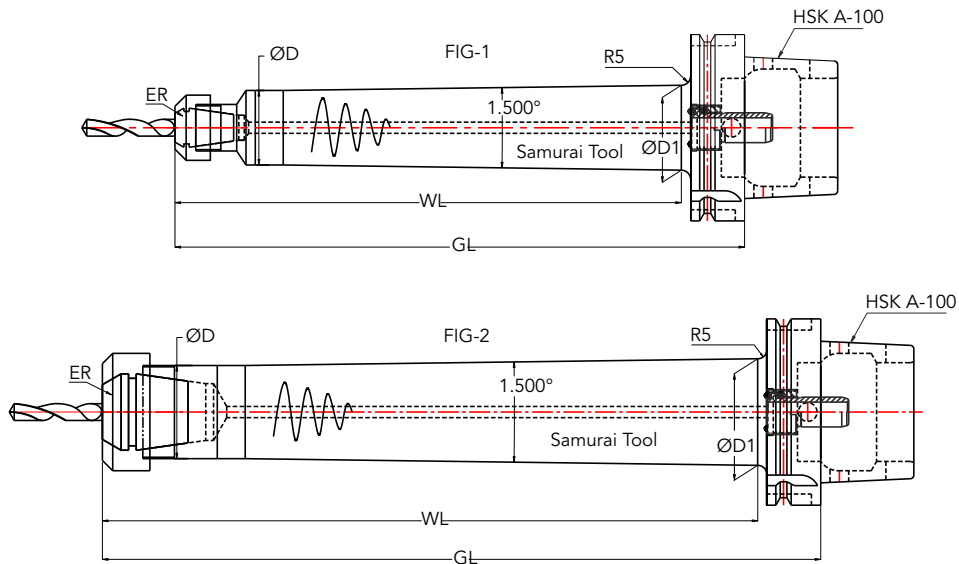
SR. NO.	PART CODE	ER	D	D1	WL	GL	FIG.
01	ABB12-DER20-BT50-430	ER20	40	50	430	454	1
02	ABB12-DER40-BT50-550	ER40	50	62.4	550	574	2

HSK A-100 L/D-8 Samurai Drill Collet Adaptor



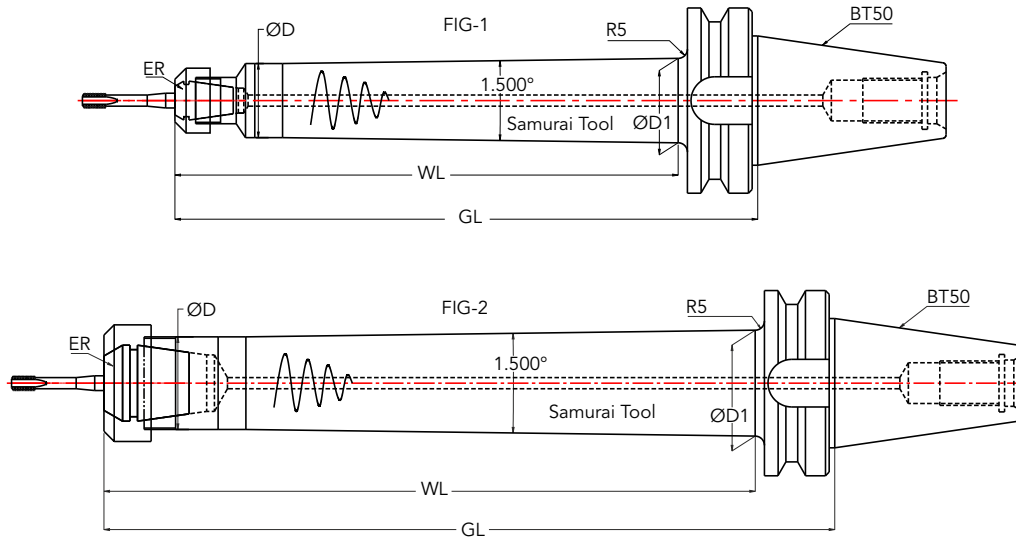
SR. NO.	PART CODE	ER	D	D1	WL	GL	FIG.
01	ABB08-DER20-HSK100-272	ER20	40	45	272	306	1
02	ABB08-DER40-HSK100-352	ER40	50	57.2	352	386	2

HSK A-100 L/D-12 Samurai Drill Collet Adaptor



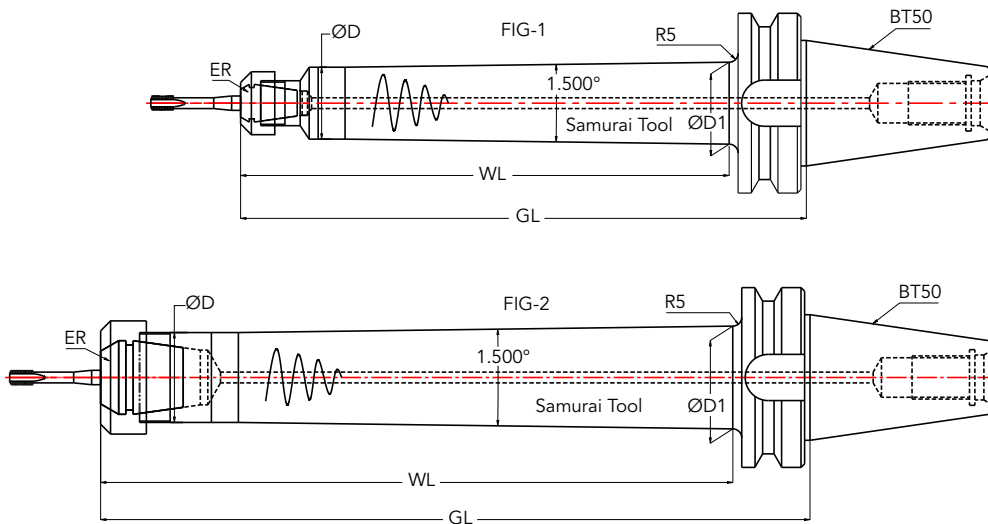
SR. NO.	PART CODE	ER	D	D1	WL	GL	FIG.
01	ABB12-DER20-HSK100-430	ER20	40	50	430	464	1
02	ABB12-DER40-HSK100-550	ER40	50	62.4	550	584	2

BT 50 L/D-8 Samurai Tap Collet Adaptor



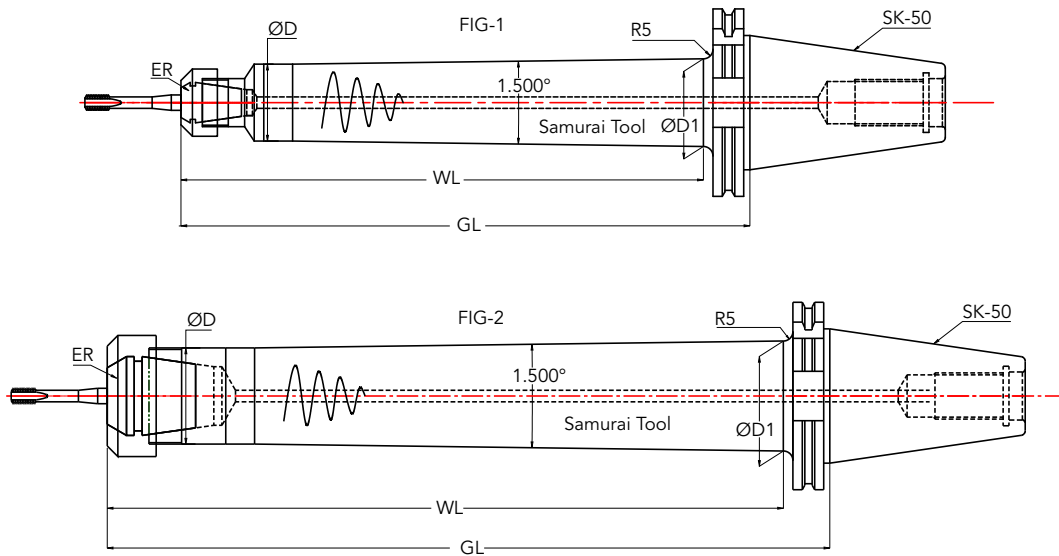
SR. NO.	PART CODE	ER	D	D1	WL	GL	FIG.
01	ABB08-TER20-BT50-272	ER20	40	45	272	315	1
02	ABB08-TER40-BT50-352	ER40	50	57.2	352	395	2

BT 50 L/D-12 Samurai Tap Collet Adaptor



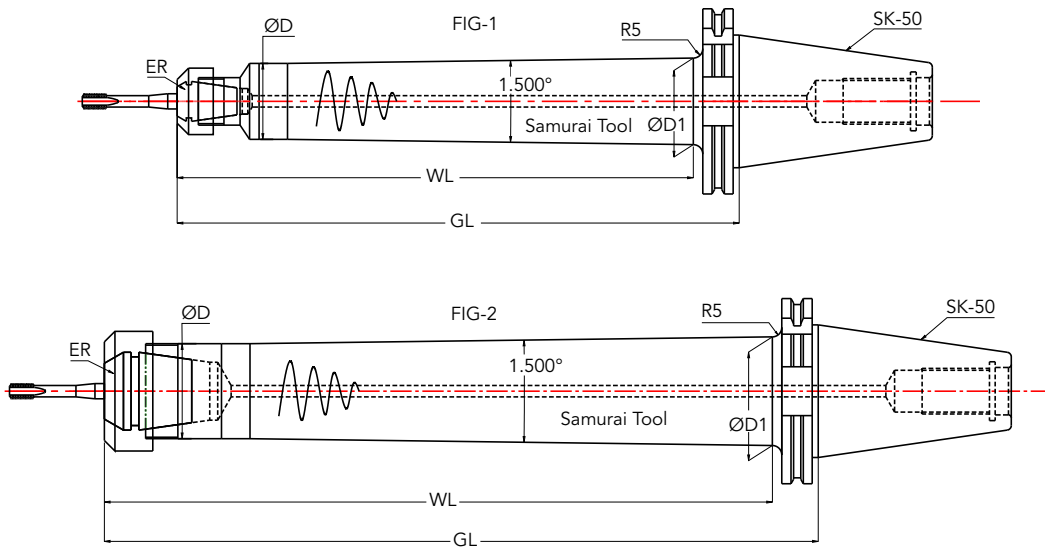
SR. NO.	PART CODE	ER	D	D1	WL	GL	FIG.
01	ABB12-TER20-BT50-430	ER20	40	50	430	473	1
02	ABB12-TER40-BT50-550	ER40	50	62.4	550	593	2

SK 50 L/D-8 Samurai Tap Collet Adaptor



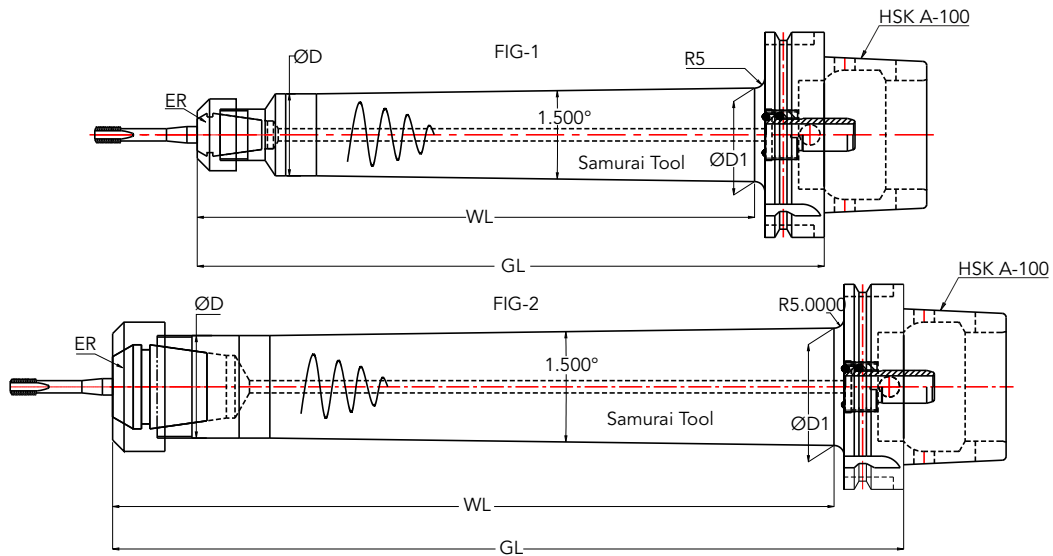
SR. NO.	PART CODE	ER	D	D1	WL	GL	FIG.
01	ABB08-TER20-SK50-272	ER20	40	45	272	296	1
02	ABB08-TER40-SK50-352	ER40	50	57.2	352	376	2

SK 50 L/D-12 Samurai Tap Collet Adaptor



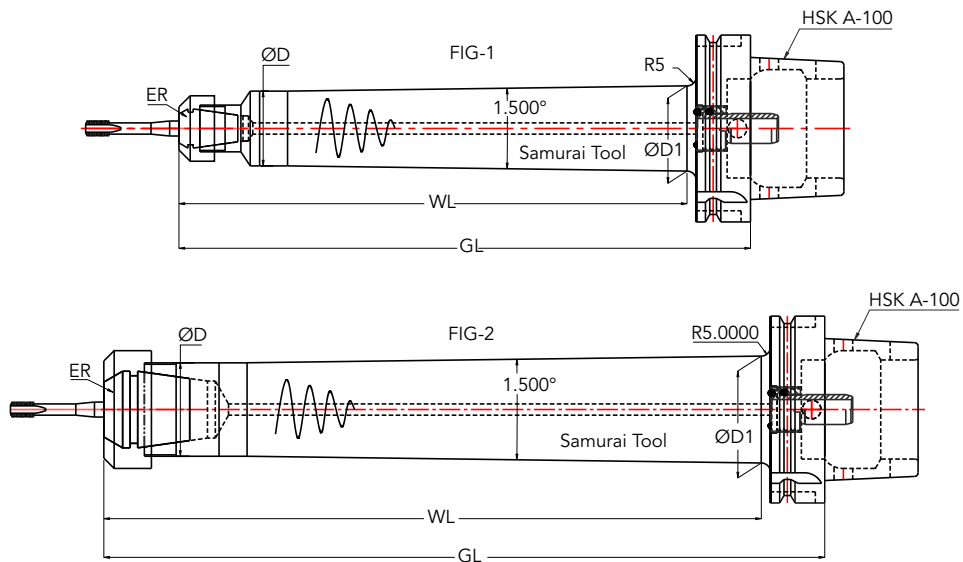
SR. NO.	PART CODE	ER	D	D1	WL	GL	FIG.
01	ABB12-TER20-SK50-430	ER20	40	50	430	454	1
02	ABB12-TER40-SK50-550	ER40	50	62.4	550	574	2

HSK A-100 L/D-8 Samurai Tap Collet Adaptor



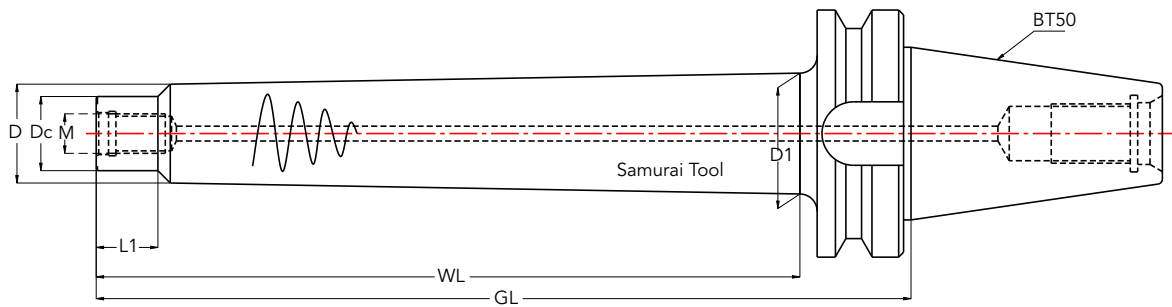
SR. NO.	PART CODE	ER	D	D1	WL	GL	FIG.
01	ABB08-TER20-HSK100-272	ER20	40	45	272	306	1
02	ABB08-TER40-HSK100-352	ER40	50	57.2	352	386	2

HSK A-100 L/D-12 Samurai Tap Collet Adaptor



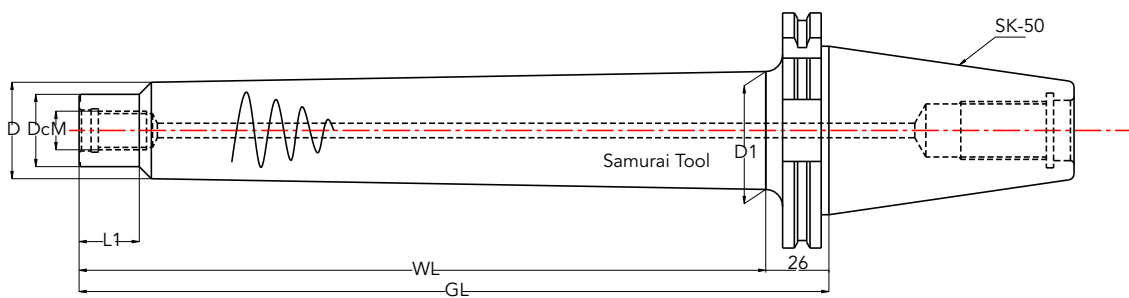
SR. NO.	PART CODE	ER	D	D1	WL	GL	FIG.
01	ABB12-TER20-HSK100-430	ER20	40	50	430	464	1
02	ABB12-TER40-HSK100-550	ER40	50	62.4	550	584	2

BT 50 L/D-8 Samurai Thread - On Adaptor



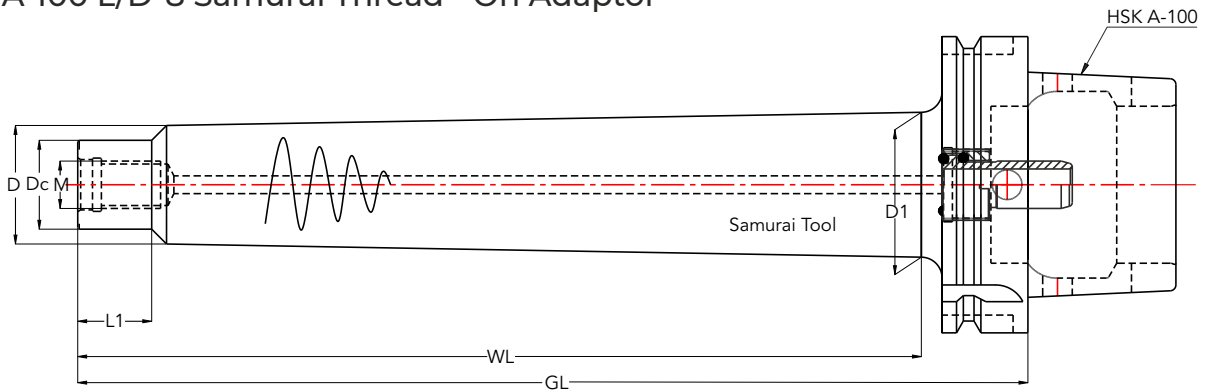
SR. NO.	PART CODE	M	Dc	D	D1	L1	WL	GL
01	ABB08-THM12-BT50-285	M12	23	40	48.9	20	285	330
02	ABB08-THM16-BT50-285	M16	30	40	48.9	25	285	330

SK 50 L/D-8 Samurai Thread - On Adaptor



SR. NO.	PART CODE	M	Dc	D	D1	L1	WL	GL
01	ABB08-THM12-SK50-285	M12	23	40	48.9	20	285	311.2
02	ABB08-THM16-SK50-285	M16	30	40	48.9	25	285	311.2

HSK A-100 L/D-8 Samurai Thread - On Adaptor



SR. NO.	PART CODE	M	Dc	D	D1	L1	WL	GL
01	ABB08-THM12-HSK100-285	M12	23	40	48.9	20	285	321
02	ABB08-THM16-HSK100-285	M16	30	40	48.9	25	285	321



Note : Special Designs and Sizes are Available on Request