

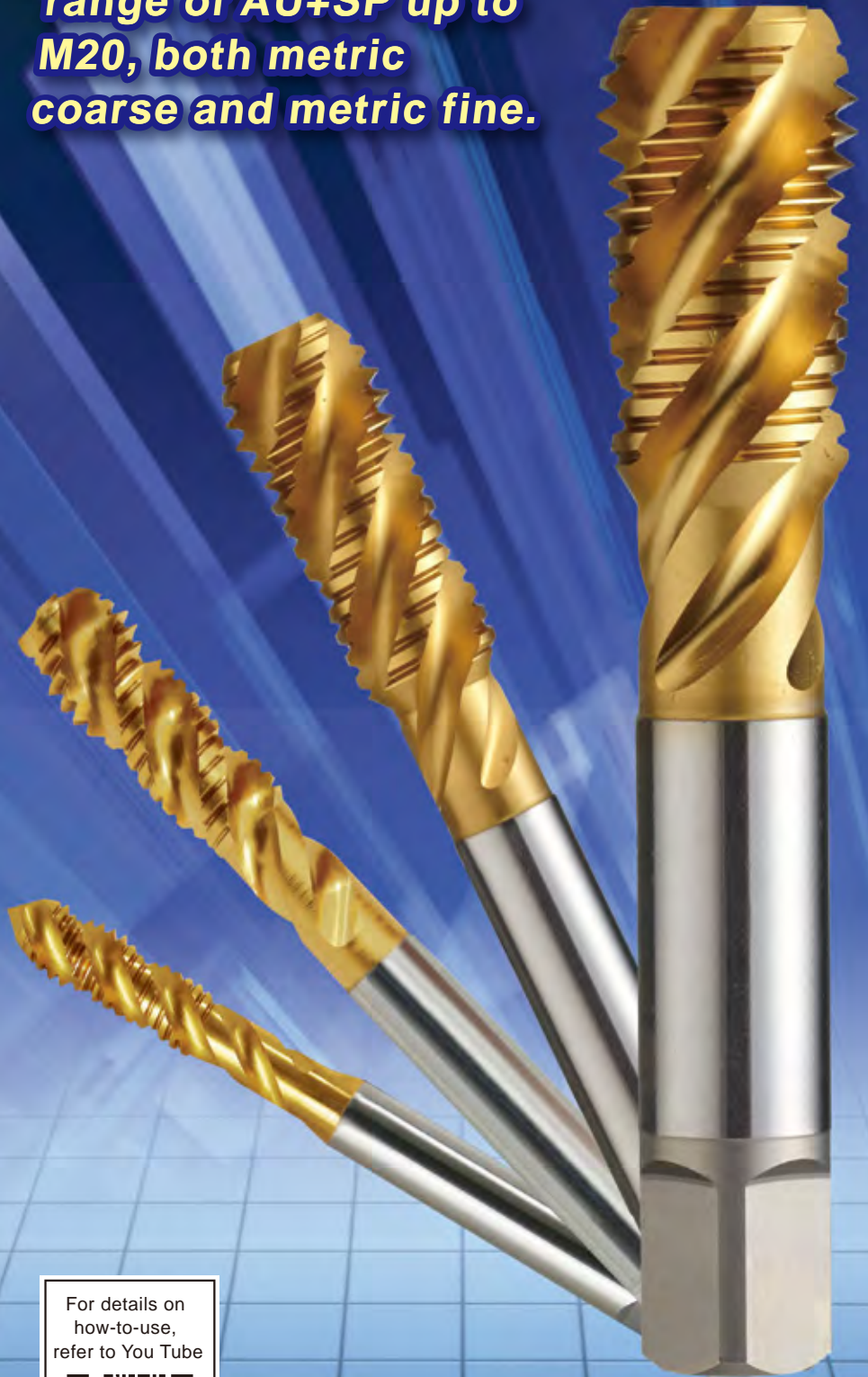
AU+SP

Plus Series Spiral Fluted Taps,
Optimum Coating for the tapping

AU+SP enables the tapping at medium to high speed
for wide range of work materials.

AU+SP

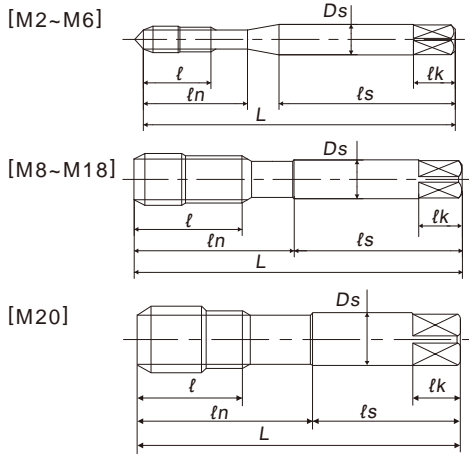
*We are expanding size
range of AU+SP up to
M20, both metric
coarse and metric fine.*



For details on
how-to-use,
refer to You Tube



Dimension



Size	Class	Code	Chamfer	L (mm)	ℓ (mm)	ℓn (mm)	ℓs (mm)	Ds (mm)	ℓk (mm)	No. of flutes
M2 X 0.4	P2	VSAPQ2.0E	2.5P	42	7.2	12	27	3	5	2
M2.5 X 0.45	P2	VSAPQ2.5F	2.5P	46	8.1	14	29	3	5	2
M2.6 X 0.45	P2	VSAPQ2.6F	2.5P	46	8.1	14	29	3	5	2
M3 X 0.5	P2	VSAPQ3.0G	2.5P	46	9	14	26	4	6	3
M4 X 0.7	P2	VSAPQ4.0I	2.5P	52	11	17	29	5	7	3
M5 X 0.8	P2	VSAPQ5.0K	2.5P	60	13	22	33	5.5	7	3
M6 X 1	P2	VSAPQ6.0M	2.5P	62	15	26	33	6	7	3
M8 X 1.25	P3	VSAPR8.0N	2.5P	70	19	-	36	6.2	8	3
M8 X 1	P3	VSAPR8.0M	2.5P	70	19	-	36	6.2	8	3
M10 X 1.5	P3	VSAPR010O	2.5P	75	23	-	38	7	8	4
M10 X 1.25	P3	VSAPR010N	2.5P	75	23	-	38	7	8	4
M10 X 1	P3	VSAPR010M	2.5P	75	23	-	38	7	8	4
M12 X 1.75	P3	VSAPR012P	2.5P	82	26	-	42	8.5	9	4
M12 X 1.5	P3	VSAPR012O	2.5P	82	26	-	42	8.5	9	4
M12 X 1.25	P3	VSAPR012N	2.5P	82	26	-	42	8.5	9	4
M14 X 2	P3	VSAPR014Q	2.5P	88	26	-	45	10.5	11	4
M14 X 1.5	P3	VSAPR014O	2.5P	88	26	-	45	10.5	11	4
M16 X 2	P3	VSAPR016Q	2.5P	95	26	-	48	12.5	13	4
M16 X 1.5	P3	VSAPR016O	2.5P	95	26	-	48	12.5	13	4
M18 X 2.5	P4	VSAPS018R	2.5P	100	33	-	51	14	14	4
M18 X 1.5	P4	VSAPS018O	2.5P	100	33	-	51	14	14	4
M20 X 2.5	P4	VSAPS020R	2.5P	105	33	-	50	15	15	4
M20 X 1.5	P4	VSAPS020O	2.5P	105	33	-	50	15	15	4

Work material

Recommended tapping speed for AU+SP

Work material	Recommended tapping speed (m/min)
Stainless steels SUS304	5~10
Alloy steels SCM/Sr	10~20
High carbon steels S45C~	10~20
Medium carbon steels S25C~S45C	10~20
Low carbon steels ~S20C/SS400	10~20
Aluminium alloy castings AC·ADC	20~30
Zinc alloy castings ZDC	20~30

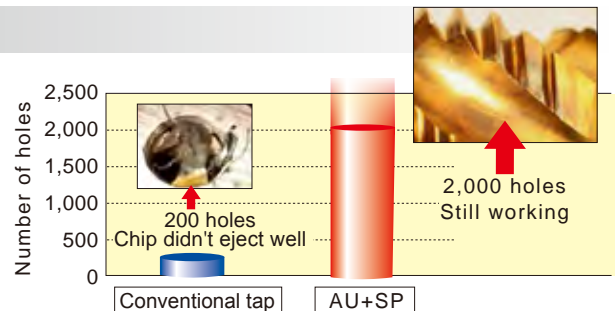
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*Tap class is only the target for the limit of internal threads.

Tool life

Tapping condition: AU+SP M6x1

Work material	SCM440
Cutting speed	10m/min
Hole diameter	Φ5.0
Tapping length	9mm blind hole
Machine	Machining centers vertical type (floating holder used)
Oil	water soluble oil (chlorine-free, 20 fold dilution)



BLF(special shape)+improvement in chip ejection efficiency

● AU+SP is designed to have a few full threads only after the chamfer and half of height for the remaining threads.

● Features of AU+SP are as follows:

- Prevention of chipping trouble at full thread portion
- Reduction of tapping torque and tapping friction
- With good thread guiding feature
- With good chip ejection



Warning

- ◆ Tools may shatter. Wear cover or eye glasses to avoid injury during tapping.
- ◆ Tools may shatter. Use tools under the proper tapping condition.
- ◆ Never wear gloves during turning operations as the gloves may get caught with the tools.
- ◆ Wear safety shoes to avoid injuring yourself by the falling tools.
- ◆ On attaching tools to the machine, fasten firmly to avoid chattering and run-out.
- ◆ Fasten the work pieces firmly so that they never move during operation. Never use worn tools or damaged tools with chipping.
- ◆ Take a special care to fire trouble. High temperature during machining may cause fire.

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