Tangential Side Thread Rolling Attachments, Type RT10, RT20 & RT30

RSVP tangential side rolling attachments were originally developed to roll threads behind a shoulder. The process requires the rolls to be plunged, at a controlled rate, into the rotating component. Tangential side rolling attachments may be mounted in any machine tool having a cross slide or turret with a controlled feed stroke. The attachment is mounted in a holder that has been designed for a specific machine tool. There must be clearance between the attachment and machine tool, as well as between the arms of the attachment and any shoulder on the component.

For left-hand threads, the same attachment can be used as for right-hand threads. Left-hand threads require left-hand rolls.

RSVP - Tangential side rolling attachments, Type RT, have a capacity range to 64 mm/2.52".

Capacity ranges are shown in the adjoining table.

The thread length including thread runout can not exceed the width of the roll. For shorter threads, rolls can be supplied with a recess for additional clearance. Roll width must be specified.

Also attachments with smaller construction numbers are suitable in the same work range, there are exceptions.

Fig. 1: Tangential Side Thread Rolling Attachments, Type RT

Capacity Range

Cylindrical Threads

Type		Major Diameter min.	Major Diameter max.	max. Pitch min. TPI	Roll width max.[1)]
RT10	mm	1.6	14	1.5	15.5
up to work No. 66	inch	1/6	9/16	16	0.6102
RT20	mm	2	30	2	21.5
up to work No. 548	inch	5/64	1 3/16	12	0.8465
RT30	mm	2	42	2.5	31
up to work No. 467	inch	5/64	1 5/8	10	1.2205

Tapered Threads

Type	Standard	min.	max.
RT10 Up to work No 66	DIN 158	M 6 x 1 taper	M 14 x 1.5 taper
	DIN 2999	G 1/16 - 28	G 1/4 - 19
	DIN 3858	G 1/8 - 28	G 1/4 - 19
	ANSIB1.20.1	1/16-27NPT(NPTF)	1/4-18NPT(NPTF)
RT20 up to work No 548	DIN 158	M 6 x 1 taper	M 30 x 1.5 taper
	DIN 2999	G 1/16 - 28	G 3/4 - 14
	DIN 3858	G 1/8 - 28	G 3/4 - 14
	ANSIB1.20.1	1/16-27NPT(NPTF)	1/2-14NPT(NPTF)
RT30 up to work No. 467	DIN 158	M 6 x 1 taper	M 42 x 2 taper
	DIN 2999	G 1/16 - 28	G 1 1/4 - 11
	DIN 3858	G 1/8 - 28	G 1 1/4 - 11
	ANSI B 1.20.1	1/6 - 27 NPT (NPTF)	1 -11.5 NPT (NPTF)

Tolerances for Shoulder dia. and cam rise.

With metric (DIN 458) and Whitworth (DIN 2999, DIN 3858) profiles the shoulder dia. and cam rise with cylindrical threads are dimensionally identical, NPT - and NPTF (ANSI B 1.20.1) threads.

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