



# THREAD CUTTING HEADS

The **WAGNER** thread cutting head is an axial operating precision tool, which produces threads of highest quality in a short time. It is available in stationary and rotating design.

The stationary tapping head is connected to the tool carrier, e.g. turret, via a tool holder. The tool moves axially onto the workpiece at a feed rate that is accurate to the pitch, which cuts the thread in a single operation. The opening mechanism of the head is triggered by the feed stop and the chasers release the workpiece and the return can take place in rapid motion. The head is closed by moving the closing lever axially or by means of an automatic closing device.

The rotating thread cutting head is flanged to the machine spindles or picked up in a chuck. The opening and closing of the head is controlled by an external control rod or an internal drawbar.

## AREAS OF APPLICATION

- cylindrical control, fine pitch threads or tapered threads, right- or left-hand threads, pipe, trapezoidal, round and special threads
- thread according to English and American standards
- parallel profiles possible in grooving process
- the heaviest cutting tasks and large diameters are effortless with the cutting head types WDK-WKK

## WAGNER CHASERS / THREAD CUTTING PLATES

- standard: HSS or HSSE
- nitrated
- coated: TIN, TiCN, T/ALN, CrN
- hard metal
- adapted to customer requirements

## ADVANTAGES

- by exchanging the chasers it is possible for different thread types to be machined with only one cutting head
- high efficiency due to chasers which can be ground
- short set-up times due to preset chasers
- time-saving working method due to single cut
- high-precision thread chasers, the pitch and shape of which are adapted to the thread to be cut
- high flexibility on almost all machines due to commercially available holders
- suited for thin walled workpieces
- suited for materials that can not be thread rolled

**Stationary Heads Compact**

Type	Regular Threads Nominal Ø mm	Fine Threads Nominal Ø mm	Pipe Threads Nominal Ø inch	Size		Weight kg	Length of Thread	
				Head Ø mm	Length mm		up to Ø mm	max. length mm
ZA 12	1.6–12	2–16	1/8–1/4"	58	58	0.8	10	43
							12	30
							16	13
ZA 16	2.5–16	3–24	1/8–3/8"	72	70	1.8	11	51
							16	30
							24	15
ZA 22	4–22	4–38	1/8–3/4"	88	82	2.8	16	unlimited ●
							22	40
							28	18
ZA 27	5–24	5–60	1/8–1"	110	109	6.8	18	unlimited ●
							27	65
							50	28

**Stationary Heads Standard**

ZE 39	8–39	10–80	1/8–2"	180	210	32	45	unlimited ●
							80	30

**Rotary Heads Compact**

Type	Regular Threads Nominal Ø mm	Fine Threads Nominal Ø mm	Pipe Threads Nominal Ø inch	Size		Weight kg	Length of Thread	
				Head Ø mm	Length mm		up to Ø mm	max. length mm
ZR 12	1.6–12	2–16	1/8–1/4"	58	51	0.6	12	unlimited ●
							16	13
ZR 16	2.5–16	3–24	1/8–3/8"	72	62	1.7	16	unlimited ●
							24	15
ZR 22	4–22	4–38	1/8–3/4"	88	70	2.8	22	unlimited ●
							38	18
ZR 27	5–24	5–60	1/8–1"	110	99	6.2	27	unlimited ●
							50	28

**Rotary Heads Standard**

Type	Regular Threads Nominal Ø mm	Fine Threads Nominal Ø mm	Pipe Threads Nominal Ø inch	Size		Weight kg	Length of Thread	
				Head Ø mm	Length mm		up to Ø mm	max. length mm
Z 16	4–16	6–45	1/8–3/8"	123	134	10	16	unlimited ●
							45	30
Z 27	6–27	6–60	1/8–1"	160	145	15	30	unlimited ●
							60	30
Z 39	8–39	10–80	1/8–2"	180	157	23	45	unlimited ●
							80	30
Z 52	8–52	10–100	1/8–2 3/4"	200	181	31	55	unlimited ●
							100	34
Z 64	8–64	10–100	1/8–2 3/4"	200	166	27	70	unlimited ●
							100	48
Z 76	–	30–120	1–4"	250	216	50	95	unlimited ●
							120	48

**Rotary Heads Heavy Duty**

Type	Regular Threads Nominal Ø mm	Fine Threads Nominal Ø mm	Pipe Threads Nominal Ø inch	Size		Weight kg	Length of Thread	
				Head Ø mm	Length mm		up to Ø mm	max. length mm
WDK	8–52	–65	R1/4–2"	310	252	54	to 65 > 66	unlimited ● 77
WEK	8–52	–95	R1/4–3"	310	252	54	–	unlimited ●
							–	unlimited ●
WGK	10–76	12–110	R1/2–3"	370	290	94	to 95	unlimited ●
							> 96	90
WHK	10–76	12–110	R1/2–4"	370	282	94	–	unlimited ●
							–	unlimited ●
WJK	24–100	30–120	R1–4"	410	294	145	–	unlimited ●
							–	unlimited ●
WKK	24–100	30–175	R1–6"	410	300	145	to 175	unlimited ●
							> 176	77

● The maximum thread length can be limited by the shank.