

GARANT Master TM plain shank thread mill 2×D, TiAIN, UNC: 1-8



Order data

Order number	139722 1-8
GTIN	4062406058029
Item class	11D

Description

Version:

Solid carbide thread milling cutters with irregular cutting edge spacing and an increased number of cutting edges. Due to the irregular cutting edge spacing they achieve very smooth running and long tool life.

Newly developed universal geometry and **high-performance coating** for use across a wide spectrum of materials.

- · Significantly reduced vibration due to irregular cutting edge spacing.
- · Increased number of cutting edges.
- · New coating for optimum wear resistance.
- · Corrected thread profile for avoidance of profile distortions.

Application:

For **UNC unified coarse threads** ASME-B1.1.

Note:

Form HB and HE supplied at the same price as HA. Form HB: order with No. 139722 + 129100 HB Form HE: order with No. 139722 + 129100 HE

Thread type: UNC
Thread type: UNC-LH
No. of teeth Z: 6
Threads per inch: 8
Nominal \emptyset D_c: 19.95 mm
Flute length L_c: 52.26 mm
Shank length L_s: 50 mm
Overall length L: 120 mm

Technical description

Shank Ø D_s: 20 mm

Thread pitch Shank Ø D, Shank length L, Thread type UNC Thread type UNC-LH Overall length L Thread Ø 25.4 mm Number of clamping slots Flute length L, Feed f₂ in steel < 750 N/mm² Thread size 1-8 UNC Nominal Ø D₀ Series Master TM Coating TiAIN Flank angle Tool material Shank DIN 6535 HA with h6 Through-coolant Cutting direction Application for type of drilling Application for type of drilling Shank tolerance Colour ring Shank tolerance Colour ring General So mm 3.175 mm 3.175 mm 3.175 mm 3.175 mm 50 mm 50 mm 60 ° 51 mm 60 ° 71 AIN 60 ° 71 AIN 71 AIN 71 AIN 72 APPLICATION OF THE MICH HA WITH	Threads per inch	8	
Shank \oslash D ₂ Shank length L ₂ Thread type UNC Thread type UNC-LH Overall length L Thread \oslash Number of clamping slots Flute length L Feed f, in steel < 750 N/mm² Thread size Nominal \oslash D ₂ Series Master TM Coating Tialin Flank angle Shank DIN 6535 HA with h6 Through-coolant Application for type of drilling Spacing of the cutters Shank tolerance Colour ring Shank tolerance Colour ring Internal Somm 20 mm 50 mm UNC UNC-LH 0UNC-LH 0UNC-LH 0100-CH 120 mm 1000-CH 1000-CH	No. of teeth Z	6	
Shank length L₁ 50 mm Thread type UNC Overall length L 120 mm Thread Ø 25.4 mm Number of clamping slots 6 Flute length L₂ 52.26 mm Feed f₂ in steel < 750 N/mm²	Thread pitch	3.175 mm	
Thread type Thread type UNC-LH Overall length L Thread Ø 25.4 mm Number of clamping slots Flute length L Feed f₁ in steel < 750 N/mm² Thread size 1-8 UNC Nominal Ø D₂ Series Master TM Coating TiAlN Flank angle 60° Tool material Shank DIN 6535 HA with h6 Through-coolant Cutting direction Application for type of drilling Application for type of drilling Spacing of the cutters Shank tolerance Colour ring Internal UNC UNC-LH 120 mm 120 mm 121 mm 120 mm 121 mm 120 mm 121 mm 121 mm 122 mm 123 mm 124 mm 125 mm 125 mm 126 mm 127 mm 127 mm 128 mm 129 mm 120	Shank Ø D _s	20 mm	
Thread type Overall length L Thread Ø Diverall length L Thread Ø Diverall length L Diverall length le	Shank length L _s	50 mm	
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Thread Ø Number of clamping slots Flute length L _c Feed f _z in steel < 750 N/mm² Thread size Nominal Ø D _c Series Master TM Coating TiAlN Flank angle Tool material Shank DIN 6535 HA with h6 Through-coolant Cutting direction Application for type of drilling Application for type of drilling Spacing of the cutters Shank tolerance Colour ring Colour ring Colour ring Internal Solid carbide Base of the cutters Internal green Internal	Thread type	UNC-LH	
Number of clamping slots Flute length L _c Feed f _z in steel < 750 N/mm² 7.	Overall length L	120 mm	
Flute length L_c 52.26 mm Feed f_z in steel < 750 N/mm² 0.15 mm Thread size 1-8 UNC Nominal Ø D_c 19.95 mm Series Master TM Coating TiAIN Flank angle 60 ° Tool material solid carbide Shank DIN 6535 HA with h6 Through-coolant yes Cutting direction right-hand Application for type of drilling up to 2×D for blind holes Application for type of drilling up to 2×D for through holes Spacing of the cutters unequal spacing Shank tolerance h6 Colour ring green Internal/external application Internal	Thread Ø	25.4 mm	
Feed f₂ in steel < 750 N/mm² Thread size 1-8 UNC Nominal Ø Dc 19.95 mm Series Master TM Coating TiAIN Flank angle 60 ° Tool material Shank DIN 6535 HA with h6 Through-coolant yes Cutting direction Application for type of drilling Application for type of drilling Application for type of drilling Spacing of the cutters Spacing of the cutters Colour ring Internal/external application 1-8 UNC 19.95 mm Solid carbide 50 ° TiAIN Flank DIN 6535 HA with h6 Tright-hand up to 2×D for blind holes up to 2×D for blind holes unequal spacing frank Internal	Number of clamping slots	6	
Thread size Nominal Ø D _c 19.95 mm Series Master TM Coating TiAIN Flank angle 60 ° Tool material Shank DIN 6535 HA with h6 Through-coolant yes Cutting direction Application for type of drilling Application for type of drilling Spacing of the cutters Spacing of the cutters Colour ring Internal/external application 19.95 mm Master TM Master TM DIN 6535 HA up to 2×D for blind holes up to 2×D for blind holes unequal spacing fine green Internal	Flute length L _c	52.26 mm	
Nominal Ø D _c Series Master TM Coating TiAIN Flank angle 60 ° Tool material Solid carbide Shank DIN 6535 HA with h6 Through-coolant yes Cutting direction Application for type of drilling Application for type of drilling Application for type of drilling Spacing of the cutters Spacing of the cutters Colour ring Internal/external application 19.95 mm Master TM Master TM TiAIN 19.95 mm 19.95 mm 19.95 mm 19.95 mm 19.95 mm 19.95 mm TiAIN Total The Dal Total T	Feed f_z in steel < 750 N/mm ²	0.15 mm	
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Coating Flank angle Flank angle Tool material Solid carbide Shank DIN 6535 HA with h6 Through-coolant yes Cutting direction Application for type of drilling Application for type of drilling Application for type of drilling Up to 2×D for blind holes Application for type of drilling Spacing of the cutters Unequal spacing Shank tolerance h6 Colour ring Internal/external application Internal	Nominal Ø D _c	19.95 mm	
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Tool material solid carbide Shank DIN 6535 HA with h6 Through-coolant yes Cutting direction right-hand Application for type of drilling up to 2×D for blind holes Application for type of drilling up to 2×D for through holes Spacing of the cutters unequal spacing Shank tolerance h6 Colour ring green Internal/external application Internal	Coating	TiAlN	
Shank Through-coolant Yes Cutting direction Application for type of drilling Spacing of the cutters Unequal spacing Shank tolerance About the cutters Application App	Flank angle	60 °	
Through-coolant yes Cutting direction right-hand Application for type of drilling up to 2×D for blind holes Application for type of drilling up to 2×D for through holes Spacing of the cutters unequal spacing Shank tolerance h6 Colour ring green Internal/external application Internal	Tool material	solid carbide	
Cutting direction right-hand Application for type of drilling up to 2×D for blind holes Application for type of drilling up to 2×D for through holes Spacing of the cutters unequal spacing Shank tolerance h6 Colour ring green Internal/external application Internal	Shank	DIN 6535 HA with h6	
Application for type of drilling up to 2×D for blind holes Application for type of drilling up to 2×D for through holes Spacing of the cutters unequal spacing Shank tolerance h6 Colour ring green Internal/external application Internal	Through-coolant	yes	
Application for type of drilling up to 2×D for through holes Spacing of the cutters unequal spacing Shank tolerance h6 Colour ring green Internal/external application Internal	Cutting direction	right-hand	
Spacing of the cutters Shank tolerance Colour ring Internal/external application unequal spacing h6 green Internal	Application for type of drilling	up to 2×D for blind holes	
Shank tolerance h6 Colour ring green Internal/external application Internal	Application for type of drilling	up to 2×D for through holes	
Colour ring green Internal/external application Internal	Spacing of the cutters	unequal spacing	
Internal/external application Internal	Shank tolerance	h6	
	Colour ring	green	
Type of product thread milling cutter	Internal/external application	Internal	
	Type of product thread milling cu		

User data

	Suitability	\mathbf{V}_{c}	ISO code
Alu plastics	Suitable	220 m/min	N
Aluminium (short chipping)	suitable	220 m/min	N
Alu > 10% Si	Suitable	180 m/min	N
Steel < 500 N/mm ²	Suitable	140 m/min	Р
Steel < 750 N/mm ²	Suitable	130 m/min	Р
Steel < 900 N/mm ²	Suitable	120 m/min	Р
Steel < 1100 N/mm ²	Suitable	90 m/min	Р
Steel < 1400 N/mm ²	Suitable	80 m/min	Р
Steel < 50 HRC	suitable only under restricted conditions	45 m/min	Н
TOOLOX 33	Suitable	85 m/min	Н
TOOLOX 44	Suitable	50 m/min	Н
INOX < 900 N/mm ²	Suitable	82 m/min	M
INOX > 900 N/mm ²	Suitable	75 m/min	М
Ti > 850 N/mm ²	Suitable	50 m/min	S
GG(G)	Suitable	120 m/min	K
CuZn	Suitable	200 m/min	N
Uni	Suitable		
wet maximum	Suitable		
wet minimum	Suitable		
Air	Suitable		

Services

Shank grinding Type HB	129100 HB
Shank grinding Type HE	129100 HE

