

TiTAN X-TREME

X-Treme - 2013.v3



HAVE YOU HEARD IT YET?

NIKKEN

Based on Nikken's award winning and best selling Multi-Lock milling chuck, the TiTAN X-TREME solution retains market leading accuracy and the reliability that Nikken's customers expect from our Tooling solutions. X-TREME features a patented 'Sure-Lock' quad clamp system to provide positive locking & restraint of the tool shank even under the most extreme of cutting conditions when direct chucking.

Benefits

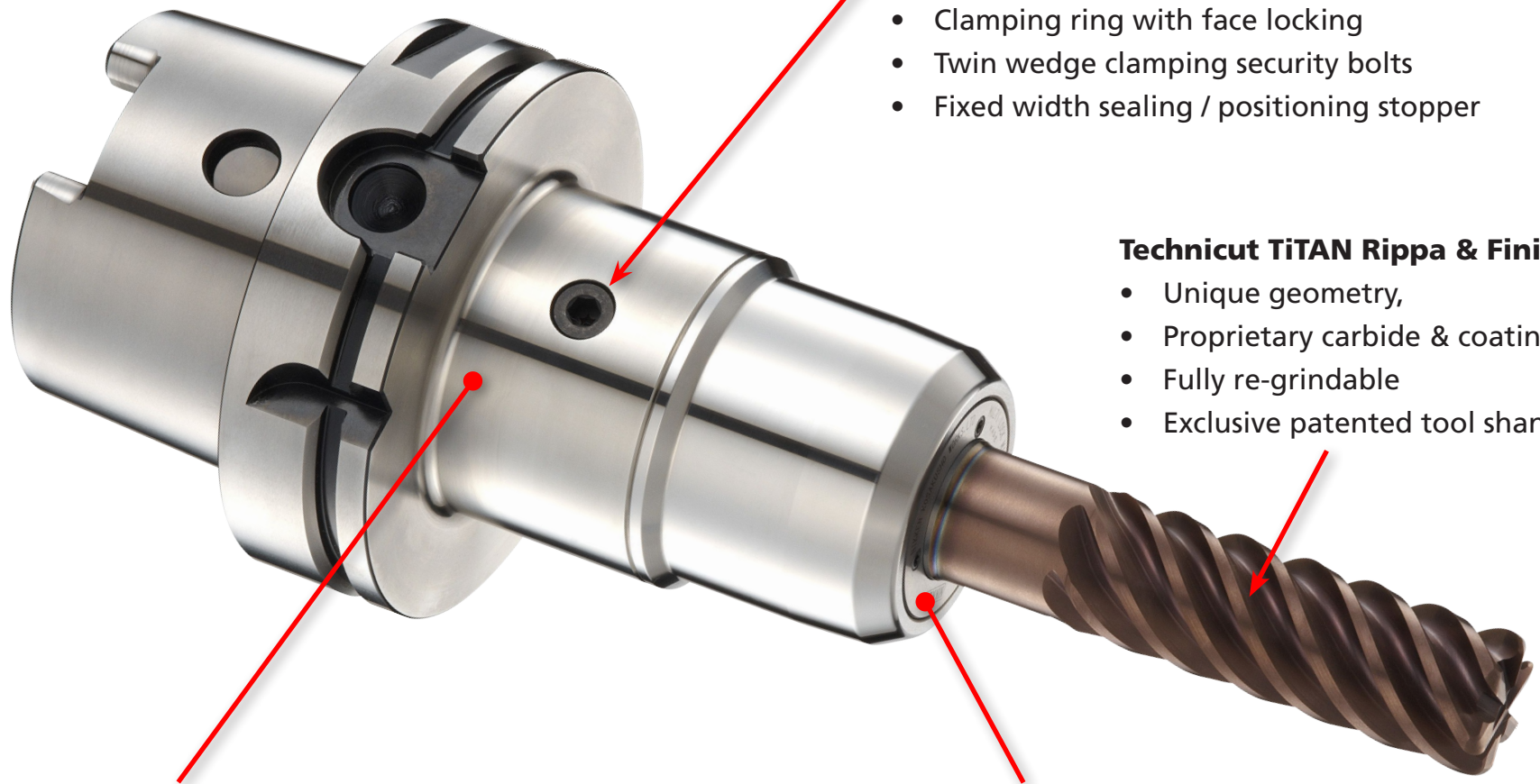
The TiTAN X-TREME solution provides ultimate performance, control and reliability to meet the requirements of demanding Aerospace components and applications. The X-TREME Multi-Lock provides the largest gripping force available from any tool holder currently available in the market on NBT50 (dual contact), HSK and Polygon C8 spindles. As standard X-TREME is fitted with an exclusive patented positive shank location and integrated face sealing system. As an option the face sealing and shank location system are completely replaceable to provide additional capabilities for Nikken's 'Jetter' system. Both options provide complete control and optimisation of high-pressure coolant systems to suit any requirement.

TiTAN X-TREME

Nikken Kosakusho and Technicut Ltd offer this joint solution. During the testing phase the cutter and toolholder delivered 267 cm³/min when cutting Titanium at the Nuclear AMRC on a Starrag HEC1600.

This impressive result would allow organisations to cut at over twice the normal depth associated with roughing & finishing Titanium. Imagine completing your roughing phase in half the current time!

The TiTAN X-TREME is the only product on the market that provides 100% concentricity and the stability required to maximize the potential of Technicut's cutters. Delivering as much as four times the current tool life of competitor products & substantially reducing spindle loads during machining, this in turn delivers a substantial increase in the return on investment for those machining Titanium.



Patented 'Sure-Lock' Quad Clamp System

- Precision main bore with grooves
- Clamping ring with face locking
- Twin wedge clamping security bolts
- Fixed width sealing / positioning stopper

Technicut TiTAN Ripper & Finisher

- Unique geometry,
- Proprietary carbide & coating
- Fully re-grindable
- Exclusive patented tool shank

Fixed Width internal sealing stopper

- Seals against tool shank for coolant supply
- Positive location & locking
- Guarantees precise tool shank position

Fully Sealed Nose Ring

- Integrated tool shank seal on front face
- Jetter type replaceable nose ring & coolant through stopper is available as an option
(perfect for profiling & wall applications)

X-TREME Multi-Lock Chuck

HSK63A X-TREME Standard Options:

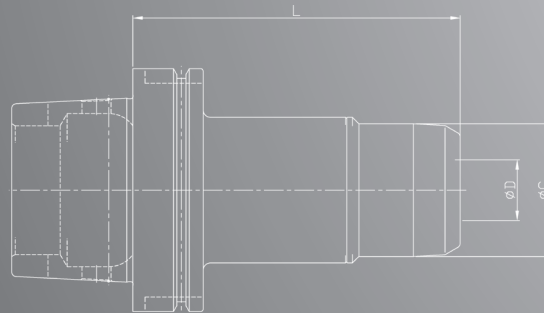
Part Number	Gripping Diameter 'C'	Nose Diameter 'C1'	Gauge Length 'L'	TiTAN Shank Length	Spanner Req'd
HSK63A-C12EX-95-IDU	12	40	95	57	GH16
HSK63A-C16EX-100-IDU	16	48	100	67	GH20
HSK63A-C20EX-105-IDU	20	55	105	70	GH25

HSK100A X-TREME Standard Options:

Part Number	Gripping Diameter 'C'	Nose Diameter 'C1'	Gauge Length 'L'	TiTAN Shank Length	Spanner Req'd
HSK100A-C12EX-95-IDU	12	40	95	57	GH16
HSK100A-C16EX-105-IDU	16	48	105	67	GH20
HSK100A-C20EX-115-IDU	20	55	115	70	GH25
HSK100A-C25EX-115-IDU	25	55	115	76	GH25
HSK100A-C32EX-120-IDU	32	68	120	82	GH32
HSK100A-C42EX-135-IDU	42	86	135	85	9HC42

HSK125A X-TREME Standard Options:

Part Number	Gripping Diameter 'C'	Nose Diameter 'C1'	Gauge Length 'L'	TiTAN Shank Length	Spanner Req'd
HSK125A-C20EX-120S	20	55	120	70	GH25
HSK125A-C25EX-120S	25	55	120	76	GH25
HSK125A-C32EX-135S	32	68	135	82	GH32



All Nikken X-TREME Chucks are supplied with BIS-C ID Pockets as standard

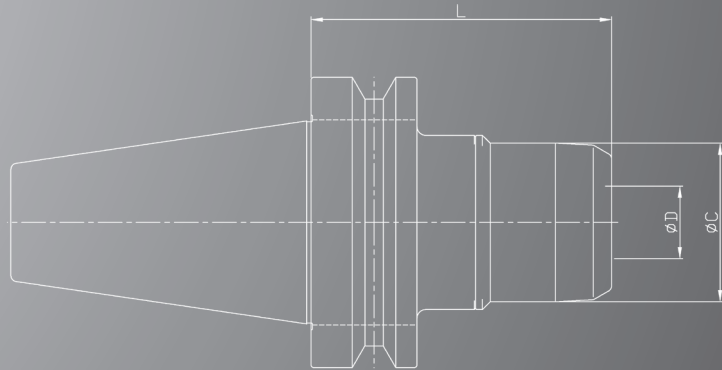
NBT50 X-TREME Standard Options:

Part Number	Gripping Diameter 'C'	Nose Diameter 'C1'	Gauge Length 'L'	TiTAN Shank Length	Spanner Req'd
NBT50-C12EX-95-IDU	12	40	95	57	GH16
NBT50-C16EX-105-IDU	16	48	105	67	GH20
NBT50-C20EX-115-IDU	20	55	115	70	GH25
NBT50-C25EX-115-IDU	25	55	115	76	GH25
NBT50-C32EX-120-IDU	32	68	120	82	GH32
NBT50-C42EX-125-IDU	42	86	125	85	9HC42

Polygon C8 X-TREME Standard Options:

Part Number	Gripping Diameter 'C'	Nose Diameter 'C1'	Gauge Length 'L'	TiTAN Shank Length	Spanner Req'd
C8-C20EX-105	20	55	105	70	GH25
C8-C25EX-110	25	55	110	76	GH25
C8-C32EX-115	32	68	115	82	GH32

*N.B. Polygon C8 is available as an optional shank size.
However this variant is not EU standard stock and is subject to manufacturing lead times*



X-TREME Accessories

Code No.	Face Seal	Stopper	Support Bolt	Drive Bolt
HSK63A-C12EX-95-IDU	9C12SL-FS-EX-A	9MC12HEX-6L	FSMB10-16	-
HSK63A-C12EX-95-IDU-J	9C12SL-FS-EX-J	9MC12HEX-6L-J	FSMB10-16	-
HSK63A-C16EX-100-IDU	9C16SL-FS-EX-A	9MC16HEX-6.5L	FSMB12-16	-
HSK63A-C16EX-100-IDU-J	9C16SL-FS-EX-J	9MC16HEX-6.5L-J	FSMB12-16	-
HSK63A-C20EX-105-IDU	9C20-FS-EX-A	9MC20HEX-12L	FSMB12-20	M12 x 20L
HSK63A-C20EX-105-IDU-J	9C20-FS-EX-J	9MC20HEX-12L-J	FSMB12-20	M12 x 20L

Code No.	Face Seal	Stopper	Support Bolt	Drive Bolt
HSK100A-C12EX-95-IDU	9C12SL-FS-EX-A	9MC12HEX-6L	FSMB10-16	-
HSK100A-C12EX-95-IDU-J	9C12SL-FS-EX-J	9MC12HEX-6L-J	FSMB10-16	-
HSK100A-C16EX-105-IDU	9C16SL-FS-EX-A	9MC16HEX-6.5L	FSMB12-16	-
HSK100A-C16EX-105-IDU-J	9C16SL-FS-EX-J	9MC16HEX-6.5L-J	FSMB12-16	-
HSK100A-C20EX-115-IDU	9C20-FS-EX-A	9MC20HEX-12L	FSMB12-20	M12 x 20L
HSK100A-C20EX-115-IDU-J	9C20-FS-EX-J	9MC20HEX-12L-J	FSMB12-20	M12 x 20L
HSK100A-C25EX-115-IDU	9C25SL-FS-EX-A	9MC25HEX-6.2L	FSMB16-20	M16 x 20L
HSK100A-C25EX-115-IDU-J	9C25SL-FS-EX-J	9MC25HEX-6.2L-J	FSMB16-20	M16 x 20L
HSK100A-C32EX-120-IDU	9C32SL-FS-EX-A	9MC32HEX-7L	FSMB16-20	M16 x 20L
HSK100A-C32EX-120-IDU-J	9C32SL-FS-EX-J	9MC32HEX-7L-J	FSMB16-20	M16 x 20L
HSK100A-C42EX-135-IDU	9C42SL-FS-EX-A	9MC42HEX-9L	FSMB16-20	M16 x 20L
HSK100A-C42EX-135-IDU-J	9C42SL-FS-EX-J	9MC42HEX-9L-J	FSMB16-20	M16 x 20L

Code No.	Face Seal	Stopper	Support Bolt	Drive Bolt
NBT50-C12EX-95-IDU	9C12SL-FS-EX-A	9MC12HEX-6L	FSMB10-16	-
NBT50-C12EX-95-IDU-J	9C12SL-FS-EX-J	9MC12HEX-6L-J	FSMB10-16	-
NBT50-C16EX-105-IDU	9C16SL-FS-EX-A	9MC16HEX-6.5L	FSMB12-16	-
NBT50-C16EX-105-IDU-J	9C16SL-FS-EX-J	9MC16HEX-6.5L-J	FSMB12-16	-
NBT50-C20EX-115-IDU	9C20-FS-EX-A	9MC20HEX-12L	FSMB12-20	M12 x 20L
NBT50-C20EX-115-IDU-J	9C20-FS-EX-J	9MC20HEX-12L-J	FSMB12-20	M12 x 20L
NBT50-C25EX-115-IDU	9C25SL-FS-EX-A	9MC25HEX-6.2L	FSMB16-20	M16 x 20L
NBT50-C25EX-115-IDU-J	9C25SL-FS-EX-J	9MC25HEX-6.2L-J	FSMB16-20	M16 x 20L
NBT50-C32EX-120-IDU	9C32SL-FS-EX-A	9MC32HEX-7L	FSMB16-20	M16 x 20L
NBT50-C32EX-120-IDU-J	9C32SL-FS-EX-J	9MC32HEX-7L-J	FSMB16-20	M16 x 20L
NBT50-C42EX-125-IDU	9C42SL-FS-EX-A	9MC42HEX-9L	FSMB16-20	M16 x 20L
NBT50-C42EX-125-IDU-J	9C42SL-FS-EX-J	9MC42HEX-9L-J	FSMB16-20	M16 x 20L



Face Seal Standard
Supplied as standard.
Centre through
coolant supply.

Standard Stopper
Supplied as standard.
Centre through
coolant supply.



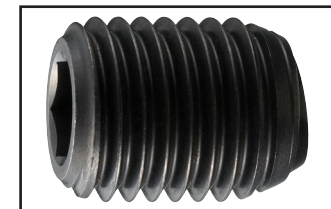
Face Seal - Jetter
Optional face seal.
External coolant supply
(ideal for profiling
applications).

Stopper - Jetter
Optional stopper.
External coolant supply
in conjunction with
Jetter Face Seal.



Drive Bolt
Supplied as standard.
Chucks from size
C20EX upwards.

Support Bolt - Kultopp
Supplied as standard.
Chucks of all sizes.



The Nikken X-TREME Multi-Lock is designed for optimum durability and performance in demanding applications & materials. To maintain long life, effectiveness and reliability we would always recommend periodic service and inspection of the internal components. Please contact your local Nikken representative to discuss application, service and on-going support of our solution.

TiTAN R I P P A

The TiTAN Rippa employs an optimised combination of material substrate, geometry, edge conditioning and coating to deliver enhanced productivity with improved stability and significantly reduced tool degradation.

The centre-through tool coolant delivery system facilitates rapid chip evacuation which reduces the cutting zone heat (especially when full slotting) while further increasing tool life expectancy.

Innovative end tooth geometries facilitate significantly elevated ramp angles ($> 7^\circ$) with no feed-rate reductions. This decreases component machining cycle times and removes the risk of component damage through base hot spots / cutter burnouts.

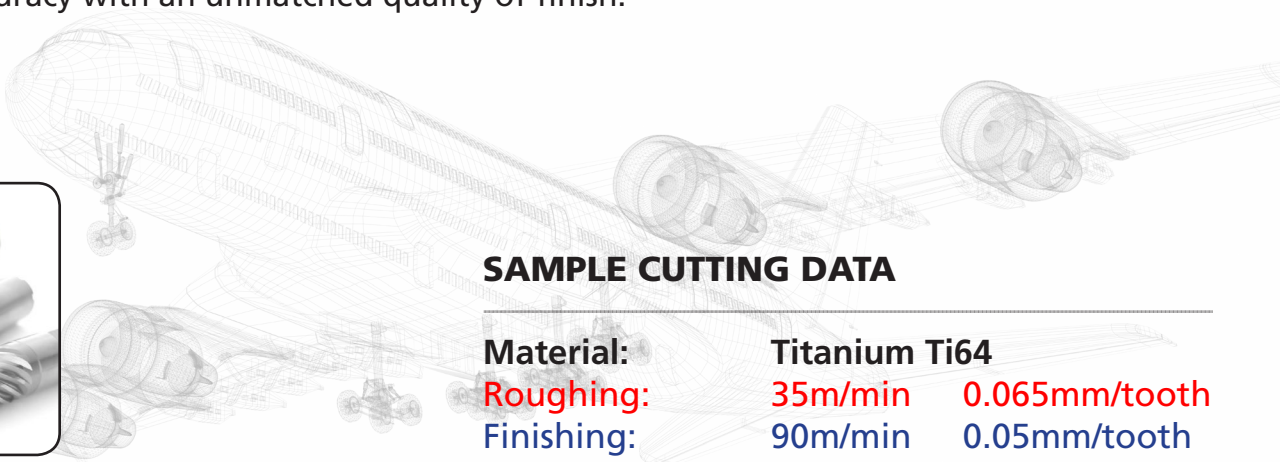
TiTAN F I N I S H E R

The TiTAN Finisher's optimised material substrate allows for a rigid tool construction which substantially reduces radial side deflection. In turn, this results in improved side wall straightness and accuracy with an unmatched quality of finish.



SAMPLE CUTTING DATA

Material:	Titanium Ti64	
Roughing:	35m/min	0.065mm/tooth
Finishing:	90m/min	0.05mm/tooth





BREATH-TAKING PERFORMANCE
DELIVERED AS STANDARD

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