



# Smartbore Micron accurate cutting edge tool adjuster Nexus



Large Diameter Finish Boring with micron accurate digital adjustment







## Welcome to Rigibore®

Manufacturers of high quality tooling for precision hole boring

Rigibore's use of technology in manufacturing means we deliver our products, even complex multi-edge cutting tools, quicker than the competition.

We pride ourselves on our enquiry response time, our attention to detail, product quality and our commitment to customer satisfaction.

Our bespoke design and manufacturing system delivers high quality boring tools in the shortest delivery times.

Rigibore® is an award winning company recognised for its use of technology and commitment to customer focus

# Innovation, technology & quality

in design and manufacture



## What our customers say about us...

"Rigibore's quality and on-time delivery performance is outstanding and considered to be Best-in-Class."

"The product, coupled with their knowledge of difficult boring applications has proven to be the perfect partner for a world class metalworking solutions provider."

"Rigibore® has customised their software and manufacturing services to fit our every need (and more importantly our customer's needs). Their flexibility is unparalleled."

## Hayle, United Kingdom



## Mukwonago, USA



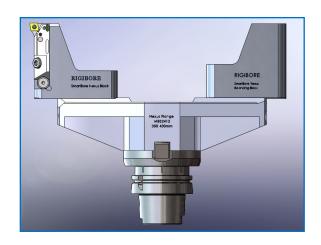
## Bangalore, India







Rigibore's Smartbore Nexus allows micron accurate cutting edge adjustments on large diameter bores from Ø 275mm (10.8268") to Ø 1020mm (40.15748")



Rigibore's Smartbore Nexus is designed for large diameter finish boring operations and uses Smartbore technology to electronically measure the movement of the insert slide and give the diameter adjustment reading after confirming the movement.

The Smartbore Nexus Module used with standard boring flanges can be adjusted using the Smartbore Digital Adjuster. Precision diameter changes can be monitored by the operator, displayed clearly on the LCD adjuster screen. Swivel barrel orientation allows clear viewing in horizontal or vertical spindle position.







#### **Nexus Benefits**

- Precision Performance guaranteed through digital adjustment capabilities. Digital readouts allow for easy, micron accurate adjustments by skilled or semi-skilled operators
- Reduced Downtime This manually operated system simplifies the adjustment process; the tool does not need to be removed from the machine spindle by using the handheld Smartbore Adjuster
- Easy to maintain no expensive or time-consuming servicing. Nexus uses standard Smartbore cartridges available from stock with minimal, inexpensive maintenance.
- Simplicity In Adjustment Precision tolerances can be easily met and maintained by operators of all skill and experience levels.
- Flexibility Measurements can be toggled between 'radius/diameter', 'metric/imperial' and 'boring/ overturning'.

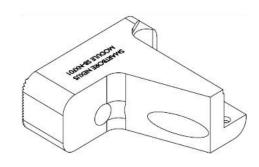




#### Smartbore Nexus Module—SB-NXF01



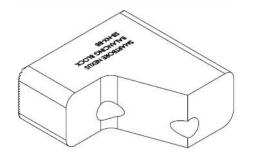
The Nexus is a self-contained module that can be added to standard flanges. The Smartbore cartridge is mounted on the block and adjusted using the Smartbore Adjuster—Digital Torx Wrench



#### Smartbore Balance Block —SB-NX-BB



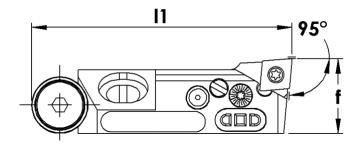
The Nexus Balance Block is adjusted radially to bring the tool into balance after Nexus is preset to the required diameter.



## **Smartbore Cartridge**

Part Number	Insert	Insert Screw	Datum Rad	Approach	Fine Adjustment Range Ø (mm)
SB-UFP1290	CC12_04	RS40120	0.8	95°	0.6
Min Bore	f	L1	Smartbore Adjuster	Grease Gun	Grease Refill
75mm	32mm	107mm	SB-ADJ187-CHR	UFPG-00	UFPG-00 RFL
2.953 "	1.260 "	4.213 "			

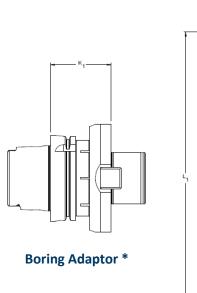


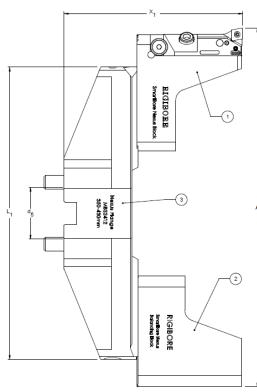






## **Boring with Nexus**





- 1. Smartbore Nexus Block—SB-NXF01
- 2. Smartbore Nexus Block—SB-NX-BB
- 3. Nexus Flange—NXF-FL01
- \* Flange Adaptor shown is HSK100A but other adaptors on other shanks are available. E.g. BT50, MVS100, 7388-50

Flange Adaptor price is dependent on length.

Please contact Rigibore for a quotation

#### **BORING**

Cutting Range (mm)	Nexus Module	Balance Block	Flange	Flange Adaptor	X1 (mm)	D5 (mm)
275-355	SB-NXF01	SB-NX-BB	NXF-FL01	-	208	D60
350-430	SB-NXF01	SB-NX-BB	NXF-FL02	-	208	D60
425-505	SB-NXF01	SB-NX-BB	NXF-FL03	-	208	D60
465-745	SB-NXF01	SB-NX-BB	NXF-FL04	NX-FA	262	D60
740-1020	SB-NXF01	SB-NX-BB	NXF-FL05	NX-FA	262	D60



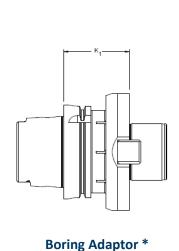
Smartbore Adjuster—Digital Torx Wrench

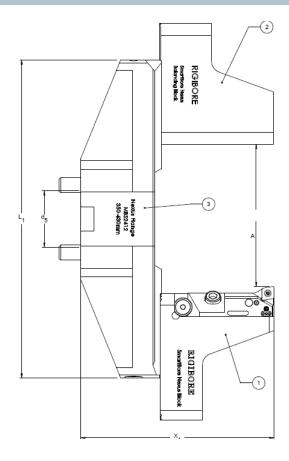
- Precision performance is guaranteed through digital adjustment capabilities
- Measurements can be toggled between 'radius/diameter', 'metric/ imperial' and 'boring/overturning'
- •Digital readouts allow for easy, micron accurate adjustments by skilled or semi-skilled operators
- •Digital fine adjustments are made with no clamping/unclamping
- •Changes are made without removing the tool from the machine





## **Overturning with Nexus**





- 1. Smartbore Nexus Block—SB-NXF01
- 2. Smartbore Nexus Block—SB-NX-BB
- 3. Nexus Flange—NXF-FL01
- \* Flange Adaptor shown is HSK100A but other adaptors on other shanks are available. E.g. BT50, MVS100, 7388-50

Flange Adaptor price is dependent on length.

Please contact Rigibore for a quotation

## **OVERTURNING**

Cutting Range (mm)	Nexus Module	Balance Block	Flange	Flange Adaptor	X2(mm) *	D5 (mm)
Note 1	SB-NXF01	SB-NX-BB	NXF-FL01	-	208	D60
Note 1	SB-NXF01	SB-NX-BB	NXF-FL02	-	208	D60
Note 1	SB-NXF01	SB-NX-BB	NXF-FL03	-	208	D60
190-460	SB-NXF01	SB-NX-BB	NXF-FL04	NX-FA	262	D60
455-735	SB-NXF01	SB-NX-BB	NXF-FL05	NX-FA	262	D60

Note 1: Please contact Rigibore for more information

\* Cutting length can be increased with custom spacers.







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