

Special Tooling

Includes:

- Multi-Feature Tooling
- Back Boring Tools
- Eccentric Tools
- Overturning Tools
- In-House Specialist Design Software

Rigibore® The Most Accurately Adjustable Boring Tools in the World



Special Tool Design

Rigibore prides itself on being a world leader in the manufacture of **special or multi-feature boring solutions**.

Using decades of industry knowledge and experience, Rigibore designs and manufactures special boring tools specific to a customer's application.

The Specialist In Special Tooling

Improved Part Quality

Meets critical tolerance requirements.

Tool quotes in 24-48 hours

In house design software allows quick design and manufacture.

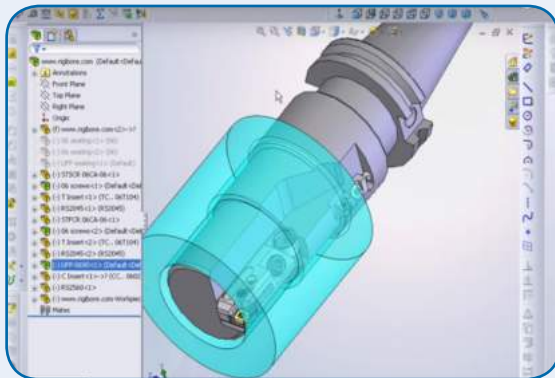
Reduced cycle time

Multi-feature tooling capabilities enable multiple critical features to be machined simultaneously.

Enhanced process reliability

Rigibore's special tools ensure accurate and repeatable performance.

RADS



Rigibore's specialized in-house design software, RADS allows the production of almost **limitless special tooling solutions**.

The advanced software provides customers with a quick quotation, within **24-48 hours**.

Whilst operating on a global scale, Rigibore remains local to the needs of its customer - designing, manufacturing and delivering within **4-6 weeks**.

Special Tooling Capabilities

- Allows the design of **Backboring**, **Overturning** and **Eccentric Tools** for particular operations.
- All special tools are manufactured to accept **ISO standard inserts** and **special form inserts**.
- Special tools can be manufactured on any shank, including **BT**, **CAT**, **HSK**, **ABS** and **Staight Shank Weldon**.
- Rigibore provides the perfect tool for roughing, semi-finishing and finishing operations.

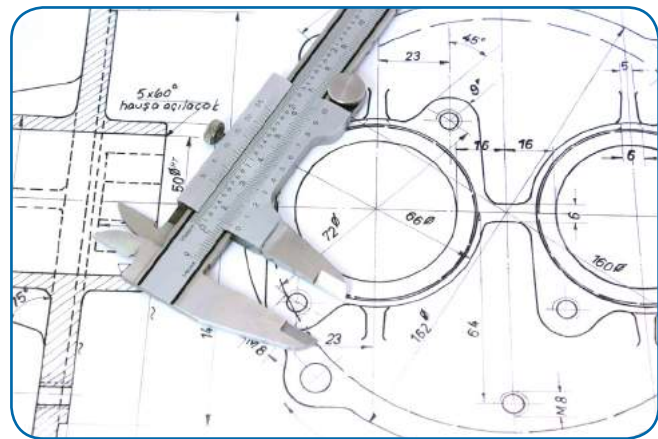


Tools For Building In

Rigibore offers standard, 'off-the-shelf' product which can be built into our special boring tools.

Keep your boring operation running!

This extensive range of bush units and cartridges are replaceable from stock, offering a fast and simple solution in the case of tool damage.



Rigibore's **MBX Boring units** can also be mounted into special tools, these units are pre-tensioned to eliminate backlash and are adjusted from the front of the unit.

- MBX units use a self-clamping/ self-locking mechanism.
- Each graduation on the adjustment dial is **0.005mm/.0002"** on radius.
- Each vernier graduation on the bush is **one micron** on radius.



ISO Cartridges are ideal for rough or semi finish boring applications, available in a wide variety of sizes.

- Minimum bore **15.6mm/0.614"**.
- The complete range of ISO cartridges are held in stock for fast delivery.
- ISO cartridges are build to accept all **standard ISO indexable** inserts.



For operations requiring precision cutting edge adjustments, **Ultra Fine Precision (UFP)** Cartridges are available, allowing adjustments of **0.005mm** on diameter.

Smartbore cartridges are interchangeable with UFP cartridges, possessing the same flawless design and functionality. However they are adjusted simply using the Smartbore Digital Adjuster, to one micron on diameter.



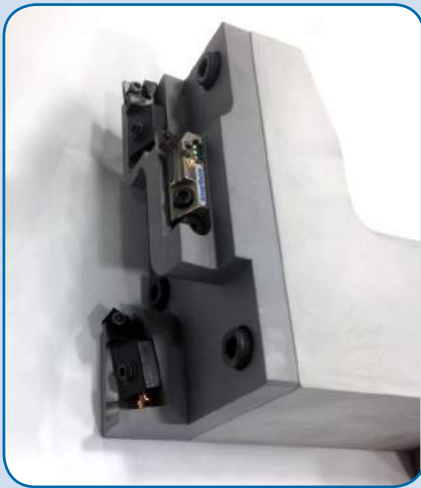
For details on featured standard tooling - visit the download page on the rigibore website:-
<http://www.rigibore.com/media/catalogues/standard-boring-bars-units-inserts.pdf>

Multi-Feature Tooling

Rigibore's combination tooling capabilities allow customers to machine multiple concentric features in one operation.

Rough and Finish Tool

CAT50 combination **Rough and Finish Chamfer Tool.**



Due to size, this special tool was designed with **2 different material types (steel and aluminium)** to reduce weight.

Roughing Tools

HSK100 combination **Roughing tool**, machining a converter housing for the heavy plant industry.



ISO Cartridges provide durability in heavy duty rough boring whilst removing stock with **greater productivity** utilising multi-feature capabilities.

Multi-Feature Tooling

Combination tooling can be designed to perform roughing and finishing operations in one pass, significantly reducing cycle time.

Finish Tool

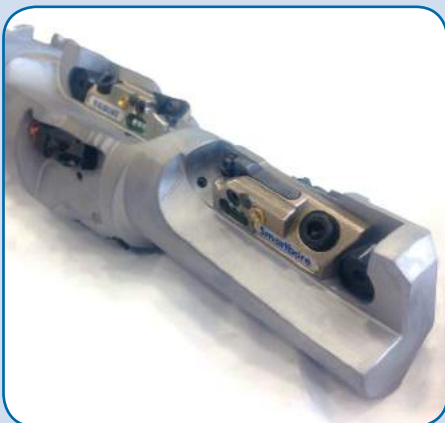
HSK36A Special **Rough and Finish** Tool used to machine a gearbox.



Rough and finish operations were performed simultaneously, contributing to a significantly **reduced cycle time.**

Smartbore "One Shot Tool"

Two or more Smartbore precision cartridges can be manufactured on a single tool machining multiple diameters in just **"one shot"**.



Cartridges are adjusted using the **Smartbore Digital Adjuster**, without removal from the machine spindle.

Superior Designs

Special tooling capabilities can be integrated with Rigibore's flagship product designs - **ActiveEdge** and **Smartbore**, allowing innovative boring systems to revolutionise your operation.

Back Boring Tools

HSK100A Aluminium Body Finish Back Bore Tool - This tool was used to precision machine a gearbox for the agricultural industry.



Micron accurate adjustments were made using the **Digital Smartbore Adjuster**.



ActiveEdge Overturning Tool

ActiveEdge BT30 overturning tool can be remotely adjusted with micron accuracy using the **ActiveEdge Remote Contol**.



This uniquely manufactured tool allows precision manufacturing **overturning the spigot** on the machining centre.

Performance Guranteed

Whether you are cutting cast iron, aluminium, steel, plastics, or titanium alloys, Rigibore technology offers you a wide and varied range of cutting edges in the form of ISO standard, indexable carbide inserts.

ISO Fixed Pocket Tooling

Rigibore can design and manufacture a range of **ISO fixed pocket tools**. Available in multi-insert design to machine multiple critical diameters.



ISO fixed pocket tools are perfect for roughing or semi-finishing operations.

PCD Round Tools

HSK63 PCD Round Tools machining a differential housing component.



PCD Tools machined 3 various grooves simultaenously, offering **superior durability** in the cut and **removed risk of error** in manual adjustment.