



standing the test of time





# Crawfords

a name you can trust

For more than 100 years, Crawford Collets has been manufacturing high precision collets and collet chucks for the machine tool industry. In that time it has established a reputation for the design, development and manufacture of the highest precision, highest quality collets and collet chucks, manufactured to exacting standards at its factory in Halifax, West Yorkshire, UK.

A wide range of collets and collet chucks are available ex-stock from the largest range held under one roof anywhere in Europe - over 50,000 different collets are held in stock.

The extensive range of Crawford Collets includes: -

- **Multibore™** collets, with guaranteed parallel grip and up to 3mm gripping range, are ideal for automated production on CNC lathes.
- **Spring collets**, primarily used for second operation work, with dedicated bore sizes to eliminate marking of component.
- The commonly used **5C/16C** and **R8** type collets are available in a wide range of varying bore shapes and sizes.
- The **six-bladed Multisize™** collets, for first and second operation work, can be used to grip round or hexagon bar with a versatile 3mm gripping range.
- **ER/ESX** collets made to exacting standards for today's modern machine shop.
- **Special collets** designed to meet customers individual requirements based on our experience and Technical expertise.

Crawford Collets is a sister company to Pratt Burnerd International, the internationally established designer and manufacturer of chucks.



# the range

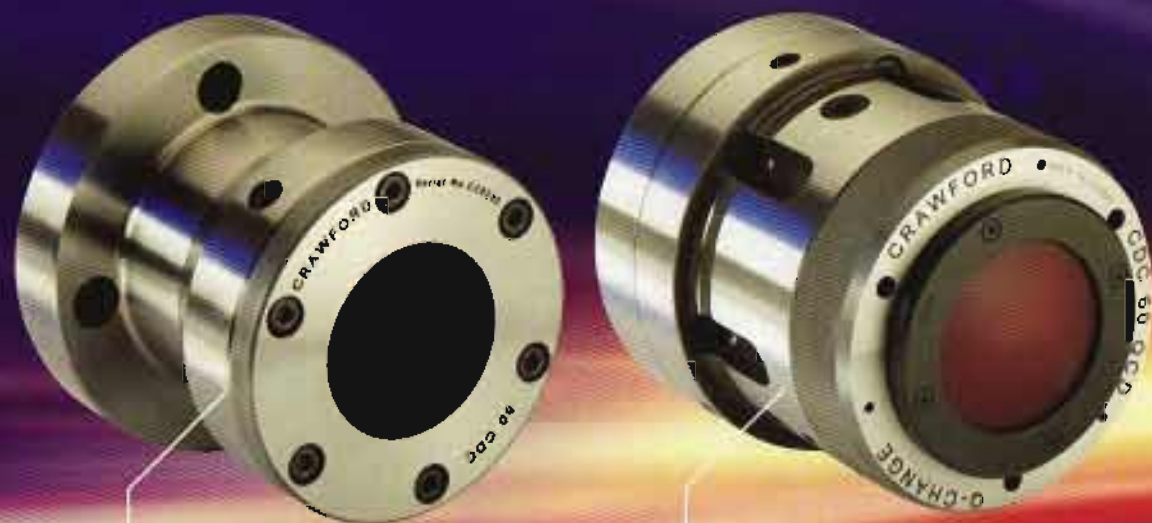
precision collet chucks

## Essence of every system is precision.

To ensure every collet and collet chuck achieves the highest standards of precision and accuracy in use, Crawford Collets has invested in the very latest technology and the most up-to-date machine tools and inspection equipment.

Every product is manufactured from the highest quality materials and is fully inspected prior to dispatch to give absolute customer assurance.

Full traceability can be provided.



### CDC Collet Chucks

Short, standard or extended length versions available. Ideal for bar or second operation work, the CDC standard length chucks are accurate 0.005mm TIR with a repeatability of 0.005mm on duplicate parts. With a large capacity – maximum round 80mm – they are available to use DIN type or Crawford multibore collets for a powerful parallel grip over a wide diameter range. Using spring collets of a fixed bore allows short or delicate components to be gripped effectively.

### Quick Change CDC

The Quick Change CDC has dead length operation, ideal for both bar and secondary operations and are accurate to 0.005mm TIR with a repeatability of 0.005mm on duplicate parts. The quick change bayonet cap minimises change over time between bar sizes.

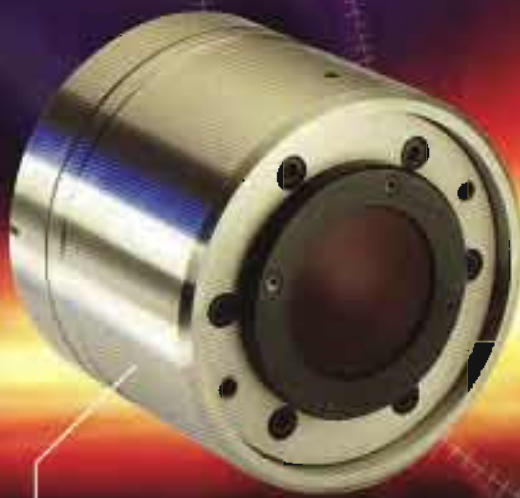
Patent No 2256381

## and collets



### Dead Length Power Chuck

The 5C and 16C dead length power chuck is available with or without the Setrite adjustment feature which gives an accuracy adjustment to virtual zero. Four screw adjustments eliminate any error in the collet. The chuck is accurate to 0.005mm TIR with a repeatability of 0.005mm on duplicate parts. The deadlength feature eliminates part pullback. Speeds are up to 6000rpm. The main body and cone are hardened and ground.  
UK patent No 2279277 US patent No 5524909



### Multibore Chuck

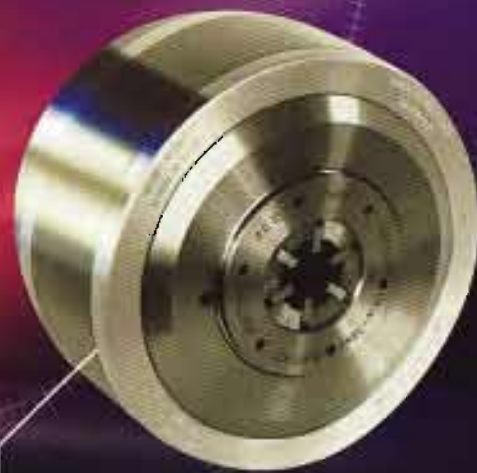
The DMC power chuck is drawback actuated to ensure positive location against the feed ram and has high concentricity accuracy. It eliminates feed length variation on CNC actuated bar feeds and maximises the machine envelope. Swarf is excluded using elastomeric seals.

Patent No 2362345



### KC Manual Collet Chuck

This key operated Multisize collet chuck offers high accuracy with a powerful grip. A simple sturdy design incorporating a ball race to reduce friction and increase gripping power.



### PC Multisize Collet Chuck

Power-operated, the integral hydraulic cylinder and spring pack operation on this multisize chuck eliminates the need for a drawtube whilst giving a safe and powerful grip. One piece construction permits rapid installation and removal. Accuracy at the chuck face using master collets is 0.02mm TIR.



# manufacture

technology allied with expertise

**To give the most efficient production, and therefore the best possible customer service, the Crawford's machine shop is organised into dedicated cells, arranged to give the most efficient production flow.**

A 675 sq m specialist grinding facility was added recently to further enhance production facilities. A sophisticated, computerised manufacturing control system maintains an exacting production schedule which ensures all principle collet sizes are available ex-stock.

The manufacture of collets and collet chucks is not just about machines and technology. The workforce is experienced in the mysteries of collet manufacture, and is supported by a fully fledged apprentice training programme which will ensure the continuance of the expertise and experience essential in the production of high precision collets.



# design

a background of continual  
development

**Design and development is undertaken by Crawford's own experienced engineers.**

**Much of the standard range has been developed in response to customer demand and from products originally created to meet a specific application problem.**

**Many different designs are held in the company archives, so it can normally exceed customers expectations with the speed of its response and the restrained costs of the solutions even for non standard collets needed for unusual applications.**