









The true line of precision

600 Group

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OPratt Burnerd OInternational

600 Group



Qualified

by experience

Pratt Burnerd International has its roots in the machine tool industry. For more than 150 years it has been designing, manufacturing and developing chucks for and with its customers. Throughout that time, innovation and development have been the watch-word of the company, keeping it at the leading edge of chuck technology. It developed the world's first international power chuck, the world beating high speed quick change chuck, the first opto-coupled gripmeter (forerunner of the radio frequency gripmeter), the award winning programmable power chuck. A policy of continual investment in plant and people ensures it remains at the forefront of the industry

Pratt Burnerd now offers the most comprehensive range of standard chucks from any one manufactures and provides solutions to complex workholding problems to customers world-wide. The extensive manufacturing plant (5,000 sq m) is at Halifax in West Yorkshire, UK. The substantial team of experienced design engineers is also based there. It has a strong network of applications-based distributors throughout the world.

Sister company, Crawford Collets, is based on the same manufacturing site. It has the largest range of ex-stock collets available from any manufacturer in Europe. Both companies are part of 600 Group.



Priven by excellence

Essence of Pratt Burnerd International is its ability to design and manufacture chucks which meet any workholding requirement.

The standard range, much of which was developed initially for special applications, reflects the company's efforts to remain close to its customers and develop the workholding systems which the industry needs not only today but will need tomorrow.

Of equal consequence is Pratt Burnerd's exceptional ability to design innovative, cost effective solutions to complex workholding problems. Moderate Constitution of the Constitution of t

Powered by perfection

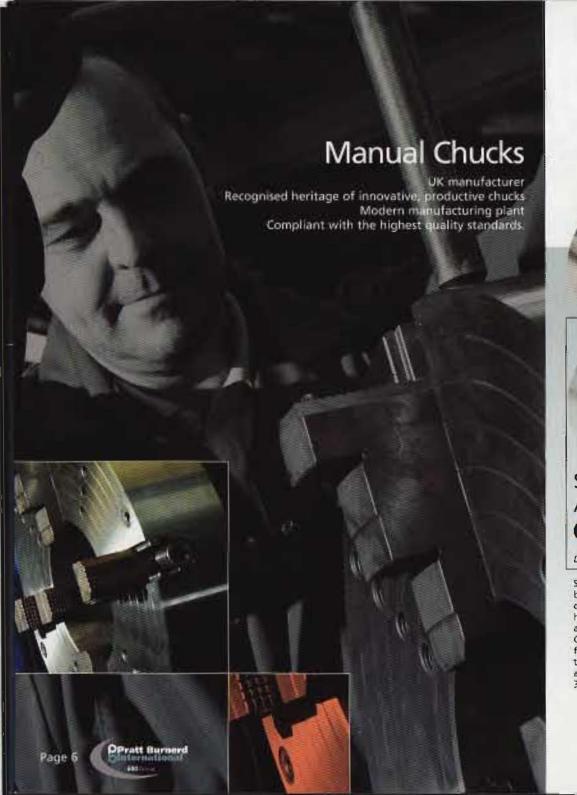
Pratt Burnerd supports extensive design and application teams as well as a large manufacturing plant in order to maintain its world-renowned capability for providing a customer with exactly the right system for his production process requirement. The highly qualified and experienced design and applications engineers ensure that every customer receives a second-to-none service.

The manufacturing plant operates only to the highest standards of manufacturing excellence, quality control and assurance, and provides full traceability. A policy of continual investment ensures that the latest machine tool technology is employed in the manufacture of the chucks. This not only enables the company to meet outstanding quality standards but also assists in controlling production costs and therefore price to the customer.

Pratt Burnerd chucks include both a standard range of manual and power chucks and special chucks, designed and manufactured to resolve specific workholding problems.









Standard Accuracy Chuck



Hardened Wear Strips

Diameters: 80 to 500mm

Standard accuracy chucks have bodies manufactured from high quality SG iron. Jaw tenons with hardened and ground wear strips are fitted on chucks over 125mm. Component parts are manufactured from high quality alloy steel, heat treated for optimum performance and durability. Accuracy is to ISO 3089:1991 (E) class 11.

Super **Precision Chuck**



Hardened Wear Strips

Diameters: 80 to 400mm

Super precision chucks have a repeatability of 0.03mm TIR guaranteed. All chuck sizes above 125mm are fitted with hardened wear strips in the tenons. A wide range of chuck adaptors is available to meet most spindle noses. Hardened base and reversible top jaws are available as an option. Accuracy is to ISO 3089:2005.



Diameters (3 jaw): 80 to 315mm Diameters (6 jaw): 125 to 315mm

6 jaw Griptru chucks allow the gripping of thin walled components with minimum distortion. A proven micro adjustment devise on both 3 and 6 jaw chucks permits concentricity to be adjusted to within 0.005mm TIR without loosening fixing screws. Repetitive gripping is possible with no more than 0.013 variation.



Setrite™ Chuck Setrite™ Adjustment

Diameters: 160 to 610mm

The all-steel Setrite chuck, supplied with hardened base and reversible top jaws, gives a concentricity of 0.013mm TIR by using the Setrite adjustment feature. For optimum accuracy, (0.005mm) each component can be trued individually. All scrolls are hardened and ground for optimum accuracy and durability.



Metric Independent Chuck

Roversible Rivers

Diameters: 160 to 400min

The Metric Independent chuck is the most economical chuck for turning one-off components and short runs. Manufactured from SG iron, screws, bearings and reversible jaws are steel. Separate adaptors suit most popular spindle noses.

Large Scroll Chuck

Diameters: 460 to 2000mm

Large 3 jaw scroll chucks can be supplied with recess mount or finished to suit most spindle noses. Hardened base and reversible top jaws are an option. The chuck is also offered with a large bore.

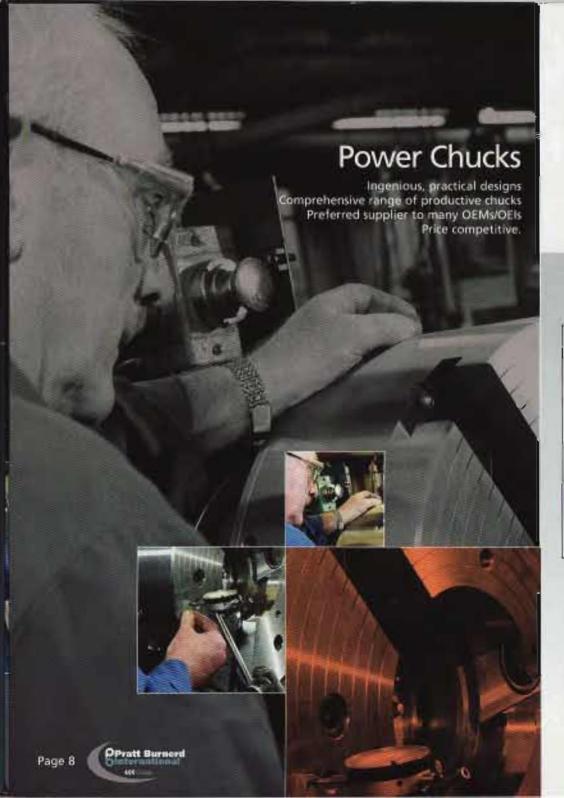


Large Independent Chuck

Reversible Laws

Diameters: 460 to 2000mm

The Large Independent 4 jaw chuck has body, screws, bearings and jaws manufactured from high quality steel. Most often, the chuck can be machined with mounting holes and recess to suit the spindle nose. Equally spaced tapped holes are provided between the Jaw ways for fitting component back stops.



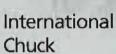


High Speed Quick Change Chuck



Diameters: 160 to 790mm

The original high speed quick change chuck has a jaw change of less than 40 seconds. The setrite feature is fitted as standard with repetitive gripping accuracy of 0.025mm TiR. It is counterbalanced against the loss of grip caused by centrifugal force operating on the top jaw. Designed for small batch production on CNC lathes, it has direct or indirect mount to A and DIN type spindles. Base jaws (60 or 90 degree serrations or acme) take collet pads, serrated, smooth or soft. Big bore and long stroke versions are also available.





Diameters: 125 to 600mm

Specifically designed for CNC lathes, the International chuck has a repetitive gripping accuracy of 0.025mm TIR. Base jaws are provided with metric 60 degree or imperial 90 degree serrations. The setrite concentricity adjustment feature is integral on all International chucks. Big bore versions are available.



Self Contained Power Chuck

Diameters: 160 to 350mm

The self contained power chuck has a built in air cylinder actuated through an interlocked control unit or it can be interfaced directly from the lathe's own control system. It is ideally suited to machines which do not have hydraulics fitted. There is no restriction in the machine spindle bore capacity as a rear actuated cylinder and drawtube are not required.



Low Cost Replacement Chuck

Diameters: 160 to 600mm

This high speed chuck has been designed as a low cost replacement for manufacturers' own chucks particularly Japanese. Accuracy is 0.025mm TiR. An easy retrofit, it has interchangeable top tooling with 60 degree serrations. It is supplied with a spindle mounting plate and semi-finished drawtube connector, soft top jaws and jaw T-nuts.

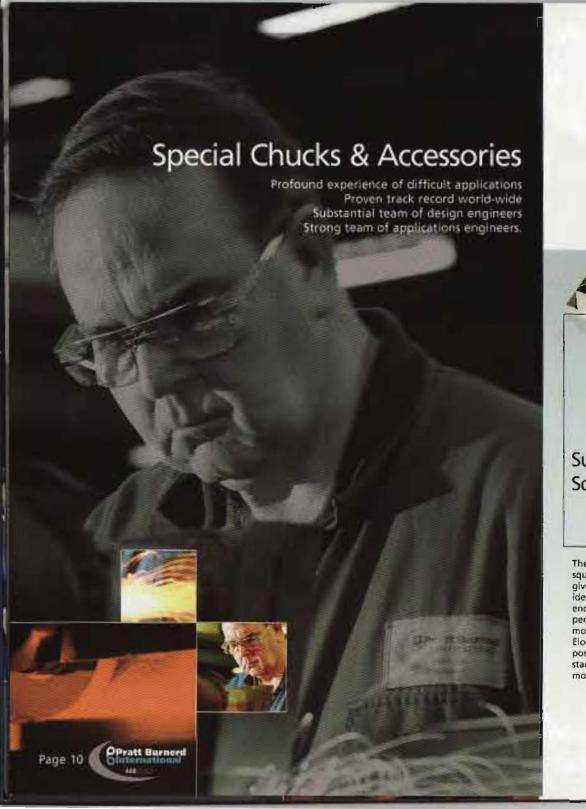


Hydraulic Cylinder

Bore sizes: 46, 56, 66, 77, 90mm

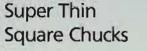
Suitable for operating International, Collet Chucks and High Speed Quick Change Chucks. This range of hydraulic cylinders has integral coolant collector. Provision is made for piston stroke sensing.

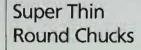














Diameters: 160 to 535mm

The super thin universal scroll square chuck has been designed to give greater Z-axis machining and is ideal for pallet applications. The end-surface clamping design permits several chucks to be mounted on the worktable. Elongated slots allow fast and easy positioning on the worktable using standard T-boits rather than mounting connecting plates.

The super thin round chuck gives 0.025nm TIR repeatability on duplicate parts using the nominated pinion. Ideal for drill presses, standard mills, VMCs, angle plates, tombstones and grinding machines, the chuck is easily mounted via a flange type mounting. Three pinions operating at a 45 degree angle give easier operation than a conventional chuck.

Designed for castings and forgings, the ball lock power chuck pulls back workpieces with tapered surfaces of up to 10 degrees while providing a right/left compliance of 5 degrees to give a strong clamping force. It is available in 2 or 3 jaw versions, as a self-centring chuck or compensating chuck with a centre or plug.



PPC



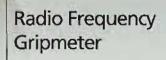
The programmable power chuck significantly reduces set up and change over times, has both high accuracy and repeatability (0.025mm TIR) and a very wide jaw movement (50mm per jaw). Unlike conventional power chucks, the PPC is fully integrated with and programmable through the lathe's controller and does not depend on a hydraulic cylinder. The jaw setting process is also significantly easier and faster than a conventional chuck, Quick jaw change is standard.



Big Bore Oil Country Chuck

Diameters: 460 to 2000mm

The extra heavy duty big bore oil country chuck has a forged steel body and hard top and master jaws. The gripping surface is serrated for even greater holding power. Large through holes and T-slots are standard.



Essential Health & Safety equipment for any busy machine shop the RFG measures accurately the gripping force being applied by the chucking system both statically and more significantly whilst rotating at speed. Calibrated up to 100kN per jaw and accurate up to 6000rpm. Data can be stored in the unit or down loaded to a PC for longer term storage or maintenance certification.



The Dickson Quick Change Toolpost is quick and easy to set up, providing a flexible approach to machining and giving significant savings in set up times. Up to four tools can be used per set up. The indexing facility allows a single tool to be used for turning facing and chamfering. Fast and simple centre height adjustment eliminates the need for packing pieces...

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Website: www.pratt-burnerd.co.ul