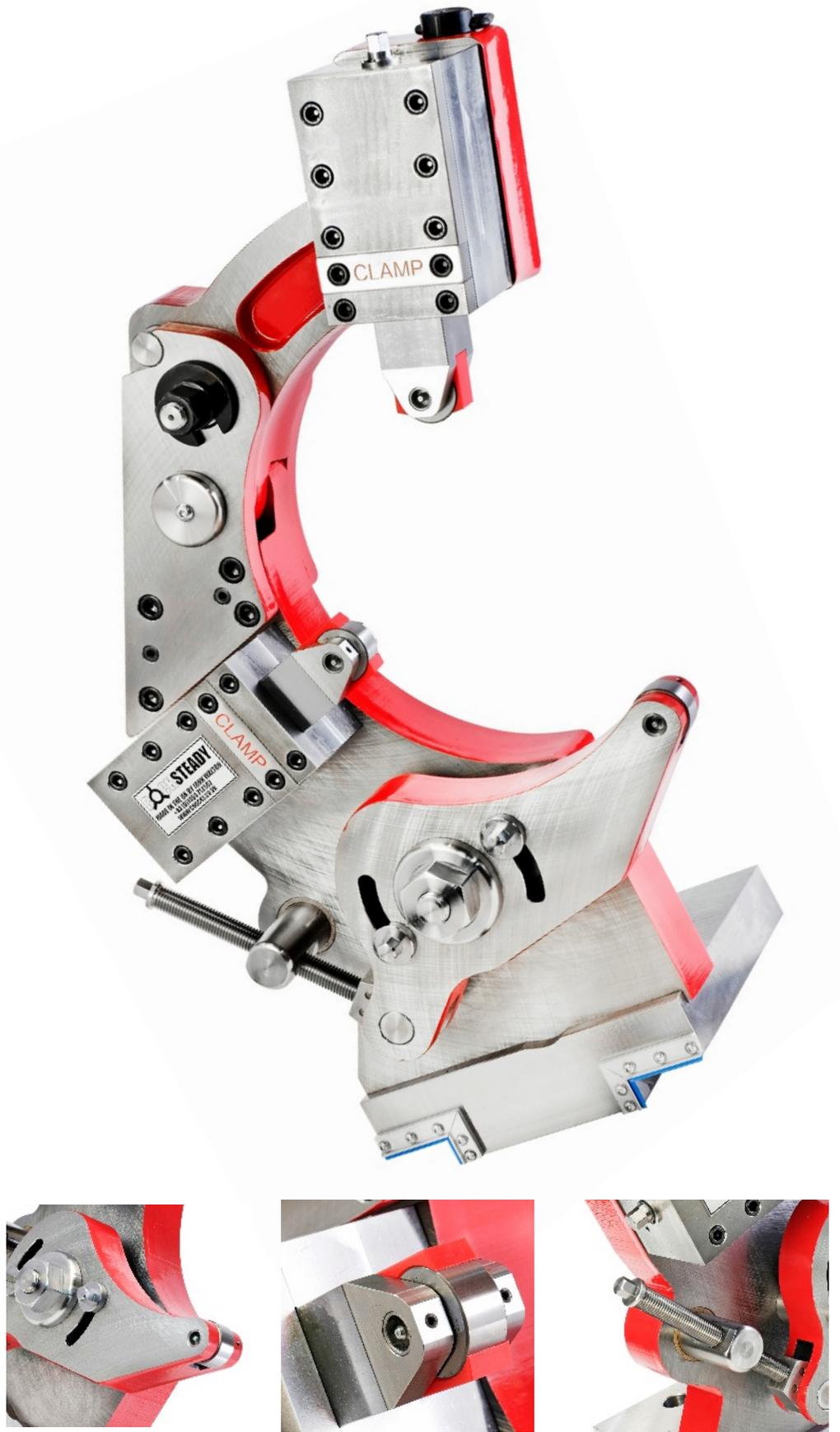


ROCKSTEADY



PRODUCT GUIDE FILE



NATIONAL



JOHN WALTON

It has been 30 years in development and now has many guises, but our Rocksteady product has become something of a success with sales in all corners of the globe. But for such a simple (in theory, at least) concept there have been many challenges to overcome.

It started back in 1990 when we were approached to design and produce a steady for a popular slant bed turning centre of the era - the customer needed to increase the steadying capacity without breaking the bank (or removing the operator door!). So with the AutoCad LT software we ran at the time we set about the task - replicating the same old same old round finger "basic" steady you would find on a Binns and Berry or Colchester but with a different angle

The first model worked just fine, but the design meant costly horizontal boring operations were required which also added to lead time, so after the fifth unit was produced the potential for further sales realised, but also the need to find a more cost effective design an absolute necessity. The Rocksteady product and brand was born.

We looked at the possibility of a modular build that would use a family of common parts over a range of sizes for the more popular diameter ranges. This required an in depth study of the best selling turning centres and their relative capacities. It was also important to look at the market sectors, components and associated tooling - and before long we were producing a range of square and rectangular section fingers and housings that could be adapted to the varying body sizes for different machines. The housing featured common hole patterns and a robust clamp plate to lock the finger once positioned. This design is still current.

The number of units produced grew rapidly - as did the demand for new features. These developments included a cantilever arm which allows access for adjustment of the rear finger from the machine apron. The alternative to this was a modification to a standard housing - adding a bevel gear system to a shaft drive. The latter a more expensive option found to be more appropriate for larger flatbed applications.

THE ROCKSTEADY STORY

And we didn't stop there. As our experience grew, so came the bigger challenges -with larger workpieces with bigger diameters came heavier weights to contend with. 30 tonnes they said? Go on then! Using the same square finger principles, Rocksteady XHD evolved. Aimed at the more specific application and larger machines XHD added another dimension (and a few more significant challenges) The addition of centralised lubrication to rollers, Hydraulic assist to open, motorised bed positioning to name but a few.



The XHD models shown are examples of customer specific requirements where we have pushed the limits in terms of load bearing and/or capacity in terms of size relative to the machine tool targeted. Again, the modular build principle reduces perceived cost, and most importantly lead time for such a "special" piece.

Without doubt the XHD range should be considered bespoke and requires a more in depth study of the machine tool, process and workpiece at stage one of the enquiry, and through all stages of supply.



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So as we say round here, its big, Its hard, and built in Yorkshire. Rocksteady has a pedigree of strength and quality throughout the range . And the range is ever growing .

We have produced this brochure to give you an insight into what has been done, and what can be done. But we are always pushing the boundaries to meet exacting customer demands.

ROCKSTEADY

RUGGED



Eorl Crabtree - Huddersfield Giants & England Rugby League star.



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DETAIL

ROCKSTEADY



Rocksteady Manual Steadyrests are constructed - not fabricated. The upper body is assembled to the base after precise and close tolerance machining to ensure rigidity and squareness of the unit.

Each and every Rocksteady unit has to pass a 15 point inspection prior to despatch. Attention to detail includes a gleaming coat of paint on non-machined faces in the appropriate colour to suit the target machine tool. Generally Rocksteady Red!

Way Wipers are fitted where necessary and the necessary Lifting Rings supplied for safety and ease of installation.

Each unit comes complete with a set of tools, Mounting Bolts, Clamps and an instruction Manual.

Our C Style Latch Top is machined to the highest precision to ensure ease of opening and repeatability. Only the very best materials are used in the production of our steadyrest



Modular Finger Housings with precision ground square section fingers, High Tensile Lead Screws, and NUTR Track Rollers as standard mounted on Roller Pins with Grease Points.

Bearing sizes NUTR2052 and 2563 are supplied with most units as standard.

Nylon Wipers are fitted to 52mm as standard and optional on other sizes..



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SC

STANDARDS

Our most popular variant, the SC (Slant Bed, C Style) uses three of our modular finger housings with robust square section fingers. Fingers are equipped with high end Yoke type Track Roller Bearings NUTR Mounted on roller pins with suitable lubrication points.

The C style Latch Top allows full clearance for component loading and offers high repeat accuracy thanks to CNC machined locations.

Base mounts can be adapted for most CNC tailstock slideways or for mounting to an existing steadyrest preparation base unit.



SCC

The SCC (Slant Bed, C Style, Cantilever) offers all the features of the SC Model, but with the addition of a heavy duty Cantilever rear arm.

A precision machined lead screw offers the operator the benefit of adjustment of the rear arm from the apron of the machine tool.

This feature can often allow for much larger capacities than the SC variant thanks to the compact design of the Cantilever arm. Heavy duty clamping bolts are included so that once positioned, the workpiece is supported firmly and accurately.

The SCC Model is widely used on all sizes of slant bed turning centre - but most often those with shallower bed angles, or those with existing prep bases..



FF

The FF (Fully Enclosed, Flat Bed) is deployed mainly on large Turning Machines with a flat bed profile. This type of steadyrest again utilises the modular finger housings and square section fingers with NUTR Rollers.

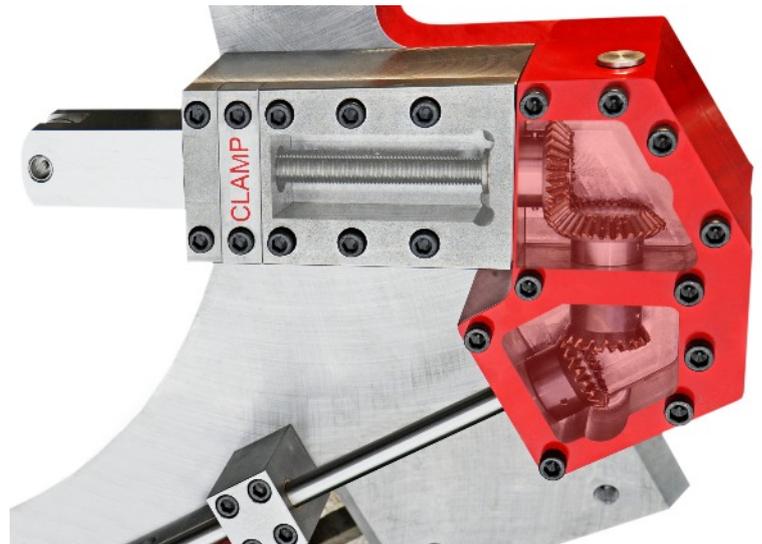
The fully enclosed design can feature either swing or lift off top with quick release swing bolts. All types of bed profile can be accommodated .



SPECIAL FEATURES



Piggy Back Rollers - For heavy applications with limited envelope - piggy back rollers offer a simple and cost effective solution. This option requires a special Finger and Housing but can be retrofitted to a standard steadyrest thanks to the common hole pattern of the modular housings.



Bevel Gear Finger Adjustment - This gives the operator the opportunity to adjust the rear finger of the steadyrest from the apron of the machine. More often applied to larger flat bed turning machines where rear access is more difficult.

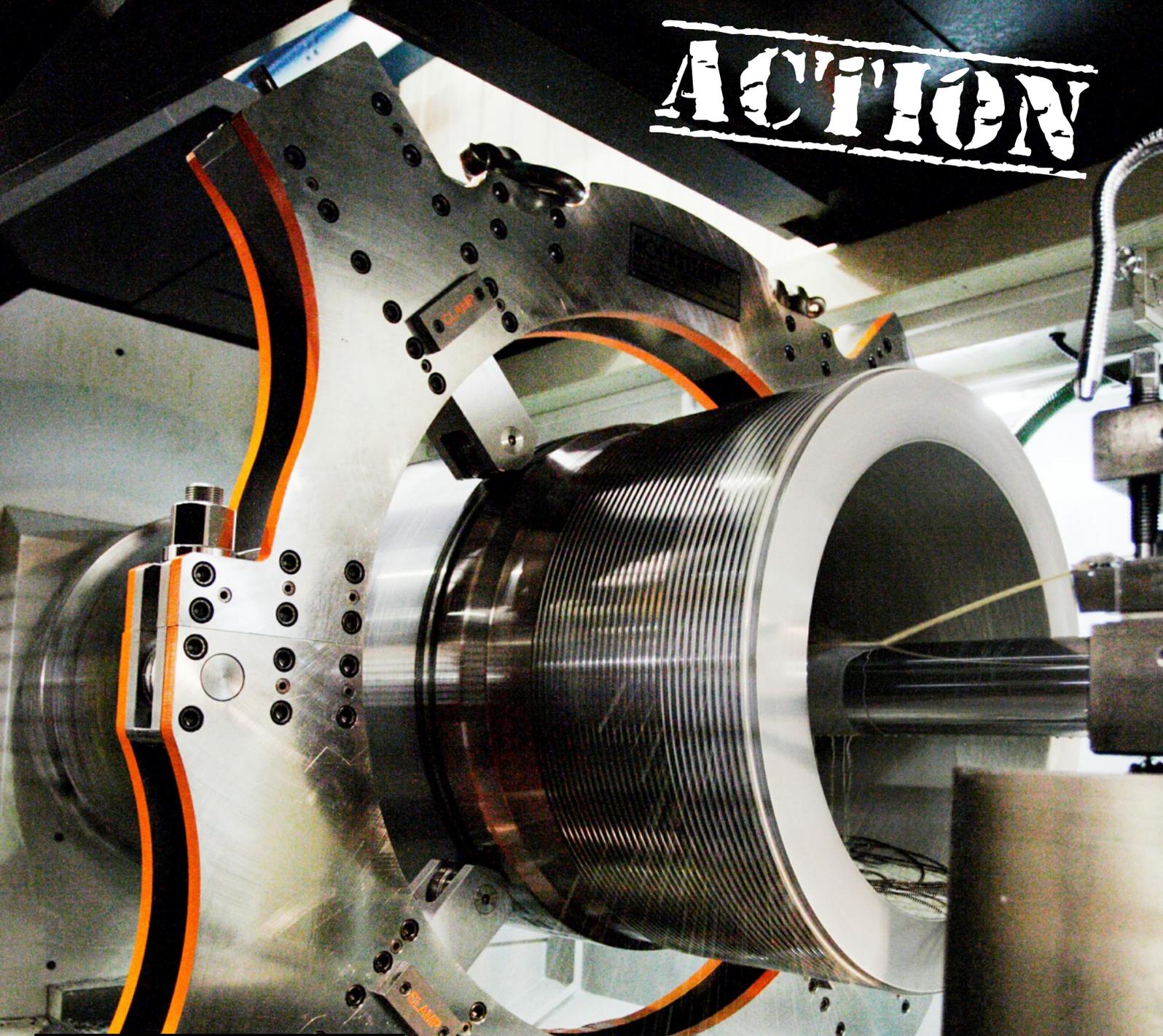
Motorised Positioning, Centralised Lubrication, Hydraulic Lift of upper arm and extra heavy duty Fingers are all included in the Steadyrest shown on the left. This was built as a matched pair for a large flat bed Mill Turn centre to carry shafts of up to 60,000kg in weight.



We can also offer Manual positioning by rack gear or cross slide shot bolt (Drag and Drop)

These features can be included at additional cost and subject to suitability to the machine tool and application. Please specify your exact requirements when you contact us with your valued enquiry.

ACTION



"This steady was made by John Walton specifically for a large project and works brilliantly. The component pictured was a forging that weighed 9 Tonnes was 43" in diameter.

The thread on the front of the component was a 36" Diameter x 1" TPI Full ACME - I cut this one myself with no issue and no chatter. Affectionately known as 'Stargate' at X-Cel we now have 2 identical units."

Andrew Hall - Director of Engineering - Vector X-Cel Limited



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ROCKSTEADY TS

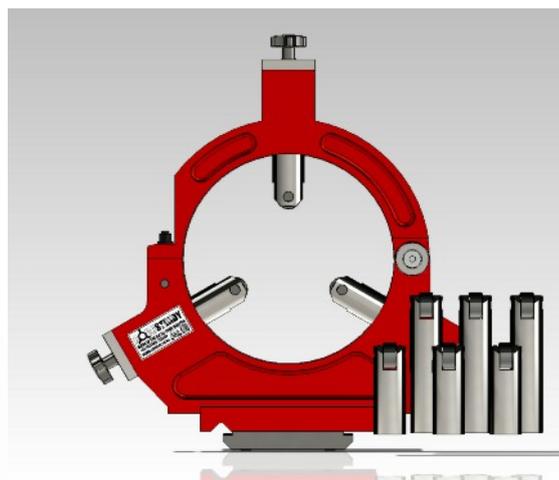
The Rocksteady TS can be supplied for a wide range of CNC Turning Centres where the application suits. This option offers simple Cantilever adjustment of the rear arm from the apron, and a swing away top arm.

A special central finger housing is provided with location for the top arm lead screw, and this reduces the number of change fingers for different sizes.

This model is more suited to outside diameter turning and less so to heavy internal work. As with all other Rocksteady products a high level of precision and standard of finish is included.



ROCKSTEADY mini



Rocksteady Mini offers a simple solution with a generic range of 20-300mm diameter in both SC and FF guises. Round fingers are utilised with NUTR15 Track Rollers in a body machined on our 5 Axis Machining Centre.

Rocksteady Mini is also widely used as a bed support on Vertical Machining Centres and also as an external bar support for CNC & Conventional Lathes. - This is shown in the image on the left.

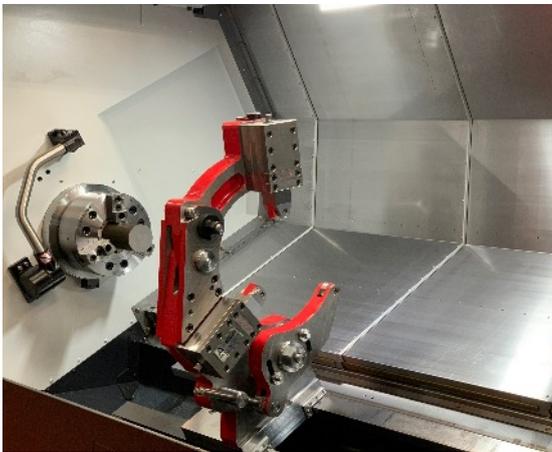


ROCKSTEADY

PRODUCT SPECIFICATIONS

DETAIL	VALUE
MAIN BODY MATERIAL	S275 STEEL SEGMENT GROUND
OTHER MATERIALS	EN8, EN24, ALUMINIUM BRONZE
ROLLERS NUTR	YOKE TYPE TRACK ROLLERS, CAMBERED
CAPACITY	20-2,000mm
MAXIMUM COMPONENT WEIGHT	UP TO 100,000kg
CONSTRUCTION	PRECISION MACHINED, BOLTED, DOWELED
SCOPE OF SUPPLY (STANDARD)	STEADYREST, 1 SET FINGERS, TOOLKIT, INSTRUCTION MANUAL, PACKING CASE

Rocksteady is wholly designed and manufactured in the United Kingdom by John Walton (Machine Tools) Limited, based in Brighouse, West Yorkshire. It is sold worldwide through a network of distributors and resellers. Rocksteady is covered by a two year conditional warranty - details of which are available on request. All specifications are of a general nature and each unit has its own range of specifications.



JOHN WALTON

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