kitagawa EUROPE

Digest Catalogue

WORKHOLDING SOLUTIONS

Full Line Up Information 2025/26

Kitagawa EUROPE

We manufacture and supply standard power chucks, rotary cylinders, NC rotary tables, vices, robot grippers, as well as other peripheral equipment for machine tools such as turning centres and vertical machining centres. Over the past 70 years Kitagawa has built a worldwide network in America, Europe, Oceania and Asia. This time has enabled Kitagawa to establish a reputation as a company with an outstanding development and production capability within the highest technical levels of the machine tool industry. Kitagawa will continue to strengthen its global support for diversifying demands across the world.



KITAGAWA

- AUSTRALIA
- GERMANY & AUSTRIA
- CROATIA & SLOVENIA
- CZECH
- HUNGARY
- INDIA
- JAPAN
- POLAND
- ROMANIA
- THAILAND
- USA
- UK
- MEXICO

DISTRIBUTORS

- ALBANIA
- ARGENTINA
- BULGARIA
- BRAZIL
- CHINA
- DENMARK
- FINLAND
- FRANCE
- ITALY
- MOROCCO
- MOLDOVA
- NETHERLANDS
- NEW ZEALAND
- NORWAY
- PAKISTAN
- PORTUGAL
- SOUTH AFRICA
- SPAIN
- SWEDEN
- TURKEY
- UAE

Kitagawa Europe Limited is headquartered in South-West United Kingdom near Salisbury. Our headquarters and our subsidiaries in Ratingen, Germany (Kitagawa Europe GmbH) and Bangalore, India (Kitagawa India Private Limited) have their own integral sales, service, technical, administration and store teams. Our teams cooperate very closely together to support their specific region. In addition we provide effective intercompany communication between the UK, Germany and India to ensure our sales and service teams are fully trained and up to date with our latest products.



Salisbury, UK



Ratingen, Germany

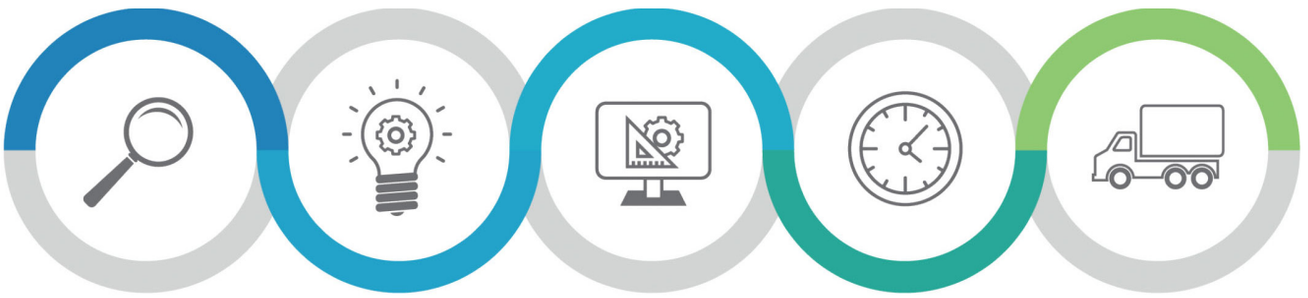


Bangalore, India

ARG

APPLICATION RESEARCH GROUP

The Application Research Group has expertise in designing, engineering and manufacturing an extensive range of work holding and tooling for turning or prismatic applications.



NEEDS ANALYSIS

The application research group reviews your work holding project to gain an in-depth understanding of the application.

CONCEPT REVIEW

After The Review, We Provide An Engineering Concept To Solve The Work Holding Challenge.

DESIGN & ENGINEERING

once the final concept is agreed upon, detailed designs and engineered drawings are completed.

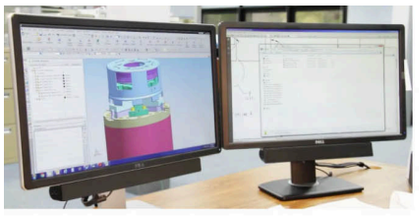
TIMELY PRODUCTION

The custom workholding product is then manufactured In-house to provide a timely and efficient solution.

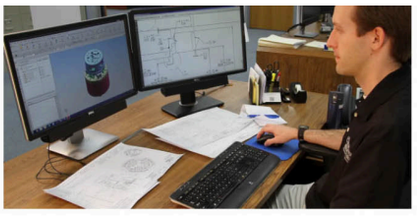
TESTING & DELIVERY

Solution is fully tested before dispatch and delivered to our customer's facility for parts production.

THE APPLICATION RESEARCH GROUP IS DEDICATED TO SOLVING PARTS MACHINING CHALLENGES



Concept Design



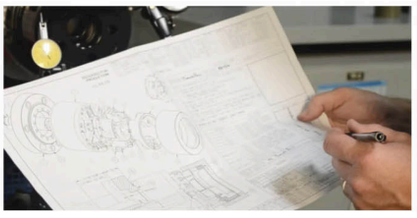
Engineering



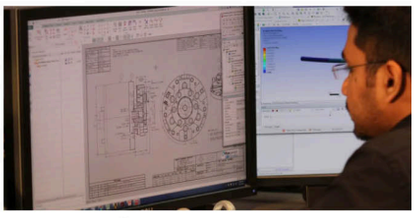
Testing



Custom Manufacturing

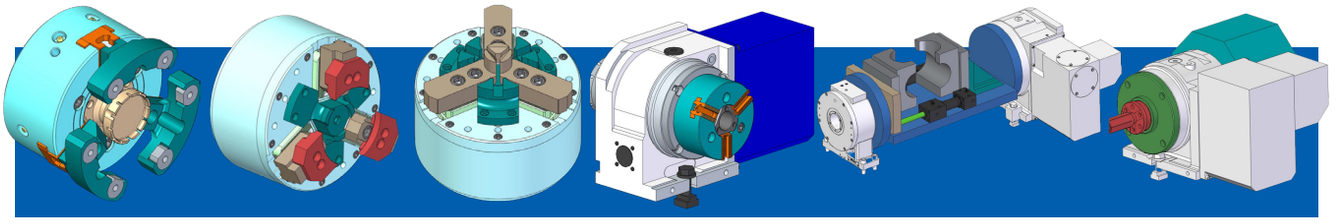


Documentation



Calculation Analysis

Extensive Custom Engineered Rotational & Stationary Solutions



Next Generation
Standard Chuck

BR SERIES



THE STANDARD HAS EVOLVED

High Precision, Ultra-large Through-hole High-speed Power Chuck

Chucks are manufactured from high grade alloy steel. Three jaw wedge style power chucks deliver up to 20% more speed, gripping force and bore size when compared to conventional chucks.

Easy to upgrade from existing chucks

Fully interchangeable with the Kitagawa B-200 and BB-200 series chucks. The only requirement is a new threaded drawtnut. You can also use the same hydraulic cylinder if changing size for size, allowing you to implement the best performance at the lowest cost.



0.01 mm T.I.R. ※3
Gripping accuracy

0.01 mm T.I.R. ※3 ※1
Gripping accuracy after removing and attaching formed jaws

450 Hours ※2
Reduced a year

※**1** With the use of optional Tnut-Plus.
The chuck maintains the gripping accuracy of 0.01mm T.I.R. or less even after removing and attaching jaws.

※**2** Assuming 3 setup changes per day, 30 minutes jaw forming per setup change

※**3** Only for BR12, the gripping accuracy is 0.015mm T.I.R.

Tnut-Plus





BRT SERIES

2-jaw High Precision
Ultra-large Thru-hole
High-speed Power Chuck

- Gripping accuracy of 0.01 mm T.I.R. or less
- Reduced jaw-lift
- Interchangeable with Kitagawa BT200 and BBT200 series
- With Tnut-Plus optional dedicated T-nuts, the repeatability of jaws at detaching and attaching is 0.01mm T.I.R. or less

BR-AJC Quick Jaw Change Upgrade

NEW



Incorporating a positionable set screw (or adjustable stop) that locates on the BR Series chuck's master base jaw. This addition of a set screw enables a number of further advantages to the BR Series

- Quick Jaw Change Capability - If the jaws are to be removed and replaced manually then the set screw on the BR-AJCxxM allows the top jaws to be replaced in less than a minute. Turning your standard BR chuck into a quick-jaw change chuck.
- Cost-Effective Solution - It is now possible to have a high accuracy, standard, quick-jaw change chuck without having to replace any of your chucking system (which is expensive and time consuming) Purchasing these new T-NUTS will instantly give you quick change capabilities, perfect for small to medium batch production. We are calling this set-up the BR-ARCxxM (xx denotes the chuck size).
- Automation Compatibility - Finally the specific designed profile of the positionable set screw allows an automation system to exchange your top jaws (Kitagawa will be releasing their own top jaw automation system soon). Automated jaw changes are now accessible to small to medium batch production! This is all possible with your standard BR series chuck, meaning an expensive new Workholding systems not required. - See page 30

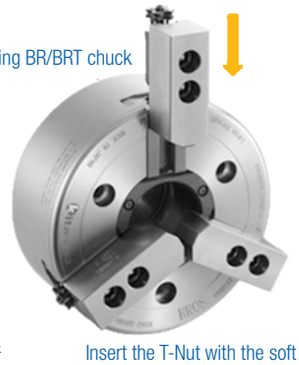
Positioning Nut



Soft Jaw

The soft jaw pre-formed & fitted with positioning nuts

Existing BR/BRT chuck

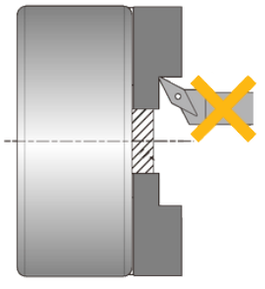


Insert the T-Nut with the soft jaw set into the master jaw

The preset positioning nut hits the end of the master jaw and stops insertion of the jaw



Simply tighten the jaw mounting bolts at the position where the positioning nut hits the master jaw



NO JAW FORMING REQUIRED

Standard Chuck

From our standard chucks and cylinders through to our most advanced, this extensive line up combines excellence with performance, and caters for all KITAGAWA chucking.



BBT200 series
2-Jaw Large Thru-Hole Power Chuck



BL-200 series
Lever style Long stroke Power Chuck



QJR series
Quick Jaw Replacement Chuck



B200 series
Large Thru-Hole High Speed Power Chuck

World Renowned Standard Chuck



N series
Closed Centre Power Chuck



HW series
4-Jaw Lever Type Power Chuck with Closed Centre



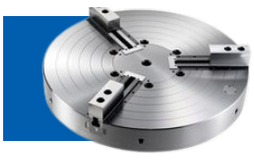
BT200 series
2-Jaw Large Thru-Hole High Speed Power Chuck



HOH series
Counter Balanced Power Chuck



BLT200 series
2-Jaw Lever Style Long Stroke Power Chuck



NV series
Large Power Chuck for Vertical Lathes



NL series
Closed Centre Power Chuck (Long Stroke)



ML series
Mega-Long Stroke Chuck



NT·NLT series
Closed Centre, 2-Jaw Power Chuck (NLT-Long Stroke)



MLT series
2-Jaw Mega-Long Stroke Chuck.



MLV series
1-Jaw Mega-Long Stroke Chuck

AIR OPERATED CHUCKS

KPC series

3-Jaw Ultra High Precision Air Chuck



- High repeatability
- Built-in pneumatic cylinder
- Optimum KPC chuck for finishing precision processes

UVE-K series

3-Jaw Air-Operated Self Contained Chuck



- Large through hole
- Built-in check
- Built-in pneumatic cylinder

UB series

3-Jaw Air-Operated Self Contained Chuck



- Largest through hole
- Built-in pneumatic cylinder
- Best suited for pipe processing
- Built-in check valves

UPR series

Mega Thru-hole Front-mounting Air-operated chuck



- Largest through hole
- Built-in pneumatic cylinder
- Best suited for pipe processing
- Built-in check valves
- Rapid stroke & gripping stroke to avoid flanges

HRS series NEW

High-speed rotation, thin power chuck with built-in cylinder ideal for machining centre multi-tasking machines

- **High gripping accuracy of 0.01mm T.I.R.**
- **Tnut-Plus & BR-AJC can be installed**
- **Equipped with one port in chuck center, can be utilized for seating confirmation, etc.**



ADVANCED CHUCK

Advanced designs that offer superior gripping characteristics for mass production. Fully customisable to suit most workpieces during every stage of manufacture.

PULL LOCK SERIES

PUB series
Through-hole pull lock chuck



- Draw down for high precision processing
- Open centre type accommodates shaft
- processing

PU series
Pull lock chuck



- Pull back chuck for external gripping
- Long-term stable accuracy
- Compatible with automation by use of seating confirmation

NEW



PUD12
Pull lock chuck for differential case machining

High precision machining by low strain, large and deep centre hole

- The large centre hole embraces the workpiece deeply to minimize run-out during machining.
- The backup wall reduces the deformation of the workpiece to help machining with high roundness and cylindricity.
- A large opening for discharging chips is provided in the backup wall to prevent troubles caused by accumulated chips.

PUE series
Pull lock chuck for internal gripping



- Stable high precision
- internal gripping suitable
- for finish machining

LU series
Level lock chuck



- Suitable for gripping
- castings and forgings
- Long jaw stroke

POWER WING CHUCK

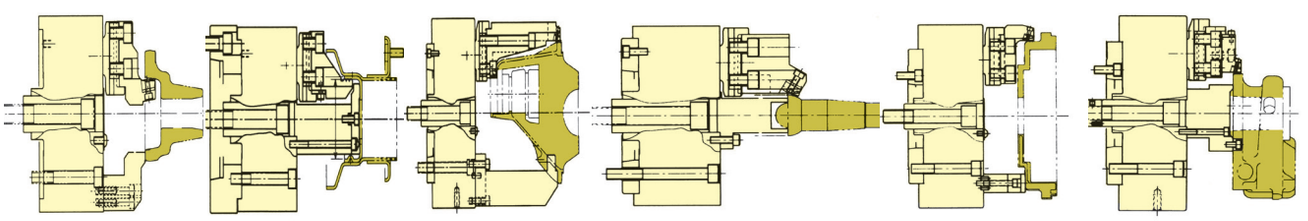
PW SERIES



Pull back of work piece for secure gripping of casting or forging part

- PWC compensating type for rough casting through centre
- Powerful gripping for rough machining and heavy machining
- Equalising jaws
- Gripping tapered part
- Complete sealing

Gripping example



Coupling | Housing | Housing | Shaft | Brake drum | Turbine housing



PWT SERIES

SERVICE EXCELLENCE

2-jaw pull back action chuck for stable gripping of irregular shaped workpieces

- Draw down irregular shaped materials for steady gripping
- PWT(C) for gripping square or irregular casting or forging work
- Compatible with PW series soft jaws

DUAL LOCK CHUCK

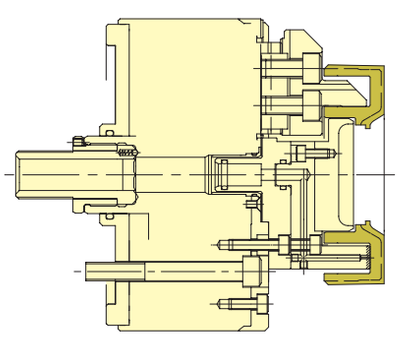
DL200 series



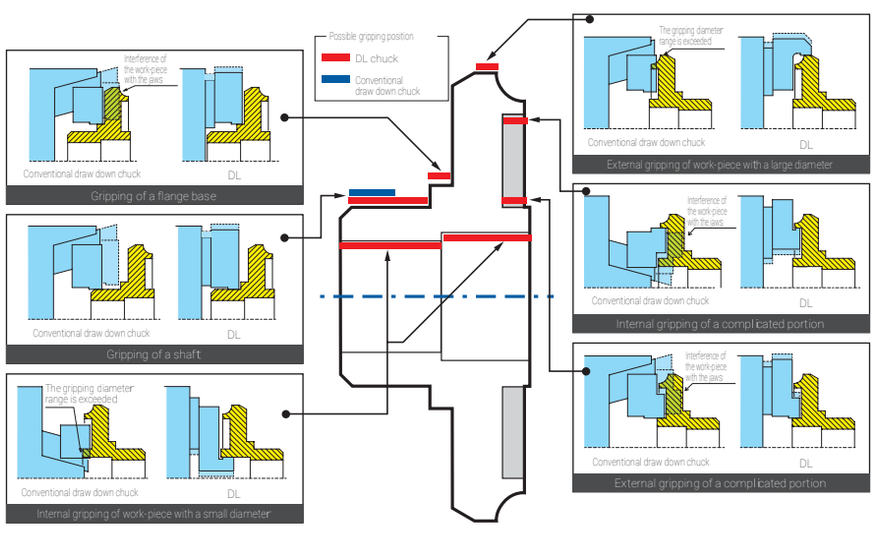
Kitagawa's unique 2-stage gripping. Parallel jaw clamping with a secondary pull back action for work seating that eliminates jaw lift.

KITAGAWA INTRODUCES THE WORLD'S 1ST CHUCK WITH TWO-STAGE GRIPPING ACTION

Work Example



Gripping Example



INCREASED GRIPPING OPTIONS

- Parallel jaw clamping with secondary pull back action for work seating.
- Jaws do not protrude in the Z axis unlike conventional pull back chucks. This allows for improved gripping on difficult areas.
- Gripping range is extended to the chuck outside diameter allowing a wider range of workpieces to be machined.
- DL series contributes to improve the productivity by applying flexible chucking for various operations.

IDEAL FOR VOLUME PRODUCTION MACHINING

Dust proof sealed body design for long life, suitable for automation and volume production.

EASY JAW FORMING

Serrated Jaws are used allowing for easy jaw forming by the customer

DUAL LOCK CHUCK

DLR208

NEW



- Moment of inertia reduced by 30% (compared to DL208)
- High gripping accuracy, ideal for automation and thin workpiece machining
- Ideal for machining easily distorted workpieces
- BR-AJC compatible

BR-AJC

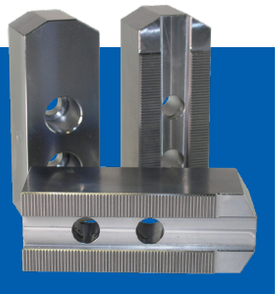


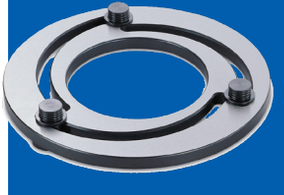
Optional Extras

Huge selection of workholding accessories and spares available from Kitagawa


Grease Gun


Hard Jaws


Soft Jaws


Jaw Boring Ring



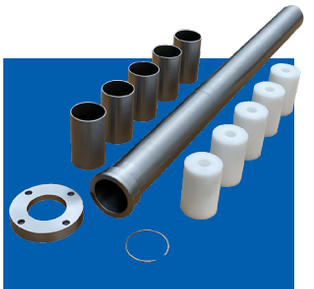
Chuck Grease Pro

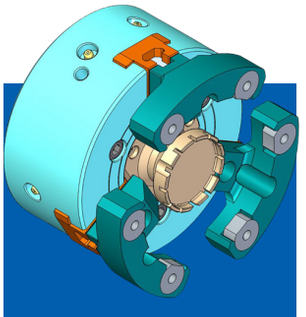


Grip Force Meter



Complete Chucking systems


Master Liners


Bespoke workholding solutions

FINGER CHUCK

FG(T) series

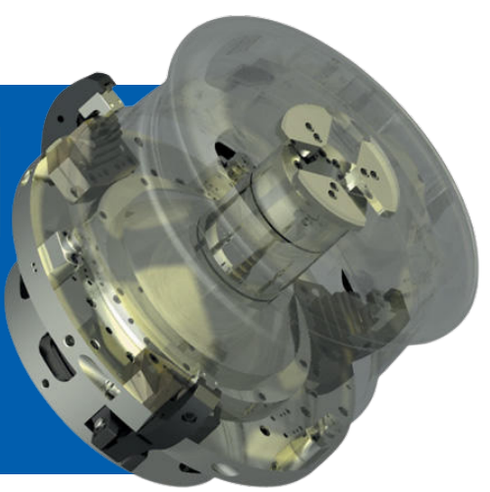


STEADY GRIPPING FOR THIN WALLED WORKPIECES

- Aluminium rear body for high speed rotation
- Through hole allows pneumatic accessories
- Face clamping to reduce distortion, ideal for thin walled workpieces
- Jaws include equalising mechanism to securely grip parts with variable thickness

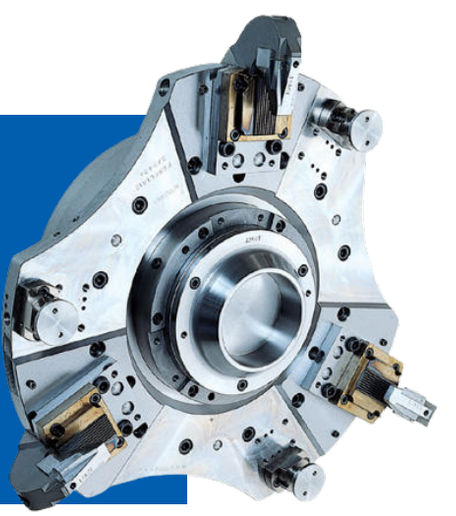
FG-V series

Finger chuck for automotive wheels



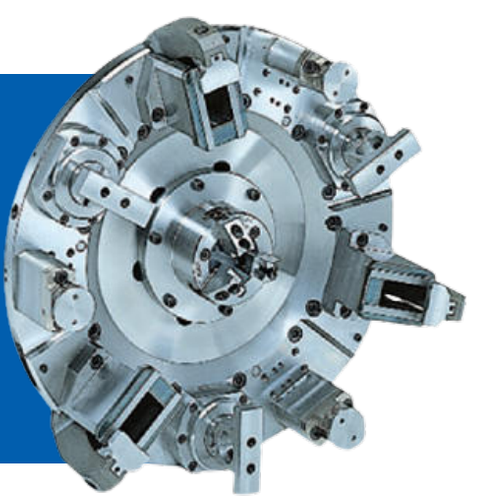
FG-L series

Kitagawa standard light weight body finger chuck



FG-M series

The floating mechanism ensures firm chucking



FG-Q series

Quick change of fixtures for various wheel sizes



HYDRAULIC CYLINDERS

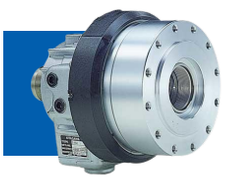
From standard to advanced type, a recognised line-up of high performance cylinders accommodates every KITAGAWA Chuck. When selecting the combination of chuck cylinders, please contact us.



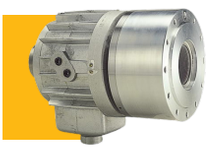
SS series
Compact Style Hydraulic Cylinder with Open Centre



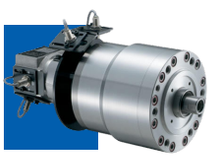
S series
Large Thru-Hole High Speed Hydraulic Cylinder with Open Centre



S-L series
Long stroke High Speed Hydraulic Cylinder with Open Centre



F series
High Speed Hydraulic Cylinder with Open Centre



YW-R series
Double piston cylinder



NEW

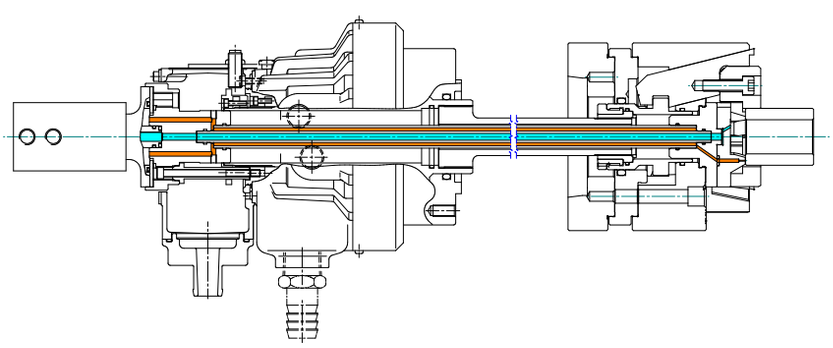
SR Series

Next-generation hydraulic cylinder with large through-hole

The best suitable design for Kitagawa power chuck

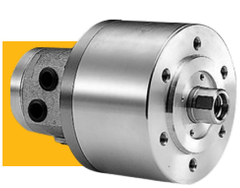
SPECIAL SOLUTION

Kitagawa cylinders can be customized for Air Seating, Through Coolant and Air Blast requirements.

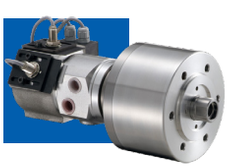




M series
Compact Style Hydraulic Cylinder with Closed Centre



Y-R series
Hydraulic Cylinder with Closed Centre



Y-RE series
Hydraulic Cylinder with Closed Centre



AY-R series
High Speed Air Cylinder with Closed Centre



YS series
Stationary Cylinder

NC Rotary Table

Wide range of 4th Axis and 5th Axis options. High clamping torque, accuracy and rigidity. Smart design & superior manufacturing techniques ensure we supply compact solutions with multiple through bore solutions.



TMX series

Side motor type (horizontal mounting)
High rigidity for heavy cutting



TW2180

High performance twin spindle tilting rotary table



RKT180

High-speed & maintenance-saving tilting NC rotary table



DM100 · DME100

Wire EDM dedicated NC rotary table



TR series

Side motor type (vertical mounting) For machining large work pieces



TP series

Mega through-hole NC rotary table
Suitable for machining large work



TBX series

Back side motor type
No-protrusion compact body



TUX TUS series

Top motor type
5 axis with horizontal machining centre



CK(R) series

Ultra compact NC rotary table
The world's thinnest body



RK201

Quick indexing NC rotary table
Roller gear & cam mechanism



RS100

Simplified type
Maximum speed: 83.3min-1



MRT200

Top motor type NC rotary table

MK series 4th axis

Strong & Compact NC rotary table
High-performance and easy-to use



- Performance improved, powerful clamping torque
- Improved mounting, reduced effective thickness and improved chip flow
- Wide selection of rotary joints, multi-purpose hole for automation, high-pressure rotary joints for fixture miniaturization and fast actuation

MK350 static clamping torque: 6000 N.m

MR series

Compact type NC rotary table



- Powerful pneumatic clamping torque by triple disk brake system
- High speed rotation
- High accuracy
- Built-in rotary joint as option
- Ideal for compact machining centres

GT series

High clamping torque NC rotary table



- NC rotary table suitable for heavy machining
- The very strong clamping torque was achieved by increased piston area and new clamping mechanism
- High clamping torque and rigid body allows heavy machining and shorter tact time
- Built-in rotary joint available



TM series

Multiple-spindle type

- Multi spindle range for multiple work piece machining reduces set up time and increase productivity
- Mono-block body & compact design
- Ideal for tapping machines with high speed rotation



TT series

Tilting NC rotary table

- Enables 5-axis 5-face machining
- Compact design

RKT500/RKT600 NEW

ROLLER GEAR & CAM DRIVEN TILTING NC ROTARY TABLE

Gripping

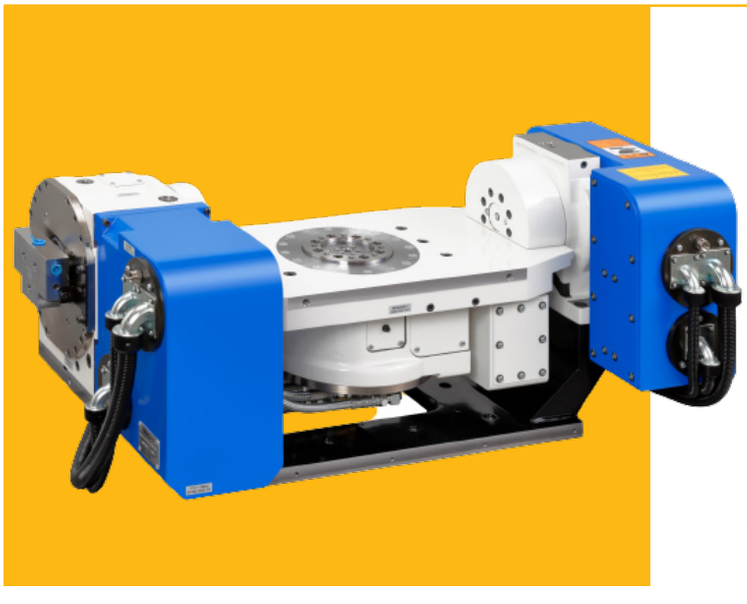
- Compact design fits on small machining
- centers with No.30 taper spindle
- Integrates large aluminium workpiece machining
- The roller gear & cam mechanism maintains stable accuracy for a long term and achieves high-speed rotation
- Compatible Rotary Joint (Option)- RKT500: 7-port (6 hydraulic/pneumatic, 1 coolant) or 11-port (10 hydraulic/pneumatic, 1 coolant). RKT600: 11-port (10 hydraulic/pneumatic, 1 coolant)
- Maximum work size: RKT500: ø500 / RKT600: ø600



Specification

	Table Dia.	Centre height	Clamping torque		Maximum pneumatic pressure	Total reduction ratio		Max.rotating speed		Allowable work inertia	Allowable mass of workpiece	Maximum dia. of workpiece	Mass of product
			Rotating axis	Tilting axis		Rotating axis	Tilting axis	Rotating axis	Tilting axis				
Model	mm	mm	N·m	N·m	MPa			min^{-1}	min^{-1}	$kg·m^2$	kg	mm	kg
RKT500	Ø134	310	600	740	0.7	1/50	1/20	※1 80(75)	※2 70(50)	1.8	100	500	285
RKT600	Ø134	310	600	740	0.7	1/50	1/30	※1 80(60)	※2 50(33.3)	1.8	100	600	296

※1 When the eccentric torque of work piece is more than 50 Nm, max. rotating speed of the rotating axis becomes the value in ( ).
※2 When the workpiece mass is more than 50 kg, max. rotating speed of the tilting axis becomes the value in ( ).
※3 Clamping torques above are at pneumatic pressure of 0.5 MPa.





Roller gear & cam mechanism NC rotary table

ROTARY TABLE - GRINDING APPLICATIONS

- **Purge structure with low air consumption (0.3L/min)**
- **Seal structure with low heat generation**
- **Long-life seal Structure that makes cleaning and replacement of seals easy**



Gear oil in a state where the seal of the standard NC rotary table is worn and cutting water has entered

Gear oil of NC roary table for grinding center after durability test

Effective for use in a dusty environment such as grinding, glass processing, and ceramic processing.



Cloudy due to powder



Clean condition with no contaminant

Available with the following tables



MR Series



RK201



TR400



TT182/200



RKT500

Particles such as cutting powder and polishing powder are prevented from entering the main body by using special seals and air purges

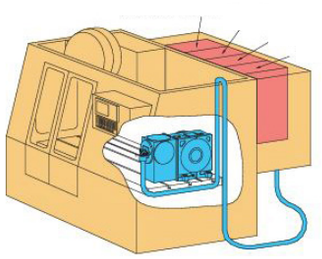
NC ROTARY TABLE CONTROLLER

Quinte series QTC100 / QTC200 / QTC300



- Color LCD enables to show various information: As well as current position, the high-resolution color LCD can show the running program, motor information and more.
- Easy to input a program: In editing program, interactive display screen prevents easy mistakes.
- Reduce indexing time: Adopting EtherCAT enables high speed communication and shortens the time of indexing.
- Easy to manage programs: Input/output programs
- and parameters can be managed by MMC (Multi Media Card) that is on the market.
- Two types of panels with different operational feeling: Touch panel follows up soft and quick operation.
- Click emboss panel type (CS) offers a sense of security with a firm click feeling.
- Select motors in accordance to a use or environment: There are many variations of motors, and a motor suitable for a particular machining condition can be selected.
- To use extension I/O enables a variety of usage: To use extension I/O option enables to select programs and to output WZRN position and M signal from machines.
- Manual pulse generator is available: Manual pulse generator is available to all models as option.
- Compatible with a remote-control function: Remote control function by serial communication with machine is available as an option.
- Compatible with absolute encoder custom support.

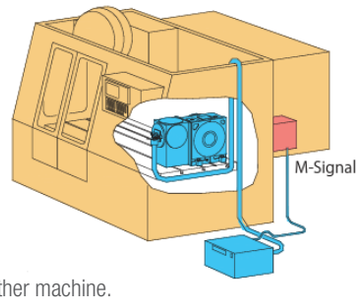
Methods for Controlling NC Rotary Table



Additional-Axis Method

- NC Rotary Table is controlled as the NC axis of the machine.
- Interpolation machining is possible with X-, Y- and Z-axis of the machine.
- Program can be controlled on the machine

M-signal Method



- NC Rotary Table is controlled by a separate controller and not as the NC Axis of the machine.
- NC Rotary Table can be fitted with machine with no compatiblity for an additional axis, as long as M-signal is available.
- NC Rotary Table can easily be transferred to another machine.

For Quinte controllers Manual Operation Pendant

- Easy holding style
- OEL display
- Smooth touch operating key switches
- Easy installation - strong magnet, able to be temporarily mounted on vertical surface



MANUAL CHUCK



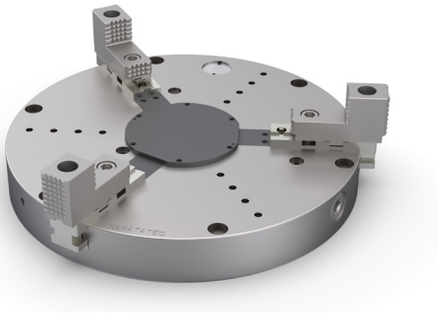
Scroll Chuck SC, JN, JN-T series

- Steel body for high rigidity, high durability and high rotational
- speed (JN series)
- Cross-guide slideway is adopted so that the chuck can securely grip components even at high speed rotation. (JN type)
- Easy front mounting for NC rotary table
- SC and JN comes with Integrated single piece jaws
- Available with Front an Back mounting

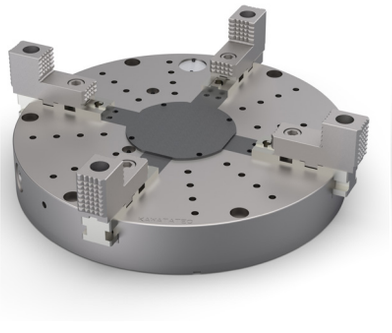
3/4/6-JAW SELF-CENTERING CHUCKS

LOW PROFILE LIGHT WEIGHT TYPE

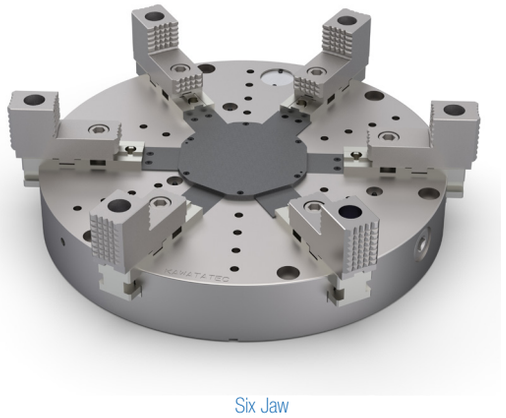
- Chucks suitable for installation on a tombstone, machining center table, or 5-axis machine table
- This will not inuence the maximum load capacity and height of the workpiece since it is designed to be lightweight and thin-shaped
- With chip covers for vertical use



Three Jaw



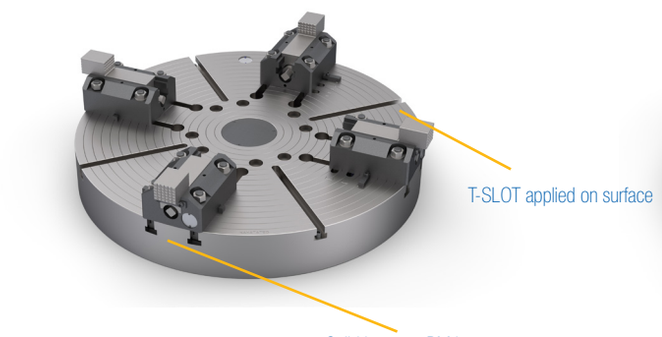
Four Jaw



Six Jaw

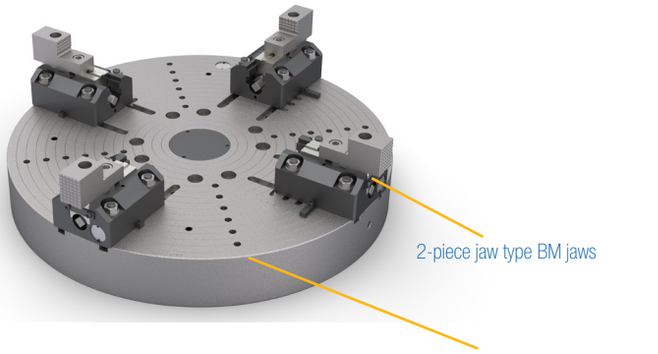
FACE PLATE WITH BORING MILL JAWS

- Cast iron body
- There are 2 types of solid and 2-piece jaw for boring mill jaws



T-SLOT applied on surface

Solid jaw type BM jaws



2-piece jaw type BM jaws

Tap hole applied on surface

Static Chuck

AS Series

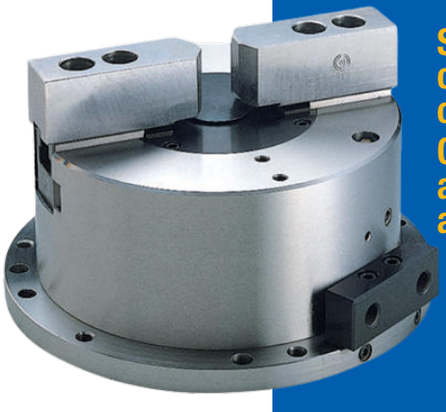
Pneumatically operated stationary chuck
Can be used as an alternative to fixture



- Small and lightweight design with built-in air cylinder
- Easy mounting by air piping
- Hollow structure optimal for bar workpiece and air blow
- Standard soft jaws for Kitagawa power chuck are used
- Lock valve unit ensures constant and regular gripping force in all machining conditions

AT series

Secure gripping of all types of component
Can be used as an alternative to a fixture



PUES06

Pull back and clamping the inner diameter of workpiece



PWS06

Suitable for 3 to 5-Axis machines
Cost reduction achieved by built-in Cylinder



PLS series

Stable cutting is guaranteed through the high precision and exceptional gripping performance



YS Modular System

Kitagawa Pneumatic or Hydraulic static cylinder to convert your rotary workholding systems for use on vertical machining centres

- The YS modular system utilises a static cylinder that can be mounted onto your machine bed. The static cylinder itself is extremely low-profile and until it is utilised it will have minimal impact on your machining envelope therefore allowing it to remain in place until it is required
- Once the static cylinder is required you have many workholding options available from a three jaw power chuck, collet chucks or even expanding mandrels. Depending on your machine size we can provide cylinders to actuate 6" (165mm), 8" (210mm), or 10" (254mm) chuck sizes
- The system can utilise Kitagawa equipment or any third party power workholding systems requiring a pull or push actuation and the cylinder can be operated pneumatically of hydraulically depending on the workholding



Machining centre mountable static cylinder with multiple work holding options

1. Low-profile Kitagawa static cylinders, as low as 77.5mm high on the Z-Axis can be easily mounted to milling and drilling machines
2. System can be adapted to almost any rotary power chuck system to enable the workholding to be used for milling operations
3. Delivering up to 20.8KN pull force with pneumatic actuation or 51.9kN pull force with low pressure hydraulic actuation (1.5MPa) within the series
4. Three base sizes available, to operate up to 10" chuck sizes and can be arranged in a multiplate configuration for automation set-ups
5. Up to 20mm of piston stroke allows adaption to a variety of workholding systems
6. Multiple standard workholding options available, three jaw chuck for plate shaped workpieces, collet chuck for bar shapes and expanding mandrels for low-pressure internal gripping

3 standard modular system setups that can be supplied



YS-BR06-001A



YS-DHP52-001A



YS-KEM-001A

CB Production System



Image shows a Kitagawa MK200 rotary table
with an MSR142A tailspindle
with a CB-F96-580 Clamping bridge assembly.
Part No: MK200.CB-F96.001A.

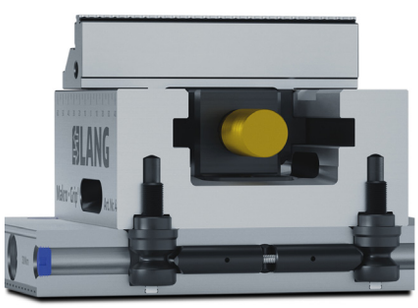
1. Kitagawa Rotary table
2. Kitagawa Tail Spindle
3. Precision ground adaptors (manufactured by LANG Technik)
4. Clamping Bridge (manufactured by LANG Technik)
5. Riser Plates
6. Sub-Plate

Typical component parts of a CB production system

Quick·Point®

High precision manual zero-point technology





Built-in Quick.point® zero-point systems

In order to maximise your machining envelope and to reduce your setup time the CB production systems all have multiple built-in Quick.point® either on 52mm grid or 96mm grid systems manufactured by LANG Technik in Germany.

Robust, wear-free mechanism for highest longevity

A patented rod system inside the plate guarantees a repeatability of less than 0.005 mm. Quick.point® trunnion beds are actuated by one or two screws to ensure simple and easy operation.

Holding force of up to 6,000 kg

The picture shows a cross-section of the Quick.point® bore where the clamping studs are pulled down by lateral clamping rods. With an actuation torque of only 30 Nm a holding force of up to 1.500 kg per clamping stud is achieved. As an example, this results in a holding force of 6.000 kg when clamping four clamping studs. If more clamping studs are used (e.g. using your own or bigger fixtures), the holding force is increased accordingly.

Flexibility has no limits!

The modularity of the system allows for the expansion of existing Quick.point® fixtures at any time and guarantees fast changeovers with the highest precision.

Advantages of having built in Zero-point plate in a trunnion

Cost effective

Due to the nature of many trunnion bed applications being customised specifically to suit a customer the addition of a zero-point system being built-in to the CB clamping trunnion bed has not increased the overall cost of the entire system therefore saving you from ordering a trunnion bed AND a dedicated zero-point system.

Maximise your machine envelope

CB clamping trunnions with a built-in zero-point system means you have saved at least 27-56mm of the machining envelope in the Z-axis enabling you to have larger workpieces within a smaller area. The LANG Quick.point® is one of the lowest zero-point systems on the market but many other zero-point systems are far taller, especially if pneumatic.

Lightweight

Simply due to the built-in nature of the zero-point system there is an immediate reduction in weight of the entire assembly which reduces loading on your machining centre.

Interchangeable

The entire trunnion bed can be removed and replaced with a different format of Quick.point® system or with a simple dedicated blank trunnion, making this the most versatile trunnion system on the market.

Manual Zero-point advantages

The manual nature of the Quick.point® zero-point exchange system assists in keeping you total costs to a minimum and reduces any potential problems that can occur with pneumatic or hydraulic systems.

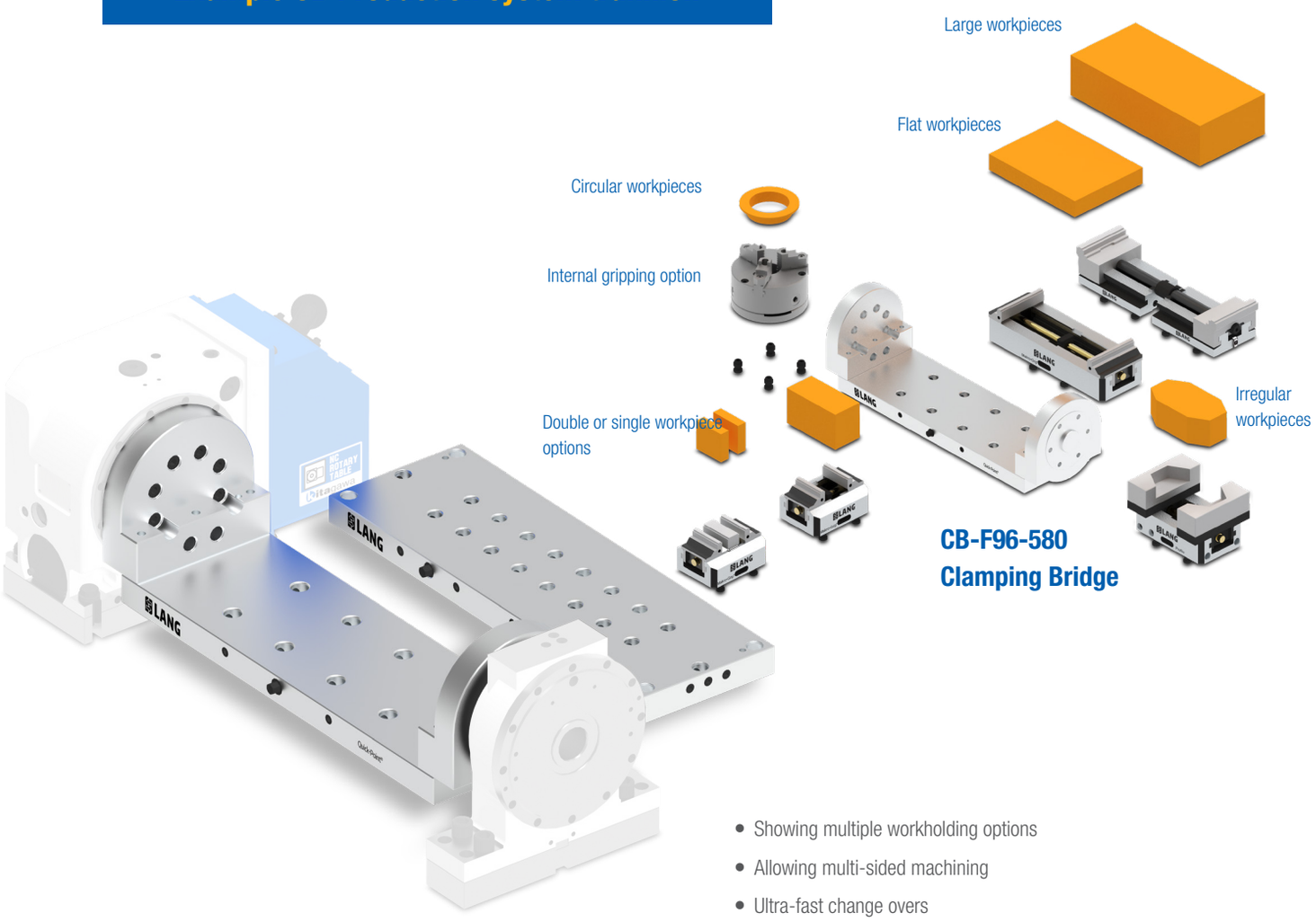
Adaptability

Allows for greater flexibility to meet specific customer requirements and provides the capability for simultaneous machining of multiple workpieces.

Rigidity

The very nature of the design of a trunnion system gives a very rigid platform for machining.

Example CB Production system trunnion



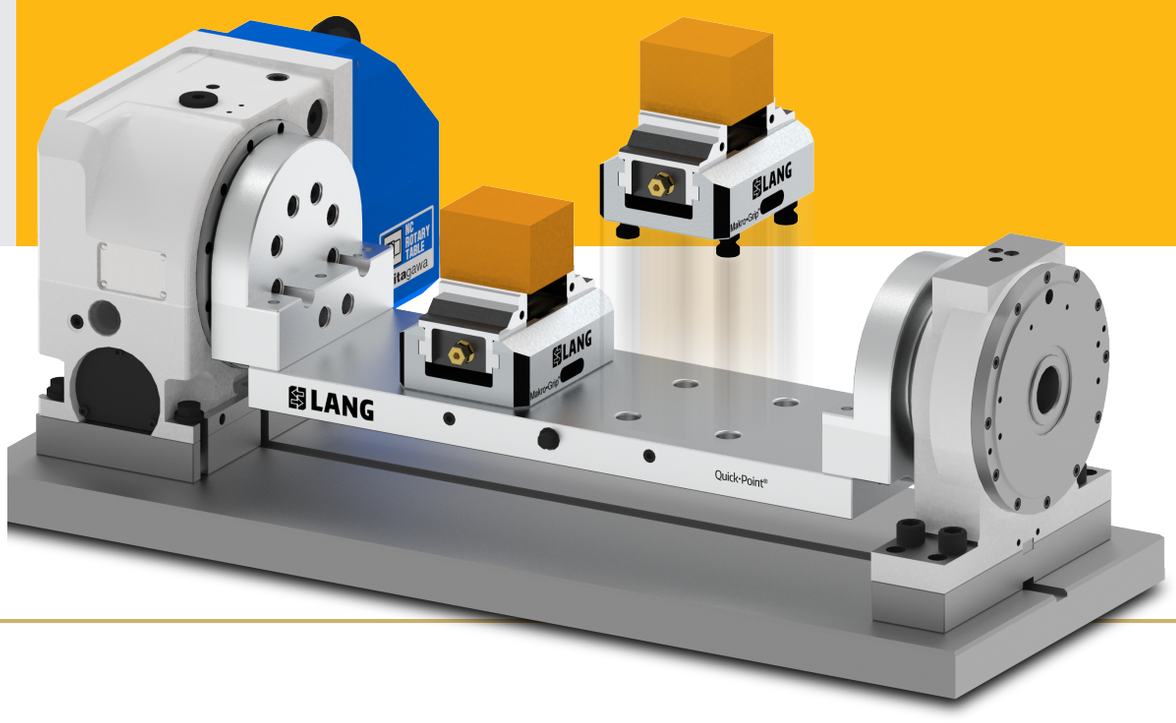
CB-F96-580
Clamping Bridge

- Showing multiple workholding options
- Allowing multi-sided machining
- Ultra-fast change overs

CB-F Type

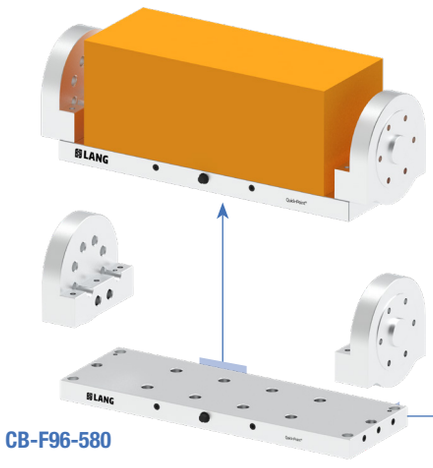
OFF/ON-CENTRE SINGLE-SIDED CLAMPING TRUNNION SYSTEM

- Very rigid system with a total assembly rotary clamping torque of 1,020Nm
- High cutting torque of 270Nm allows for rapid machining of complex shapes
- Quick.point® holding force up to 6,000kgs ensures your work holding is secure
- Built in Quick.point® reduces the overall weight therefore lowering the moment of inertia
- Clamping trunnion allows for excellent tooling access and mulitiple workholding options
- Precision ground adaptors ensures high repeatability and for multiple trunnion positions or types



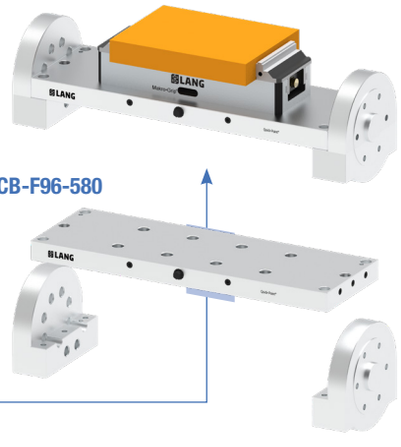
Option: Change clamping bridge from Off-Centre to On-Centre

Maximum 480mm x 192mm x 165mm Work Piece*



Detach clamping bridge from base of adaptor flanges

Allows for flat workpieces to be machined

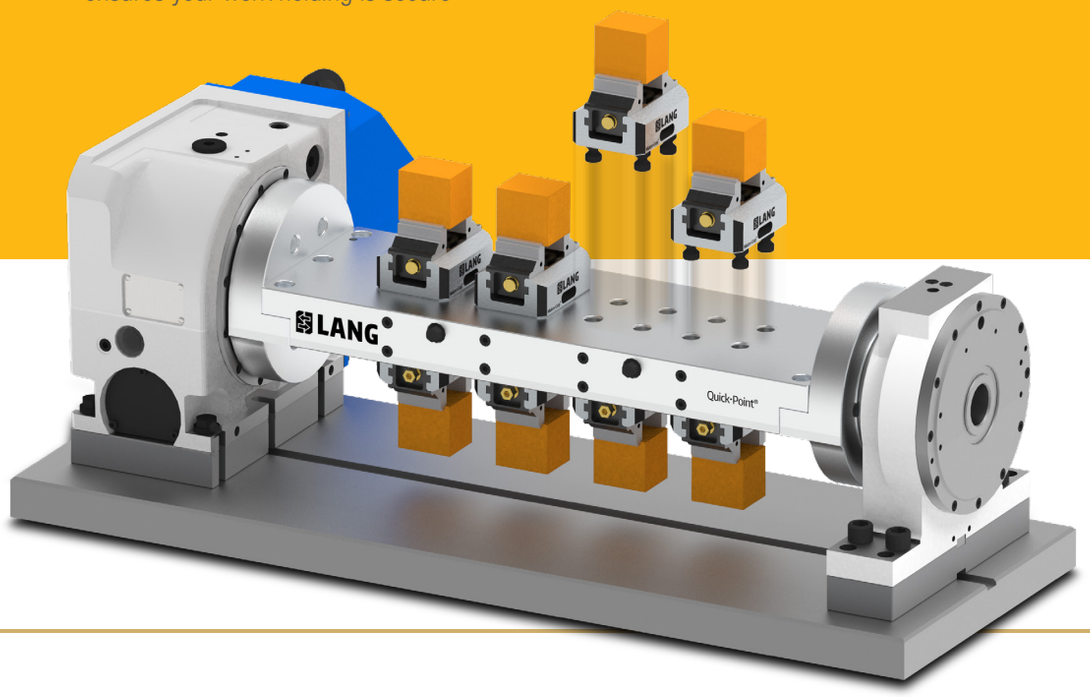


Attach clamping bridge on top of adaptor flanges

CB-N Type

ON-CENTRE DUAL-SIDED CLAMPING TRUNNION SYSTEM

- Very rigid system with a total assembly rotary clamping torque of 1,020Nm
- High cutting torque of 270Nm allows for rapid machining of complex shapes
- Quick.point® holding force up to 6,000kgs ensures your work holding is secure
- Built in Quick.point® reduces the overall weight therefore lowering the moment of inertia
- Clamping trunnion allows for excellent tooling access and mulitiple workholding options
- Precision ground adaptors ensures high repeatability and for multiple trunnion types

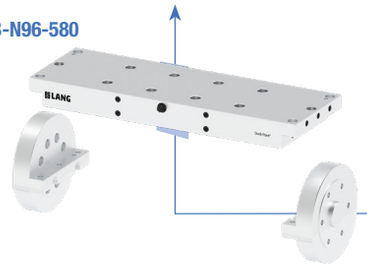


Option: Change clamping bridge from a 96mm Quick.Point® to a 52mm Quick-Point®

Two large workpieces



CB-N96-580

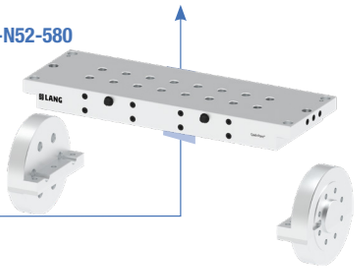


Detach 96mm Quick.point® clamping bridge from base of adaptor flanges

Four workpieces with 52mm Quick.point® Clamping bridge



CB-N52-580



Attach 52mm Quick•point® clamping bridge to base of adaptor flanges

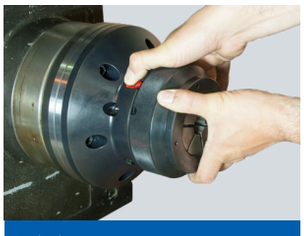
QD-CRL series

BAR MACHINING QUICK CHANGE SERIES POWER COLLET CHUCK

- This system mounts directly to the lathe spindle to ensure a consistent mounting without the need for correction.
- Klamp QDCRL collet chucks are suitable for spring, varibore and rubberflex collets increasing its flexibility. Varibore and rubberflex collets allow rough, unfinished bar to be machined in the first operation and spring collets can be used for high accuracy in the second operation.
- Workpiece remains in a fixed position during actuation allowing for precise z-axis positioning. A tapered sleeve is pushed forward, compressing the collet and gripping the workpiece.



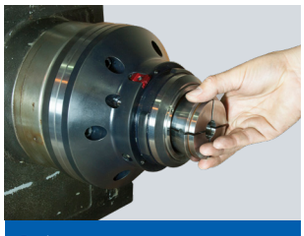
Ultra-Fast 10 Second Collet Changes



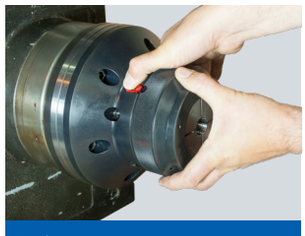
Unlock



Remove



Replace



Lock



DKF series

FIXED LENGTH SERIES POWER COLLET CHUCK FOR BAR MACHINING

First & Second Operation Collet Chuck

Designed with a fixed length actuation system that ensures the collet is held stationary. Allowing the collet chuck to be used in bar feeding operations and highly accurate second operations. Klamp DKF collet chucks are suitable for collets which have a +/-0.5mm gripping range.

Quick & Easy Mounting

Klamp collet chucks mount directly to the lathe spindle or use a precision adaptor plate to ensure a consistent mounting without the need for correction. The precision fit of the Klamp collet chuck enhances the rigidity of the overall system. The need for adjustment is minimal, meaning less machine down-time.

Fixed Length Collet

Workpiece remains in a fixed position during actuation, allowing for precise z-axis positioning. A tapered sleeve is pushed forward, compressing the collet and gripping the workpiece.

Short Body/Wide Range

DC Varibore collets allow for a compact body design maximising the lathe work envelope. Gripping capacities of the series range from 4mm to 80mm.

Ultra-Fast 10 Second Collet Changes



Insert & Unlock DC Collet



Remove DC Collet



Insert DC Collet



Lock & Remove DC

KEM series

POWER EXPANDING MANDRELS FOR LATHES



Internal Clamping Offers Full Part Access

Allows for full access to the entire external profile of the workpiece so all external diameters can be turned in a single operation, guaranteeing perfect concentricity.

Quick & Easy Mounting

Klamp expanding mandrels can mount directly onto the lathe spindle. Interchangeable with most standard chucks, installation is quick and easy. The need for adjustment is minimal, meaning less machine down-time.

High Accuracy & Rigidity

Pull-back design draws the workpiece securely against a part locator for 'dual-contact' rigidity.
Modular Design.

All Mandrel models have a common flange configuration, enabling full interchangeability with all back bodies.

Parallel Expansion for Optimum Accuracy & Grip Force

The Klamp double-angle design provides parallel sleeve expansion, ensuring full-length part contact and positive release when the part is unclamped.

Two Regular Sleeve Types Available



Standard Sleeves

Cost effective sleeves where the expander pin is outside the sleeve body, with either a 0.5mm or 0.8 gripping range, suitable for through bores and operated with a part locator.



Flush Sleeves

Expander pin is inside/ level with the sleeve body with either a 0.5mm or 0.8 gripping range, suitable for blind bores and enables the sleeve to grip as much of the internal diameter as possible.

Customised Systems Available



Dual sleeves extended length sleeves, 1/2 length sleeves and larger diameter sizes are available with up to 635mm ID gripping for supporting a wide range of parts.

Manually Actuated Expanding Mandrels

Heavy Duty Gearing

The Klamp KEM-MA provides a high gripping force using a manually actuated mandrel. These models utilise the same precision mandrels, expanding sleeves and locators as our CNC Expanding Mandrels. Thus, giving you the ability to have an internal gripping solution that can be rapidly deployed with whatever standard workholding system your machine(s) has.



Load the KEM-MA manual actuator into a three jaw or collet chuck, gripping on the 38mm location spigot.



Actuate the power chuck to ensure KEM-MA is locked in position, adjust T.I.R as required.



Load a workpiece's internal diameter over the sleeve and actuate the mandrel using the key provided.

KEM-MA



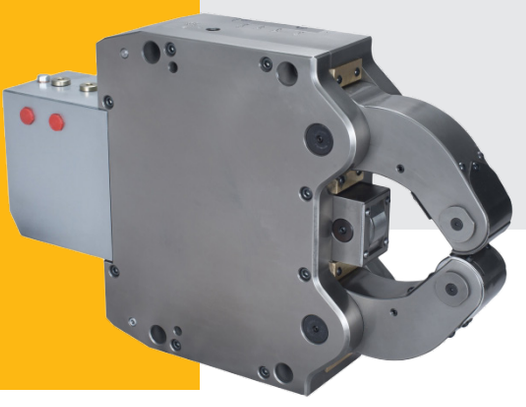
Steady Rests

Enhance precision, achieve high accuracy and stability in your turning operations

Engineered for high-performance machining, Our steady rests provide essential support for long, slender workpieces, reducing deflection and vibration for superior results. Whether you're working with small or large diameter parts, our robust and various designs ensures a perfect fit for every job, boosting your productivity and minimising errors.

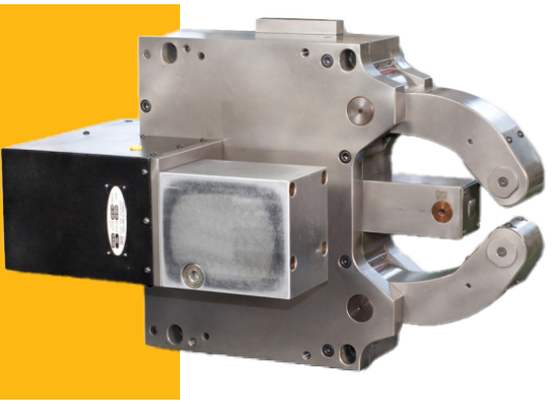
Kitagawa FRUN Series

- Centering range: 6-350 mm
- Max.clamp force/roller: 1kN ro 20 kN
- Repeatability: 0.005mm - 0.01mm
- Common mounting interface
- Fully sealed



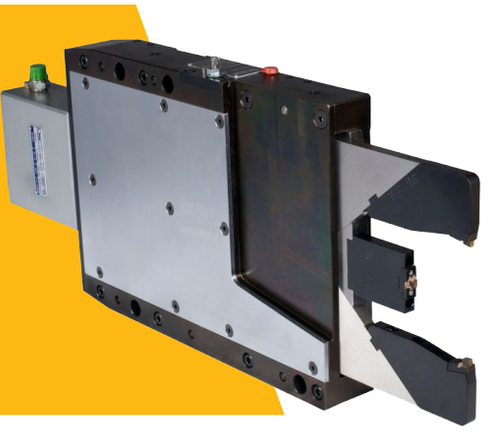
Kitagawa FRUB Series side-mounted Cylinder

- Centering range: 16-630 mm
- Max.clamp force/roller: 10kN ro 40 kN
- Common mounting interface



Kitagawa AS Series Grinding Steady Rest

- Clamping rangse: 10-142 mm
- Repeatability: 0.01mm
- Standard Operating Pressure: 4-35 Bar
- Common mounting interface



LARGE POWER CHUCK

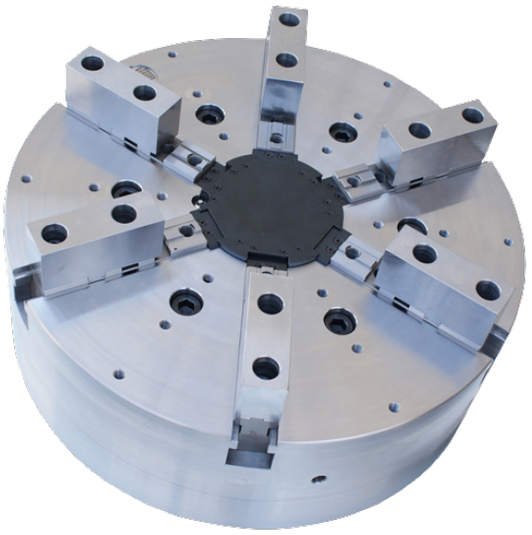
6-JAW FLOATING CHUCKS

FLC series

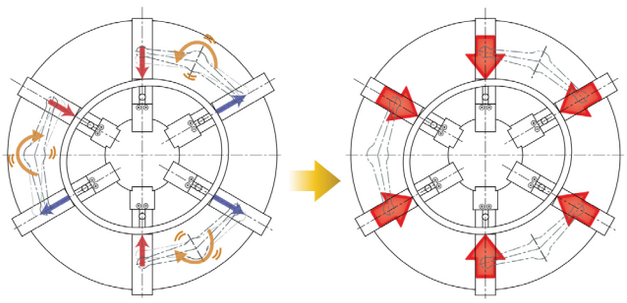
- Long jaw stroke 86mm (DIA)
- Centrifugal force compensation
- With chip cover for vertical use

FCH series

- Jaw stroke 28.6mm (DIA)
- Pitch 7mm square serration
- With chip cover for vertical use



12-jaw Floating spec with pendulum jaw: Each floating jaw is attached with a pendulum jaw and clamped equally at 12 points to giving an improvement in circularity.

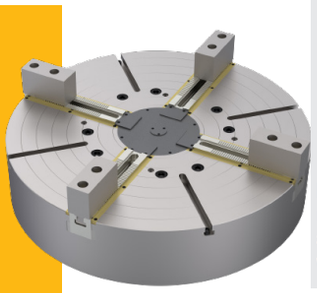


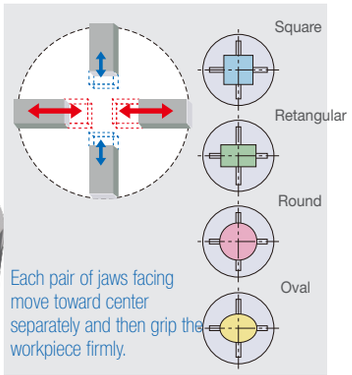
Floating function

- Floating function included
- inside the chuck
- Allows for equal clamping at 6 points in the first process of ring materials with low circularity

4-JAW (2+2) POWER CHUCKS

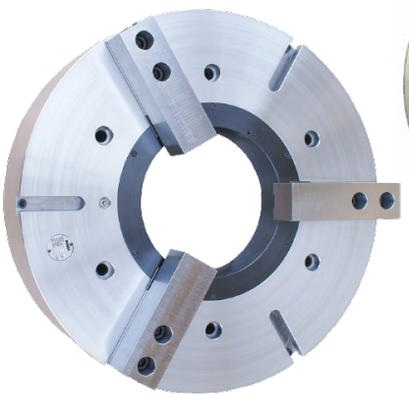
- Irregularly shaped parts can be gripped securely due to the centripetal action of the two parts of jaws which are mounted crosswise
- With chip covers for vertical use
- Long jaw stroke, Large gripping range
- One set of soft jaws included (Hard top jaws not included)

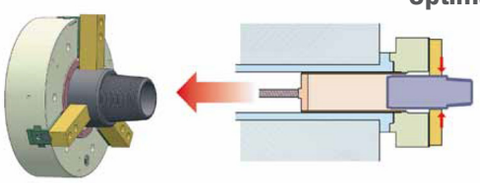




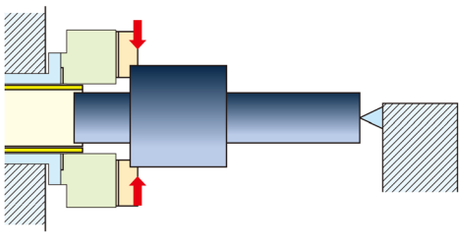
POWER CHUCK WITH EXTRA LARGE BORE THRU-HOLE

Optimal for short-length shaft machining





The workpiece is partially stored in the spindle, and the nearby part to be machined is held firmly



The end part of workpiece is stored in the chuck, and large diameter part is clamped so as to allow for stable machining.

In addition, long shape workpiece can be machined with smaller machine

Power Vices

COMPACT DESIGN

Power vise (Jaw width:125mm) Hydraulic vise (Jaw width:125 mm)

The overall length is ultra-compact with the largest jaw opening in products of the same class!
The vice overall length is fixed regardless of the jaw opening position. With the low height body, the jaw height is the most excellent in products of the same class. A wide machining area can be ensured.

Work lift-up Reduced to 0.015 mm or less!
A binding beam method (work lift-up prevention mechanism) which has a pull-in effect in clamping has been adopted. This mechanism has reduced work lift-up to 0.015mm or less.

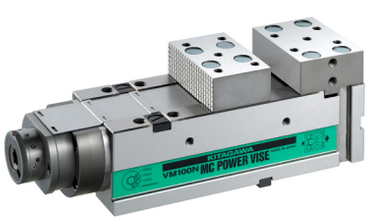


Chip Guard Cover
The attached C-caps can be, mounted on the top-face bolt holes of both jaws, which prevents from gathering chips and cutting water.

Easy Jig Mounting!
Tapped holes are provided on the top faces of both jaws. Those make jig mounting easy, enabling various kinds of machining operations.

Firm, Stable and Easy Clamping!

A maintenance-free enhancement mechanism, the “toggle joint mechanism”, has been incorporated, thus realizing the stability in spite of a high clamping force. The preset system makes clamping force adjustment easy. In addition, manual clamping without enhancement is possible, which has extraordinarily improved the usability. A stable clamping and reliable positioning.



VM-N series

MC power vice Multi-use type

For vertical & horizontal mounting, inside and outside clamping



V75V series

5-axis centering vice. Large gripping force upto 20kN



VQX-N series

MC power vice

Everlasting standard

MV125N

Multi-power vice - vertical 4-piece integrated type

Vertical integrated vice without angle plate



KFWD series

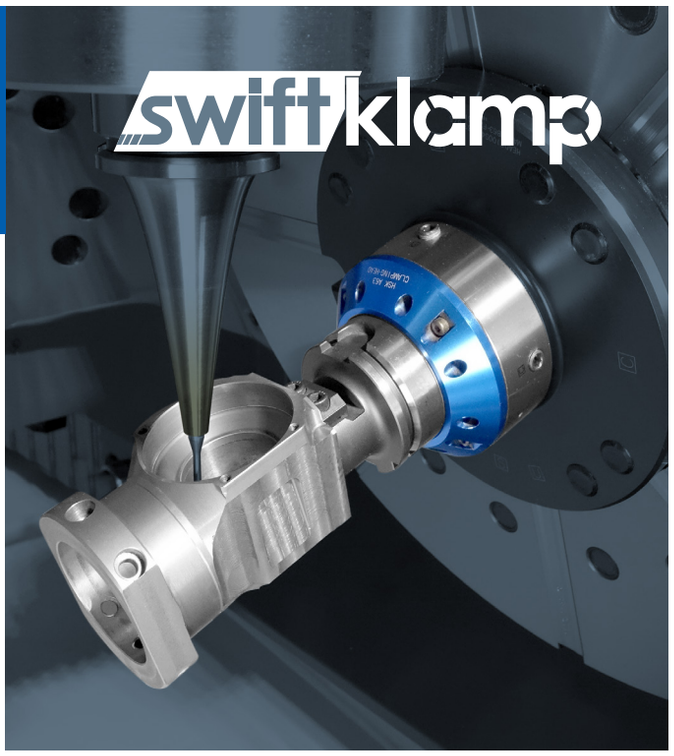
Pneumatic 2-jaw centric power block

Cross tenon base jaws for ease of own manufacture of top jaws

Built-in check valve and action confirmation function



5-Axis Workholding



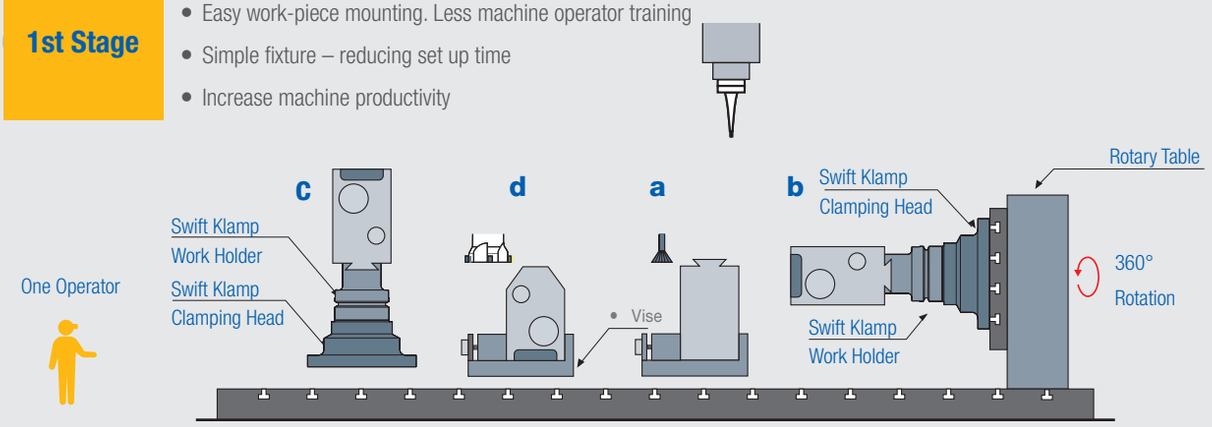
- Unparalleled part access
- Cost-efficient preparation
- Strong dual-face clamping
- Superior bending rigidity
- High positioning accuracy
- Multiple workholder options
- Manual & automatic exchange option
- 10-second work-holder exchange
- Versatile mounting options
- Seating detection & air blow
- Suitable for automated process

The Three Stages of Process Improvement Using Swift Klamp

Higher efficiency – produce more parts per shift.
Keep your machine making chips – and profits!

1st Stage

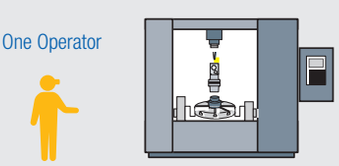
- Easy work-piece mounting. Less machine operator training
- Simple fixture – reducing set up time
- Increase machine productivity



a. Dovetailing Process b. 1st, 2nd, 3rd and 4th Process c. 5th Process d. 6th Process & Dovetail Removal

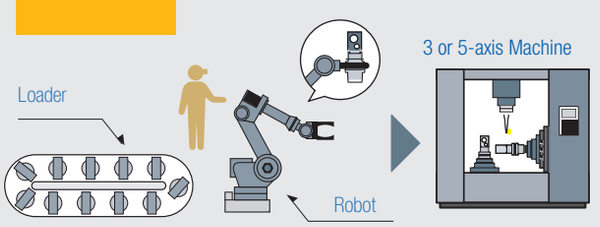
2nd Stage

5-axis
Machine



3rd Stage

Automation
– Lights Out Operations



Automation Solutions

NEW

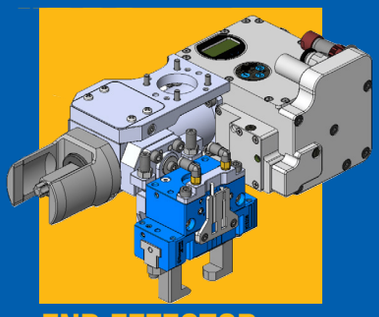
BR-AJC



BR-AJC-A



BR CHUCK



END EFFECTOR

Automate your jaw change

Automated jaw changes are now accessible to small to medium batch production!

This is all possible with your standard BR series chuck, meaning an expensive new workholding systems not required.

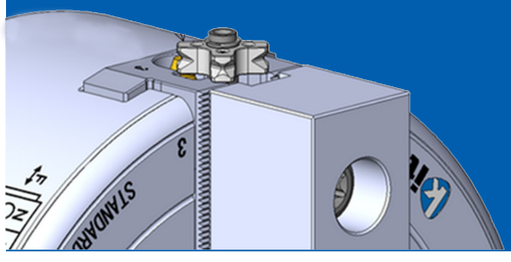
Enables unmanned automatic jaw change for BR and BRT chucks with the use of a robot loader and the Kitagawa end Effector.

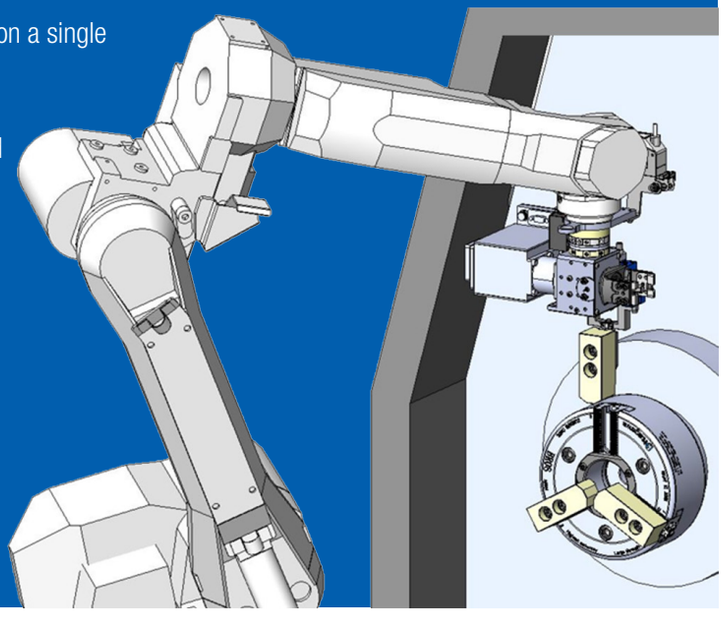
BR-AJC-A dedicated end effector is a package “work-handling” device, that consists of:

- Integrated jaw transfer robot gripper
- Torque wrench nut runner for jaw mounting bolts
- Reaction force receiver

This set up allows the user to have multiple workpieces on a single machine with minimal machine downtime.

The specially designed BR-AJC-A T-Nut allows formed jaws to be reinstalled without the need for reforming and still achieve a high repeatability.

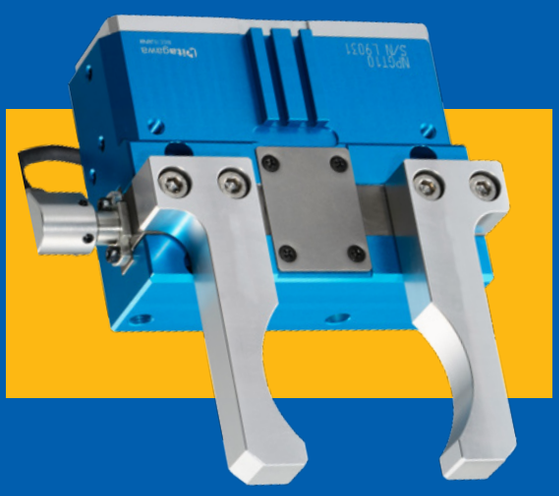


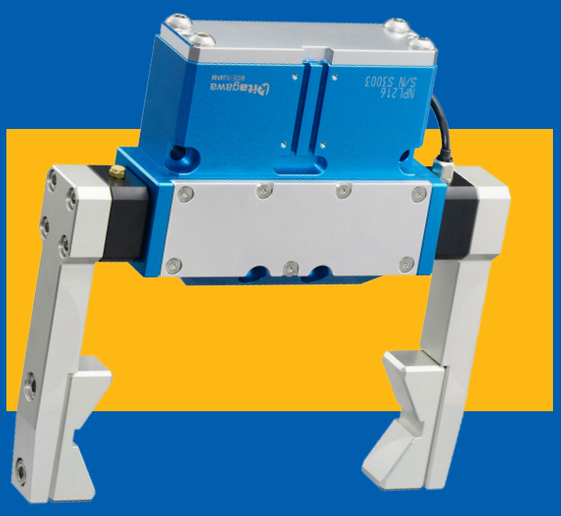


NEW

NPGT-S & NPL-S

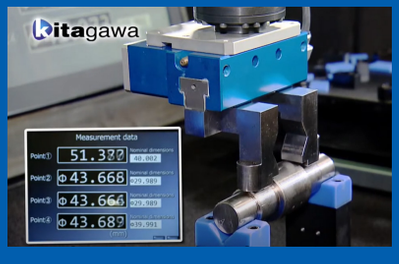
WITH MEASURING FUNCTION





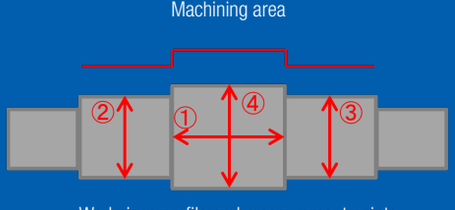
Measure a workpiece with your robot gripper







- **Measure up to 4 lengths or diameters with high accuracy**
- **Data to analyse machining operation**
- **Re-machine failed workpieces**
- **Reduce human error from repetitive tasking**
- **Reduce CMM equipment**
- **Increase machining efficiency**



Workpiece profile and measurement points

Watch the NPGT-S in action

PCX138
PALLET CLAMPING SYSTEM

NEW



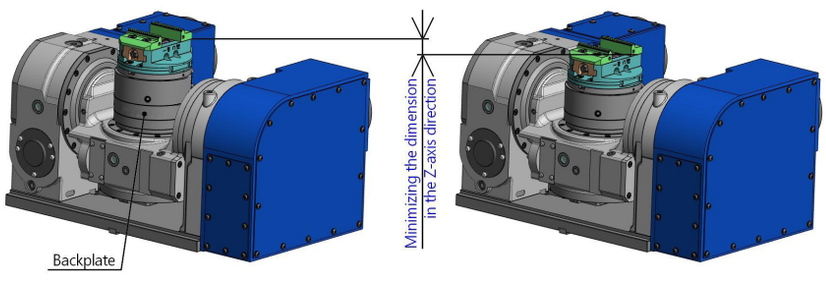
PCX138 series

- Significant reduction in setup time
- Factory automation and unmanned operation
- High-precision positioning
- Best match with NC rotary tables
- All stainless body

Best matched with Kitagawa NC rotary tables

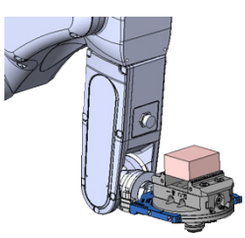
The interface on the rotary table side is dedicatedly designed for the pallet clamp mounting. Eliminating the backplate minimizes the Z-axis dimension and expands the machining area.

Watch the PCX138 in action



Installation on the standard NC rotary table

Installation on the NC rotary table designed with a dedicated interface

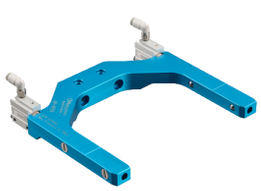


Designed specifically for automatic compatible pallets, it is suitable for narrow spaces and short pitch pallet clamps.

(Only in horizontal position during pallet conveying)

Permissible pallet mass: 10kg

Body mass: 0.5kg





A: Free pallet, round type



B: Free pallet, square type



C: Centring vise pallet

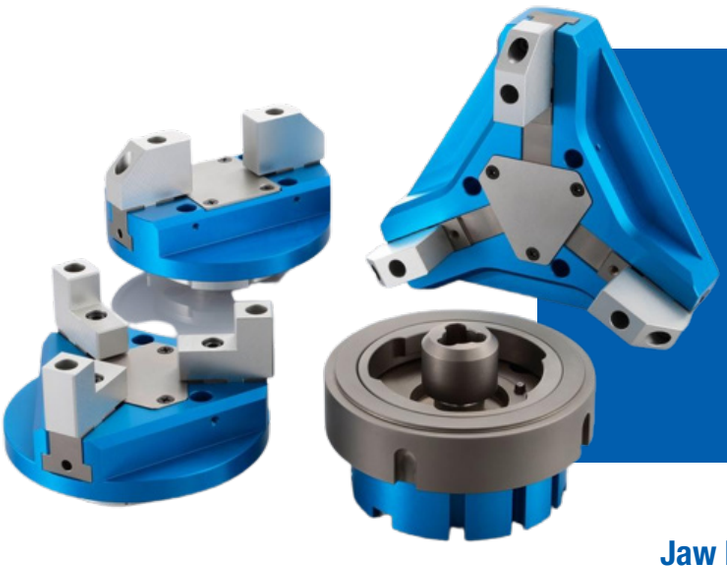


D: Scroll chuck pallet



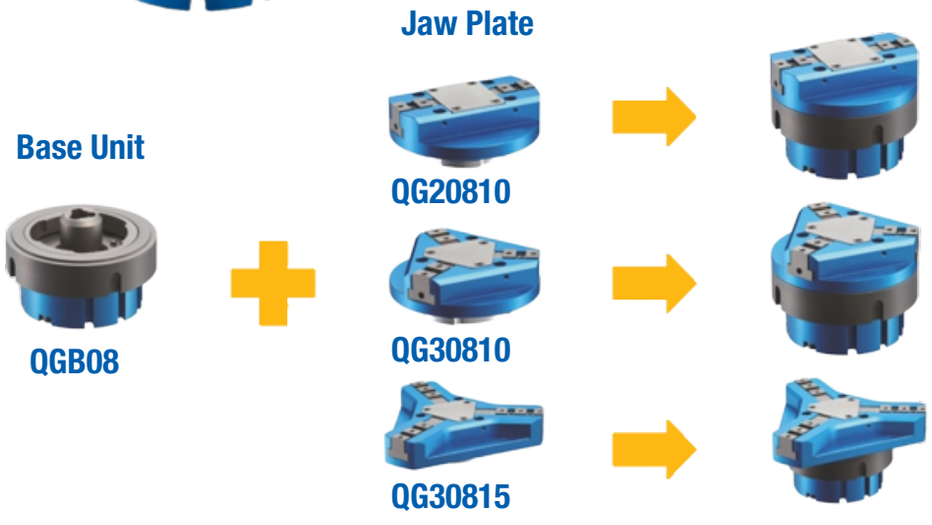
E: Inner diameter collet pallet

EASY CHANGEOVER GRIPPER



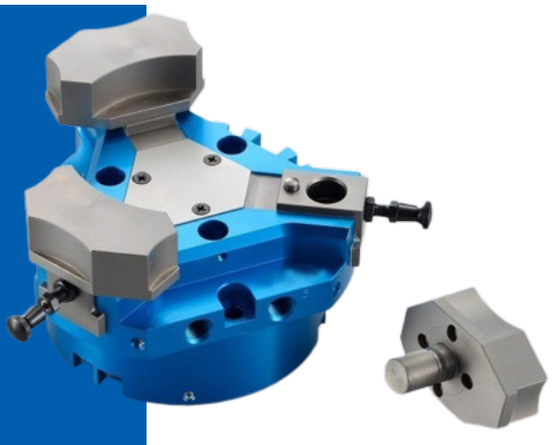
QGB(L) series

- Quick jig exchange with easy operation just to loosen the lock nut
- Lightweight and compact
- Easy retrofit since it is manual exchange
- No need for teaching or adjustment at jig exchange

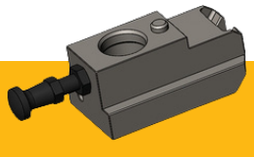


NTS-QM series

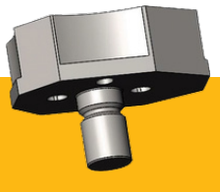
- Easy jaw exchange
- Modification from an existing NTS gripper is possible
- Just by replacing the standard master jaws of your NTS gripper with the quick master jaws, your NTS gripper will become a quick jaw change gripper
- One set of hard jaws supports workpieces from 20mm to 60mm on NTS309 and 23mm to 79mm on NTS311



Accessories



Quick jaw change base jaws



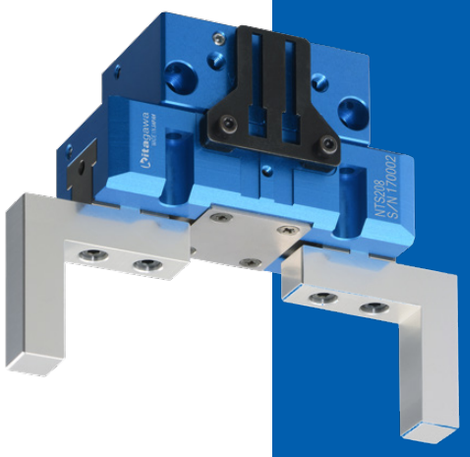
Quick Hard Jaws



Quick Soft Jaws

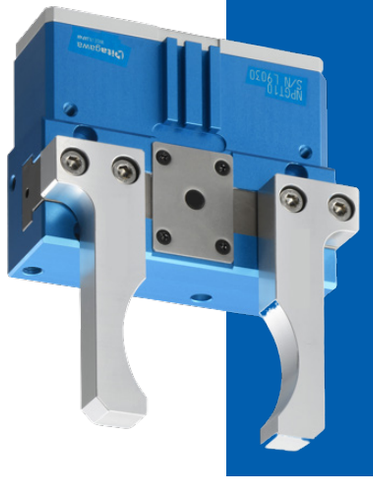
Robot Grippers

2-JAW PARALLEL GRIPPER



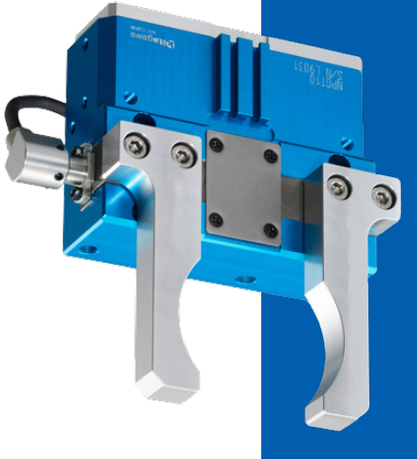
NTS2 series

- Swarf protection and maintenance improved
- High gripping force for stable gripping of heavy work piece
- Lightweight and compact body not limiting load capacity of robot
- New mounting style for smaller protrusion compared with conventional models
- Improved gripping accuracy due to highly rigid body



NPGT series

- The thin body enables flexible system design.
- The high restoration accuracy by utilizing workholding technology of lathe chucks
- NPGT achieves higher gripping force than the similar stroke model
- Variety of options including several detection methods and the model with a through hole (NPGT10, NPGT12, NPGT16)



NPGT_S series

- Possible to measure gripping length
- The thin body enables flexible system design.
- The high restoration accuracy by utilizing workholding technology of lathe chucks
- NPGT achieves higher gripping force than the similar stroke model

3-JAW PARALLEL GRIPPER



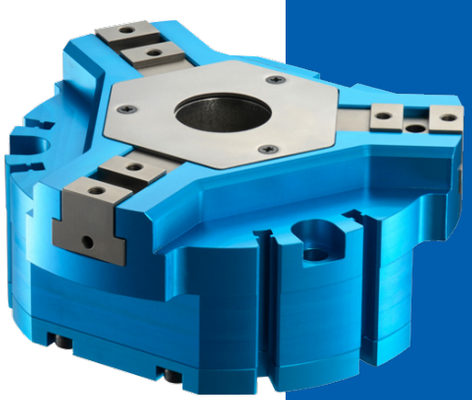
NTS3 series

- Swarf protection and maintenance improved
- High gripping force for stable gripping of heavy work piece
- Lightweight and compact body not limiting load capacity of robot
- New mounting style for smaller protrusion compared with conventional models
- Improved gripping accuracy due to highly rigid body



NPG3 series

- Ideal for machining environments with cutting chips, dust, coolant fluid, etc. (IP67)
- Large ID gripping force
- Unique sealing structure reduces the number of pipes

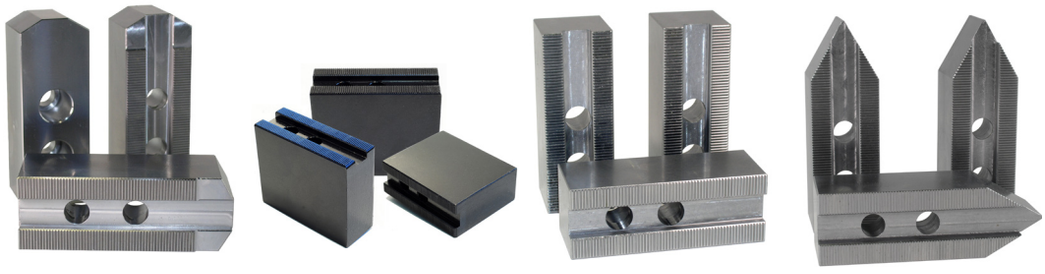


NTB series

- Swarf protection and maintenance improved
- High gripping force for stable gripping of heavy work piece
- Lightweight and compact body not limiting load capacity of robot
- New mounting style for smaller protrusion compared with conventional models
- Improved gripping accuracy due to highly rigid body

Jaw Finder

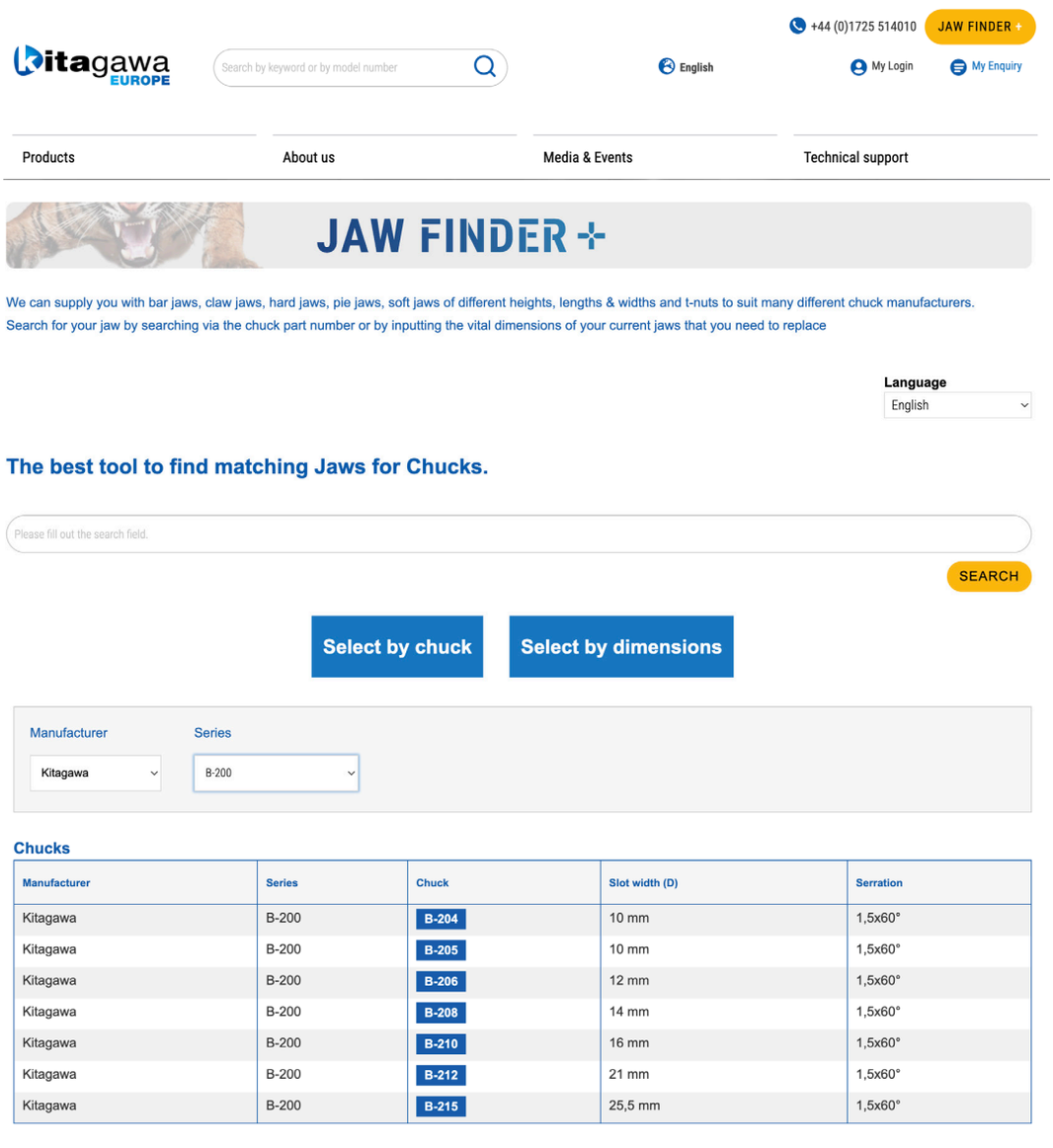
Are you searching for the right jaws, but don't know which one will fit the best for you?



Top jaws, stepped jaws, reversible jaws, stepped jaws, segment jaws or other type?

We have the right solution for you: Our Jaw Finder.

The Jaw Finder supports a wide range of manufacturers. With few clicks choose the manufacturer and type, and the Jaw Finder will show you the right accessories. You can also search by the dimensions of the existing jaws.



Manufacturer	Series	Chuck	Slot width (D)	Serration
Kitagawa	B-200	B-204	10 mm	1,5x60°
Kitagawa	B-200	B-205	10 mm	1,5x60°
Kitagawa	B-200	B-206	12 mm	1,5x60°
Kitagawa	B-200	B-208	14 mm	1,5x60°
Kitagawa	B-200	B-210	16 mm	1,5x60°
Kitagawa	B-200	B-212	21 mm	1,5x60°
Kitagawa	B-200	B-215	25,5 mm	1,5x60°

Grease your chuck

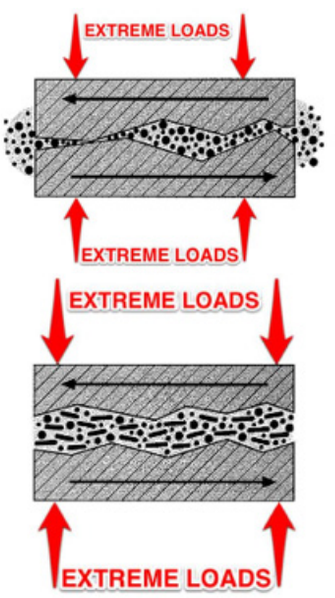
FIVE VERY GOOD REASONS YOU NEED TO GREASE YOUR CHUCK

- Stop your chuck from malfunctioning at low hydraulic pressure
- Increase your gripping force by up to 50%
- Improve your accuracy
- Reduce wear and prevent seizure
- Operate safely



WHY SHOULD YOU USE KITAGAWA GREASE INSTEAD OF OTHER GREASE?

Many people use standard grease or Lithium grease because it is readily available. These are liquid hydrodynamic lubricants and under extreme loads will flow out from between critical surfaces.



Kitagawa Chuck Grease Pro

Specifically developed for chucks and is a boundary grease with more solid consistency. Under extreme loads the grease stays between the critical surfaces preventing metal to metal contact and staying in the chuck.

Available in

- 1Kg Tin
- 18Kg Can
- 400g Cartridge



Chuck Grease Pro

Service & Support

In case of any abnormalities or malfunctions please contact your local Kitagawa distributor or Kitagawa office for:

- **Technical support**
- **Replacement parts**
- **Arrange for a trained service engineer visit**

Hydraulic Cylinder



To keep reliable operation of the cylinder, it is recommended to use hydraulic oil with a viscosity of 30-50cSt at 40°C (ISO VG32 VG46 equivalent product) and an inline filter with 25 micron mesh. Incorrect oil and contamination can effect the heating, drain amount, seals, acting speed and thrust force of the cylinder.

2-3 Months Inspection

- Clean the suction strainer
- Check for any leakages
- Check the hydraulic drain flow
- Check for abnormal vibration noise and heat

6 Months Inspection

- Replace the hydraulic oil
- Check proximity switches and detector plate

Power chuck



To keep the chuck running in best condition for a long time, adequate lubrication is essential. Insufficient lubrication causes; a drop in the gripping force, operation failure at low hydraulic pressure, a drop in gripping accuracy, abnormal wear and seizing.

Daily Inspection

- Clean the chuck body
- Sliding jaw chucks: lubricate using a grease gun and chuck grease pro
- Full stroke the jaws

6 Months Inspection (or 100,000 strokes)

- Disassemble and clean (Kitagawa service engineer or local distributor)

Rotary Table



To keep the rotary table in best condition for a long time, adequate lubrication is necessary. Insufficient lubrication causes abnormal wear and reduced accuracy.

Daily Inspection

- Clean away chips
- Confirm the rotary table is fixed securely
- Check the lubrication oil level and colour
- Confirm the electric cables and pneumatic hose are not damaged
- Confirm the machine zero operation and indexing operations work correctly
- Confirm there is no abnormal vibration, noise or heating

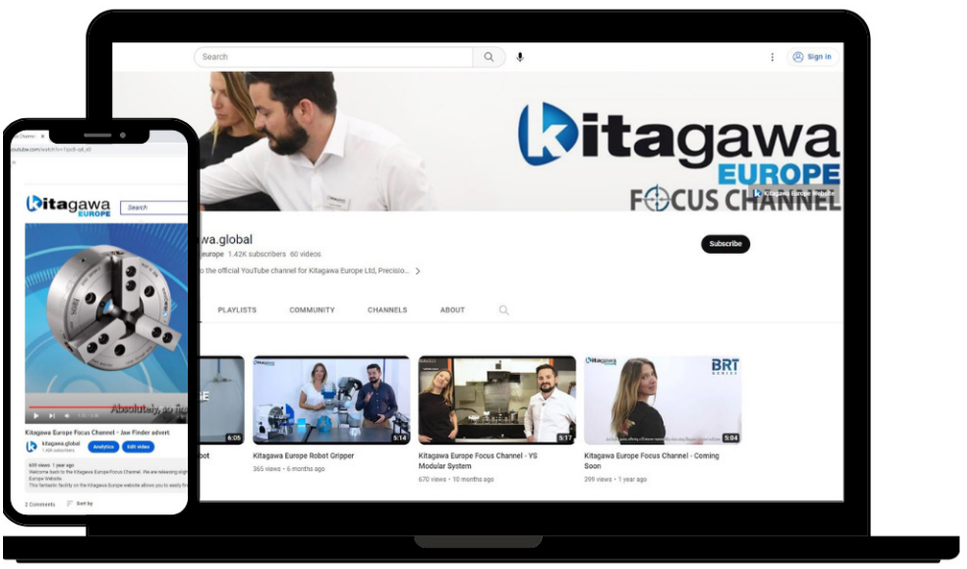
6 Months Inspection

- Change the lubrication oil (ISO 32 or 68 grade hydraulic oil depending upon model)
- Check backlash between worm wheel and worm shaft. Adjust if necessary
- Confirm all electrical connectors are securely attached and not damaged
- Check inside the motor case for corrosionw

YouTube

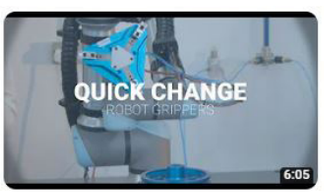
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BR and BRT next generation lathe power



Kitagawa Europe Quick Change Robot



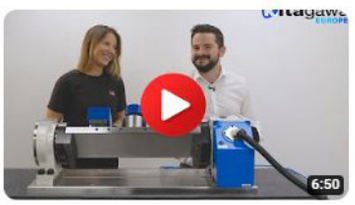
Kitagawa Europe Robot Gripper



Kitagawa Europe Focus Channel - YS

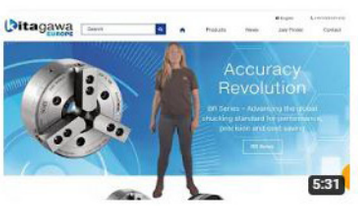


Europe Focus Channel - Coming



Kitagawa Europe CB Production System

1.8K views • 1 year ago



Kitagawa Europe Focus Channel - Jaw Finder advert



Kitagawa Europe Focus Channel - MK se Unboxing

kitagawa EUROPE FOCUS CHANNEL

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Version 1.3 2025