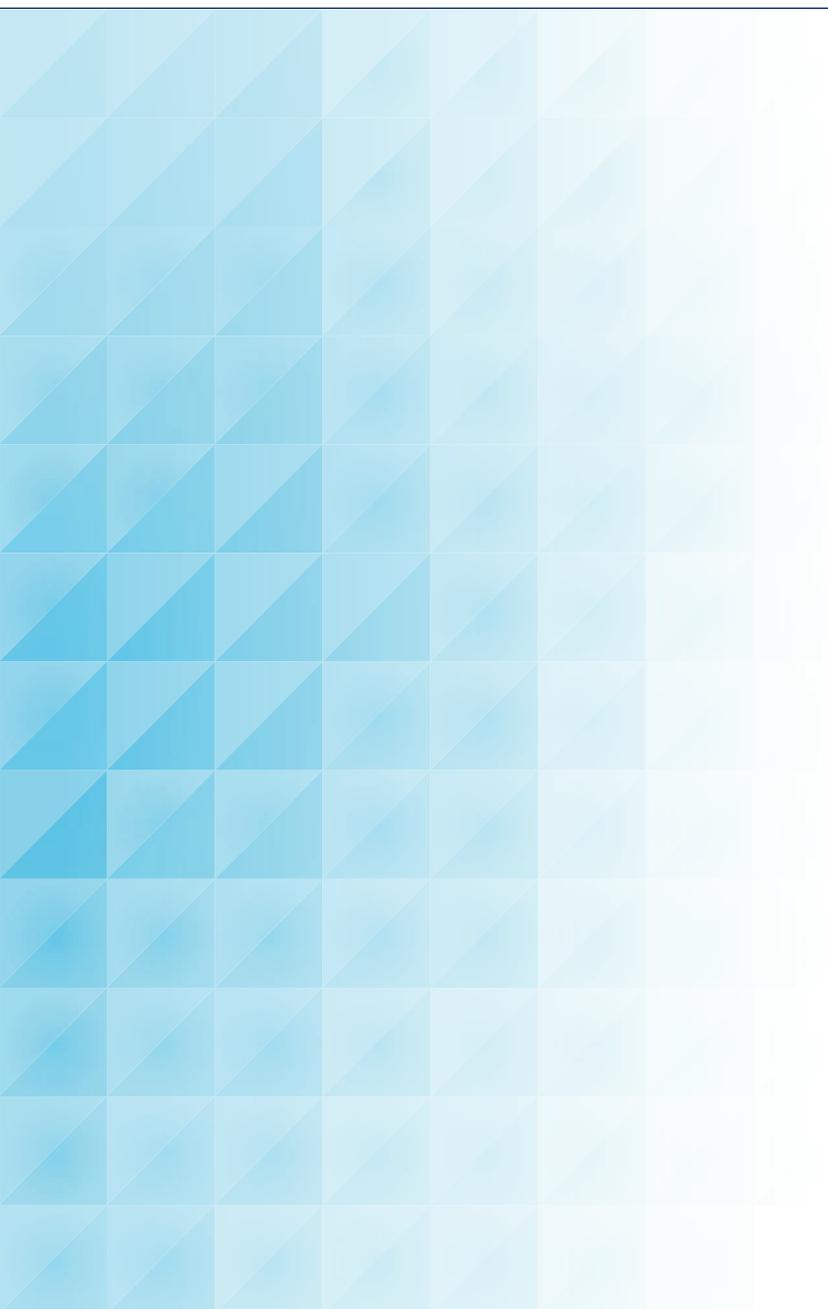


If you have the notion ... we have the motion

A dynamic company supplying innovative rotary and linear power transmission equipment through knowledgeable staff since 1982



Contents

■ Ball Screws & Satellite Roller Screws	04
■ Lead Screws	06
■ Helix Linear	08
■ Flexible Shaft Couplings	10
■ ETP Transmission	14
■ Clutches & Brakes	16
■ Custom Solutions	18
■ Compliance	22
■ In the Community	23



“

There are a number of positive reasons why ABSSAC has well over three decades of successful trading under its belt, but one anchoring factor has to be the continuous investment in the people who make the company what it is. Whether staff have been at ABSSAC 1, 10, 20 or 35 years, it is these dedicated staff that underpin the great customer service through all of the key departments of sales, marketing, engineering, finance, quality assurance and despatch. Treating others as you would want to be treated is a core philosophy of the company and by continuously mixing that with some exciting and innovative engineering products, you have a great mix for a long term business strategy.

Products supplied by ABSSAC have been incorporated in devices and systems operating in some of the most basic, to the outright interesting and challenging. ABSSAC's rotary, linear and specialist products go the distance for a wide range of customers and our ability to quickly adapt a standard program part into a key component has enhanced product designs around the world.

Let us help you with your linear and rotary challenges.

Simon Cattle - Managing Director

”

Ball Screws & Satellite Roller Screws

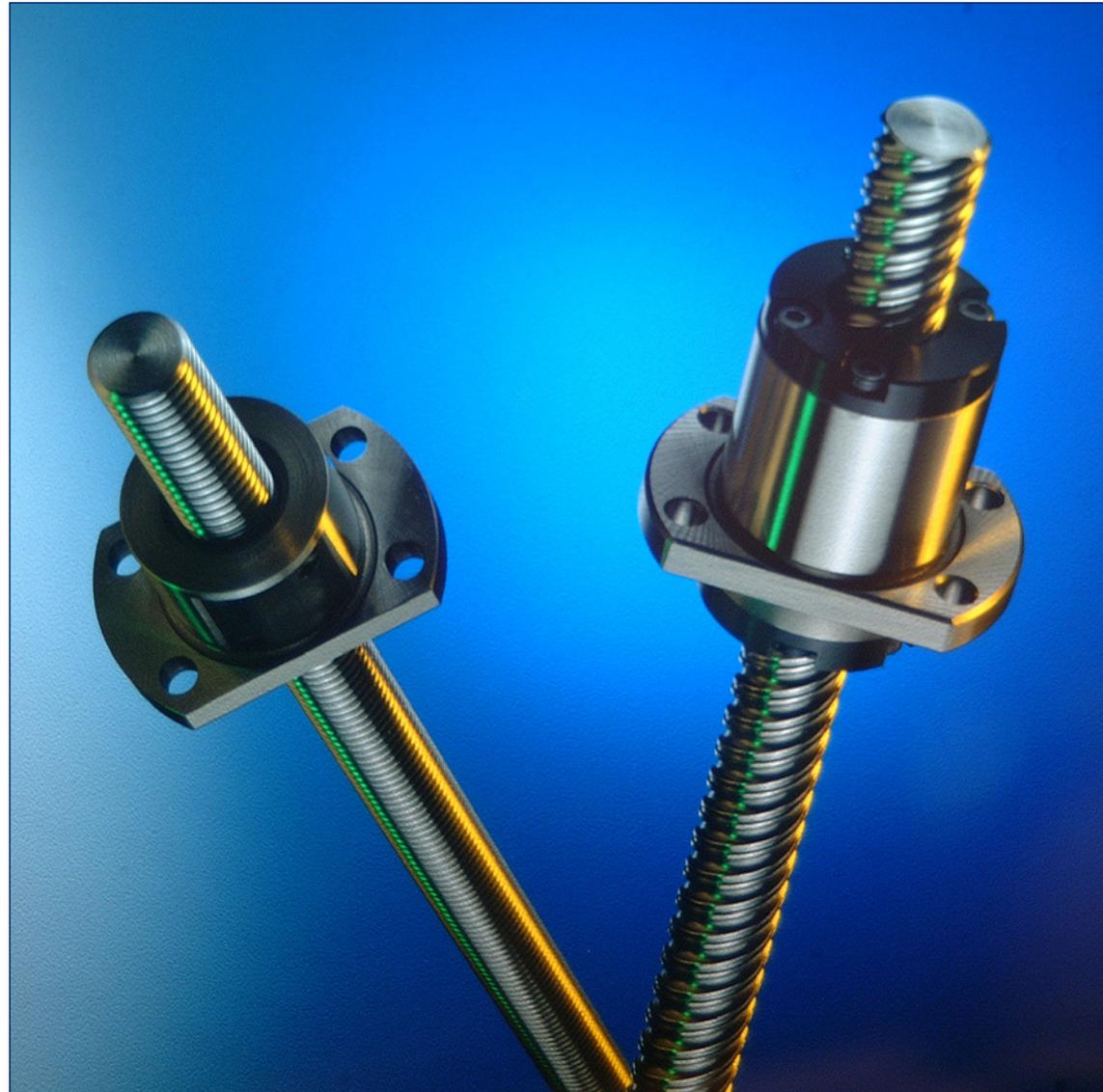
ABSSAC is an established supplier of ball screws and satellite roller screws, including support bearings and other related ancillary products. They have expertise in assisting engineers to specify the correct linear products for their applications, whilst a fast turnaround machine shop supplies linear products ready to fit directly into an application, reducing customer scrap rates.

“

I write to express my sincere thanks and appreciation for the excellent advice, encouragement and support provided by ABSSAC Ltd.

Tim Smith
Chief Executive Officer
The AFE Group Limited -Williams
Refrigeration, Falcon Foodservice
Equipment, Mono Bakery Equipment,
Millers Vanguard & Serviceline

”





Rolled Ball Screws

Ball screws that have been cold rolled formed are ideal for applications that do not require the finite accuracy of the ground ball screw equivalents, but are still required to reliably transmit a linear load with a high degree of repeatable accuracy. Utilising a wide range of ball nut designs, diameters from 4mm to 80mm and leads of 1mm to 50mm are available with accuracies of C7 to C10.



Ground Ball Screws

Ball screws that have been formed by a grinding process are used where acute linear accuracy is paramount within an application. ABSSAC offers a quality program of metric threaded screws, with a variety of standard and bespoke ball nut designs. Diameters from 1.8mm to 16mm and leads of 0.5mm to 30mm are available with accuracies of C0 to C5.



Transport Ball Screws

ABSSAC offers an industrial ball screw range that effectively converts high torque rotary input into precise high load linear movement. All industrial ball screws can be delivered cut to length and if required, machined ready to fit into the required support bearing mounts. Utilising the recirculating ball bearing nut technology as the base of the product, the industrial class ball screws encompass screw diameters from 12mm up to 80mm as standard with C7 accuracy. Leads of 1mm to 50mm are available through a large range of ball nut designs which in many cases utilise multiple ball circuits to achieve greater load capacities.



Satellite Roller Screws

A satellite roller screw employs matched rollers to rotate (or satellite as the product name suggests) around the screw thread during actuation instead of ball bearings. The admissible static and dynamic load capacities are therefore considerably higher than that of a ball screw for the same diameter. In fact the static load can be 3 times greater than that of ball screws and as a consequence their lifespan can be up to 15 times longer. As standard, satellite screws can be supplied with outside diameters as small as 10mm and up to 200mm. Leads can be as fine as 0.25mm. The satellite roller screw is therefore primarily chosen as part of a transition within a new or existing design to achieve greater load capacity and greater linear positional accuracy, in the smallest envelope space.

All rolled and ground ball screws can be supplied cut to length, with end journals machined ready to fit into an application.

Lead Screws

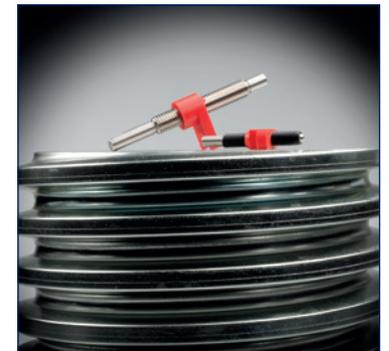
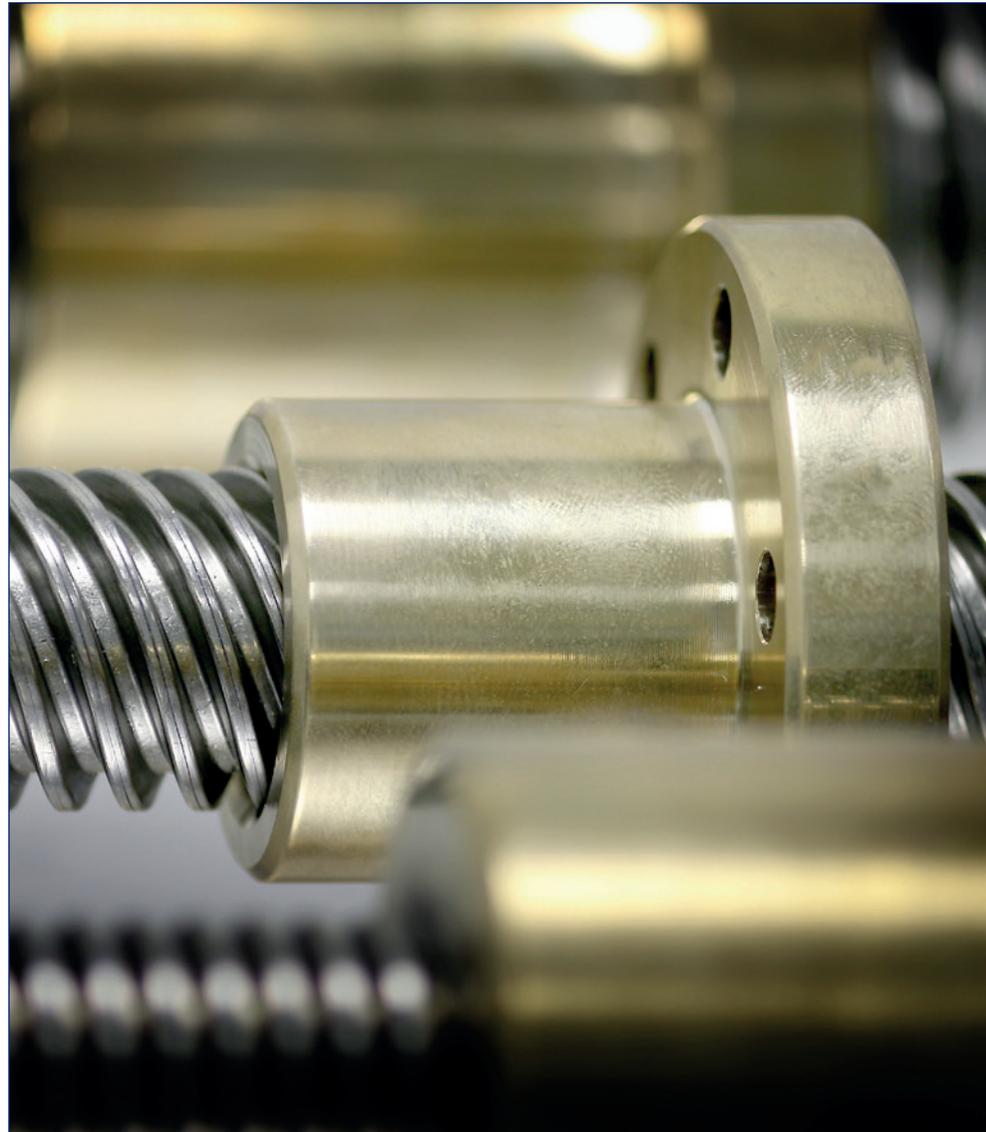
Lead screws can be supplied in machined, rolled or whirled formats, using Steel, Stainless Steel or in some cases Aluminium or Bronze. Combine this with the ability to offer further journal end machining, gun drilling, screw hardening and special coating treatments give ABSSAC the competitive edge. Perhaps, you are looking for a lead screw supplier that can produce exactly what you want? Or perhaps you have an old acme screw that needs replacing but have no technical drawing specifications to work from, ABSSAC can help. Most common thread forms supplied are acme or trapezoidal, but ABSSAC can also supply multi-start or special thread profile requirements, as well as auger mixing screws and self reversing screw formats. In addition to the range of lead screws a complete range of plastic, steel or bronze nuts are available, which are tapped and matched to the screw can be supplied.

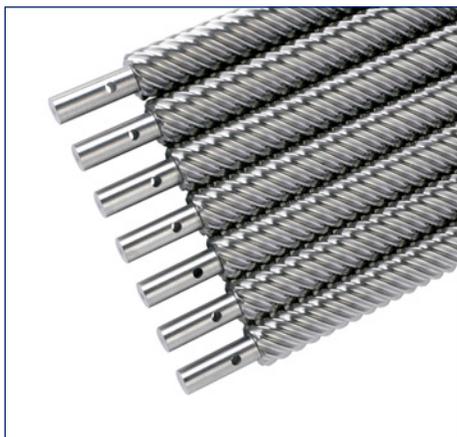
“

Just a quick note to say thank you to the ABSSAC team that helped us through our challenging lead screw and nut application. The whole specifying process was made a whole lot easier by talking to people with in depth product knowledge and then deliver the product, right the first time. It often is not reported back, but on this occasion I felt like I wanted to say thank you.

Adam Heathcote Bsc Eng

”





Precision Rolled

ABSSAC has a truly extensive range of lead screws along with their associated nuts and bearings. They have been assisting engineers specify the correct linear products since 1982 and are passionate about the products they supply through a traditional hands on approach to everything they do. A fast turnaround machine shop can supply end journals that are ready to fit directly into your application and help reduce your scrap rates. Let ABSSAC help you find the right product for the right price, including support bearings, racks and splines and other related ancillary products.



Power Screws

Power screws and all associated nuts are ideal for medium to heavy duty industrial applications. ABSSAC continuously stock up to 3 meter lengths of lead screw diameters of 12mm, 16mm, 20mm, 22mm, 24mm, 30mm, 36mm, 40mm and 50mm in both right and left handed formats. The power screws are available in both Steel and Stainless Steel and can be supplied with a large selection of round bodied flanged or non-flanged Bronze matched thread nuts. Bespoke nut designs and full end journal machining is also available.



End Machining

Supplying ball and lead screws ready to fit into applications often requires ABSSAC to supply product to a customer drawing specification. Employing turning, grinding, milling and straightening techniques optimises the final product. Reverse engineering projects are also welcomed.



Product Spotlight



The largest range of lead screw, acme screws and trapezoidal screws in the world. The precision screws range in size from 1 to 25mm in diameter with an incredible amount of nut options with varying materials and models. Being able to pull on in-house, dry lubricant technology as well as advanced injection moulding techniques, means that we can specialise in the supply of unique linear solutions using a variety of machining methods to arrive at a technical solution within budget.

“

The ability for ABSSAC to quickly produce a 3D print of the nut design was a huge success and enabled us to demonstrate our end product concept to our customer

Phil Rapp - Sub Sea ROV Engineer

”





Lead Screws

1.5 - 50MM DIAMETER ASSEMBLIES

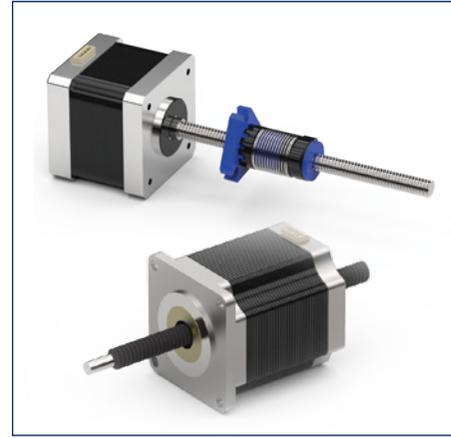
Helix manufactures lead screws ranging in size from 1.5 - 50 mm diameter with a wide variety of nut designs and materials. Helix nuts are available in threaded and flange mounts. Anti-backlash nuts perform with zero backlash, and are self-compensating for wear.



Precision Torque Spline

ROTARY AND LINEAR MOTION

Helix Precision Torque™ Splines are a convenient and efficient product that allows low friction linear motion while transmitting torque.



Linear Actuators

NON-CAPTIVE LINEAR ACTUATORS

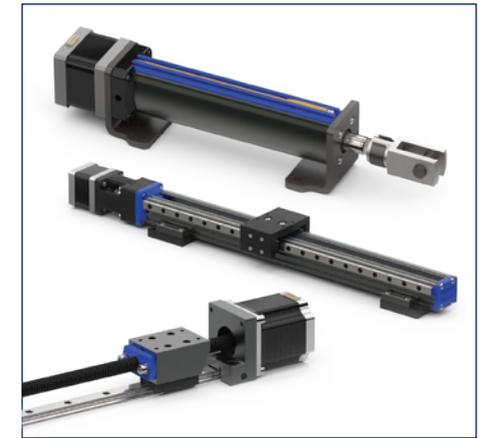
Translating Screw Linear Actuators

Helix Non-Captive Linear Actuators are offered in NEMA 8,11,14,17,23 and 34 frame motors.

HYBRID LINEAR ACTUATORS

Stepper Motor Linear Actuators

Helix Hybrid Linear Actuators feature precision lead screws and nuts to produce accurate and repeatable linear motion. Actuators are manufactured in NEMA sizes 8,11,14,17 and 23



Electric Cylinders

ELECTRIC CYLINDERS

Ball Screw and Lead Screw Drives

These Electric Cylinders are built with a precision 300 series stainless steel lead screw or ball screw. Lead screw models include a Teflon-coated screw and internally lubricated nut.

MICRO PRECISION LINEAR ACTUATORS

Modular Miniature Linear Actuators

Helix manufactures three different models to meet the demands of different linear motion applications.

PRA LINEAR ACTUATORS

Profile Rail Linear Actuators NEMA 8, 11, 17, 23

The PRA is built with either lead screw or ball screw drives. Lead screws can be coated with Helix H10X™ PTFE to increase the nut life by 10X.

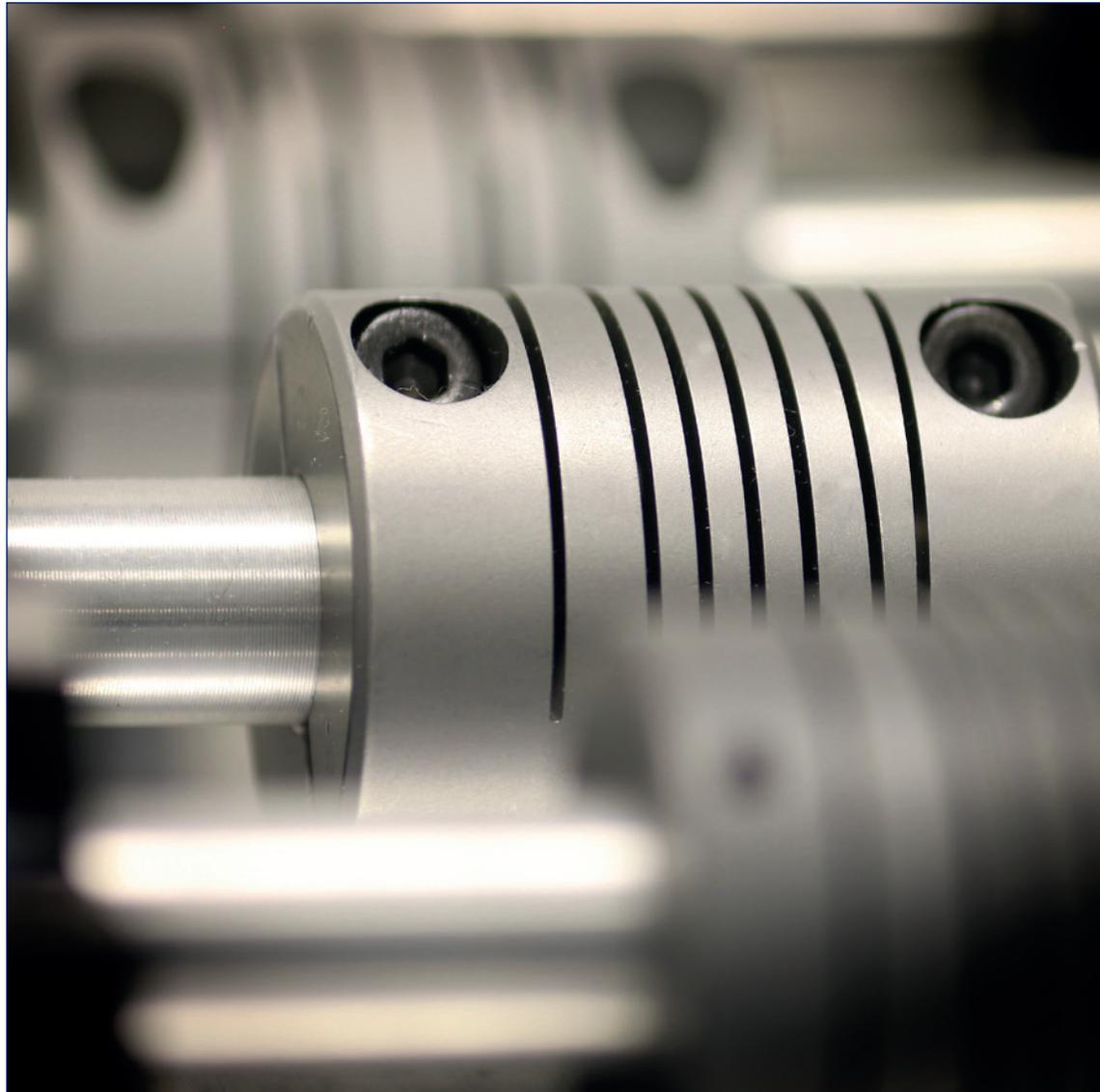
Flexible Shaft Couplings

Specifying the right flexible shaft coupling for an application can be a technical challenge for the engineer, particularly as there are so many designs to choose from. Shaft size, torque capability, angular and parallel shaft misalignment, not to mention material and attachment, all add to the myriad of parameters that narrow down choice. ABSSAC prides itself on experience in the specification of shaft couplings, whether light or heavy duty. With 35 years plus of supply chain behind them, ABSSAC will ensure correct product specification.

“

I have just been advised that our shaft coupling has just come in. Many thanks for improving the delivery on this, it is much appreciated.

”





Budgetbeam Couplings

A low cost flexible shaft coupling addressing the requirement for a high torsional stiffness, low cost, zero backlash, single piece construction, beam style flexible shaft coupling.

To achieve these extraordinary parameters, the budgetbeam shaft coupling utilises a very efficient helical beam configuration. The new Budgetbeam shaft coupling provides zero backlash and constant velocity torque transmission characteristics with excellent performance and reliability. Additionally, low radial bearing loads and low inertia are also advantages of the new design.



Jaw Couplings

These are low cost, no fuss shaft couplings. The JAW shaft couplings are available in steel, cast iron and aluminium and can come with ATEX approval if requested. To suit shaft sizes from 6mm to 100mm or supplied pilot bored.

The curved jaw coupling design consists of an elastic "spider" and two hubs. The spider, made of an advanced polyurethane material, provides dampening of impulse loads, minimizing shock to the motor and other sensitive equipment.



Rigid Shaft Couplings

When the application requires a direct and solid shaft connection and shaft misalignments during operation are minimal, then the ABR solid or rigid type couplings can be used. To suit shafts from 6mm up to 50mm in diameter as standard.

A solid compression-type coupling or rigid coupling as it is sometimes termed has no flexibility but can effectively be used to connect two shafts to make a permanent joint. The solid coupling is usually designed to be capable of transmitting the full torque load capacity of the shaft.



Bellows Shaft Couplings

Metal bellows shaft couplings deliver, high torsional rigidity, due to the bellows' radial rigidity and low side thrust and the bellows lateral flexibility.

Other coupling types have either low windup or low side thrust, but not both. Precision motion control applications require mechanically tight systems, especially between motors, driven loads, and feedback devices, to ensure accurate positioning. Such systems often require shaft couplings that are both torsionally rigid, to accurately transmit rotational position and laterally flexible to accommodate shaft misalignment.



Slot Coupling

The slot coupling is a solution for equalizing all kinds of offset. Its unique slit structure once revolutionized the coupling industry – over the years, this well established solution has come a long way and now represents the ideal solution for installation situations that involve misalignment or high levels of resonance. Not only does the one-part design ensure absolute stability at the highest speeds (>30,000 rpm) and a low mass moment of inertia, but it also enables maximum torsional stiffness to be achieved in the face of dynamic load changes.



Sure-Flex Shaft Couplings

With a large stock of Sure-Flex Couplings and Sleeves ABSSAC can quickly provide a great basic shaft coupling solution.

With knowledgeable staff always available, the elastomeric coupling uses two cast iron hubs available prebored or pilot bored and a proven centre element produced from an elastic polymer, to compensate for arduous shaft misalignments. The proven product delivers reliable torque transmission whilst simultaneously dealing with shock and vibration.



Stepflex Coupling

The latest innovative product in the range of flexible couplings. It is an all rounder and provides very high resonance damping performance whilst delivering 0.5 to 12Nm of zero backlash torque. Step-Flex dual rubber resonance damping couplings feature an innovative laminated rubber element which achieves high damping with low reaction force. They dampen vibration more effectively than flexible couplings that use metal in their intermediate elements. This enables resonance to be mitigated over a wide range of operating speeds and provides stable high-speed control, with zero backlash. The product is RoHS-compliant



Semiflex Shaft Couplings

The compact precision coupling that can deliver high performance. Semiflex® is a torsionally stiff, precision coupling that operates without producing radial restoring forces by means of a unique system of two internal pairs of parallel links arranged at 90° to each other. The angular synchronisation of the connected shafts always remains constant regardless of the misalignment.



Controlflex Couplings

The Controlflex shaft coupling has been designed and developed specifically with shaft encoders in mind. The compact design consists of two anodised aluminium hubs and a unique middle element that transmits torque at constant velocity. Most importantly, the unique and integral torque element accommodates all kinds of shaft misalignment. Standard bore combinations range from 3 mm up to 20 mm. from stock.



Plastic Shaft Couplings

Offering an excellent low cost equivalent to aluminium shaft couplings especially where the torque requirement is lower.

This product range offers a quality range of plastic injection moulded shaft couplings giving high torsional stiffness combined with exceptional durability to shaft misalignment. The range is ideal for medium duty use and are available in a large variety of bore combinations from 1.5mm to 12.00mm.



SFC Coupling

These are disc-spring couplings that use a lightweight, high-strength aluminum alloy for the clamp hub to enable high torsional stiffness and high response. Both single-element types with high torsional stiffness and flexible double-element types that separate double elements with a spacer are available. Both lower the moment of inertia by linking the outer diameter of the hub to the shaft diameter. They are ideal for servomotor applications.



Laminate Disc Couplings

Form-Flex® disc style couplings enable high torque transmission whilst simultaneously compensating for angular, parallel and axial shaft misalignment.

The disc coupling designs can handle speeds up to 8500 RPM, using either the single disc set style or double disc set style. Higher rotational speeds can be achieved via balancing with bore sizes from 25mm to 400mm being catered for.

The key advantages for using composite shafting lies in its weight saving characteristics and the inherent nature to reliably transmit high torque with near zero torsional wind up.

Product Spotlight ETP Transmission

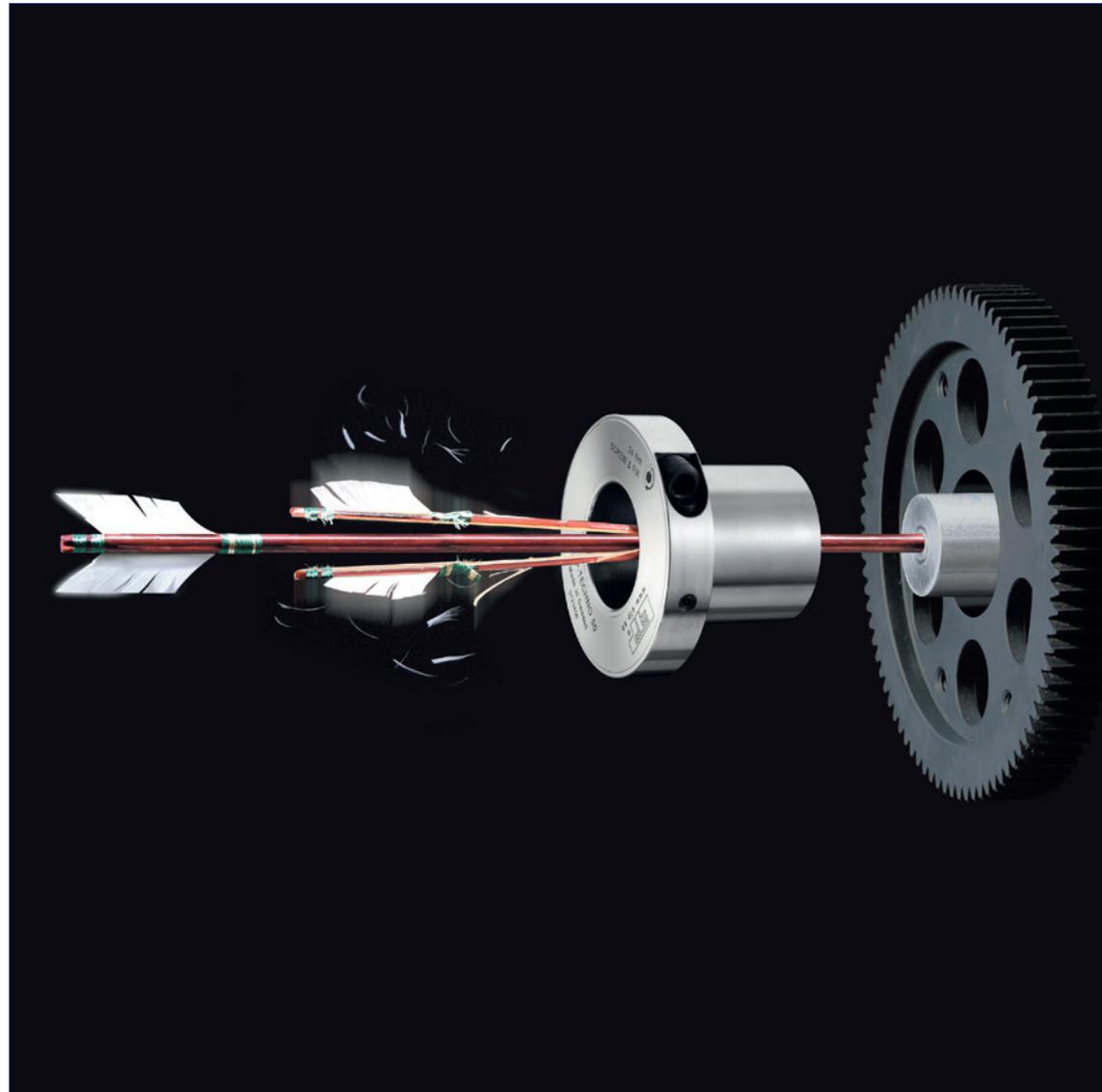
Pascal discovered the principle. ETP put it to work. The scientist Blaise Pascal formulated the principle of pressure propagation in liquids many years ago: Pascal's law or the principle of transmission of fluid-pressure states that, "pressure exerted anywhere in a confined incompressible fluid is transmitted equally in all directions throughout the fluid such that the pressure ratio (initial difference) remains the same". The ETP product utilises the many positive qualities of this principle and has continued to develop it further so that it can be utilised reliably and accurately within industrial applications.

“

Fitting ETP product with our production line has had a significant effect on reducing down time when machines are calibrated

Dan Spencer
Packaging Machinery
Product Flow Manager

”



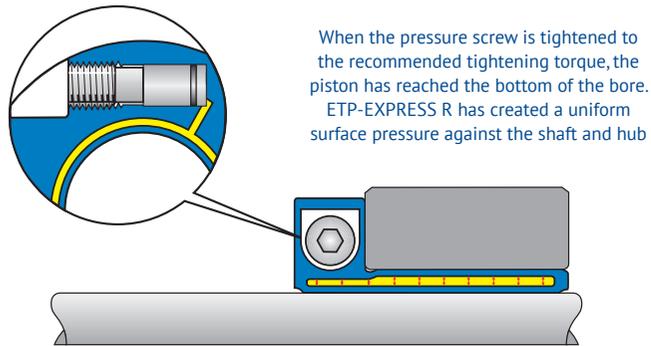
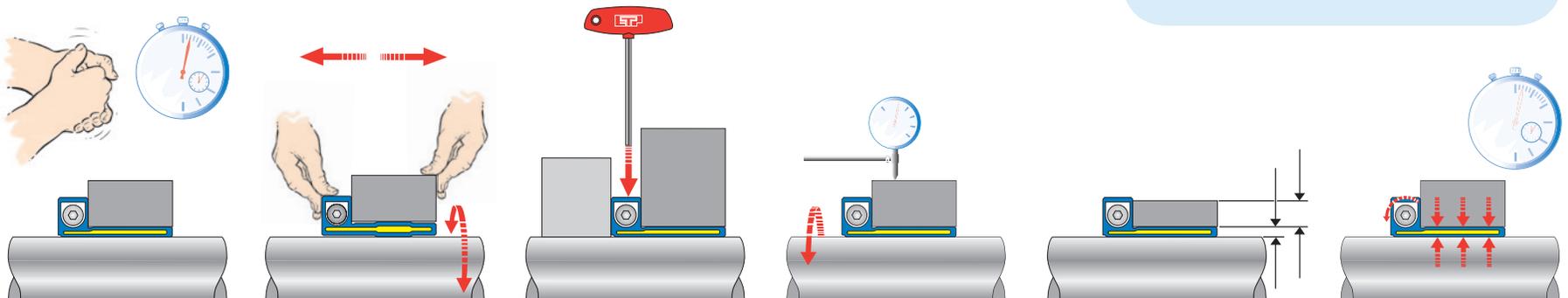
How can hydraulic bushes improve over their traditional, mechanical counterparts? The ETP range has the answers.

Everyone in every industry needs to save time and space while improving performance. Given this, the traditional mechanical clamping bush suffers a number of key disadvantages.

The first is that these traditional methods of connection rely on bolts to secure the shaft. This is problematic enough when installing them, but even more so when maintenance or adjustment are required and the bush has to be removed. In these situations, the securing bolts need to be undone painstakingly, half-turn by half-turn. This process is time-consuming and laborious in the best of conditions, but in demanding environments, the time and difficulty involved become truly critical issues.

The bolts used in such devices also pose significant problems in terms of design. The bolts require that any machine or installation that incorporates them must allow space not only to accommodate them, but also for the operator or technician to access them for maintenance or adjustment. This can add significantly to the machine's footprint and can lead to compromises in other areas that reduce the efficiency or performance of the design.

ETP's hydraulic bushes allow quick, easy and precise screw mounting in a multitude of applications by virtue of using a single screw for mounting and dismantling of the hub. This ensures an extremely quick and easy service interval time due to easy adjustment of the hub, achieved by the application of the principle of pressure propagation in liquids.



ETP products apply this principle by using a hydraulic pressure medium (usually an inert wax or paste composition) confined in a double-walled sleeve. This is pressurised using a flange containing one or more screws and a piston with seals for the pressure setting. The moderately-high pressure is distributed evenly along and around the hub and shaft, with the double-walled sleeve expanding uniformly and giving an even contact pressure against shaft and hub – thus effecting locking. The self-contained nature of the products means that this procedure can be repeated many times.

Regardless of whether hubs are being removed or repositioned, mounting and dismantling can be achieved in just a few seconds rather than tens of minutes that might normally be taken.

While all ETP products are customisable, they are available in a number of varieties. These include:

ETP-EXPRESS which has only one screw for pressurising and is therefore suitable when there is a need for the fast and accurate repositioning of the hub.

ETP-POWER, a hydraulic connection that consists of a double-walled hardened steel sleeve filled with a specially-developed pressure medium and a flange for higher torques and stresses.

ETP-TECHNO, whose outer and inner diameter and the side of the flange towards the hub are accurately machined for excellent concentricity.

ETP-CUSTOM SOLUTIONS – There is also a range of ETP products that can be intelligently controlled or designed to suit individual applications.

Product Spotlight

SPRING APPLIED BRAKES

Safety brakes, overload protection or clutch and brake combinations are found in many applications, however continuous innovation and improvement keeps us apart from the competition. For example, the brand new BXR-LE type super slim safety brake has an impressive, space saving, physical size. The spring actuated brake model is half the thickness, but same outer diameter, as its big brother type BXW series. It is operated by the compressive force delivered from several built in springs which are activated in the event of a power failure or if the power was cut off due to an emergency. The new model features holding and braking torque just under the existing models, the overall thickness can be as little as 14.0mm in model 035. Through magnetic field analysis and using the latest FEM techniques, the brake has been enabled to have an optimal physical design.

Operational costs can also be lowered by using the BXR-LE series. With all safety brakes, when a machine is running, the brake is continuously consuming electrical current, in order to maintain the brake in a released condition. However, the necessary electrical energy consumed when the brake starts to release differs greatly from the current draw requirement when the brake is held in the released condition. By optimising this differential with an over excitation power supply, the operational energy saving can be up to 90 % .

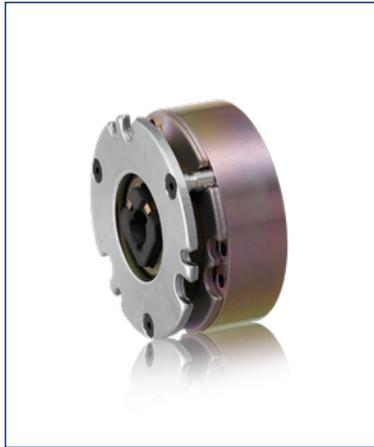


Spring Applied Brakes



BXR LE Model

- Brake Torque 0.06 Nm to 3.2 Nm
- Outer Diameter 26 mm to 71 mm
- Operating Temperature:
Brake -10 C to 40 C,
controller -20 C to -60 C
- Input voltage DC 24V ± 10%
- Ultra-thin design made possible
with a dedicated controller
- Super slim design
- RoHS compliant



BXW Model

- Brake Torque 0.12 Nm to 5.2 Nm
- Outer Diameter 37 mm to 75 mm
- Operating Temperature
-10 C to 40 C
- Choose braking or holding function
- Holding brake offers double the
torque of a braking application due
to different friction lining
- Possible to mount on stator and
armature sides
- Hand release lever available
- Torque from 0.2-5.2 Nm
- RoHS compliant



BXR Model

- Brake Torque 5 Nm to 55 Nm
- Outer Diameter 83.5 mm to 185 mm
- Operating Temperature
-10 C to 40 C
- Emergency holding brake
- 2/3rds thickness of old generation
- Weight and space saving design
- Super lightweight rotor with
spline hub
- Stainless steel core and resin glue
to combine friction lining and
rotor hub
- Low inertia
- RoHS compliant



BXL Model

- Brake Torque 2 Nm to 22 Nm
- Outer Diameter 83mm to 158mm
- Operating Temperature
-10 C to 40 C
- Standard brake series
- Mid torque range
- Ready to mount
- RoHS compliant



BXH Model

- Brake Torque 4 Nm to 44 Nm
- Outer Diameter 83 mm to 158 mm
- Operating Temperature
-10 C to 40 C
- Standard brake series
- Mid torque range
- Ready to mount
- RoHS compliant

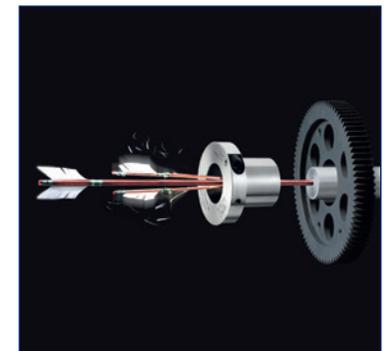
Custom Solutions

ABSSAC is passionate about the products they supply, so if you are stretching the boundaries of engineering design and require some form of rotary or linear solution, ABSSAC can help. The specialist product ranges are made up of standard products that can be easily adapted, to fit exact requirements or innovative, cutting edge products, offering unique performance characteristics not available anywhere else in the UK.

“

What a refreshing change to deal with a company that actually knows what it is talking about, and then delivers the finished product on time.

”





Custom Lead Screws

If standard thread forms and nuts designs do not quite fit what you are looking for, ABSSAC can provide a solution that exactly fits your specification. ABSSAC is in the unique position of being able to offer bespoke thread forms through an engineering department that welcomes the unusual. Working with special and exotic thread forms and multifunctional nut designs, gives ABSSAC the adaptability to supply a product whilst remaining competitively priced.



Custom Shaft Couplings

Unique flexible solutions encompass the ability to deliver a given torque through various angular, parallel and skewed shaft misalignments. These parameters determine the type and size of shaft coupling used which ABSSAC's sales engineers with well over 35 years' experience can assist with. Often using the same machines that manufacture standard products means costs are kept to a minimum, but performance enhancement is unmatched. Set ABSSAC the challenge.



Schmidt Shaft Couplings

The Schmidt coupling is used for extreme parallel shaft offset in a small D.B.S.E. (distance between shaft ends). The compact, torsionally stiff performance shaft coupling, can transmit high torque without applying a side load during operation. Interestingly, its modular construction allows both torque transmission and radial offset capacity to be optimized for each application. No other shaft coupling design can provide the parallel shaft offset to overall length ratio.



Machined Springs

Machined from a solid piece of material, the product takes spring performance in compression, extension, torsion or lateral movement to unmatched territory. Offering a new way of looking at both performance and attachment, the product is machined to meet exact customer size and performance requirements. Uniquely, double and triple start spring formats, within the single piece construction, can provide totally linear spring rates with a <1% performance tolerance. A complete choice of materials can be utilised to supply a truly formidable product package.



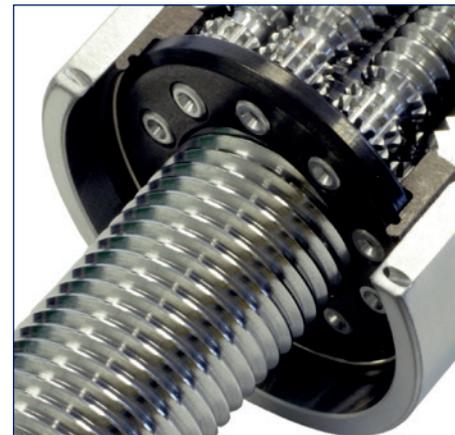
ETP Hydraulic Bushes

A growing part of ABSSAC's ETP business is in the continuous development programme, where standard ETP products can be adapted to have legitimate advantages in bespoke applications. Using the same double-walled hardened Steel (in some cases Stainless Steel) sleeve, filled with a pressure medium, provides the reliable and moderately high surface pressure that ensures shaft and hub locking. This unique product is currently being placed into a wide range of applications where reliable, precise and repeatable clamping is an advantage.



Carbon Composite Springs

The Carbon Composite Bellows™ Spring (CCBS) is a system of carbon fibre elements that combine to work as a high performance, light weight flexible compression spring. The weight saving product can replace conventional coil springs or metallic Belleville disc springs by offering value through unique dynamic characteristics and unparalleled in-the-field design flexibility. A functional spring is made from several individual elements, paired in sets and joined to make a stack. The Carbon Composite Bellows Spring offers new solutions to old challenges.



Satellite Roller Screws

Offering a full custom capability, a roller screw design will always transmit more load than a ball screw nut assembly size for size. Offering sub-micron linear accuracy, when required, applications have been as diverse as replacing the hydraulic legs on flight simulators to high accuracy zero backlash roller screws used above earth's atmosphere. The product takes linear challenges to the next level, offering high load capacity, reliability and acute accuracy. The product design accepts high acceleration and deceleration and is capable of rotating in excess of 5000 rpm making the roller screw product a superior linear drive alternative.



Self Reversing Screws

With the self-reversing screw product, only one direction of rotation is required of the screw to achieve reciprocated bi-directional linear movement. The movement is achieved by using a follower blade in the nut that is matched to the particular groove width and screw turn round on the screw.

There is not a standard range of this screw type as all designs are manufactured to meet the customer's individual specification. They can be created in just about any mild Steel, Stainless Steel, Bronze or Aluminium. The nut can be supplied in a style and size according to customer requirements.



Adding Flexibility

Sometimes an application can benefit from a little material flexibility. The flexibility could be required in a drive shaft or solid mount, or perhaps be required to address harmonic issues. The flexibility may also be needed at a post design stage, which can then not be placed within the system without major changes to the original design. Using the advanced and unique Heli-Cal beam solution, a flexibility can be machined into the customer's part or supply a complete part with a predetermined flexibility. This is cutting edge technology at affordable levels.



Edge Welded Bellows

If you have an application where the control of volume in a liquid or gas is important, the edge welded bellows product may be able to help. Providing the most flex in the smallest amount of space, ABSSAC is dedicated to developing and perfecting edge welded bellows design, fabrication and manufacturing technologies with full application design assistance. Using state-of-the-art manufacturing capabilities allows customers to benefit from exact requirements. Working within the size range of 12.7mm to 147mm (OD) and working in materials such as AM350, Stainless steel, Titanium, Hasteloy, and Inconel, we will design and manufacture bellows in 0.05mm to 2 ply 0.18mm thickness.



Electroforms

ABSSAC can supply quality-crafted bellows, couplings, electroforms, and electrical contacts using the electroform expertise of Servometer©. For those engineers familiar with the traditional electroforming process, we are offering a new way of looking at both complexity of shape, wall thickness tolerance, integral strength and capability. The process begins with a piece of aluminium stock or bar. Next the internal geometry of the electroform is machined into the aluminium to produce a mandrel. After inspection, nickel, copper, gold, silver or combinations thereof are electrodeposited onto the mandrel to a precise wall thickness. Following a post plate inspection, the plated mandrel is trimmed to produce the desired end configuration and dimensions. Finally, the aluminium mandrel is then dissolved in a caustic solution leaving behind the completed precision electroform.

Compliance

Quality Assurance

ABSSAC maintains a quality assurance regime in line with the new version of ISO, that being ISO9001:2015

Health & Safety Review

Constant monitoring to ensure Health & Safety reviews are completed to satisfaction.

FIRE Risk Assessment

Constant monitoring to ensure fire risk reviews are completed to satisfaction.

Conflict Materials Dodd-Frank Wall Street Reform Act 2016

ABSSAC is a UK based company and has investigated its obligation to this reform by letter to its suppliers.

R.E.A.C.H Regulation on Registration, Evaluation, Authorisation and Restriction of Chemicals

The products supplied by ABSSAC Limited meet the REACH directive.

R.o.H.S Restriction of use of certain Hazardous Substances

The products supplied by ABSSAC Limited meet the RoHS directive.

COSHH

Control of Substances Hazardous to Health

Constant monitoring to ensure a COSHH compliance is completed to satisfaction

Foreign Corrupt Practises ACT 2016

ABSSAC complies with the "FCPA" and the applicable laws of other countries that prohibit bribery and other corrupt practices (collectively, "Anti-Bribery Laws").

ABSSAC Ltd Environmental Policy Update

Our Mission Statement - Abszac recognises that it has a responsibility to the environment beyond legal and regulatory requirements. We are committed to reducing our environmental impact and continually improving our environmental performance as an integral part of our business strategy and operating methods, with annual review points. We will encourage customers and suppliers to do the same.

General Data Protection Regulation (GDPR)

ABSSAC is committed to ensuring the security and protection of the personal information that we process, and to provide a compliant and consistent approach to data protection. We have always had a robust and effective data protection program in place which complies with existing law and abides by the data protection principles.





ABSSAC in the community

ABSSAC continues the sponsorship of the TDMS Robotics club at The De Montfort School, Evesham into the future and wishes them luck with preparations for the next robotics challenge.

Now in our 7th year as the main sponsor, the VEX Competition tasks teams of students with designing and building a robot to play against other teams from around the world in a game-based engineering challenge. Students learn lifelong skills in teamwork, leadership, communication and more. Tournaments are regional and national levels with champions going on to compete against the best in the world at VEX Worlds each April.

The TDMS Worcestershire Regional was held in the main school hall, with teams attending from all over the UK. Robots Tolerance and Titan were very competitive during this competition, with Titan becoming Tournament Champions, qualifying for the National Championships yet again.

In 2017, the TDMS Tolerance team competed in more regional events than before in a bid to win a coveted Excellence award. With both a well designed Robot performing in the field, and a well presented Engineering Notebook, this award was secured during the regional event at the Stowe School Regional, Buckingham. By winning the Excellence award, this provided a place at the World Championships.

TDMS robotics, with a team of five A-level students, competed at the VEX Robotics competition in Louisville, Kentucky, America. Shipping the robots, staff and pupils out to the USA was a big event. In the end TDMS ranked 24 out of 94 in their division and came a respectable 57th in the world ranking.

The teams are currently busy tweaking their robots to ensure they are in optimum condition for next year's competition.

 @TDMSRoboticsUK

-  facebook.com/abssac
-  twitter.com/ABSSAC
-  uk.pinterest.com/abssac
-  instagram.com/abssac

ABSSAC Ltd, E1A The Enterprise Centre, Enterprise Way,
Evesham, Worcestershire. United Kingdom. WR11 1GS
Call: 01386 421 005 | **Fax:** 01386 422 441
Email: sales@abssac.co.uk
Visit: www.abssac.co.uk

JAN-2019-OVERVIEW



ABSSAC
PRECISION MOTION SINCE 1982