



#### **HI-FORCE SERVICES**

Hi-Force is a UK headquartered manufacturer of high pressure hydraulic tools and equipment supplying to over 100 countries worldwide. However the DNA of Hi-Force is still today heavily focussed on a "service first" basis. The origins of Hi-Force and its shareholders go way back to the late 1960s, when sister company H.E.S. Sales Limited was formed. H.E.S. (Hydraulic Engineering Services) started out as a purely "service company" offering clients tool repair and tool rental services.

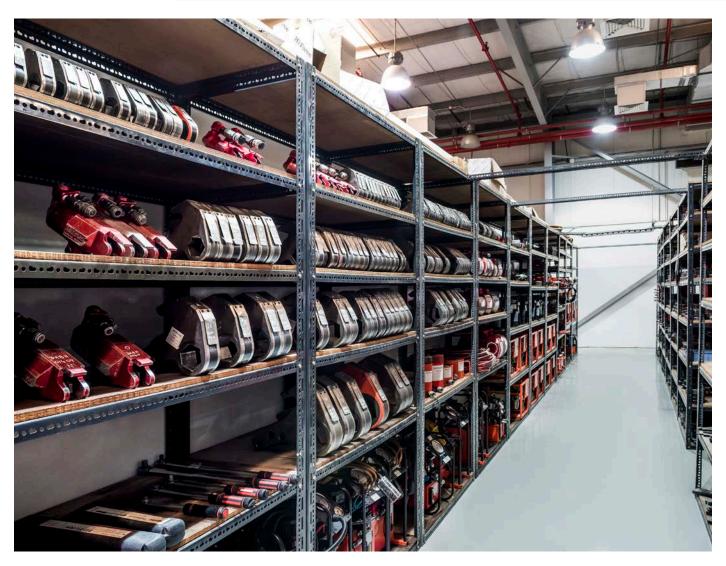
When Hi-Force started manufacturing hydraulic tools in the late 1980s, it was always understood that continuing to offer users a full after sales service support, would be mandatory and today all overseas Hi-Force Regional Offices are modelled on the original and highly successful H.E.S. blueprint.

This catalogue is our first ever catalogue focussed entirely on our "Services" portfolio and includes: Tool Rental, On-Site Services, Tool Repair, Maintenance and Calibration, Testing and Service Contracts and Product Use, Service and Repair Training. Hi-Force firmly believes that our "Service First" philosophy is what separates us from the vast majority of our competitors and we believe it continues to help us gain an ever increasing number of loyal customers.

## TABLE OF CONTENTS

TOOL RENTAL	4
ON-SITE BOLTING SOLUTIONS	6
ON-SITE LIFTING & JACKING	8
TOOL REPAIR & MAINTENANCE	10
TORQUE TOOL CALIBRATION	12
TRAINING	14
PRODUCT TRAINING COURSES	16
ECITB MECHANICAL JOINT INTEGRITY TRAINING COURSES	18
SERVICE & REPAIR TRAINING COURSES	22
HI-FORCE PRODUCTS	24





### **TOOL RENTAL**

The Hi-Force philosophy of offering a complete service package to support our valued customers needs and requirements includes tool rental services. With an extensive array of products available within the Hi-Force range, it is sometimes difficult for our customers to decide on the most suitable tool in which to invest their money.

Additionally, with our higher value products like high tonnage cylinders, powered pumps, hydraulic torque wrenches, stud bolt tensioners and hydrotest pumps, many clients simply cannot justify the high capital outlay to purchase, especially in cases where their needs for the product are relatively short term or even simply for a one off job. In some cases annual budget restraints also make it difficult to get purchase expenditure approval even though there is a definite requirement for the tools.

Hi-Force actively encourages and promotes its tool rental services package, both at Regional Offices and at participating distributors worldwide. Many of our customers worldwide who have purchased Hi-Force products, initially took the opportunity to "try out" both our product quality and our level of service support via tool rental. Once satisfied, these same customers became brand loyal purchasers of Hi-Force products on a regular basis.

An additional benefit of maintaining a comprehensive fleet of rental tools at our Regional Offices and participating distributors is that users can easily request on-site demonstrations, using rental tools at short notice, or even utilise our rental services whilst having their own equipment serviced or repaired.



In most industries the biggest drain on company profits is the loss of time and productivity, due to delays in the availability of tools, for completing shutdown and maintenance activities. Additionally in new construction projects delay penalties during construction and commissioning can easily be avoided if the right tools are available to carry out the work correctly from the outset. Hi-Force tool rental offers the perfect solution to help avoid unnecessary and costly delays in completion of the work.

Hi-Force tool rental is available on both a short and long term basis and all equipment provided is tested, calibrated and certified prior to mobilisation to site. Tools can be mobilised very quickly from the extensive stocks, held locally, at all Hi-Force group company locations and select Hi-Force Distributors worldwide.

Hi-Force tool rental offers users a fast and economical alternative to purchasing capital intensive specialised equipment, at short notice.







### **ON-SITE BOLTING SOLUTIONS**

Hi-Force offers a bespoke on-site bolting service designed to maintain the integrity of bolted joints across multiple industries, where the safe movement of hydrocarbons in a leak free environment is absolutely critical.

To complement Hi-Force's extensive range of bolting tools, our on-site bolting services are tailored to suit unique customer requirements. Customers can select the required support which extends to manpower, supervision and training from our highly competent team of supervisors, trainers and technicians. We also provide tool sale or rental agreements, as well as bolt load calculations and real time Flange Management database software, to assist with the smooth running of the project workload. Our flexible approach to offering customers all of the individual components of our on-site service capabilities, or a combination of some, or all of them, ensures clients receive a cost effective and tailored service package.

Our bespoke on-site bolting containers offer a safe and secure storage facility for all purchased or rented bolting equipment. This can also include a secondary container supplied with an ECITB (Engineering Construction Industry Training Board) approved bolting training rig, for on-site training of technicians in the safe and correct way to assemble and bolt up flange joints, as well as a tool service and repair facility, to cater for on-site service and repair of all bolting tools, whilst on site.

Hi-Force bespoke on-site containers are fully equipped with lighting, heating and cooling air conditioners, storage racks, tool servicing equipment and adequate spare parts for all the tools mobilised to site.



- ▶ Full technical support and advice during preconstruction phase
- On-site surveys prior to commencement of the work to ensure all necessary requirements are fulfilled
- ▶ Tooling specification for correct tightening of all bolts and joints, available for both purchase and rental agreements
- Specialist tooling for unique customer requirements, designed and manufactured by Hi-Force
- ▶ Bolt load calculations conforming with the latest industry ASME PCC-1 standard and Flange Management Database
- ▶ Fully equipped, purpose designed and air conditioned on-site tool store container
- ▶ Air conditioned repair and training container, complete with ECITB approved training rig for onsite training and demonstration purposes as well as repair and maintenance facilities, limiting costly time delays
- ▶ Qualified and experienced on-site Supervisors, Trainers and Bolting Technicians
- ▶ ECITB approved training delivered on site for contractors and plant owners bolting crews

















### **ON-SITE LIFTING & JACKING**

In addition to tool rental and on-site bolting services, Hi-Force is also able to offer an on-site lifting and jacking service, utilising Hi-Force high tonnage cylinders, pumps and accessories. Past projects completed include bridge lifting, cantilever and steel structures weighing and a wide variety of lift and shift applications.

Our record and past experience of working with many major multi-national companies is second to none and our personnel have established an excellent reputation for meeting and beating critical time deadlines, even in the most demanding conditions. Our on-site personnel have received many verbal and written testimonials for their excellent performance and further details can be provided on request. Hi-Force is very proud of its reputation for carrying out efficient, safe, competitively priced on-site jobs, within budgeted costs and specified and critical time periods.

Major customer industries include oil and gas, petrochemicals and refining, power generation, shipbuilding and ship repair, cement plants, civil and mechanical construction and major maintenance activities.





### **TOOL REPAIR & MAINTENANCE**

Every year huge amounts of money are lost to industries worldwide due to the breakdown of capital intensive hydraulic and pneumatic tools. This extensive loss of revenue could be drastically reduced if users and owners were always in a position to call upon specialist repairers, at short notice, to identify the faults and carry out fast, reliable, guaranteed repairs.

Hi-Force is at your service! We have built our success on our "service first philosophy" and a long history of providing customers with a comprehensive repair service for a wide range of hydraulic and pneumatic tools.

All Hi-Force offices worldwide, along with participating Hi-Force Distributors operate a fully equipped workshop repair facility, using the latest "state of the art" repair and testing equipment and techniques, carried out by trained and qualified workshop technicians. Our global network of Hi-Force service centres is modelled on our highly successful and wholly owned UK Distributor company, H.E.S. Sales Limited, who have been offering repair services, along with the other services detailed in this catalogue, from two strategically placed locations in England, since the early 1960's. Hi-Force Service centres carry good stocks of commonly used spare parts and are able to offer a first class guaranteed repair service for all Hi-Force products as well as international competitor brands. All items repaired carry a 90-day warranty against faulty materials or workmanship and are returned to the customer with an individual test/calibration certificate.

Make the most of your investment in tools through regular servicing and repair through the Hi-Force service network.

#### **TOOL REPAIR & MAINTENANCE**







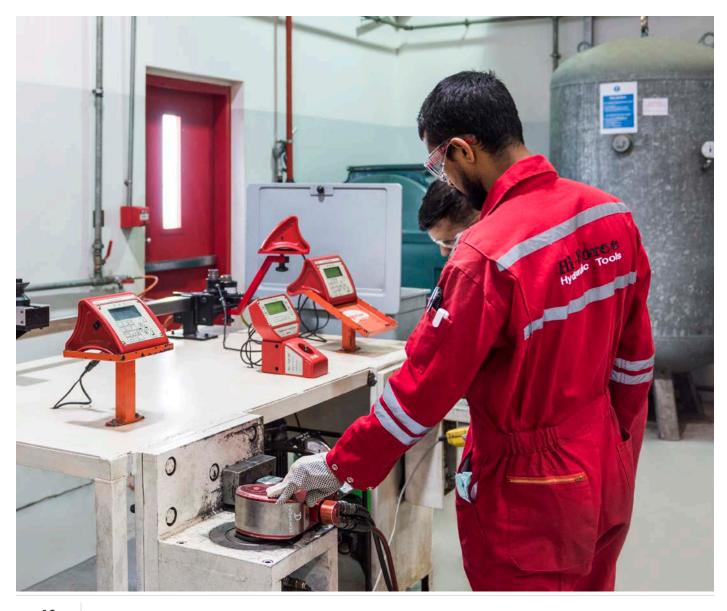
### TORQUE TOOL CALIBRATION

Manual, pneumatic, electric and hydraulic bolting tools are designed to apply accurate and measurable torque forces, to bolts and nuts, to ensure that the correct amount of tension is applied to maintain the integrity of the bolted joint. In most cases bolting tools are used extensively to tighten hundreds and sometimes thousands of bolts and nuts, it is therefore very important to have these tools regularly checked and tested on independently certified, torque tool calibration equipment. It is recommended that tools be checked, tested and if necessary recalibrated at least every 12 months, however in cases of extensive tool use this should even be considered more frequently than this.

Hi-Force offers in-house torque tool calibration services, utilising the best available calibration equipment, with valid, independently approved "UKAS" calibration certificates, that are regularly renewed in line with international standards and codes of practice. All torque tools tested and calibrated are issued with an individual test and calibration certificate, traceable to the UKAS certified calibration equipment used.

Whether it is a simple hand torque wrench, a manual or powered torque multiplier or a hydraulic torque wrench, from Hi-Force or any other leading brand, utilising the Hi-Force torque tool calibration service, is the best way to ensure torque tools consistently deliver accurate torque.

Contact your Hi-Force Regional Office or approved Distributor for your nearest torque tool calibration centre.



12

#### **TORQUE TOOL CALIBRATION**



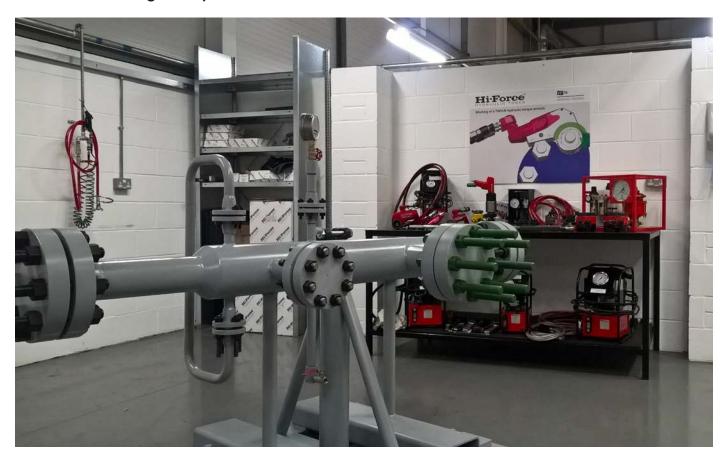






Hi-Force has been providing training courses in the safe and correct use, application, service and repair of hydraulic tools for many years. In 2013, Hi-Force introduced ECITB (Engineering Construction Industry Training Board) approved training courses. Our UK training school, covering an area of 150 square metres, incorporates a fully equipped classroom, product practical training area and a service and repair training facility.

#### **Hi-Force UK Training Facility**



Between 2013 and today, Hi-Force has used the UK training facility as a blueprint for establishing additional training schools at our Regional Offices in UAE, Malaysia, South Africa and The Netherlands, with a further facility due to open, in Italy, by the end of 2019. All Hi-Force training schools worldwide deliver training to the same exacting standards, set by Hi-Force UK and indeed the UK based group training department continually monitors and assesses the standards of training, delivered at all training schools worldwide.

All Hi-Force training courses are designed to provide a first class education, to all delegates, utilising our "state of the art" training school facilities, at all locations. By ensuring that all training courses are delivered to the same standards, using the same training materials and techniques, delegates can attend a Hi-Force training school nearest to their respective location, reducing both travel time and cost.

With everything located under one roof within each Hi-Force training school, delegates can be provided with all the required elements, of both classroom theory and "hands on" practical training. All training facilities are equipped with an ECITB approved training rig, plus an extensive range of the latest Hi-Force hydraulic tools, including all the required ECITB bolting tools for delivery of ECITB Mechanical Joint Integrity Training. Similarly our service and repair training facilities are fully equipped, with all the required workshop equipment and tooling, to deliver high quality hydraulic tool service and repair training.

14 www.hi-force.com

#### Hi-Force Dubai FZCO Training Facility



#### Hi-Force Malaysia Training Facility



Hi-Force training courses are ideally suited for field sales engineers, sales office personnel, on-site supervisors and engineers, technicians and everyone else involved within the sales, service and repair, on-site supervision and operation of high pressure hydraulic tools, to a wide variety of industries worldwide.

Hi-Force is totally committed to improving the technical knowledge of our own employees, those of our Distributors and the many thousands of users, of Hi-Force hydraulic tools, throughout the world. Hi-Force's investment in world class training facilities, is testament to our ongoing commitment to not only offer products of the highest quality, but to also ensure that our network of regional offices and distributors continue to offer users the correct and proper technical advice and support, whilst discussing individual customer specific requirements for hydraulic tools.

#### **Hi-Force Netherlands Training Facility**



15



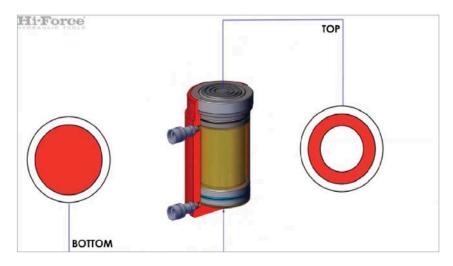


#### PRODUCT TRAINING COURSES

With our ever expanding network of Hi-Force regional offices and authorised distributors worldwide, Hi-Force has identified technical product and application training as an essential core competency for us to maintain our continued growth in the hydraulic tools market.

The latest, updated version of our Product Training Course, is divided into various product groups, each of which cover all aspects of technical sales, industry specific application selling, special product design, practical and theoretical operation, health & safety and general maintenance. Hi-Force believes that our Product Training courses are at the leading edge of the high pressure hydraulic tools industry worldwide.

To cater for the large number of different countries in which our products are now distributed and sold, we have designed our Product Training Courses in such a way that animations and graphics are used wherever possible, minimising the need for sometimes difficult to understand explanations. This enables us to easily translate the text of the various training modules into different languages to suit local market requirements. The moving graphics used within the Hi-Force Product Training Courses vary from a simple hand pump and cylinder, through to complex multiple lifting applications, using split flow pumps, hydraulic torque wrenches and stud bolt tensioners, all of which clearly demonstrate how our products operate, in the most simplistic way.







When delegates experience the visual learning provided by these graphics and then move to the practical training area to put theory into practice by operating our tools in real and simulated situations, the retention of knowledge is far greater than learning just from presentation slides, or books, containing only text and pictures.

Hi-Force Product Training courses can be delivered from any of our worldwide training school locations, from within the facilities of one of our authorised distributors, or even on-site, at the facilities of an end user of our products, provided there is a suitable classroom and practical training area available, as well as the required selection of Hi-Force products, for completing all the practical elements of the applicable training module.

Hi-Force Product Training courses can be tailored to suit individual needs and can be held for any number of days from one up to a full working week of five days. All Training courses will incorporate a written and verbal test, for all participating delegates, to ensure that the required level of learning is achieved. Delegates achieving the required minimum pass level will receive a certificate, in recognition of their achievement.

Whilst primarily focussed on our own global sales team and that of our distributors, we also offer Hi-Force Product Training to end users of our products.





#### **ECITB MECHANICAL JOINT INTEGRITY TRAINING COURSES**

Hi-Force is approved by the ECITB (Engineering Construction Industry Training Board) for the delivery of Mechanical Joint Integrity (MJI) training courses in line with industry standards and practices.

Hi-Force's ECITB approved Trainers have the technical and practical knowledge, and understanding to deliver these training courses. These in-house trainers have many years of "hands on" experience in the Oil, Gas and Petrochemical industries (onshore & offshore), as well as Power Generation and a wide variety of construction industry applications, requiring bolted joint technology. They are also fully trained and competent in the use of the various mechanical and high pressure, hydraulic tools used to deliver the training courses, in terms of theoretical, practical and the required Technical Testing (TMJI) as specified and required by the ECITB, prior to the issue of a certificate of successful completion to the delegate.

18 www.hi-force.com



The technical content of the MJI training modules will include:

- ▶ Mechanical Joint integrity (Flange and Bolt Materials, Components, Lubricants, Dis-assembly, Inspection, Assembly)
- ▶ Safe use of high pressure hydraulic equipment
- ▶ General Tooling Maintenance
- ▶ Correct Tool selection

Hi-Force, as an approved ECITB Training Provider, will competently train all delegates that attend these courses. All courses are most suitable for delegates employed to carry out Mechanical Joint Integrity and Flange Management activities, that are or could be associated with potential work scopes to industry standards, or client specific requirements that follow industry guidelines.

Hi-Force can develop and provide training courses that will suit client specifications if required and we will be happy to provide advice on any applicable industry standard. For further details please contact Hi-Force UK or your Regional Hi-Force Office or local Distributor.

Health and Safety is of paramount importance to Hi-Force, as we continuously strive to not only maintain the levels of competence of personnel in the bolting industry, but to further develop and improve these levels in order to reduce the potential risk of accidents or incidents wherever possible.





#### ECITB MECHANICAL JOINT INTEGRITY TRAINING COURSES

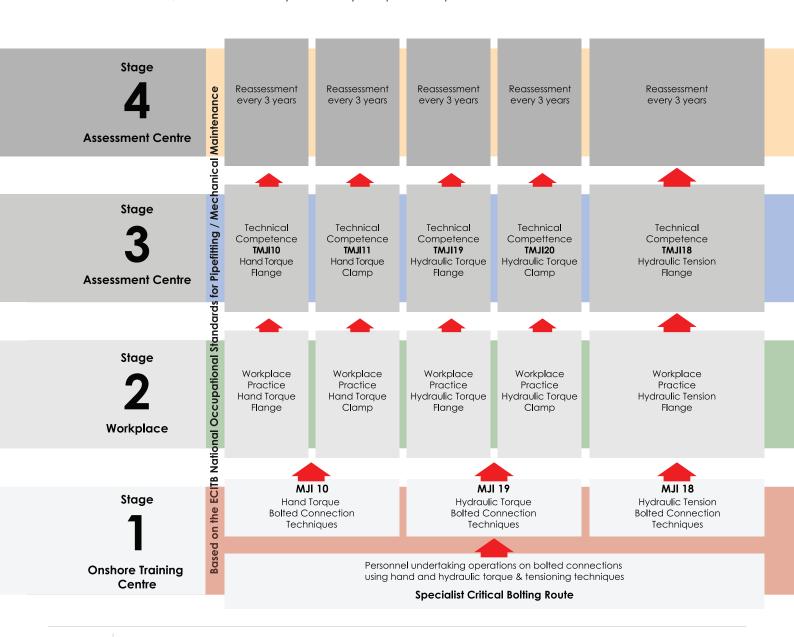
Hi-Force is a member of the ECITB and our Training School and Trainers are approved to deliver the following Training Courses and Technical Test Units.

Part 1 – Training (Stage 1) – "Theoretical & Practical" – Duration 3 days

- ▶ MJI10 Hand Torque Bolted Connection Techniques
- ▶ MJI18 Hydraulically Tensioned Bolted Connection Techniques
- ▶ MJI19 Hydraulically Torqued Bolted Connection Techniques

Part 2 – Technical Tests (Stage 3) – "Theoretical and Practical" – Duration 1½ days

- ▶ TMJI10 Dismantle, Assemble and Hand Torque Flanged Joints
- ▶ TMJI11 Dismantle, Assemble and Hand Torque Clamp Connectors
- ▶ TMJI18 Dismantle, Assemble and Tension Bolted Connections (Hydraulic Tensioning)
- ▶ TMJ119 Dismantle, Assemble and Hydraulically Torque Flanged Joints
- ▶ TMJI20 Dismantle, Assemble and Hydraulically Torque Clamp Connector Joints



20



#### The Four Stage Process to ECITB Accreditation

The Training (stage 1) and Technical Tests (stage 3) are provided as two separate elements of the overall course. The Technical Tests (stage 3) can be taken by the delegate, usually within 3 - 12 months of completing the Training (stage 1) and only after the respective delegate has completed a series of workplace specific practical exercises, related to the new skills and knowledge obtained from the initial Training Course (stage 1). All ECITB training courses are fully documented and further details of the course content can be made available on request. All delegates will also be registered with the ECITB, once they attend the training and receive their ECITB accreditation certificate on successful completion of stages 1, 2 and 3.

All delegates that are awarded ECITB accreditation must be reassessed every three years (stage 4) to maintain validity of their certification. This course requires one and a half days duration to complete.

#### The Future

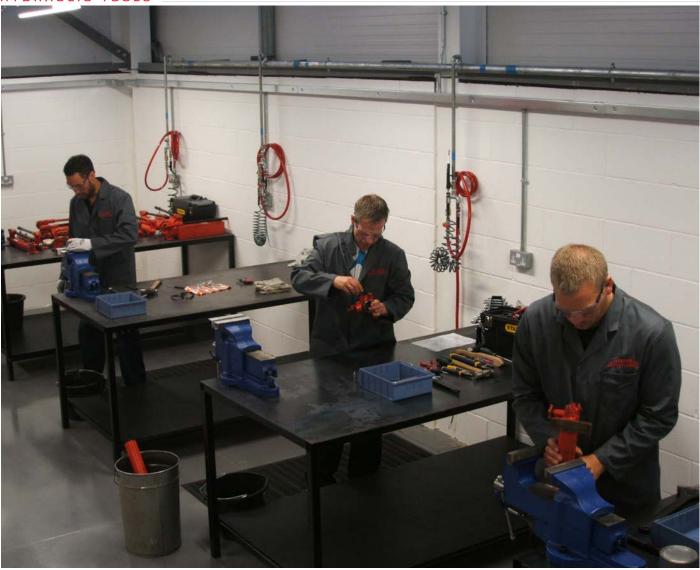
Hi-Force continually monitors ASME and European directives and any changes that are introduced and implemented will under guidance of the ECITB, be incorporated into our training modules and applied as required.

#### **Industry Compliance**

Hi-Force ECITB training modules comply with the following training standards and guidelines:

- ▶ ECITB MJI & TMJI Training & Testing Units (UK & International)
- ▶ Step Change in Safety Mechanical Joint Integrity Route to Competence Guidance
- ▶ BS EN 1591-4-2013: Flanges and their joints Part 4 Qualification of personnel competency in the assembly of bolted connections of critical service pressurised systems
- ▶ ASME PCC -1-2013: Guidelines for pressure boundary bolted flange joint assembly
- ▶ Energy Institute Guidelines for the management of the integrity of bolted flange joints for pressurised systems
- ▶ BS EN 1591-1-2013: Flanges and their joints Design rules for gasketed circular flange connections Part 1 Calculations
- ▶ BS EN 1591-2-2008: Flanges and their joints Design rules for gasketed circular flange connections Part 2 Gasket parameters
- ▶ BS EN ISO 27509: 2012 Petroleum & Natural Gas Industries Compact flange connections with IX seal ring
- ▶ BS EN 1515-2:2001: Flanges and their joints. Bolting. Classification of bolt materials for steel flanges, PN designated





#### **SERVICE & REPAIR TRAINING COURSES**

As a rapidly expanding manufacturer and supplier of high pressure hydraulic tools, Hi-Force recognises the very important role that after sales service and repair plays in achieving future sales growth. Ultimately the entire success of the Hi-Force brand is dependent on not only manufacturing and supplying tools of the highest quality and performance, but also ensuring that users of our products are able to access a high quality after sales service, with readily available spare parts, wherever they are in the world. To achieve these standards, we are placing the continuing establishment of fully equipped Hi-Force Service Centres, manned by fully trained service and repair technicians as a top priority. To ensure this is achieved, Hi-Force has invested in and is proud to offer modular training courses, in the correct service and repair of our complete range of products.

Hi-Force Service and Repair Training Courses are primarily available to our Global Distributor Network and are designed to enable our Distributors to gain the highly prestigious Hi-Force Authorised Service Centre accreditation. To achieve this, our Distributors need to send personnel for training and establish a fully equipped Service Centre facility within their own premises. All Hi-Force offices globally, operate a fully equipped Service Centre facility and in the future certain elements of our Service and Repair Training Courses will be made available within our Regional Office network.

22







Establishing a Hi-Force Authorised Service Centre offers many advantages to our distributors, including an increased revenue stream, through chargeable service and repair work, greater customer loyalty gained from the benefits of offering full after sales support, authorisation to carry out warranty work on behalf of Hi-Force and of course the added opportunity to invest in Tool Rental Services, given that a service centre is vital for supporting this additional activity. To help achieve our goals of establishing a professional, worldwide network of Authorised Service Centres, we offer several financial incentives to our Distributors, to assist them with becoming an Authorised Hi-Force Service Centre.

We are also able to offer Service and Repair Training to end users of our products, that prefer to have their own in-house tool repair facilities. One of the major advantages of the modular designed Service and Repair Training courses, is that we can tailor courses to suit specific individual requirements of our end user customers.

As with all of our Hi-Force training packages, we offer a mixture of theoretical classroom training with full hands on practical training, within the one designated Training School. Our trainers are vastly experienced in all aspects of the courses we provide. Contact your local Hi-Force office for further details on all of our first class training packages.



Hi-Force offers over 2000 standard products and customised solutions to meet your project requirements;



#### **Hydraulic Cylinders**

Page 5 of Product Catalogue

The extensive range of Hi-Force hydraulic cylinders includes a wide choice of options related to capacity, stroke length and single or double acting operation, steel or aluminium construction, hollow piston centre hole and mechanical failsafe lock ring designs. All models are 700 bar maximum working pressure and capacities range from 4.5 tonnes to 520 tonnes, with special design cylinders also available on request.



#### **Hydraulic Pumps**

Page 27 of Product Catalogue

The Hi-Force range of manual and powered hydraulic pumps comprises of 113 standard models, with additional factory fitted options, of electric solenoid valves and 60 Hz motors, available to order. The range comprises of manual, battery, electric, air and petrol engine driven options, all suitable for use at pressures up to 700 bar maximum, excluding the HPX hand pump range, which offers even greater output pressure options, for specialist ultra-high pressure applications. Both the manual and the powered pump options are available in either single or two stage output flow rates and the extensive range and choice of models available.

Also available are the synchronous lifting systems with fixed or variable speed control, which have been designed for precise lifting and lowering of heavy loads using multiple synchronised hydraulic cylinders. The system can control from 4 to 32 lifting points in different operating modes including manual, preload, automatic control, depressurisation, centre of gravity and indicative weighing.



### **System Components**Page 55 of Product Catalogue

The Hi-Force range of system components is designed and manufactured to provide all the essential accessory items required to complete the required high pressure hydraulic system.







#### Jacks

Page 67 of Product Catalogue

The Hi-Force range of hydraulic jacks offers a wide choice of lifting capacities, closed and extended heights, material construction and design. From a basic, low cost range of steel bottle jacks, to self-contained aluminium and remote pump operated, steel toe lift jacks and compact low height jacks for confined space applications, the Hi-Force hydraulic jack range offers the user a wide choice of options to suit every application. All jacks are supplied prefilled with oil ready to use.



#### ToughLift Jacking System

Page 75 of Product Catalogue

The Hi-Force Toughlift Jacking System offers users the easiest and safest method of lifting heavy plant and construction vehicles, in the mining and construction and locomotives in the railway industry, when critical maintenance and breakdown repair work is required. Suitable for lifting even the largest vehicles currently in production around the world, the Hi-Force Toughlift is available in 50, 100, 150 & 200 tonne lifting capacities.



#### **Skates**

Page 167 of Product Catalogue

The Hi-Force range of skates comprises of a choice of six different designs, all manufactured to provide a flexible and dependable solution for heavy load movements. A wide range of accessories like turntables, stabilisers, spacer bars and steering handles is also available.



#### Presses

Page 175 of Product Catalogue

The Hi-Force range of workshop presses offers a choice of models with capacities from 10 to 200 tonnes, supplied with all the necessary hydraulic components, ready for immediate use. A wide variety of hydraulic systems are available from simple manually operated pump to air or electric driven versions.





#### **Torque Tools**

Page 81 of Product Catalogue

The extensive range of Hi-Force torque tools includes manual torque wrenches and multipliers, pneumatic torque wrenches, square drive and hexagon direct drive hydraulic torque wrenches, all capable of providing accurate and correctly controlled bolt torque loads, in a wide variety of industrial applications. A comprehensive range of accessory items including heavy duty sockets, extended reaction arms, hexagon reducer bushes, back up wrenches, hydraulic torque wrench pumps, hoses and hose reels to operate with these controlled bolt torque tools is also available.



#### **Bolt Tensioners**

Page 107 of Product Catalogue

The Hi-Force range of hydraulic stud bolt tensioners, includes both spring assisted and manual piston retraction top side tensioners, sub-sea tensioners, hydraulic tensioner nuts, special design tensioners made to customer specifications, along with a range of manual and air driven hydraulic bolt tensioner pumps, hoses and accessories. The modular design of Hi-Force hydraulic stud bolt tensioners enables the user to maximise the range of bolt sizes covered by selecting interchangeable accessories to cover multiple bolt sizes, from each size of hydraulic bolt tensioner load cell.



#### **Nut Splitters & Spreaders**

Page 125 of Product Catalogue

The Hi-Force range of hydraulic nut splitters provides the perfect answer for removal of worn, damaged or corroded fasteners. Manufactured from high quality steel, the range includes single acting and double acting versions, designed for splitting hexagon nuts from 17 mm to 136 mm AF sizes. The flange spreader range offers mechanical and hydraulic spreader options and provides the ideal solution for opening flanges safely in the marine and oil & gas industries.





#### **Hydrotest Pumps**

Page 135 of Product Catalogue

The Hi-Force range of hydrotest pumps offers a choice of two speed manual operated models, with maximum output pressure up to 1000 bar, through to an extensive range of air driven models offering output pressure up to 2,931 bar. All air driven models can also be factory fitted with an integral chart recorder if required. Both manual and air driven versions can also be factory fitted with special seals, manufactured from viton and ethylene propylene for use with special fluids or chemicals.



#### **Puller Kits**

Page 145 of Product Catalogue

The extensive range of Hi-Force hydraulic pullers include models with pulling capacities from 10 to 220 tonnes, with a wide variety of pulling configurations, including 2 & 3 way pullers, internal pullers, bearing separators, all supplied with the necessary hydraulic components. Additionally within the range, Hi-Force offers hydraulic pin and bush puller and instalment tool kits.



#### **Crimpers & Cutters**

Page 155 of Product Catalogue

The Hi-Force range of hydraulic cable crimping tools, offers a choice of self-contained manually operated tools with inbuilt hydraulic pump, crimper heads for use with a remote manual or powered hydraulic pump and battery driven tools. All models are suitable for correctly crimping a wide range of electrical connections to cables. Hi-Force also offers a range of hydraulic cutters, with a choice of inbuilt or remote pump hydraulic operation.



#### **Speciality Tools**

Page 179 of Product Catalogue

Hi-Force speciality tools includes hydraulic hole punchers and hydraulic pipe benders. All tools operate at 700 bar maximum working pressure and are suitable for operation with standard range Hi-Force pumps and accessories.



# Hi-Force Limited Prospect Way, Daventry, Northants, NN11 8PL, United Kingdom Tel: +44 1327 301 000 | Fax: +44 1327 706 555 daventry@hi-force.com

#### **Hi-Force Regional Offices:**

#### Azerbaijan

Baku

Tel: +994 12 447 4100 Email: baku@hi-force.com

#### Italy

Milan

Tel: +39 0253 031 088 Email: italy@hi-force.com

#### Malaysia

Selangor

Tel: +603 5525 4203

Email: malaysia@hi-force.com

#### **Netherlands**

Numansdorp

Tel: +31 (0)85 9028 111

Email: holland@hi-force.com

#### Kingdom of Saudi Arabia

Dammam

Tel: +966 13 802 1338 Email: saudi@hi-force.com

#### South Africa

Midrand

Tel: +27 11 314 0555

Email: south.africa@hi-force.com

#### **United Arab Emirates**

Abu Dhabi

Tel: +971 2 551 3100

Email: abu.dhabi@hi-force.com

Dubai

Tel: +971 4 815 0600

Email: dubai@hi-force.com

Jebel Ali Industrial Area

Tel: +971 4 802 7400

Email: jebel.ali@hi-force.com

www.hi-force.com