



**HYTORC®**  
Since 1968

GET THE **MOST** OUT OF YOUR BUDGET.  
GET THE **BEST TOOLS** FOR THE JOB.

MADE IN U.S.A.



## FINDING THE RIGHT TOOL FOR THE JOB IS EASY. **START HERE.**

HYTORC is the global leader in bolting tools and services. We are able to offer a full line of superior torque and tension tools that feature the most advanced technology available along with the best return on investment possible. With more and higher quality tools than anyone else in the business, you can be sure you'll find the perfect one for your job — and your budget.

*While imitators abound, the simple fact is: nothing performs, nothing lasts, nothing works like HYTORC.*

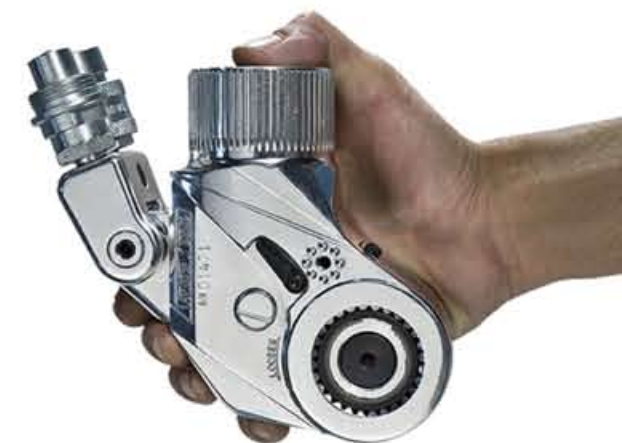


## IF YOU USE IT, CHANCES ARE **WE INVENTED IT.**

For the past 40 years, HYTORC has created virtually every major technological breakthrough in torque and tension tools — featuring more efficient designs, more durable materials, and more value for the dollar. And, we don't plan on stopping any time soon. When you choose a HYTORC tool, you can be confident that it's the best there is. Not just the best tool for your job, but the best choice available.

**HERE ARE JUST A FEW HYTORC INNOVATIONS DEVELOPED TO HELP YOU DO EVERY JOB BETTER, FASTER, SAFER AND SMARTER:**

- First in safety with remote-controlled hands-free tool operation
- First to do away with reaction arms and backup tools to eliminate OSHA recordables
- First to offer the option to set calibrated Torque, bolt stretch or bolt load
- First with an all-around, dual choice reaction system
- First with a bolt load accuracy of  $\pm 5\%$
- First to guarantee a minimum 50% time reduction
- First to guarantee leak-free and failure-free startups



# HYDRAULIC TENSION TOOL: **CRITICAL PATH** TECHNOLOGY

The world's fastest tension tool from the world leader.

When it's speed you need, there is really only one choice. HYTORC's XXI is the fastest and most universal tensioner in the world. In fact, it's 3X faster than the next fastest hydraulic tension tools. In addition to its best-in-class speed, this tool offers an unprecedented bolt load precision of  $\pm 10\%$  or  $\pm 5\%$  with our LoadISC™ Technology. Speed. Precision. Power. That's HYTORC.

## CRITICAL PATH TECHNOLOGY BENEFITS:

- Fastest and most universal tensioner in the world at 3x the speed of the fastest hydraulic tension tools
- Operates at a maximum pressure of 10,000 psi (700 bar) in conjunction with an ASME approved mechanical Load-Washer or a tension nut hands-free even when inverted
- Each tool size handles up to 6 different bolt sizes at an unprecedented bolt load precision of  $\pm 10\%$  or  $\pm 5\%$
- Stretches the stud to the desired bolt load without usual unknown bolt relaxation
- Durability derived from ample use of 300,000 psi tensile strength aircraft material
- Only 4 tools in a criss-cross position are required to assure measurement-free precision bolt load

## Is it the right tool for you?

The XXI is not for everyday applications. It's built for speed and to excel in certain jobs. While it is more expensive than hydraulic tensioners, you may want to consider this: Only 4 tools in a criss-cross position are required to assure measurement-free precision bolt load. This can be done in literally one-third of the time. So the savings add up fast.



XXI



Blazing speed and breakthrough bolt load precision.

## THE HYTORC MONEY-BACK GUARANTEE

Only HYTORC offers a money-back, no questions asked guarantee. If one of our tools does not perform as promised in its first year of service, return it for a full refund.

Visit us at [www.HYTORC.com/TOOLTRADE](http://www.HYTORC.com/TOOLTRADE) today to learn how you can get up to 20% off your next tool.



# HYDRAULIC TORQUE/TENSION TOOLS: **REGULAR & CRITICAL PATH** TECHNOLOGY

Speed. Safety. ROI. Plus, the versatility to handle any job.

Critical Path Technology delivers all the benefits of One-Way Ratchets, plus the ability to convert to a hands-free torque/tension machine. Only HYTORC offers this technology and the convenience, versatility and value that come with it. No one else even comes close.

Cut bolting time by two thirds and optimize joint reliability. Start up leak-free and stay leak-free. Make bolting hands-free safe. This 21st century technology handles every single torque or tension application to your fullest satisfaction. Guaranteed.

**HYDRAULIC TORQUE/TENSION TOOLS BENEFITS:**

- Eliminates the number one reason for hydraulic torque tool failure: internal drive torsion
- Delivers high speed and versatility
- Nuclear precision bolt load with simple ASME approved accessory
- Handles every single torque or tension application to the fullest satisfaction with money-back guarantee
- Durability derived from ample use of 300,000 psi tensile strength aircraft material

**Is it the right tool for you?**

Regular & Critical Path Technology is the best value in the marketplace and HYTORC’s premium offering. While this technology costs more up front, it has many benefits that make it a much stronger value over the long haul. Often, due to the savings afforded by this technology — due to its versatility, leak- and failure-free startups, and elimination of downtime and unscheduled outages — these tools actually pay for themselves during the first use. On pure tensioning applications, you can get these benefits plus the increased speed of the fastest tensioning machine in the market by stepping up the Critical Path Technology XXI tool.



AVANTI



Premium tools with best-in-class versatility. Only from HYTORC.



STEALTH





# HYDRAULIC TORQUE TOOLS: **ONE-WAY** RATCHET TECHNOLOGY

Imitated. But never duplicated.

In every way, HYTORC set the standard in one-way ratchet technology. So much so, that these tools are the most commonly used — and most often “copied” in the industry. But don’t be fooled. Our competitors’ tools may appear similar, but that’s only on the surface. As the inventors and innovators of this technology, only HYTORC delivers the uncompromising quality, reliability and performance your job demands — and at the lowest costs.

## ONE-WAY RATCHET TECHNOLOGY BENEFITS:

- Assures longest active stroke of all hydraulic torque wrenches
- 24-degree nut turn per stroke due to ratchet assurance device
- Faster than Three-Moving Part Technology
- Ideal for high torque or loosening of highly corroded fasteners
- Durability derived from ample use of 300,000 psi tensile strength aircraft alloy
- Costs approximately 20% less than Regular & Critical Path Technology
- Affordable for general plant maintenance and production

## Is it the right tool for you?

This technology is built for heavy use. Priced about 20% below the Regular and Critical Path Technology, One-Way Ratchet Technology is an affordable tool for general plant maintenance and production.

When considering these tools, keep in mind that they require trained operators to avoid finger pinching with the reaction arm. Training is also recommended for simultaneous use of 4 tools to avoid joint failure, unscheduled downtime, and gasket crushing. For a higher level of safety and efficiency, and the ability to use multiple tools hands-free without reaction arms or back up wrenches, you may want to step up to Regular and Critical Path Technology tools.



XLCT



Fast, durable and affordable — a great choice for general applications.



MXT





# THREE-MOVING PART TECHNOLOGY

Simple to use. Easy to fix. Ready for action.

HYTORC not only invented Three-Moving-Part Technology, we've continually improved it. That's why only HYTORC can give you the field-tested quality and advanced design that delivers the safest, most reliable, glitch-free performance. The materials we use today are the same high-tensile strength, low-weight alloy that keeps commercial airliners flying. So you know they'll work — and keep working — on any job.

## THREE-MOVING PART TECHNOLOGY BENEFITS:

- Basic, durable engineering
- Never-stuck technology to avoid tools getting stuck on the job
- Click-on reaction arm
- 360-degree reaction arm indexing to assure safe operation
- Auto-reverse with push-through drive
- Quick exchange square drive to hex drive
- Uni-hose swivel to avoid hose kinking

## Is it the right tool for you?

The beauty of Three-Moving-Part Technology is its simplicity. As a result, these tools never get stuck. You'll appreciate this when you're looking down the barrel of a deadline. And, because they're easy to fix, you get greater productivity and increased ROI. Perhaps best of all, these tools feature all the capabilities of more expensive one-way ratchet tools without the cost.

However, Three-Moving-Part Technology is not the optimum choice for every job. It's relatively slow when torquing above 1,000 ft lbs and when loosening highly corroded fasteners. Also, from a safety point of view, these types of tools are not ideal for vertical applications. In these cases, you may want to step up to a One-Way Ratchet Technology tool.



EDGE



The power to meet every deadline with the tools that never get stuck.



VERSA



GET IT DONE FASTER – AND RIGHT THE FIRST TIME WITH  
**THE AWARD-WINNING LOADISC.™**

The LoaDisc™ makes the Avanti and Stealth the only hands-free hydraulic wrenches in the world. Placed underneath a standard heavy hex nut, the LoaDisc is an economical low profile reaction washer with an inner thread segment. This provides controlled surface friction that enhances bolt load accuracy — from  $\pm 35\%$  to  $\pm 10\%$  — and eliminates pinch points for a safer work environment.



**SPEND \$600 AND SAVE A MILLION.**

**HOW CAN A WASHER SAVE A COMPANY ONE MILLION DOLLARS?** When production time is valuable, every hour saved during an outage or shutdown translates into increased earnings. For an average cost of \$600 for tool rental and consumables, the LoaDisc washer makes installation easier, increases safety, and cuts the time of most bolting jobs in half!

THE **CLAMP™** GIVES YOU THE HIGHEST LEVEL  
**OF BOLTING OPTIMIZATION.**

For critical applications and the ultimate in peace of mind, the CLAMP™ is the professional's choice. This award-winning mechanical tensioner replaces a standard hex nut – ideal in applications where there is little or no side clearance. No other system available today offers the same accuracy and ability to achieve precise bolt load.



**KNOCK OUT A 16 HOUR JOB IN 6**

The Clamp Nut reduces job time and increases safety by eliminating many of the complicated and unsafe procedures required by hydraulic tensioners. It is being used on critical applications by every major oil and gas company in refineries, nuclear power stations, chemical plants, and more. The results above have been tested and proven by independant testing companies.