



# Onsite Tooling Facilities & Support To Major Outages and Shutdowns



Peter Baxter- PEG Corporate Account Manager  
Productivity Enhancement Group



## AGENDA

- Introduction to HYTORC
- Planning for Tool cabins
- Manned Tool Cabins
- Reporting Procedures
- Unmanned Cabins
- Familiarisation Training
- Summary of Benefits
- Innovative Fasteners Explanation and Case Studies.



ESTABLISHED 1968



## Mission Statement

To Optimise Safety, Quality and Schedule  
In Industrial Bolting through Innovative  
Solutions, and an Unyielding Commitment to  
World Class Customer Service.



## The HYTORC Standard



## Hydraulic, Pneumatic and Electric Torque tools



## HYTORC Mobile Vans

Each HYTORC mobile technician is equipped with the training and tools required for repair and service of all HYTORC bolting systems.

Additionally, each vehicle is equipped with state of the art calibration systems for hand torque wrench calibration and hydraulic, pneumatic and electric torque wrench calibration up to 20,000 ft-lbs.



## INITIAL PLANNING/SURVEY

- \*Site Survey/Walk through
- \*Work with Planners
- \*Interrogate work packs
- \*Identify tooling required
- \*Agree on siting of Cabin
- \*Will it be in a Blast zone
- \*Establish if manned or unmanned
- \*How many operatives need up front tool training
- \*Outage/shutdown mechanical window duration
- \*Cost model preferred



## Refinery Shutdowns & Major Projects

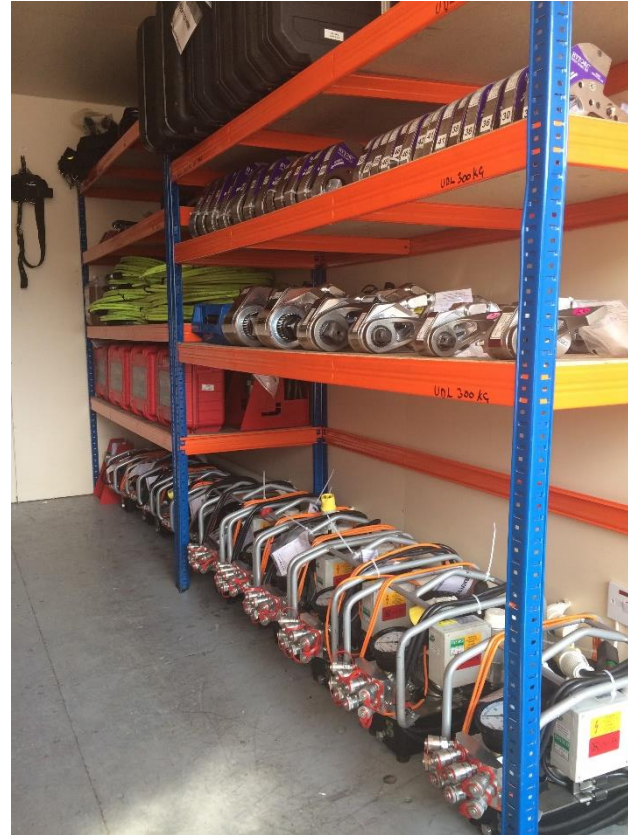


## Power Generation Outages & Major Projects



## CABIN WITH HYTORC TECHNICIAN

- Survey Report Completed
- Identified Tooling Required
- Security ID
- Site Assistance
- Collate usage reports
- Quarantine/unfit tools
- Additional tool training



## TOOLING FAMILIARISATION TRAINING



- Familiarisation Pre-Event
- Refresher During Event if Required
- Highlight main operation of tools
- Expand on Safe Operation
- Highlight the Potential Dangers
- Hands On
- Encourage Questions/Ask if Unsure
- Issue Card ID





# HYTORC Tool Usage & Reporting Documentation

Hytorc Cabin Stock Control



## CABIN STOCK ISSUES

Issue Cabin Tools & Accessories

## AMEND CONTRACT / RETURNS

Amend Existing Contract or Return Tooling

## FUNCTION TESTING

Function Test Tools For Hire Shelf

## SHIFT / CONTRACTOR CHANGE

Amend Issue Details

## STOCK HISTORY

Issues / Receipts and Function Tests

## STOCK ENQUIRIES

Current Issued Stock Enquiry

## HIRE REPORTS

Hire & Tool Status Reports

## COMPANIES / LOCATIONS

Create / Amend Companies & Locations

## WORK AREAS

Create / Amend Work Areas

## CONTRACTOR STAFF RECORDS

Create / Amend Contractor Staff Records

## HIRE ITEMS / CHARGE RATES

Amend Items and Charge Rates

## USER RECORDS / OPTIONS

Edit User Records and Program Options

### Sub Contractor Details

Card Number:

M GIBBONS

Issue Date: 23/05/2017

Expiry Date: **23/05/2019**

### Location Details

Company:

Work Area:

WOC / Job Number:

Station Plant Details:

### Item Details

Serial Number:

### Items Issued

Serial Number	Description	Cert / Pat	Valid Until
076551503	HYSTREAM AIR PUMP	HG9423	02/04/2020
147383	BTM 1000 DOC	C13612 PAT3471	22/05/2020 18/02/2020

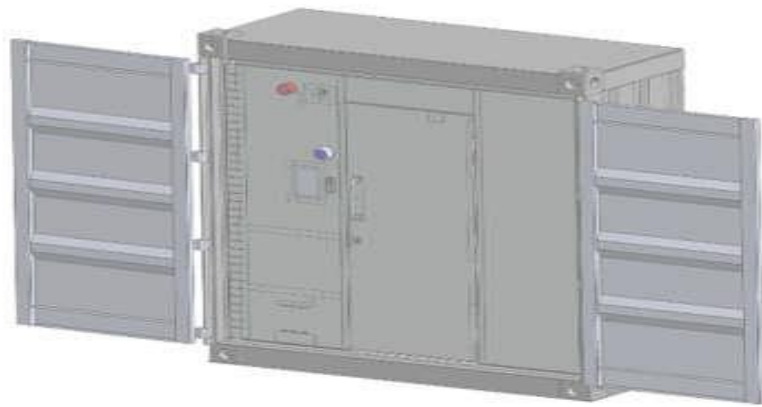


Print Certificates for Tooling



The panel is fabricated from stainless-steel and powder coated for maximum resistance to rust. Access to the container is controlled with unique ID fobs, all assets moving in and out are recorded against the individual.

Can be fitted into a Blast container with protected Doors on The Front



Site Based Blast Cabin Within Refinery



## Tool Site Boxes

Sited local to Job

Designated tooling for Job

Lockable

Portable

Identify missing tools quickly.

Tool serial numbers  
registered to particular tool  
box



## BENEFITS



## Management of Tooling for Major Events

- Tools Fit for Purpose
- Reduce tool & Plant downtime
- Operator safety
- Bespoke tooling
- Reduce costs
- Managed or Unmanned cabins
- Innovative fasteners
- Increased Productivity

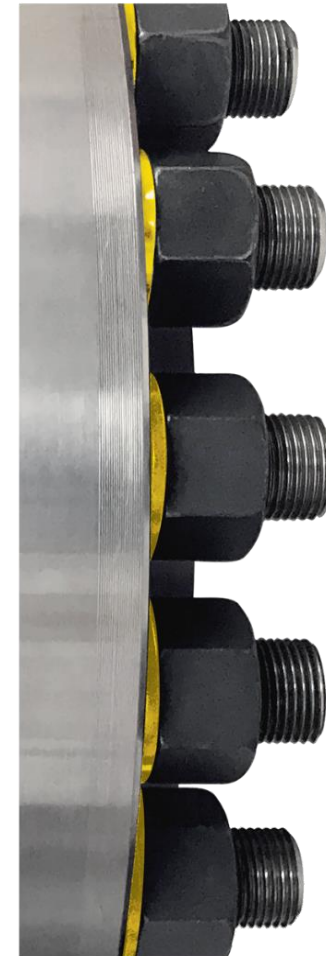
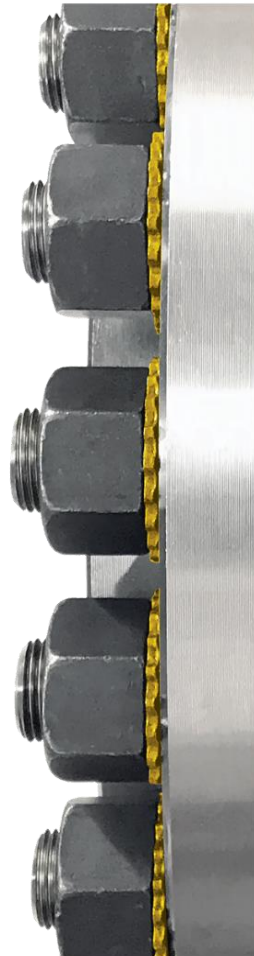


The **HYTORC Washer System** eliminates crush points with the only **reaction arm-free** and **backup wrench-free** bolting solution.

**HYTORC Reaction Washer** features a smooth side to reduce the friction of the turning nut, a knurled side to keep the Washer from rotating, and outer lobes to brace reaction forces, thus eliminating the need for reactions and completely eliminating dangerous pinch points.

**HYTORC Backup Washer** features knurls on both sides to keep the backup-nut from rotating, thus eliminating the need for a backup wrench and completely eliminating dangerous pinch-points on the opposite side of the flange.

To find out more visit: [www.hytorc.com](http://www.hytorc.com)



**Reaction forces are transferred safely from the Tool Driver to the HYTORC Reaction Washer.**



**Reaction Washer becomes a stationary fixture**

**Reaction forces are transferred directly to the lobes on the Reaction Washer**

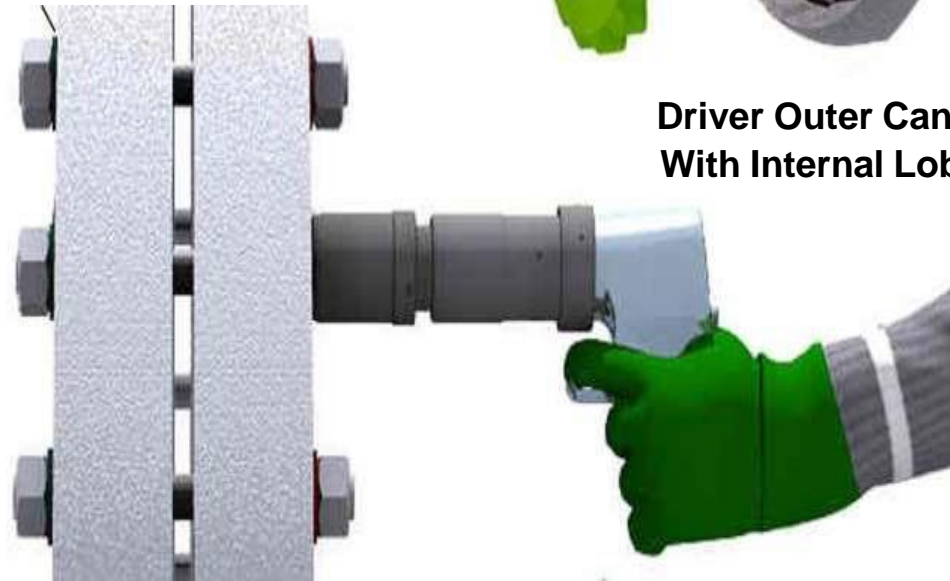
**Backup Washer holds back nut stationary**

**Driver outer canister forms safety shield containing all forces within**

**Reaction Washer External Lobes**

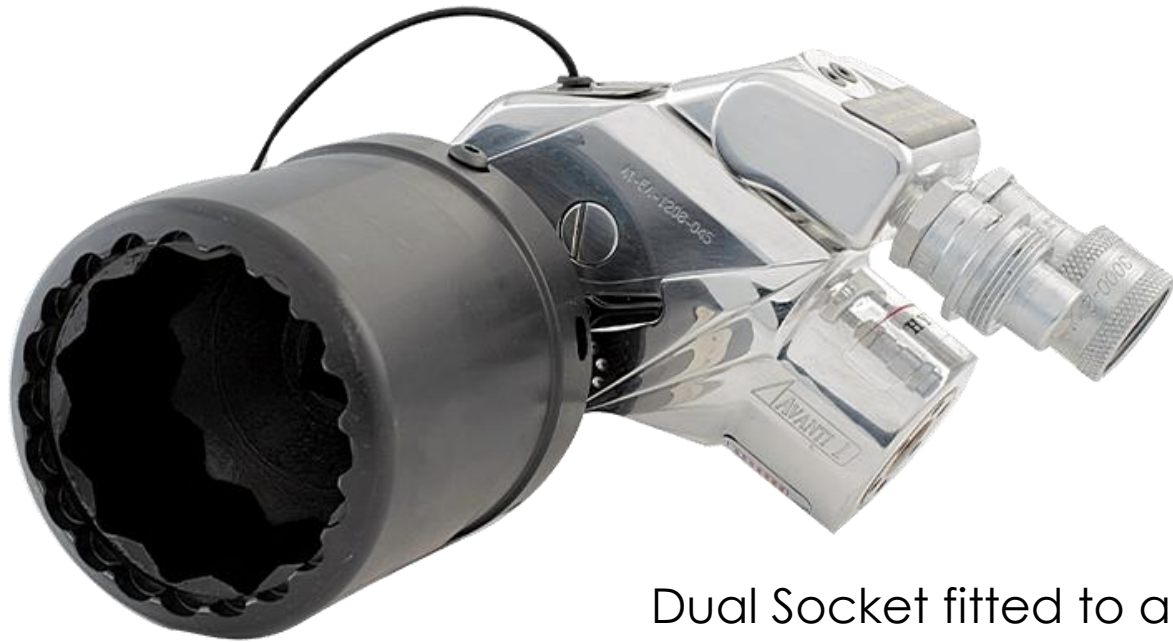


**Driver Outer Canister With Internal Lobes**

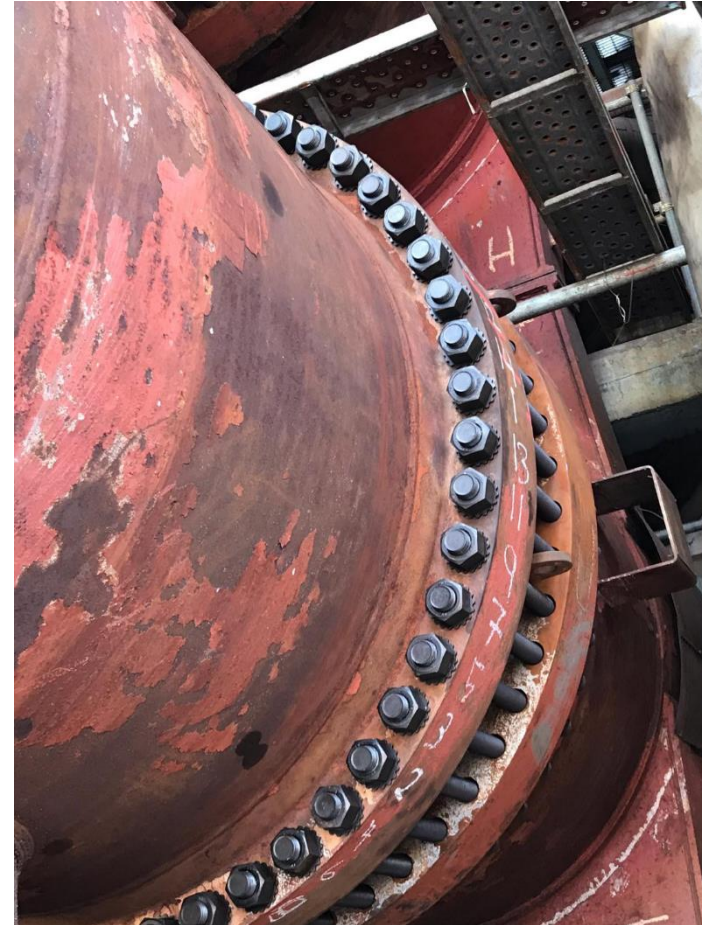


## Case Study

Heat Exchanger Fitted with the HYTORC Washer System



Dual Socket fitted to a Avanti Hydraulic tool



Use of 4 tools for Parallel joint closure



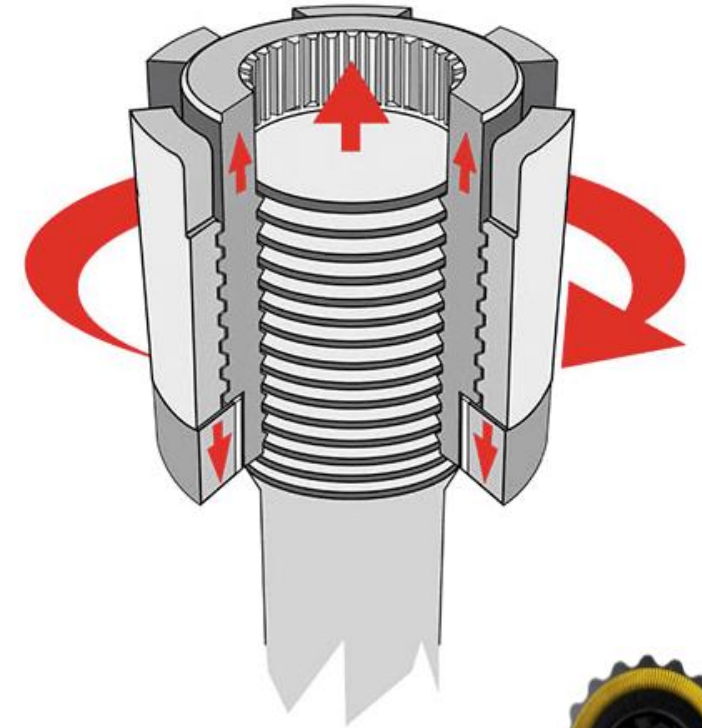
# The HYTORC Nut™ is a three part mechanical tensioning device



## Case Study

HYTORC nuts installed on the bypass/blow down Filter on a Auxiliary Gas Circuit

Work in the RCA historically took a shift but with HYTORC nuts the job completed in under 2 hours.





# Thank you

Sales Questions: [Sales@hytorc.com](mailto:Sales@hytorc.com)

Information : [Info@hytorc.com](mailto:Info@hytorc.com)

E mail: [peter.baxter@hytorc.co.uk](mailto:peter.baxter@hytorc.co.uk)

**HYTORC**

Peter Baxter  
Corporate Account manager  
PEG UK

**Phone:**  
+44(0) 7904 962447

**Email:**  
[peter.baxter@hytorc.co.uk](mailto:peter.baxter@hytorc.co.uk)

**Online:** [hytorc.com](http://hytorc.com)