



RIGLOCK™

BUILT BY FHE



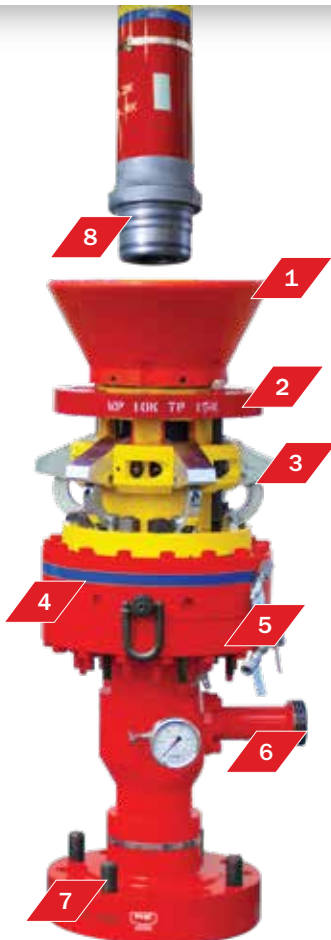
RIGLOCK™

IS LIKE THE

HARDHAT

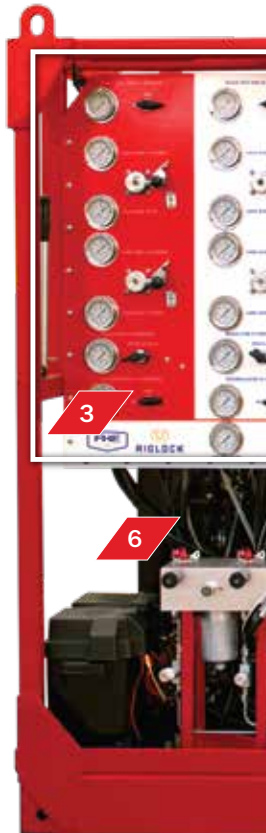
RIGLOCK™ WAS CREATED FOR SAFETY

RigLock™ was initially created for the sole purpose of safety; to remove our men from the danger that surrounds manually removing and replacing the nightcap and lubricator assembly, 40+ feet in the air. A once necessary risk is now completely eliminated with the installation of RigLock™ on the wellhead.



THE RIGLOCK™ FEATURES

- 1 OVERSIZED, HIGHLY VISIBLE ENTRY GUIDE
- 2 LOCKING RING MECHANICALLY SECURES CAMS
- 3 CAM LOCKS SECURES EQUIPMENT CONNECTION
- 4 MANIFOLD TO TEST INTEGRITY OF THE CONNECTION
- 5 ACCESSIBLE HYDRAULIC HOOKUPS
- 6 INTEGRATED 2" 1502 PUMP IN SUB PORT
- 7 FLANGE CONNECTION TO THE WELLHEAD
- 8 NIGHT CAP CONTAINS PRESSURE



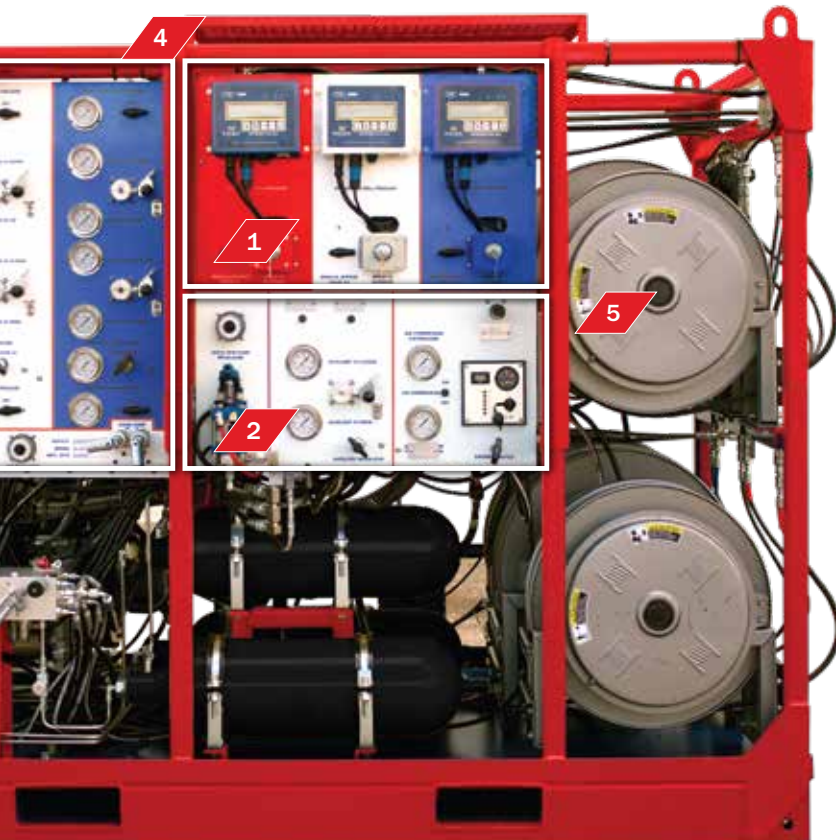


FRACK DOESN'T WAIT ON WIRELINE WIRELINE DOESN'T WAIT ON FRACK™

RECORD BREAKING STAGE COMPLETIONS WITH RIGLOCK™

With the flip of a switch, RigLock™ streamlines wireline operations. Implementing RigLock™ on each wellhead of a multi-well site with the right team of operators can save hours of time, completing a record breaking number of stages each day. Hands-free rigging up and down means frac operations never stop; frac doesn't wait on wireline and wireline doesn't wait on frac™.

WATCH RIGLOCK™ IN ACTION
[VIMEO.COM/RENEGADEWLS](https://vimeo.com/renegadeWLS)



THE RIGLOCK™ CONTROL UNIT FEATURES

- 1 WELL PRESSURE MONITORING SYSTEM
- 2 SYSTEM POWER/PRESSURE CONSOLE
- 3 SAFETY LOCKOUTS
- 4 SOLAR PANEL FOR ON BOARD POWER STORAGE
- 5 RETRACTABLE HOSE REELS
- 6 PERKINS DIESEL-HYDRAULIC POWER UNIT WITH AIR COMPRESSOR

RIGLOCK IMPACT REPORT

COMPANIES WHO HAVE HIRED RENEGADE SERVICES FOR RIGLOCK RENTAL & OPERATIONS HAVE EXPERIENCED THE FOLLOWING 3RD PARTY-BACKED RESULTS:

**+ 30-40
MINUTES
SAVED PER
WELL SWAP²**

Remote, hands-free operation during rigging saves 30 to 45 minutes per well swap² because with RigLock® frac doesn't wait on wireline and wireline doesn't wait on frac.

**+ 3-4
ADDITIONAL
STAGES
PER DAY²**

The time saved per well swap creates a potential to yield an incremental 3 to 4 stages per day². Achieving a greater number of stages per day, provides a substantial margin expansion opportunity.

**+ 4-5 MM
ANNUALIZED
EBITDA¹**

A recent third-party market analysis¹ states "providers using RigLock® could experience up to \$4-\$5 million of annualized EBITDA improvement per hydraulic fracturing spread" due to the efficiency gains that RigLock® implementations offers.

THE BENEFITS OUTWEIGH THE COSTS

Just one incremental stage per day has a greater impact on profitability than a ~\$5,500 per stage pricing increase.¹

THE SERVICE COMPANY YOU HIRE MATTERS

"...the RigLock is not the "Silver Bullet" of efficiency technologies, and the associated benefits of RigLock are moot without the many moving operational/logistical parts keeping pace with the incremental efficiencies of the technology...it is our opinion that RigLock gains are very much a function of how efficient the particular E&P/service provider was before during well swap operations."¹



renegadewls.com
riglockrenegade.com

5 REASONS TO HIRE RENEGADE WIRELINE SERVICES

WHEN IT COMES TO RIGLOCK™

- 1** We have aided in breaking fracking records by increasing the number of stages per day by about 40%.
- 2** RigLock™ has been on location for 800+ days with Renegade Services. We are the experts.
- 3** We helped create RigLock™. Renegade VP of Operations played a pivotal role in every step of the development process for RigLock™.
- 4** Renegade Services has a preferential relationship with the manufacturing company for RigLock™, Frank Henry Equipment (FHE).
- 5** Our RigLock™ technicians work on rotating 12-hour shifts so that the RigLock™ package is manned 24 hours a day on your site.

WHEN IT COMES TO WIRELINE SERVICES

- 1** Renegade's Wireline Services in accompaniment with RigLock™ has completely eliminated NPT on past multi-well projects.
- 2** Renegade is the largest privately owned cased hole wireline company in the US with 13 locations and over 130 trucks.
- 3** In 2018 alone, Renegade was awarded the AESC Gold Award for Safety and NE Oilfield Services Company of the Year.
- 4** Renegade Services is an industry leader focused on propelling forward and staying on top of industry advancements.
- 5** Our extensive service directory, which includes RA tagging and logging, makes Renegade a convenient companion on any project.

RIGLOCK™ PACKAGE OVERVIEW



PRIMARY CAM LOCKS SECURE THE CONNECTION AND ARE LOCKED OUT WITH A SECONDARY RING.



RIGLOCK™ SYSTEMS ARE CONTROLLED WITH A CUSTOM-DESIGNED HYDRAULIC CONTROL UNIT.



SPEED UP YOUR WIRELINE OPERATIONS BY USING MULTIPLE RIGLOCKS™ ON THE SAME WELL PAD.



FHE RIGLOCK™ INTEGRATES A 2" 1502 PUMP IN SUB PORT TO DELIVER HELPFUL ADDITIVES.



ALL THE NECESSARY ACCESSORIES ARE STORED CONVENIENTLY IN THE RIGLOCK™ TOOLBOX.



AN INTEGRATED MANIFOLD ALLOWS YOU TO VERIFY THE INTEGRITY OF THE RELEASED CONNECTION.



RIGLOCK™ SPECIFICATIONS

10,000 psi.

12,500 psi.

MODEL	RL-51810KFLGXRL5-R4	RL-71610KFLGXRL5-R4	RL-51815KFLGXRL5-R4	RL-71615KFLGXRL5-R4
NOMINAL ID	5.12 in.		5.12 in.	
HYDRAULIC OPERATING PRESSURE	1,800-2,200 psi.		1,800-2,200 psi.	
WORKING PRESSURE	10,000 psi.		12,500 psi.	
QUICK TEST PRESSURE	15,000 psi.		18,750 psi.	
API 6A	PSL3		PSL3	
API TEMP. CLASS	P-V		P-V	
SERVICE	H ₂ S		H ₂ S	
RING SEAL	BX-169	BX-156	BX-169	BX-156
UPPER CONNECTION	common hand unions		7 1/4 in	
FLANGE CONNECTION	4.06-, 5.125-, 7.06-in, API		4.06-, 5.125-, 7.06-in, API	
PUMP-IN PORT	2 in. 1502		2 in. 2202	
MAXIMUM OD	23 in.		23 in.	
APPROX. WEIGHT	1725 lbs.		1725 lbs.	
OVERALL LENGTH	varies by connection size		varies by connection size	

15,000 psi. coming summer 2018