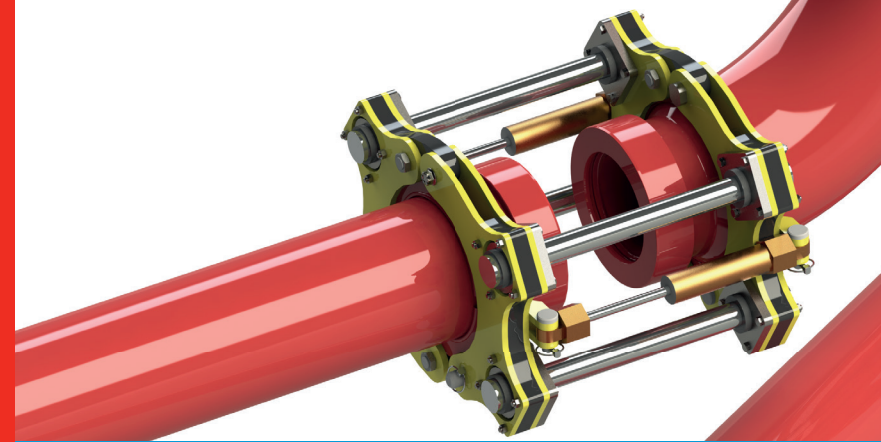


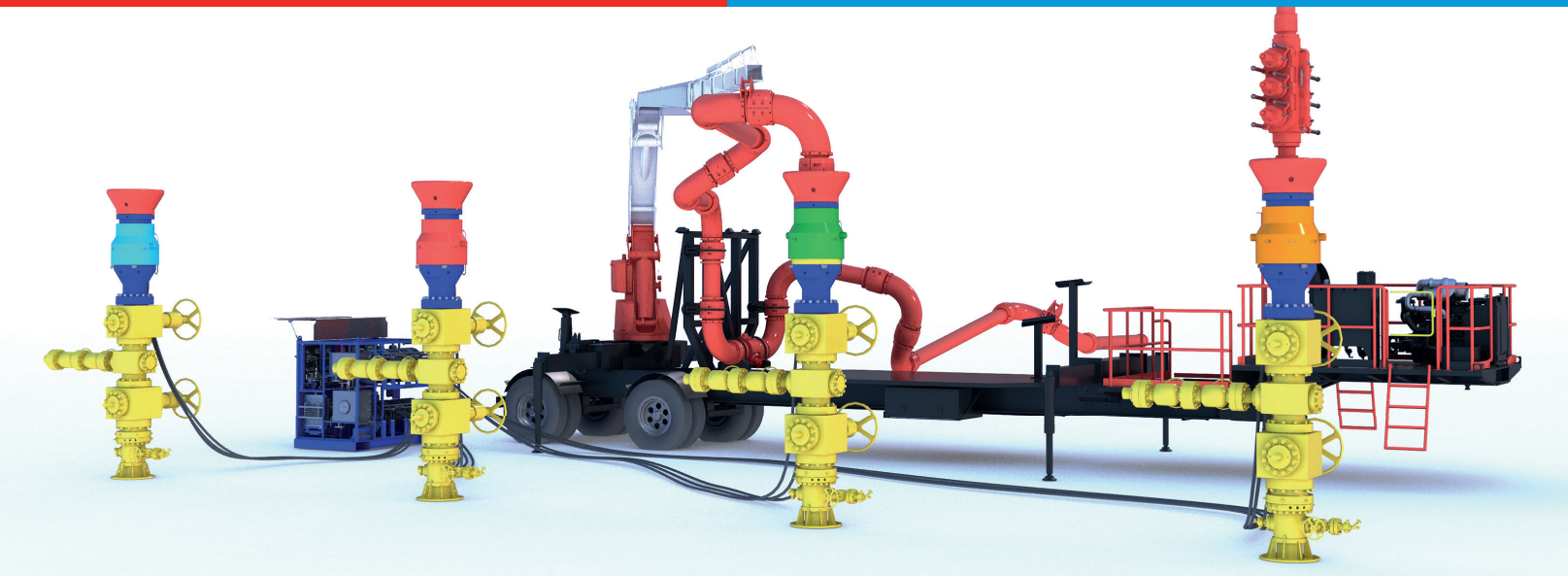
up to
90%
reduced
iron on site



Seal Replacement Tool

Even the toughest equipment can have unexpected issues, but our seal replacement tool, supplied with every FracMaxx, minimizes downtime and allows seals to be changed out on location.

Our tool gives access to connector seals, allowing seal replacement without removing the pipework from service.

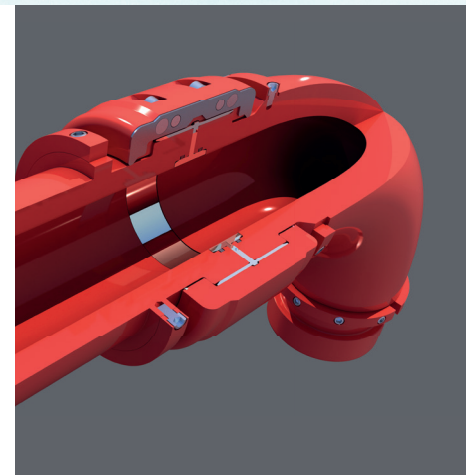


Rotating Swivel Connector

Reducing the costs of operations was a key focus for our engineering teams, with carefully considered design details maximizing reliability to keep you working on site.

Our patent-pending rotating swivel connector features:

- Low-friction hub and clamp connection to minimize wear and keep your FracMaxx moving from well to well
- High-pressure seals feature integral anti-extrusion protection for long seal life
- Weather sealed joints prevent ingress keeping you working in the world's toughest environments
- The connector is designed to rotate without line pressure or tools



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The FracMaxx and Big Bore QuickLatch System

Robust and simple
by design





FracMaxx Articulated Flowline

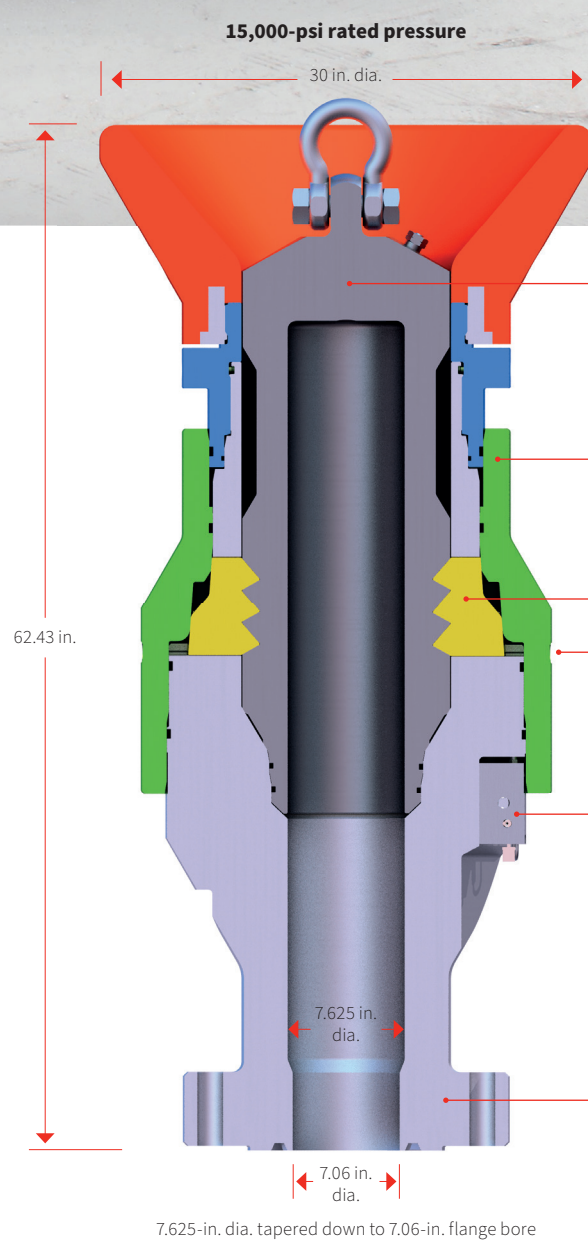
Increase efficiency and reduce your costs on the frac site with our new big bore FracMaxx™ articulated flowline system. Park the FracMaxx trailer on site, hook up to the manifold trailer, and be ready to frac in a fraction of the time needed in a traditional rig up. Reach up to four wellheads with the long-reach big-bore iron and versatile crane, all from a single position.

Simplicity and reliability are critical to your efficient well site operations, so we have introduced the FracMaxx and QuickLatch™ system as a single large-bore high-capacity flowline and wellhead connector. You can now easily connect and disconnect from the wellheads for frac operations, without needing costly hours rigging up zipper manifold flow iron.

As part of the high-pressure frac manifold, our system removes the challenges of traditional flow iron rig up in a simple fit-for-purpose package designed for today's evolving frac industry. Eliminate the need for the high-maintenance zipper manifolds, significantly reduce potential leak points, and decrease the time need to rig up with our FracMaxx and big bore QuickLatch.

- High-Performance Features**
- Large-bore high-capacity flowlines, up to 135 bpm, gives you the capacity for the most demanding frac jobs
 - 4¾ times greater flow area than conventional 4-in. 1502 iron
 - 15,000-psi maximum working pressure to suit the highest pressure demands
 - Improved reliability and minimized maintenance costs due to all integral fittings and no welds or threads
 - Long sweep forged elbows minimize erosion, reducing wear and total cost of ownership
 - Compact knuckle boom crane with remote allows for the best view possible on a busy frac site
 - Customizable options to suit your needs and maximize your efficiency

up to
60%
reduction of
rig-up/rig-down time



Big Bore QuickLatch

Our integrated safety systems ensure the latch is fully engaged and it is safe to frac. Sensors detect full travel of the piston and that the interlocking pins are in place.

Once latching is confirmed a simple traffic light system displays a green light on the control panel and on two indicator towers on the latch.

With a big 7.625-in. bore to complement the FracMaxx system, erosion and damage to your latch are reduced giving you better performance and reliability. The big bore QuickLatch gives more than twice the flow area of conventional smaller latches. This significant increase in flow area means fluid velocities of less than half those seen in smaller latches and reduced erosion damage to the gear.

Entry guide

High-visibility tough red rubber entry guide makes stabbing the wireline and FracMaxx connectors as simple as possible.

Stinger

The long stinger and parallel bore aligns the assembly and protects the seals when stabbing.

Piston

Maximum reliability is achieved with a single moving piston. The large diameter ensures you have the power to engage the FracMaxx when you need it.

Keys

Tough stainless steel keys draw in and lock the stinger holding the pressure loads and keeping the seals engaged. The multi-rib profile gives large load holding surface area for long life and reliability. The 4" taper on the rear key face prevents the latch from being forced opened by well pressure, even if hydraulic control is lost.

Key rescue

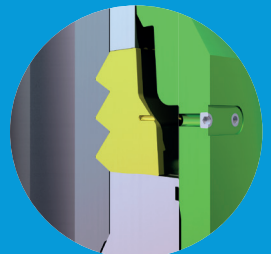
Be prepared for all eventualities with easy access to manually release the keys in the case of unexpected trouble.

Smart manifold

Our integral well pressure detection system prevents the latch being released with pressure in the bore. The visual indicator is connected directly to the hydraulic controls and isolates the "disengage" control when pressure is present. An electrical pressure sensor feeds information to the control system providing further isolation and safety from the controls.

Integrated flange

A tough integrated 6BX156 flanged connection makes for simple and reliable connection to your wellhead. Other connections can be supplied on request.



Key rescue feature

QuickLatch Control Module

Quickly and safely minimize your changeover time on site and keep frac operations running as efficiently as possible with our QuickLatch control system. QuickLatch controls are housed in a lightweight aluminum skid with a diesel-driven hydraulic control system configured to operate up to four latches.

Integrated safety controls provide an easy to understand traffic light system. Red indicates the latch is open, amber indicates a system fault, and green indicates the latch is engaged and it is safe to frac.

The quick test and preload system provides the dual benefits of efficiency and reduced equipment wear. A fast seal test, after connecting the big bore iron or wireline stinger, minimizes delays when changing over. The key preload feature reduces wear in the latch caused by normal pumping vibrations.



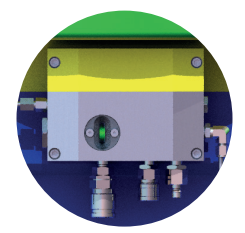
Big Bore QuickLatch with Night Cap Arm

The night cap is easily removed and fitted using the control module with the night cap arm system. Robust and simple hydraulic cylinders retract the night cap and rotate it to a storage pot for safe keeping during operations.

Pressure Sensing

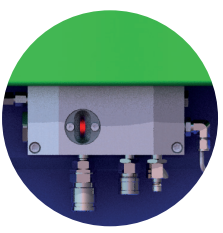
The presence of well pressure within the QuickLatch is shown by an indicator in the smart manifold block. If red is seen through the viewing disk, well pressure is present; green means there is no well pressure. The built-in interlock means the latch cannot be opened with well pressure in the bore.

Unlatched position:
Yellow marker visible

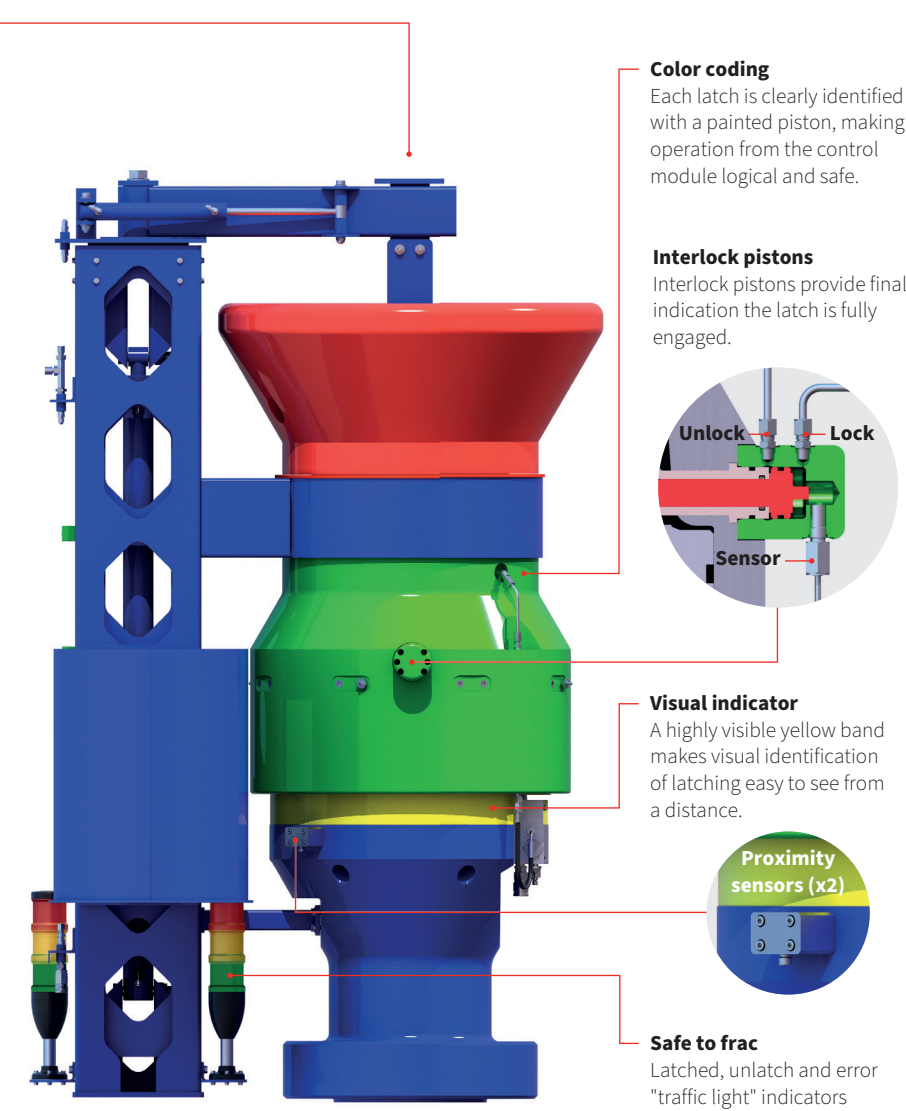


Green indicator:
Well pressure not detected. Latching WILL operate

Latched position:
No marker visible

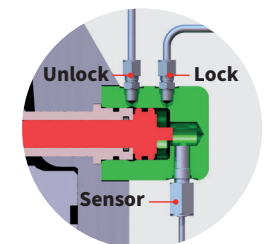


Red indicator:
Well pressure detected. Unlatching will NOT operate

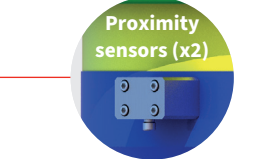


Color coding
Each latch is clearly identified with a painted piston, making operation from the control module logical and safe.

Interlock pistons
Interlock pistons provide final indication the latch is fully engaged.



Visual indicator
A highly visible yellow band makes visual identification of latching easy to see from a distance.



Safe to frac
Latched, unlatch and error "traffic light" indicators showing latch status.