

Integrated Completions

DELIVERING BETTER WELLS,
EASIER AND FASTER

HALLIBURTON

Leadership through Innovation

For nearly a century, Halliburton has developed innovative answers to the industry's most difficult challenges. Our clients trust us to deploy practical solutions that give them a critical edge in a highly competitive market. Our latest innovation combines field-proven technologies from multiple product lines into a single, streamlined offering that improves efficiency, HSE, and reliability.



Working Together Sets Us Apart

Well completion requires many specific services from multiple points of contact. Within Halliburton, three product service lines (PSLs) often work side-by-side at the wellsite: Completion Tools, Production Enhancement, and Wireline and Perforating. Now, these groups are bringing their services together into a single offering.



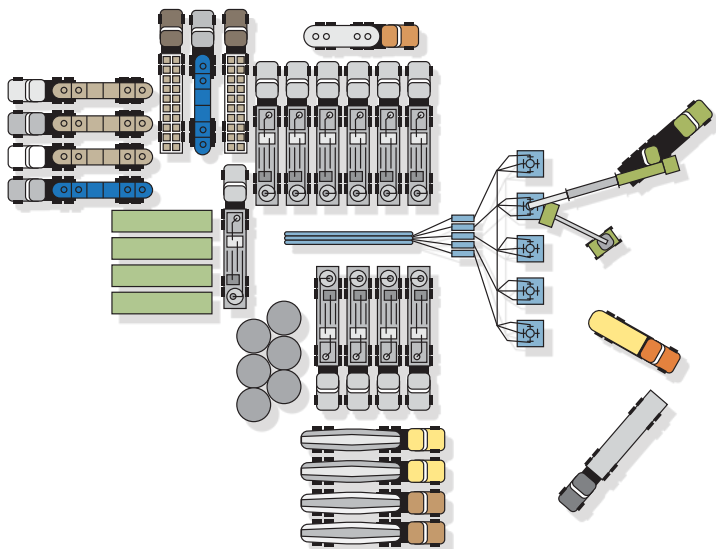
The **Completion Tools** group delivers purposed, reliable downhole equipment for all kinds of challenging plays.



The **Production Enhancement** group focuses on engineered stimulation solutions to maximize recovery and efficiency.

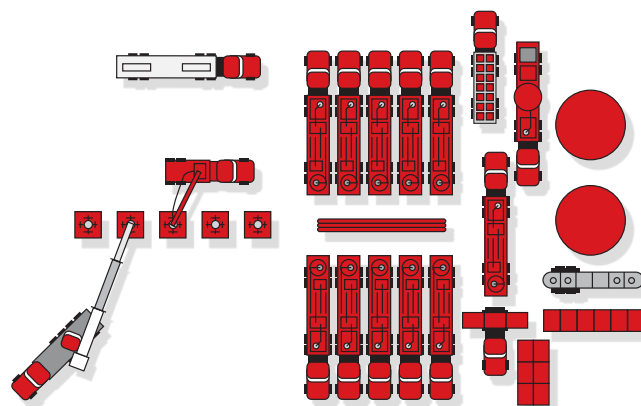


The **Wireline and Perforating** group offers products and services specifically designed to increase safety and efficiency.



LEGACY COMPLETIONS

Most sites require several vendor companies using traditional completions offerings. This creates a huge footprint and introduces inefficiencies.



HALLIBURTON INTEGRATED COMPLETIONS

With Halliburton Integrated Completions, operators can reduce the amount of personnel and equipment on site and benefit from the latest technologies.

Introducing a Leading-Edge Integrated Solution for Well Completions

Often, operators contact, negotiate with, and manage several service providers during a well completion project. And, because those service providers operate independently, they require a lot of redundant personnel and equipment at the wellsite. This large footprint can have a negative impact on efficiency and may unnecessarily increase HSE exposure.

This new Integrated Completions offering from Halliburton changes the equation. Operators can now schedule and manage many aspects of a well completion job through a single point of contact. And, thanks to close collaboration between teams, we can complete a job with a much smaller footprint, making the entire operation safer and more efficient.

INTEGRATION ADDS VALUE FOR CUSTOMERS

Combining services into a single offering is convenient for customers, but that is just the start. The benefits from individual technologies come together to dramatically improve efficiency, HSE, and reliability.



	BOOST EFFICIENCY	IMPROVE HSE	ENHANCE RELIABILITY
SURFACE EQUIPMENT			
Integrated Technical Command Center	●		●
ExpressKinect™ Quick Latch	●	●	
ExpressKinect™ Wellhead Connection Unit	●	●	●
ExpressKinect™ Manifold	●	●	
ExpressSand™ Delivery System	●	●	●
DOWNHOLE EQUIPMENT			
EcoSeal* Greaseless Wireline	●	●	●
Velocity™ Perforating System		●	●
Illusion® Spire Dissolvable Frac Plug	●		●
Obsidian® Prime Frac Plug	●		●
Fas Drill® Ultra Frac Plug	●		●
INTELLIGENT SERVICES			
Prodigi™ Intelligent Fracturing Control	●		●
IntelliScan™ Equipment Monitoring System	●	●	●
IntelliSync™ Equipment Tracking System		●	●

Surface Equipment

Much of the surface equipment at traditional wellsites has remained largely unchanged for decades. Threaded connectors, high-pressure pipes, and pneumatic pumps have worked for years, but have a lot of room for improvement. These innovations from Halliburton are changing the way operators think about wellsite equipment and set a new bar for safety, reliability, and efficiency.

Integrated Technical Command Center [EFFICIENCY | RELIABILITY]

The Integrated Technical Command Center is a unique solution that centralizes Wireline and Frac controls in a single location. This streamlines the operation and enables a greatly reduced footprint. The Integrated Technical Command Center also allows Halliburton to communicate and collaborate with the operator more quickly and effectively during the job, leading to better efficiency and reliability.

ExpressKinect™ Quick Latch [EFFICIENCY | HSE]

The ExpressKinect™ Quick Latch replaces the standard threaded connection between pressure-control equipment and the wellhead. This remotely operated hydraulic connection eliminates the need for personnel near the wellhead, greatly improving safety. It also allows for simultaneous operations, which shortens transition times on multiwell completions and reduces nonproductive time.

ExpressKinect™ WCU [EFFICIENCY | HSE | RELIABILITY]

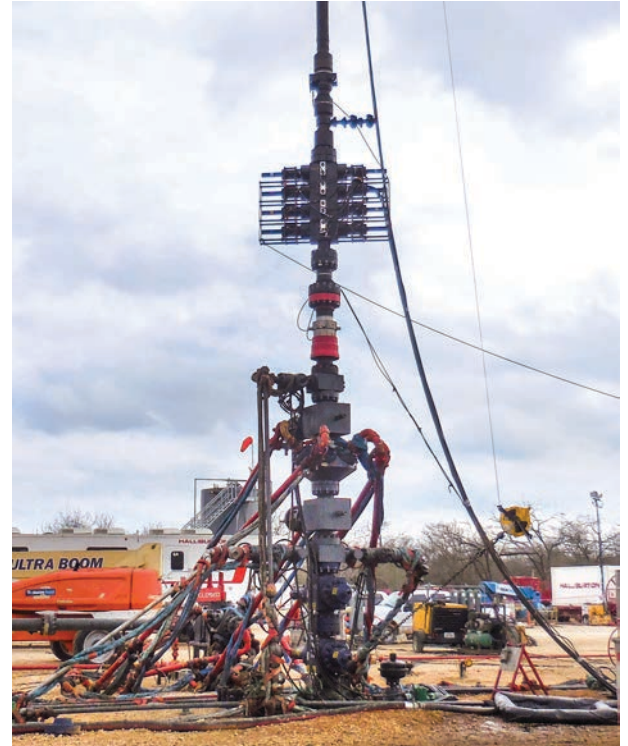
The ExpressKinect™ Wellhead Connection Unit (WCU) provides a single-line rig up to the wellhead without the need for traditional zipper manifolds. This eliminates up to 85% of the high-pressure iron between the manifold trailer and the wellhead. That reduction in equipment leads to better safety, fewer potential points of failure, and faster cycle times.

ExpressKinect™ Manifold [EFFICIENCY | HSE]

Traditional stimulation jobs use at least 12 high-pressure pumps that require four connections each. The ExpressKinect™ manifold incorporates three of the four connections into the system, reducing rig-up time, HSE exposure, and leakage points. This system also reduces the number of lifts required and provides lift assistance, further improving employee safety and rig-up efficiency.

ExpressSand™ Delivery System [EFFICIENCY | HSE | RELIABILITY]

Modern unconventional wells use increasingly large volumes of proppant, creating complexity in storage, logistics, and conveyance. The ExpressSand™ delivery system replaces traditional pneumatic transfer systems with a containerized system that produces less dust and noise, has fewer failure points, and allows for real-time inventory management.



ExpressKinect™ Quick Latch



ExpressKinect™ Manifold

Downhole Equipment

When it comes to completions, downhole equipment represents the workhorses of the industry. Tools, plugs, and cables must be both reliable and efficient, as any delay can mean tens of thousands of dollars off the bottom line. These technologies are pushing the limits of what is possible while still delivering the kind of performance that customers expect from Halliburton.

EcoSeal Greaseless Wireline [EFFICIENCY | HSE | RELIABILITY]

The next-generation EcoSeal greaseless wireline features a polymer jacket that reduces friction and allows for greaseless pressure-control operations. They also eliminate loose, broken, and high wire nonproductive time.

Velocity™ Perforating System [EFFICIENCY | HSE]

The Velocity™ perforating system uses a unique modular design that can be prepared and deployed much faster than traditional guns. The system does not require any field wiring of guns, detonators, or ignitors, which reduces the potential for human error and increases reliability and safety.

Illusion® Spire Dissolvable Frac Plug [EFFICIENCY | RELIABILITY]

Illusion® Spire, the next-generation dissolvable plug from Halliburton, improves efficiency in multiple areas of plug-and-perf operations. The enhanced durability and pumpdown capabilities allow operators to deploy the plugs faster while using less water. The dissolvable plug has a 32% larger internal diameter and is made with 45% less material volume, which minimizes the time needed for wellbore cleanout in preparation for production.

Obsidian® Prime Frac Plug [EFFICIENCY | RELIABILITY]

The Obsidian® Prime frac plug is a field-proven composite plug that is well known for providing maximum zonal isolation. Its exceptional drillability reduces damage caused by long drillouts, significantly reducing completion time, and improving efficiency. Additionally, it can be run with RapidBall™ self-removing balls for further flexibility.

Fas Drill® Ultra Frac Plug [EFFICIENCY | RELIABILITY]

The Fas Drill® Ultra frac plug is a short, compact plug, which greatly improves millout times. This composite plug can withstand pump rates beyond 14 BPM and pressures up to 10,000 psi. The industry-leading design provides enhanced efficiency and reliability while maintaining excellent zonal isolation and performance.



Intelligent Services

Data acquisition and analysis enables more efficient use of existing equipment. These innovations from Halliburton are bringing digital tracking, reporting, and automation to the wellsite in entirely new ways. By gaining new understanding of how equipment is performing in the field, customers can streamline their operation while improving productivity and reliability.

Prodigi™ Intelligent Fracturing Service [EFFICIENCY | HSE | RELIABILITY]

The Prodigi™ AB intelligent fracturing service combines reservoir knowledge from Halliburton and cutting-edge proprietary algorithms to bring automated treatment control to the wellsite. This service can help lower fracture treating pressure, reduce screenout risk, and improve flow distribution – all of which increases efficiency and asset value for customers.

IntelliScan™ Equipment Monitoring System [EFFICIENCY | HSE | RELIABILITY]

The IntelliScan™ equipment monitoring system represents a new way of thinking about equipment maintenance. Rather than relying on predetermined service intervals, this condition-based maintenance system enables electronic monitoring of performance and a data-driven approach to maintenance. It improves reliability and reduces HSE exposure while cutting down on unnecessary repairs.

IntelliSync™ Equipment Tracking System [HSE | RELIABILITY]

High-pressure iron may not be the most high-tech equipment at the wellsite, but it can still benefit from modern innovations. The IntelliSync™ equipment tracking system combines ruggedized hardware and enterprise-level software to track statistics, location, and condition of critical equipment using RFID technology.

Intelliscan™ Equipment Monitoring System Interface											
LEGEND		19693 Q10 XHD					197 Q1 XHD				
<div></div>	Good	Discharge	<div></div>	<div></div>	<div></div>	<div></div>	Discharge	<div></div>	<div></div>	<div></div>	<div></div>
<div></div>	Warning	Suction	<div></div>	<div></div>	<div></div>	<div></div>	Suction	<div></div>	<div></div>	<div></div>	<div></div>
<div></div>	Caution	29054 Q10 XHD					8481 Q10- XHD				
<div></div>	Failure	Discharge	<div></div>	<div></div>	<div></div>	<div></div>	Discharge	<div></div>	<div></div>	<div></div>	<div></div>
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IntelliScan™ Equipment Monitoring System and IntelliSync™ Equipment Tracking System



**EcoSeal is a registered trademark of Camesa.*

The Halliburton Integrated Completions offering brings together a continuously evolving set of technologies. To learn how you can leverage the latest innovations in your operation, contact your Halliburton representative or visit us on the web at **Halliburton.com**

Sales of Halliburton products and services will be in accord solely with the terms and conditions contained in the contract between Halliburton and the customer that is applicable to the sale.

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