



Industry's *first multi-taper*
rotary shouldered connection

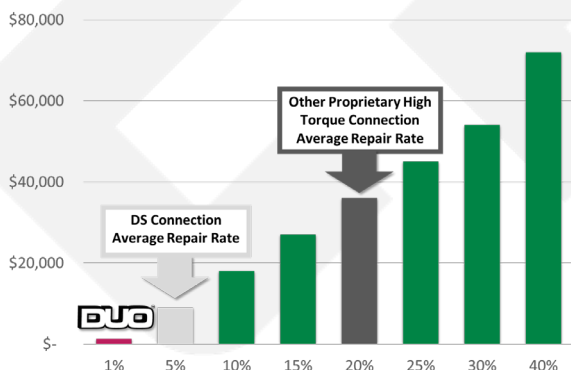
Drive the bit to TD with the lowest cost

2018

First DUO® string deployed in summer, 2018

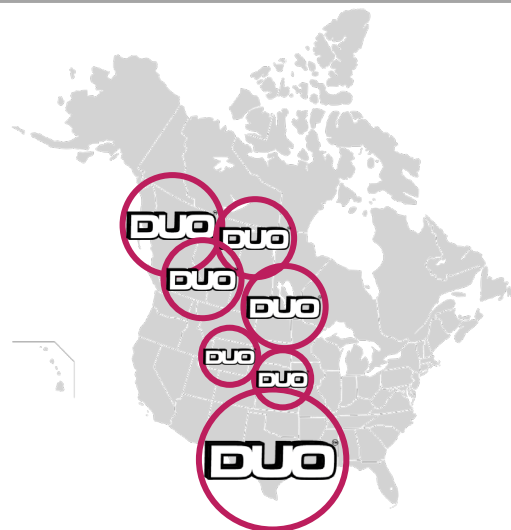
72,000+

More than 72,000 connections in operation 60+ strings of DUO®

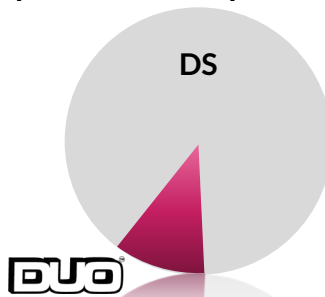


0.71%

Average shop repair rate



Repair Cost Over per String Life



\$168K+

SAVING OVER \$168K+ PER STRING*

DUO® repair cost: 0.4 ¢ /m drilled

*Based on CAOEC 1,500 drilling days

DUO has successfully drilled for:



3912 70 Avenue
Leduc, AB T9E 0W1
+ 1(780)980-3644



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Inspection Summary

Size	Inspected Ends	White & Reface	Red (Fatigue)	Double Green (Shop Thread Repair)
400 DUO®	11,284	11,275	0	9
430 DUO®	7,026	6,919	0	107
450 DUO®	16,110	15,975	0	135
480 DUO®	4,630	4,605	0	25
Total	39,050*	38,774	0	276
Shop repair rate:				0.71%

**The inspection summary covers DUO® strings deployed from summer 2018 through fall 2021.*

A total of 39,050 connections (boxes and pins) were inspected, with only **0.71% (276 ends)** requiring machine shop repair due to thread damage.

As of 2025, more than **60x DUO® strings** are in operation across Canada and the United States - continuing to deliver consistent, reliable performance to this day without a single fatigue crack reported.



430 DUO®
field inspection



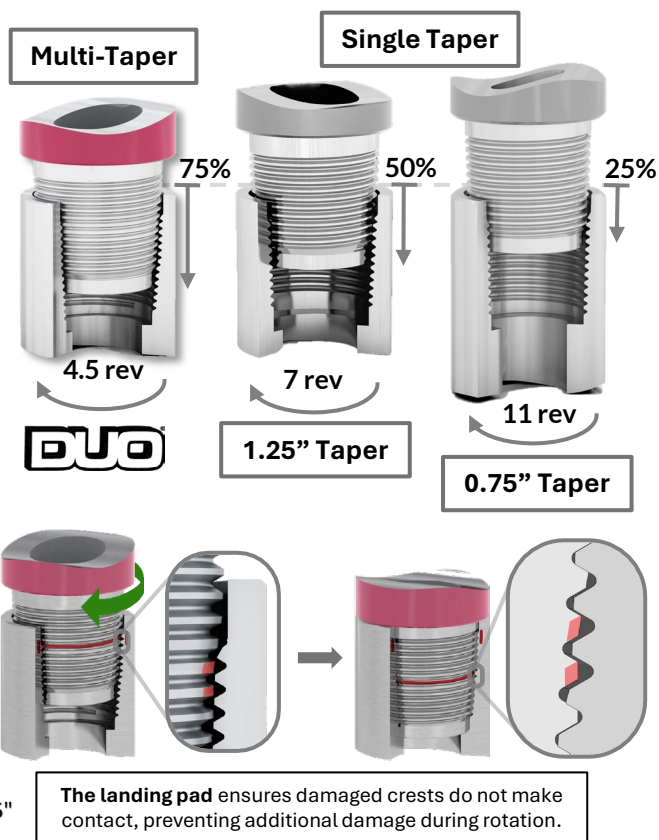
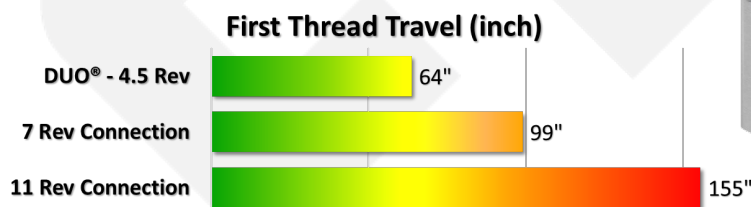


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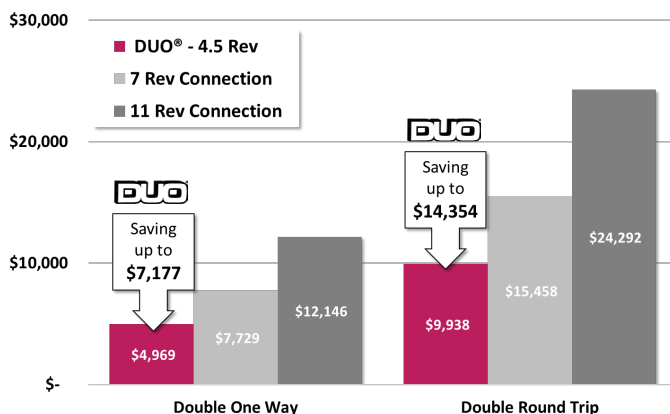
The DUO® multi-taper design enables deeper stab-in, requires **4.5 turns** to spin in and out, significantly **reducing rig time**.

The shortened thread travel distance per make-up/break-out cycle **minimizes the risk of thread damage**, while the unique self-centered landing pad further **enhances operational tolerance**.

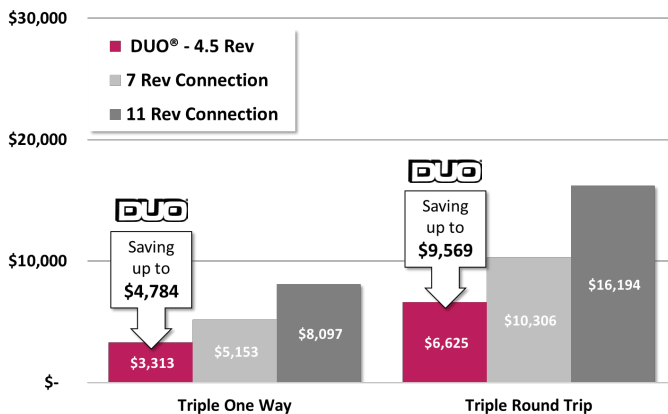


Field-proven, **DUO®** retains **superior frictional preload** with **exceptional fatigue resistance**, consistently delivering **reduced non-productive time (NPT)** and **minimal repair rates** (<1% cumulative).

Double Rig, Spin In & Out Cost



Triple Rig, Spin In & Out Cost



*based on \$100k leasing cost/per day, 20,000ft string, range 2 drill pipe, makeup/breakout speed at 25RPM

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Performance

- **High torque performance**
- Wide range of sizes
- Time-proven thread form, design and field-verified for **anti-galling and fatigue-resistance**

Cost of ownership

- Field verified **minimal repair** rate (<1% cumulative)
- Field dress/reface available for minor damage
- Existing obsolete inventory conversion to DUO®

Ease of use

- Deep stabbing, **4.5x revolution** to makeup/breakout
- **Landing pad** design, operating forgiveness
- **Retains frictional preload**, endure downhole condition with consistent breakout value

Service/network

- Convenient licensee network
- Non-proprietary thread form, globally stocked insert
- Tubular/accessories management
- Technical/sales/marketing support

Connection	OD	ID	Rec. MUT* (ft-lbs)	Max MUT* (ft-lbs)
390 DUO®	4.875"	2.688"	22,000	23,800
	124 mm	68 mm		
400 DUO®	5.250"	2.688"	30,300	32,800
	133 mm	68 mm		
430 DUO®	5.250"	3.000"	27,000	29,300
	133 mm	76 mm		
433 DUO®	5.250"	3.125"	25,100	27,200
	133 mm	79 mm		
	5.250"	3.250"		
450 DUO®	133 mm	83 mm	21,800	23,600
	5.375"	3.000"		
	137 mm	76 mm		
	5.375"	3.250"		
	137 mm	83 mm		
480 DUO®	5.500"	3.000"	33,800	36,600
	140 mm	76 mm		
	5.625"	2.875"		
	143 mm	73 mm		
530 DUO®	5.625"	3.750"	26,400	28,600
	143 mm	95 mm		
	5.750"	3.500"		
550 DUO®	146 mm	89 mm	34,000	36,800
	6.500"	3.750"		
	165 mm	95 mm		
580 DUO®	6.625"	3.750"	50,500	54,700
	168 mm	95 mm		
	6.625"	4.000"		
550 DUO®	168 mm	102 mm	55,200	59,800
	6.625"	4.000"		
580 DUO®	7.000"	4.250"	50,200	54,400
	178 mm	108 mm		
580 DUO®	7.000"	4.250"	62,000	67,200

*Data shown are based on 135ksi yield strength tool joint material.
Contact us for configurations not listed.

