Grant Prideco Express (VX) Connection

Higher torque, improved hydraulics, and lower total cost of ownership

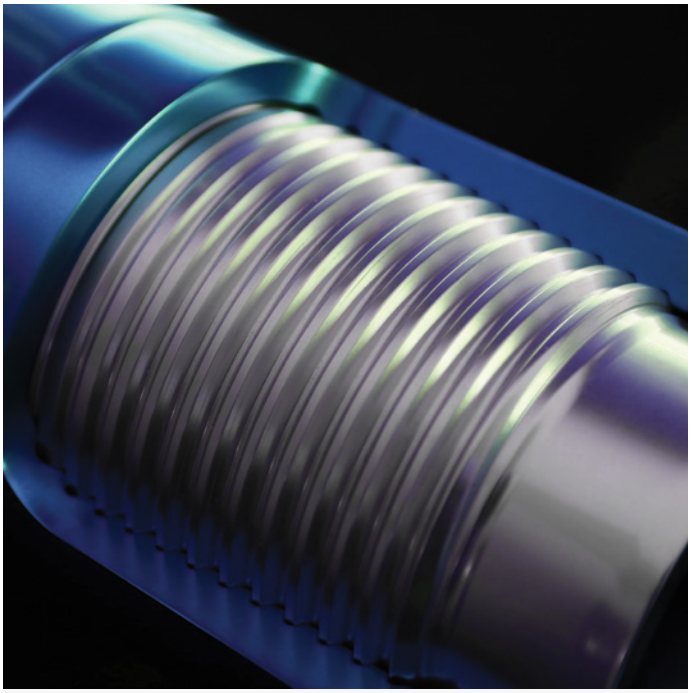
Extended reach, horizontal drilling, and HPHT drilling conditions expose drill pipe to levels of stress that largely exceed the capacity of standard API connections. To improve drilling efficiency, brought by optimized hydraulics, to reduce risk and total cost of ownership, it is crucial to select the proper drill pipe connection.

Our VX™ double-shouldered connection is designed to withstand today's challenging drilling operations by providing higher torque capacity for drilling extended-reach wells. VX connections also contribute to simplifying operations with their proprietary thread profile that reduces damages, thus reducing the amount of connection repairs.

Superior Performance

While the primary torque shoulder provides a seal and an initial preload during makeup to full recommended torque, the secondary torque shoulder provides the targeted higher torque capacity. The thread design maximizes the contact area at stab-in, to better support the weight of the stand before the connection is spun, and is optimized to prevent wedging of thread crests. Finally, the elliptical root geometry minimizes stress concentration to promote improved fatigue resistance.

Pipe OD (in)	Nominal Weight (lb/ft)	Grade	Connection	Tool Joint OD (in)	Tool Joint ID (in)	Recommended MUT (ft-lb)
3.5	13.3	S135	VX 38	4.75	2.563	20,500
4	14	S135	VX 39	5	2.688	25,000
4.5	16.6	S135	VX 43	5.375	3	29,700
4.5	16.6	S135	VX 46	6.25	3.5	42,000
5	19.5	S135	VX 50	6.5	3.75	51,200
5.5	21.9	S135	VX 54	6.75	4	57,500
5.5	21.9	S135	VX 57	7	4.25	60,700
5.875	23.4	S135	VX 57	7	4.25	60,700
6.625	27.7	S135	VX 65	8.25	5.25	85,600



Features

A proprietary thread form that reduces the possibility of damage to the connection in service and gives it enhanced fatigue resistance

- A connection geometry that allows for deep stab-in and reduces the number of turns in spinning
- High strength material to promote higher performance and allow streamlining

Benefits

With a deep stab, more threads engage quickly, providing quick and sound makeup of the connections, saving costly rig time.

- **Higher torque**
  Torque capacity averages 150–200% compared to API connections
- **Improved hydraulics**
  Streamline profile provides improved hydraulics and annular clearance
- **Fast makeup**
  6–7 turns from stab to full makeup
- **User friendly**
  Eliminates the need for stabbing/de-stabbing guides
- **Rugged**
  Thread profile reduces wedging and thread damage, reducing recut rate