

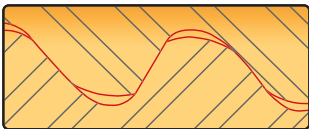
VAM EXPRESS

Designed to drill farther, faster

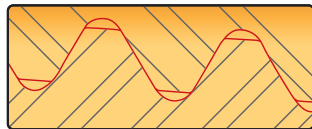
Developed using the latest VAM connection technology, the patented **VAM Express™** connection incorporates a proprietary thread profile and high-performance double shoulder design making the most rugged high-torque connection available today. The primary torque shoulder provides initial seal and pre-load during make-up to full recommended torque and the secondary torque shoulder provides high torque capability. Trip time is money. With the easy stabbing and quick make-up of the **VAM Express** high performance connections, drilling contractors can save valuable rig time, resulting in significant cost saving on each well.

The **VAM Express** thread form features a large, rounded stab crest and a laid down stab flank which allows easy stabbing of the connection. A back beveled crest reduces the chance of wedging the thread and increases the freedom of movement, allowing easy connection make-up. The elliptical root increases resistance to rotational-induced bending fatigue.

Thread performance



VAM Express™ thread form



API thread form

The VAM Express connection design provides:

Quick rig make-up

6-7 turns from stab-in to full make-up similar to API connections with trip-time savings up to 16% better than other high-performance connections.

High torque

Torque capacity averages 1 1/2 to 2 times that of API connections.

User friendly

Reduces stabbing damage and the need for stabbing or de-stabbing guides because of thread form design.

Durability

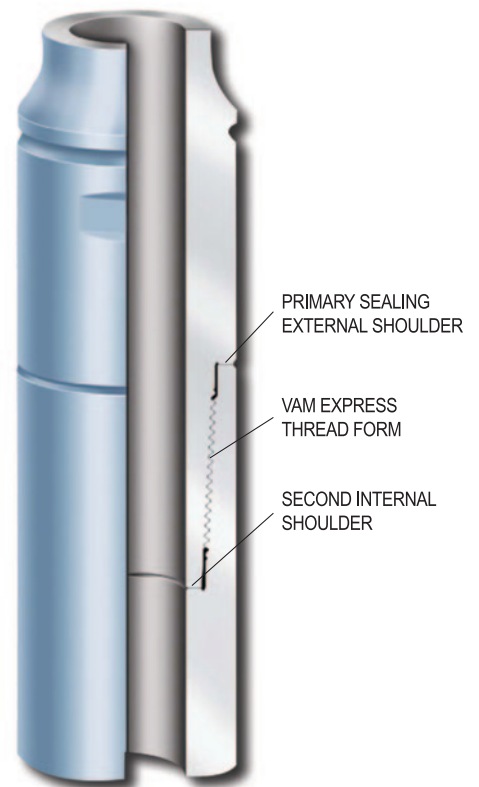
Reduces wedging risk, resulting in less thread damage and a low re-cut rate.

Sour Service

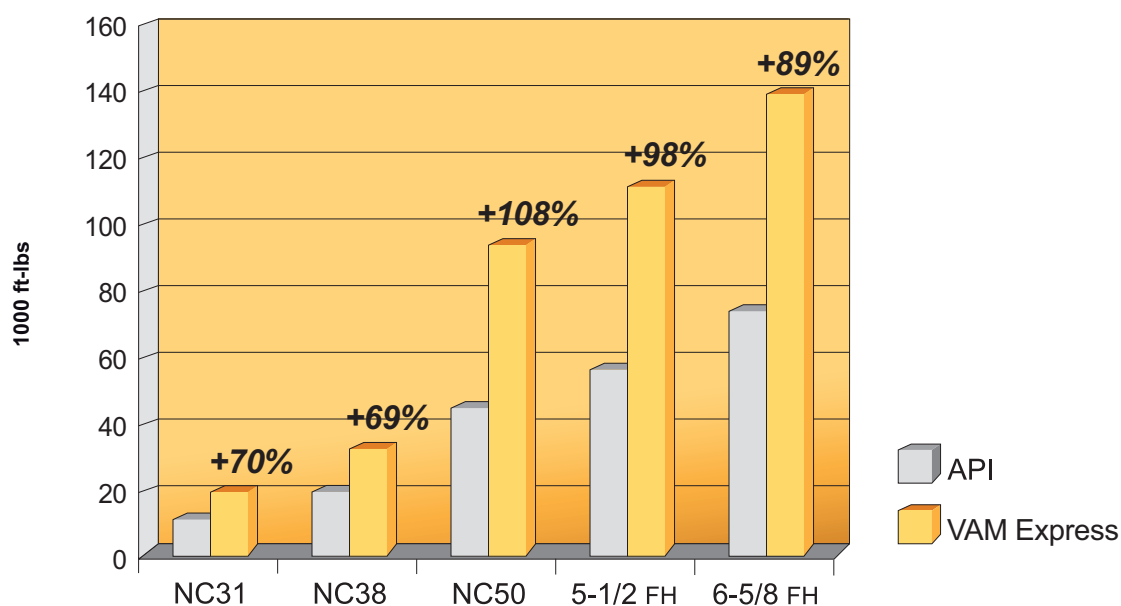
A lower grade tool joint (105 ksi or even 95 ksi) exhibits the same level of torque as an API connection in 120 ksi, enabling optimum drilling parameters in sour environments.

Strength

Allows change of OD/ID for improved hydraulic performance.



Torque Benefit - VAM Express™ vs API



Note: Data based on API and VAM Express connections. OD and ID were selected to be the same for comparative purpose.

Typical Tool Joint Data and Comparison

Pipe Size (in)	Connection		Tool Joint		Make-up Torque (ft-lbs)
	Type	Size	OD (in)	ID (in)	
2-7/8	API	NC31	4	2-1/8	6 890
	VAM Express	VX-31	4	2-1/8	11 700
3-1/2	API	NC38	4-3/4	2-9/16	11 500
	VAM Express	VX-38	4-3/4	2-9/16	19 500
		VX-39	4-7/8	2-13/16	20 200
4	API	NC40	5-1/4	2-9/16	16 600
	VAM Express	VX-39	4-7/8	2-9/16	22 300
		VX-40	5-1/4	2-13/16	25 600
4-1/2	API	NC46	6-1/4	3-1/4	19 900
	VAM Express	VX-46	6-1/4	3-1/4	47 800
5	API	NC50	6-5/8	3-1/2	26 700
	VAM Express	VX-50	6-5/8	3-1/2	59 700
5-1/2	API	5-1/2 FH	7-1/8	4	33 400
	VAM Express	VX-54	6-3/4	4	57 500
		VX-57	7-1/8	4	70 000
5-7/8	API	NA	NA	NA	NA
	VAM Express	VX-57	7	4-1/4	59 000
6-5/8	API	6-5/8 FH	8	5	43 900
	VAM Express	VX-65	8	5	86 400