

High  
performance



**VAM® 21 / VAM® 21 HT**

- VAM® TOP
- VAM® TOP HC
- VAM® TOP HT
- VAM® HP
- VAM® HW ST
- VAM® SLIJ-II
- VAM® SG
- VAM® FJL
- VAM® HTF
- VAM® HTT
- VAM® BOLT
- DINO VAM®
- BIG OMEGA™
- DWC™
- VAM® SW
- VAM® MUST
- VAM® TOP FE
- VAM® TTR

**VAM® 21**

Connect with confidence

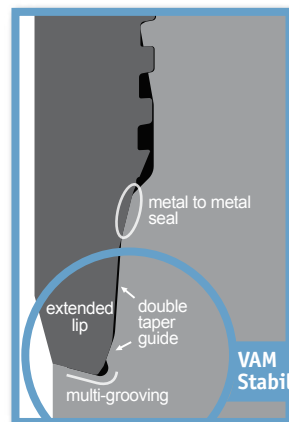
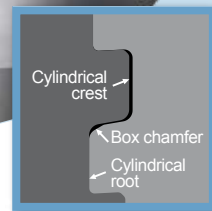
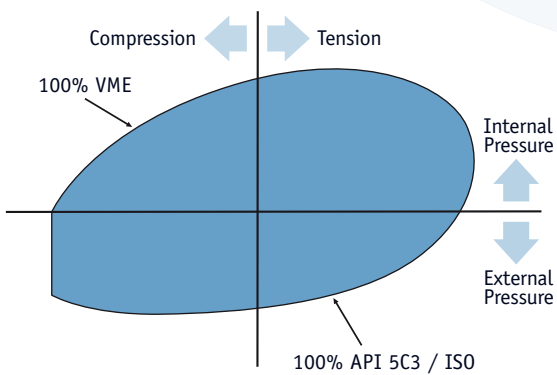
# Design Features

## VAM<sup>®</sup> 21

## VAM<sup>®</sup> 21 HT



VAM<sup>®</sup> 21 is ISO 13679 CAL-IV  
qualified within the full pipe envelope



AVAILABLE WITH  
CLEANWELL OPTION

**VAM® 21 is the latest generation of T&C premium connection introducing an innovative and revolutionary design. Confidence thanks to ISO 13679 CAL-IV compliance within the full pipe body envelope extends the opportunities for your well designs.**

## Benefits

- SIMPLE, RELIABLE AND EASY RUNNING
- SEAL PROTECTED FROM ROUGH HANDLING
- SUITABLE FOR AUTOMATED RIG HANDLING SYSTEMS
- CLEAR AND REPEATABLE MAKE-UP CHARTS
- PERFORMANCES PRESERVED WHEN INCREASING TORQUE (MTS VALUE)
- REDUCED DRILLING WEAR SUSCEPTIBILITY



## The best VAM® T&C premium connection

VAM® 21 is the highest performing and most reliable VAM® connection to date with excellent gas tight sealing under combined loads, extreme compression resistance (100%) and innovative VAM® Effect with the VAM® Stabilizer™. Seal and shoulder functions are separated so that torque and compression have no affect on the sealing performance.

## Applications

Suitable for any kind of application, even the most critical:

- PRODUCTION CASING
- TUBING
- LINER
- TIE-BACK
- EXTREME HPHT WELL DESIGNS

## Performances

- **FIRST CONNECTION VALIDATED TO ISO 13679 FDIS-2011 CAL-IV**, the most stringent connection qualification procedure to date
- **EXTREME COMPRESSION RESISTANCE** (100% of Pipe Body Yield Strength)
- **BENDING VALIDATED UP TO 42°/100FT**
- **SEALABILITY VALIDATED UP TO 240°C (464°F)**

## VAM® 21 HT

Provides even more torque for dedicated applications: Rotating liner, Drilling with Casing, ERD, Multilateral wells, horizontal sections.

**VAM® 21** and **VAM® 21 HT** are interchangeable.

SCAN THIS QR CODE WITH YOUR SMARTPHONE  
TO KNOW MORE ABOUT **VAM® 21**





Product Line



and



21 HT SEALABILITY (MTS) (lb)		TENSILE YIELD STRENGTH & COMPRESSION RESISTANCE (x1000 lb)				MINIMUM INTERNAL YIELD PRESSURE (API 5C3 MIYP) (psi)				EXTERNAL PRESSURE RESISTANCE (API 5C3) (psi)				NOM. WEIGHT	SIZE (OD)
110 ksi	125 ksi	80 ksi	95 ksi	110 ksi	125 ksi	80 ksi	95 ksi	110 ksi	125 ksi	80 ksi	95 ksi	110 ksi	125 ksi	lb/ft	in. mm
16 550	18 700	422	501	580	659	10 140	12 040	13 940	15 840	10 500	12 020	13 470	14 820	18.0	5 127.00
18 950	21 450	501	595	689	783	12 240	14 530	16 820	19 120	12 760	15 150	17 550	19 940	21.4	
21 750	24 600	543	645	747	849	13 380	15 890	18 400	20 910	13 830	16 430	19 020	21 620	23.2	
14 400	16 250	397	471	546	620	7 740	9 190	10 640	12 090	6 290	6 940	7 480	7 890	17.0	5 1/2 139.70
19 350	21 900	466	554	641	729	9 190	10 910	12 640	14 360	8 830	10 020	11 110	12 090	20.0	
24 200	27 400	530	630	729	829	10 560	12 540	14 530	16 510	11 160	12 930	14 540	16 060	23.0	
26 000	29 450	601	714	826	939	12 120	14 390	16 660	18 930	12 650	15 020	17 390	19 760	26.0	6 5/8 168.28
27 900	31 650	628	746	864	982	12 730	15 110	17 500	19 890	13 220	15 700	18 180	20 660	26.8	
21 950	24 900	522	620	718	816	6 970	8 280	9 590	10 900	4 950	5 320	5 570	5 840	23.2	
24 750	28 050	555	659	763	867	7 440	8 830	10 230	11 620	5 760	6 310	6 730	7 020	24.0	7 177.80
33 200	37 700	651	773	895	1 017	8 810	10 460	12 120	13 770	8 170	9 220	10 160	11 000	28.0	
40 800	46 250	734	872	1 010	1 147	10 040	11 920	13 800	15 680	10 320	11 830	13 230	14 540	32.0	
45 750	51 950	856	1 017	1 178	1 338	11 880	14 100	16 330	18 560	12 420	14 750	17 080	19 410	36.7	7 5/8 193.68
21 400	24 300	532	632	732	832	6 340	7 530	8 720	9 910	3 830	4 150	4 430	4 650	23.0	
27 750	31 500	604	717	830	944	7 240	8 600	9 960	11 310	5 410	5 890	6 230	6 450	26.0	
34 500	39 150	676	803	929	1 056	8 160	9 690	11 220	12 750	7 030	7 840	8 530	9 110	29.0	7 177.80
41 100	46 600	745	885	1 025	1 165	9 060	10 760	12 460	14 160	8 610	9 740	10 780	11 710	32.0	
47 500	53 900	814	966	1 119	1 272	9 960	11 830	13 700	15 560	10 190	11 650	13 030	14 320	35.0	
46 800	53 100	877	1 041	1 206	1 370	10 800	12 830	14 850	16 880	11 390	13 430	15 130	16 740	38.0	7 5/8 193.68
53 400	60 650	950	1 129	1 307	1 485	11 800	14 010	16 230	18 440	12 350	14 660	16 980	19 300	41.0	
57 900	65 750	1 001	1 189	1 377	1 565	12 500	14 840	17 190	19 530	13 010	15 450	17 890	20 330	42.7	
34 050	38 650	683	811	940	1 068	6 890	8 180	9 470	10 760	4 790	5 130	5 350	5 670	29.7	7 5/8 193.68
43 800	49 700	778	923	1 069	1 215	7 900	9 380	10 860	12 340	6 560	7 270	7 870	8 340	33.7	
50 150	56 850	837	994	1 151	1 307	8 540	10 140	11 740	13 340	7 690	8 640	9 480	10 200	35.8	
56 300	63 800	895	1 063	1 231	1 399	9 180	10 900	12 620	14 340	8 820	10 000	11 080	12 060	39.0	9 5/8 244.48
53 000	60 200	916	1 088	1 260	1 432	5 750	6 820	7 900	8 980	3 080	3 330	3 470	3 530	40.0	
61 500	69 900	1 005	1 193	1 381	1 570	6 330	7 510	8 700	9 890	3 810	4 130	4 410	4 620	43.5	
71 700	81 400	1 086	1 289	1 493	1 697	6 870	8 150	9 440	10 730	4 760	5 090	5 300	5 630	47.0	9 7/8 250.83
76 300	86 500	1 244	1 477	1 710	1 943	7 930	9 410	10 900	12 390	6 620	7 340	7 950	8 440	53.5	
88 900	101 200	1 350	1 604	1 857	2 110	8 650	10 280	11 900	13 520	7 900	8 880	9 770	10 540	58.4	
		1 453	1 725	1 998	2 270	8 860	10 520	12 180	13 840	8 260	9 320	10 290	11 140	62.8	9 7/8 250.83
		1 507	1 790	2 072	2 355	9 220	10 940	12 670	14 400	8 880	10 070	11 170	12 160	65.3	
		1 531	1 818	2 105	2 392	9 370	11 130	12 890	14 640	9 150	10 400	11 560	12 610	66.4	
		1 546	1 836	2 125	2 415	9 470	11 250	13 020	14 800	9 330	10 610	11 810	12 900	66.9	10 254.00
		1 614	1 917	2 219	2 522	9 920	11 780	13 650	15 510	10 120	11 580	12 940	14 210	68.9	
		1 705	2 025	2 344	2 664	10 250	12 170	14 090	16 010	10 690	12 260	13 750	15 150	73.9	
		1 040	1 236	1 431	1 626	5 210	6 190	7 160	8 140	2 470	2 590	2 610	2 610	45.5	10 3/4 273.05
		1 165	1 383	1 602	1 820	5 860	6 960	8 060	9 160	3 210	3 490	3 660	3 740	51.0	
		1 276	1 515	1 754	1 993	6 450	7 660	8 860	10 070	4 020	4 290	4 610	4 850	55.5	
		1 398	1 660	1 922	2 184	7 100	8 430	9 760	11 090	5 160	5 580	5 880	6 070	60.7	11 3/4 298.45
		1 519	1 803	2 088	2 373	7 750	9 200	10 650	12 110	6 310	6 960	7 510	7 920	65.7	
		1 237	1 469	1 701	1 933	5 180	6 150	7 130	8 100	2 440	2 550	2 570	2 570	54.0	
		1 384	1 643	1 903	2 162	5 830	6 920	8 010	9 100	3 170	3 440	3 610	3 680	60.0	11 7/8 301.63
		1 505	1 788	2 070	2 352	6 360	7 560	8 750	9 940	3 870	4 180	4 470	4 690	65.0	
		1 634	1 940	2 246	2 552	6 930	8 230	9 530	10 840	4 880	5 240	5 470	5 760	71.0	
		1 565	1 859	2 153	2 446	6 480	7 700	8 920	10 130	4 080	4 340	4 670	4 920	67.8	13 3/8 339.73
		1 652	1 962	2 271	2 581	6 860	8 150	9 430	10 720	4 750	5 080	5 290	5 630	71.8	
		1 399	1 661	1 924	2 186	4 500	5 340	6 190	7 030	1 670	1 670	1 670	1 670	61.0	
		1 556	1 847	2 139	2 431	5 020	5 970	6 910	7 850	2 260	2 330	2 330	2 330	68.0	13 3/8 339.73
		1 661	1 973	2 284	2 596	5 380	6 390	7 400	8 410	2 660	2 820	2 880	2 880	72.0	
		1 773	2 105	2 438	2 770	5 760	6 840	7 920	9 000	3 090	3 340	3 490	3 550	77.0	

1 ksi = 1000 psi  
1 psi = 0.006895 Mpa = 0.06895 bar

Higher Internal Pressure resistance is possible through controlled wall thickness tolerance

Higher External Pressure resistance is possible using High Collapse grades



# Popular VAM® connections

## VAM 21



**VAM® 21** is the latest generation of T&C premium connection introducing an innovative and revolutionary design. Confidence thanks to ISO 13679 CAL-IV compliance within the full pipe body envelope extends the opportunities for your well designs.

**VAM® 21 HT** is also available to provide enhanced torque capability.

## VAM TOP



**VAM® TOP**, along with its **VAM® TOP HT** and **VAM® TOP HC** derivatives, is globally recognized as setting the standard in reliability and performance, for threaded and coupled premium connections.

The connection represents the output of 30 years of VAM® Research & Development activities and has a track record that stretches back over more than 15 years. The connection minimizes the risks that result from combined loads induced by: gas pressure, temperature, bending, compression.

## VAM SLIJ-II



**VAM® SLIJ II** is an improved, second generation version of the former VAM® SLIJ connection.

It is an integral casing joint machined on plain end non upset pipe. The design combines a near flush OD with high tensile efficiencies and stronger structural integrity. The connection is ideal for production and intermediate casing, liner and tie back applications in all types of wells.

## CLEANWELL®

**CLEANWELL®** is an anti corrosion and lubricating system applied in the mill on the surface of VAM® threads (available in Dry or Semi Dry version). Developed for Carbon steel and Corrosion resistant alloy materials, CLEANWELL® is designed to prevent the use of thread compounds that have proved to damage the environment, affect health and safety or contaminate downhole equipments and producing formation. Using CLEANWELL® will generate no discharge nor unnecessary handling from the mill to the rig. Take off the protector and run it!

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