



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® BOLT

## Fast - Tight - Safe

# Design Features

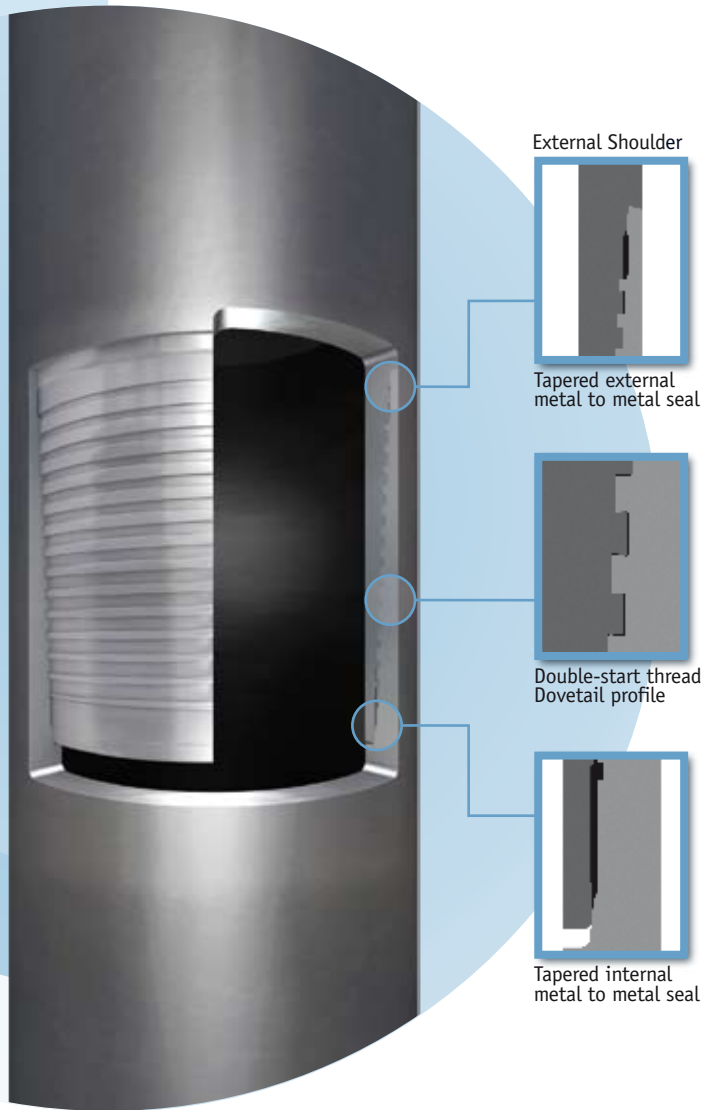


- DUAL METAL-TO-METAL SEALS**  
 High pressure seal abilities under combined loads.
- DOVETAIL THREAD DESIGN**  
 Locks radially pin and box and prevents from jump-out.
- TEST VALIDATION**  
 Tested gas tight performances on combined loads cycles, with internal and external pressure.

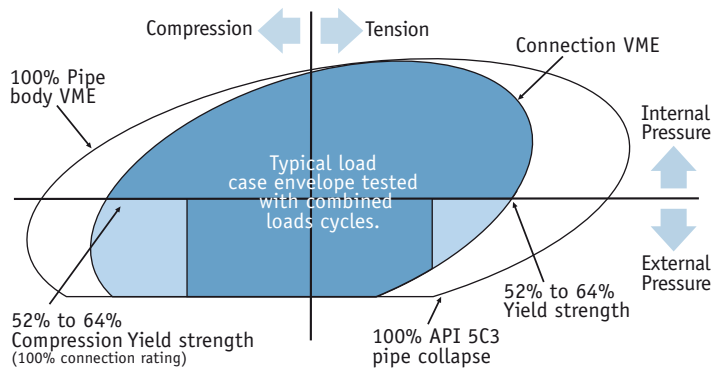
Example of ISO13679 testing:

ISO 13679: 2002 CAL II qualification of 14" 115# VM125HC and 11 7/8" 71.8# VM125HC.

ISO 13679: FDIS2011 CAL I-E qualification of 11 7/8" 71.8# Q125.



## Connection ratings and VME:



**VAM® BOLT is a Premium Flush Surface Casing connection suitable for tight clearance applications, especially complex big bore well heads. Easy to run, providing superior seal abilities and mechanical integrity in extreme loads.**

## Benefits

- EXTREME CLEARANCE
- EXCELLENT JUMP-OUT RESISTANCE
- HIGH SEALABILITY IN COMBINED LOADS
- FAST MAKE-UP
- EASY STABBING
- VALIDATED WITH ENVIRONMENTAL FRIENDLY THREAD COMPOUND



**VAM® BOLT is dedicated to answer the most challenging applications for surface casing. It allows tight clearance applications and offers alternatives for well architecture and drilling programs.**

## Applications

- BIG BORE SUBSEA WELLHEADS WHICH REQUIRE TIGHT CLEARANCE SURFACE CASING IN 18" AND 16" DIAMETER
- COMPLEX DESIGNS ARE DRIVEN BY CLEARANCE AND HIGH PERFORMANCE e.g. HPHT, deep offshore wells, where many casing strings might be required
- CONTINGENCY LINER APPLICATION (16", 11 7/8")
- THICKER INTERMEDIATE CASING (14" instead of 13 3/8")

## Performances

- 100% FLUSH INTEGRAL JOINT
- DOUBLE METAL TO METAL SEALS PROVIDE INTERNAL AND EXTERNAL PRESSURE TIGHTNESS
- SEAL ABILITY VALIDATED WITH COMBINED LOADS CYCLES
- MAXIMUM COMPRESSION RESISTANCE
- EXCELLENT MECHANICAL INTEGRITY DUE TO RUGGED AND DOVETAIL THREAD

## Easy Running

- FAST MAKE-UP WITH DOUBLE START THREAD
- IMPROVED STABBING
- THE SQUARE SHOULDER PROVIDES HIGH BREAK-OUT RESISTANCE AND RELIABLE MAKE-UP

SIZE (OD)	NOM. WEIGHT	WALL THICKNESS		DRIFT DIAMETER	BOX OD	TENSILE EFFICIENCY	YIELD STRENGTH (kips)				INTERNAL YIELD API	
		in.	mm				in.	in.	% PBYS	80 ksi	95 ksi	110 ksi
11 7/8 301.63	71.8	0.582	14.783	10.625 SD	11.875	62%	1 024	1 216	1 408	1 600	6 860	8 150
14 355.60	115.0	0.812	20.625	12.250 SD	14.000	65%	1 749	2 077	2 405	2 733	8 120	9 640
16 406.40	84.0	0.495	12.570	14.823	16.000	54%	1 043	1 239	1 434	1 630	4 330	5 140
	97.0	0.575	14.610	14.750 SD	16.000	58%	1 310	1 555	1 801	2 047	5 030	5 970
	109.0	0.656	16.660	14.600 SD	16.000	63%	1 612	1 914	2 217	2 519	5 740	6 820
17 7/8 454.03	93.5	0.500	12.700	16.688	17.875	52%	1 135	1 348	1 561	1 773	3 920	4 660
	105.0	0.562	14.270	16.564	17.875	51%	1 247	1 481	1 715	1 948	4 400	5 230
17 15/16 455.61	93.8	0.500	12.700	16.750	17.938	52%	1 139	1 353	1 566	1 780	3 900	4 630
18 457.20	94.0	0.500	12.700	16.813	18.000	53%	1 176	1 397	1 617	1 838	3 890	4 620
	105.0	0.562	14.270	16.689	18.000	56%	1 399	1 661	1 924	2 186	4 370	5 190
	117.0	0.625	15.880	16.563	18.000	60%	1 648	1 957	2 266	2 575	4 860	5 770
	119.0	0.640	16.260	16.533	18.000	61%	1 708	2 028	2 349	2 669	4 980	5 910
	127.0	0.688	17.480	16.437	18.000	63%	1 887	2 241	2 595	2 948	5 350	6 350



Triple-stand running 16" VAM® BOLT.

# Product Line **VAM® BOLT**

INTERNAL PRESSURE (psi) 5C3		EXTERNAL PRESSURE (psi) API 5C3				MAXIMUM MAKE-UP TORQUE				NOM. WEIGHT	SIZE (OD)	
110 ksi	125 ksi	80 ksi	95 ksi	110 ksi	125 ksi	80 ksi	95 ksi	110 ksi	125 ksi	lb/ft	in. mm	
9 430	10 720	4 750	5 080	5 290	5 630	TBD				71.8	11 7/8 301.63	
11 170	12 690	6 960	7 750	8 440	8 990	TBD				53 200	115.0	14 355.60
5 960	6 770	1 480	1 480	1 480	1 480	29 400	32 600	36 100	39 700	84.0	16 406.40	
6 920	7 860	2 270	2 340	2 340	2 340	30 200	33 500	36 900	40 300	97.0		
7 890	8 970	3 080	3 320	3 470	3 520	32 600	35 900	39 300	42 600	109.0		
5 390	6 130	1 090	1 090	1 090	1 090	41 600	TBD				93.5	17 7/8 454.03
6 050	6 880	1 560	1 560	1 560	1 560	52 400					105.0	
5 360	6 090	1 080	1 080	1 080	1 080	38 400	TBD				93.5	17 15/16 455.61
5 350	6 080	1 060	1 060	1 060	1 060	39 100	TBD				94.0	18 457.20
6 010	6 830	1 520	1 520	1 520	1 520	40 300					105.0	
6 680	7 590	2 080	2 110	2 110	2 110	42 800					117.0	
6 850	7 780	2 210	2 270	2 270	2 270	44 100					119.0	
7 360	8 360	2 640	2 780	2 830	2 830	46 200					127.0	

Upon request (tests requested to validate full performance).

Note: Proprietary grade (High Collapse, Sour Service, ...) and Special Drifts available upon request. Other sizes could be available upon request.



VAM® BOLT does not suffer from rig misalignment.



The double start thread reduces the number of make-up turns.

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