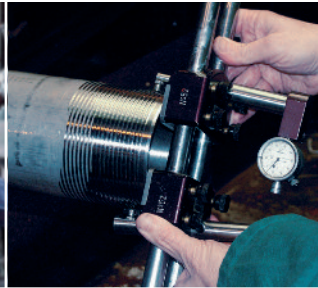


**VAM® TOP**

# The industry reference for premium connections



**VAM® 21**

**VAM® TOP**

**VAM® TOP HC**

**VAM® TOP HT**

**VAM® SLIJ II**

**VAM® FJL**

**VAM® HTF**

**VAM® SG**

**DINO VAM®**

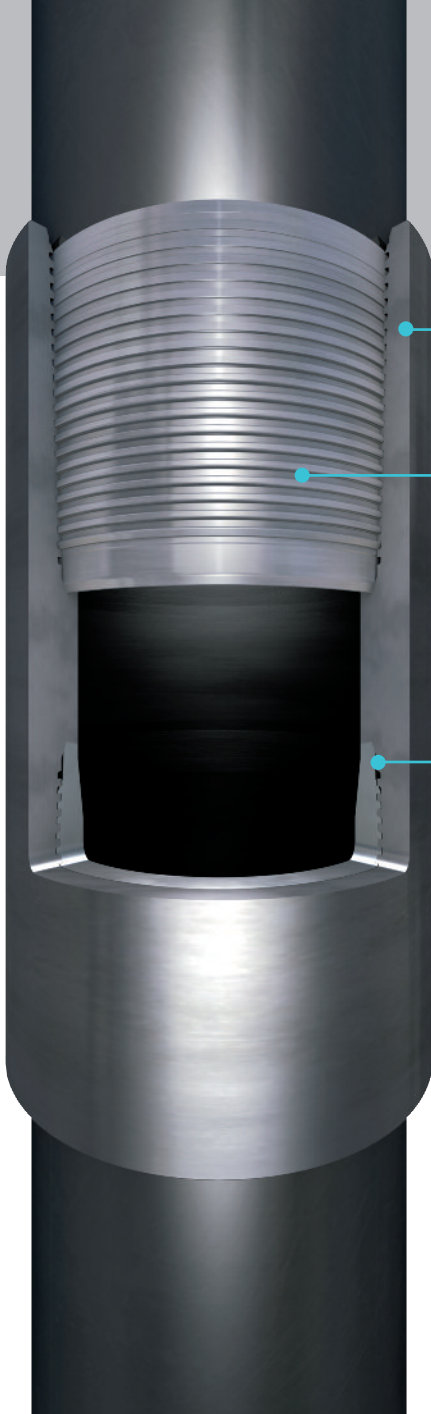
**BIG OMEGA™**

**VAM® TOP FE**

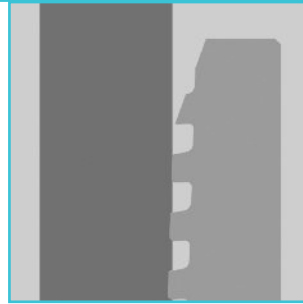
**VAM® HW ST**

**VAM® MUST**

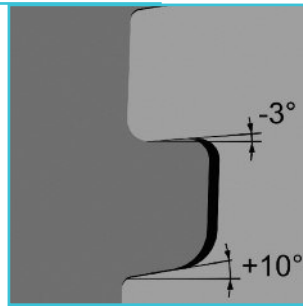
 **SUMITOMO METALS**



Vanishing threads

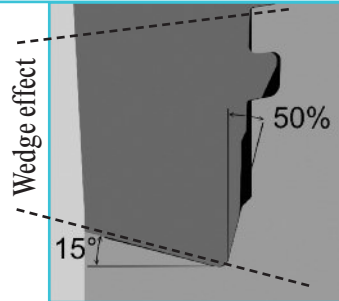


Thread form

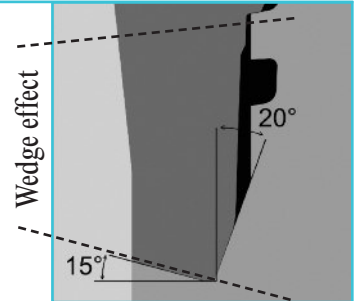


Ø 2 3/8" and 2 7/8" – 8 TPI  
 Ø 3 1/2" to 4 1/2" – 6 TPI  
 Ø 5" to 7 3/4" – 5 TPI  
 Ø 8 5/8" and above – 4 TPI  
 Taper 1:16

Tubing internal seal



Casing internal seal



## VAM® PRODUCT LINES

### Reference Products

Highest performance	For critical applications: reliable and easy to run	T&C	VAM® 21
	The Oil industry's reference product	T&C	VAM® TOP series
Greatest clearance	Combining generous running clearances with high mechanical performances	IJ	VAM® SLIJ-II
	For maximum clearance	IJ	VAM® FJL
Fastest running	Providing improved running performance for intermediate casings	T&C	DINO VAM®
	Increasing running reliability for surface casings	T&C	BIG OMEGA™

### Speciality products

For steam injection wells		T&C	VAM® SW
A heavy wall connection for extreme external pressures as found in squeezing clay and salt domes		IJ	VAM® MUST
For High Pressure, High Temperature wells		T&C	VAM® HW ST
		T&C	VAM® HP
Riser application	Drilling surface BOP and Inner Production Riser - TLP / Spar	T&C	VAM® TOP FE









VAM® TOP is globally recognised as setting the standard in reliability and performance, for threaded and coupled premium connections. The connection represents the output of 30 years of V&M TUBES' Research & Development activities and has a track record that stretches back over more than a decade. The connection minimises the risks that result from combined loads induced by:

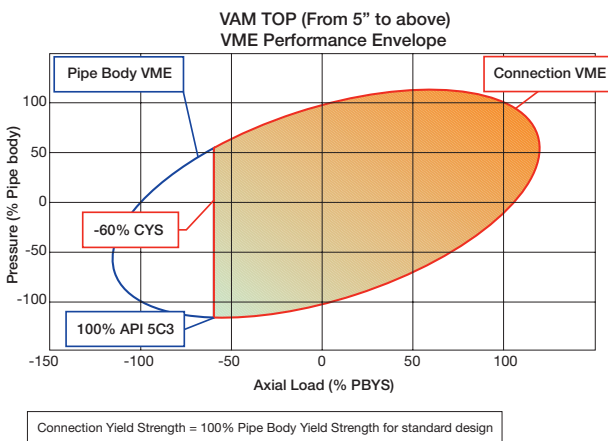
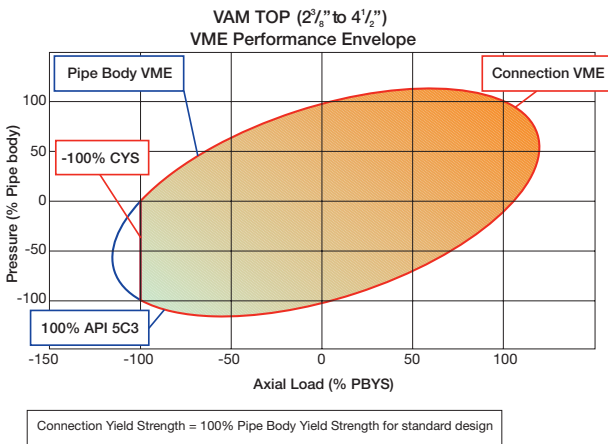
**GAS PRESSURE    TEMPERATURE    BENDING    COMPRESSION**

**Energized metal-to-metal seal**

- A patented metal-to-metal seal system offers excellent gas-tight sealing, under even the most severe combined loads, as encountered in deviated or long horizontal wells.
- The seal integrity remains constant after repeated make-ups and break-outs.
- The seal geometry protects against galling.

**Reverse angle torque shoulder**

- A reverse angle torque shoulder provides a positive torque stop which allows for accurate power-tight make-up and minimizes hoop stresses in the connection.
- The “wedge” effect caused by the reverse angle gives the connection superior structural strength.
- The shoulder design is optimized in order to resist adverse conditions such as combined compression and external pressure or combined bending, compression, and torque (see the corresponding gas-tight VME performance envelopes for tubing and casing sizes).



**BENEFITS**

- **Excellent resistance to bending, compression and torque**
- **Reliable gas-tight sealing under any kind of combined loads**
- **Easy to use and repair**
- **Successful field running experience for more than 10 years**

**Improved hook thread design**

- A modified hook thread profile with 3° reverse angle on the load flank, not only provides the connection with superior tension strength but also increases its resistance to compression.
- The excellent structural strength including increased bending and compression resistance, makes this connection especially suited for highly deviated and long horizontal wells.
- Optimized thread geometry minimizes the risk of galling, even when thread lubricants are poorly applied.

**Coupling design**

- The 100% efficient connection performance has been engineered through factors such as: the coverage of the vanishing threads, long internal shoulder, and coupling critical cross sections greater than those of the pipe body

**Streamlined internal profile**

- A pin ID chamfer, tight tolerances on the coupling center and a long shoulder combine to minimize turbulence and energy loss inside the connection for high-velocity gas flows.

**Extensive testing to the limits**

- The connection has been extensively tested through the whole range of diameters in accordance with the most stringent qualification procedures, including the latest ISO13679 standards.

**Options**

- Enhanced HP-HT qualified designs are available upon request, for the most extreme applications.
- VAM® TOP SC90 / VAM® TOP SC80 (special clearance): these extra-clearance couplings offer 90% and 80% tensile efficiency respectively.
- GRE liner: the combination of a GRE liner with a standard VAM® TOP connection has been tested and fully validated.
- CLEANWELL®: this option gives access to all the benefits coming from a dope-free solution: no storage dope, no running dope.
- VAM® TOP HT / VAM® TOP HC / VAM® TOP FE: Specific VAM® TOP designs are available for higher torque applications / higher compression applications / enhanced fatigue resistance. Please refer to the dedicated leaflets for details.

# 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 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.



## 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.

## 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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