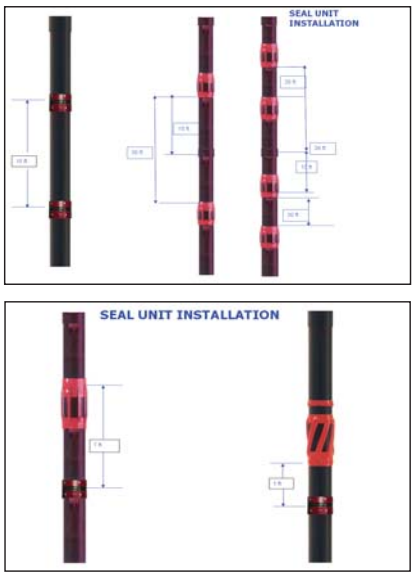


7) Seal Unit Operating Instructions:

The rubber rings for seal-units area available for two temperature ranges:

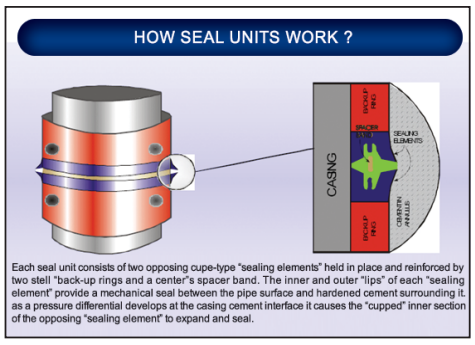
1) Up to 275°F
2) Up to 400°F.

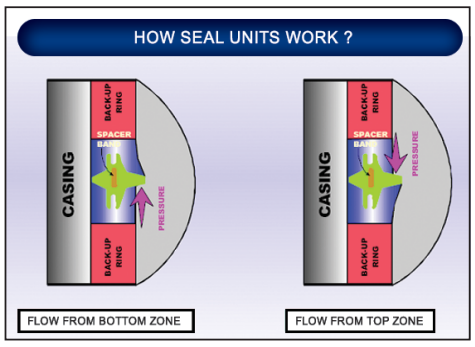
When the unit will be used in relatively deep applications where the bottom hole temperature may not be exactly known, it is advisable to use the high temperature version.

The placement of the seal-units on the string is based on zone spacing, pressure and formation types. For positive zone separation one unit is placed above and below each zone, with a centralizer or turbolizer installed 3 to 5 foot below each unit. In case of critical zone separations two units are installed on each side of the zone with a centralizer or turbolizer between the seal-units.

In liner applications where liner top leakage is likely to occur, one or two seal units are placed in the liner overlap area.

Important Note: Although the Cement Seal Unit resembles a stop collar in many ways, it should NOT be used as a stop device.





8) Case History

More than 700 cement seal units of different sizes (171 pc of 9 5/8", 542 pc of 7", and 18 pc of 4•") were used and installed in the casing of 72 wells (gas and oil producers wells) in one major off shore operating company in the Arabian gulf since 1999.

Nineteen (19) wells had been tested for zonal isolation after primary cement operations, the results proved no communications between zones in 18 wells. Sixty three (63) wells are producing gas or oil without any indication of annulus pressure or zonal communication since year 2000.

Well	Number of SCU	Casing Size
8	171	9-5/8"
62	542	7" liner
2	18	4-1/2" liner

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PVSS II - Best fit SCADA system for the Oil and Gas industry

There are a wide variety of SCADA systems in the market but only a few are able to handle widely distributed, redundant and complex systems with hundred of thousands of data points. ETM professional control, an Austrian software house, is offering a state-of-the-art SCADA system for the Oil and Gas industry

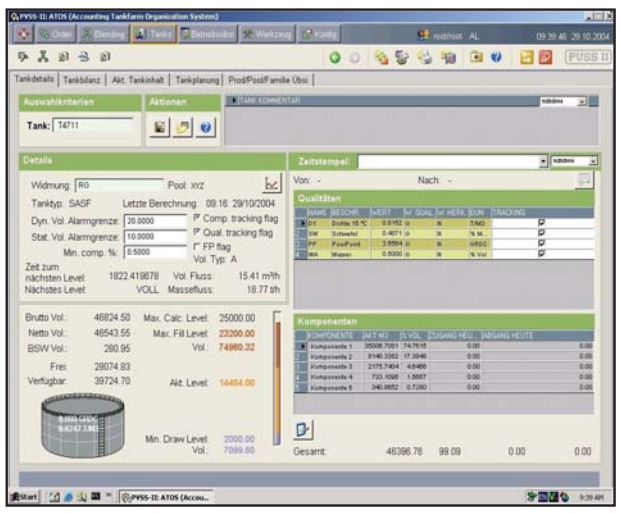
A photograph of a gas storage application in RAG, Austria

PVSS II is a process control system for the visualization, monitoring and control of complex industrial processes often seen in the Oil and Gas industry. Its state-of-the-art architecture and modular design perfectly covers the needs of the industry.

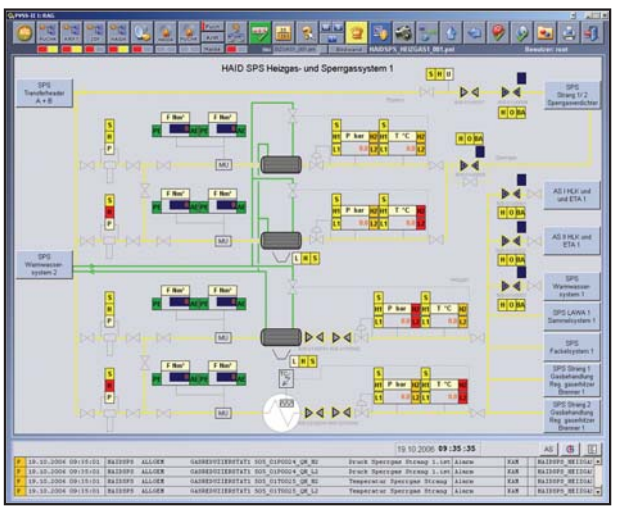
PVSS II is a flexible tool, able to manage hundreds of connected systems in a widely distributed network. The huge number of data points in such systems is handled precisely and very quickly thanks to the event driven communication. The flexibility and openness of the tool is proofed by the fact that it can run on Windows, Linux and Sun Solaris operating systems. To secure the highest overall efficiency for customer applications, PVSS II is offering a hot stand-by redundant set-up. And to meet today's security needs, it utilizes the Kerberos authentication protocol developed by the MIT (Massachusetts Institute of Technology).

Customers in the Oil and Gas industry are using PVSS II, as a reliable, stable and convenient tool meeting all the requirements of their complex applications such as: Europe's largest underground gas storage, an extended Accounting Tankfarm Organisation System for an OMV refinery, the East-West pipeline in China and as the latest success, the choice of N.V. Nederlandse Gasunie to use PVSS II as the standard SCADA system for their entire gas distribution network. N.V. Nederlandse Gasunie owes one of the largest high pressure gas pipeline grids in Europe, consisting of 12,000 kilometres of pipeline and approximately 1,100 gas receiving stations.

PVSS II from ETM professional control is always the right choice if you are looking for a reliable and flexible tool for complex and large applications.



A screenshot of PVSS II/ Tankfarm Management System



Screenshot PVSS II/ Gas storage application