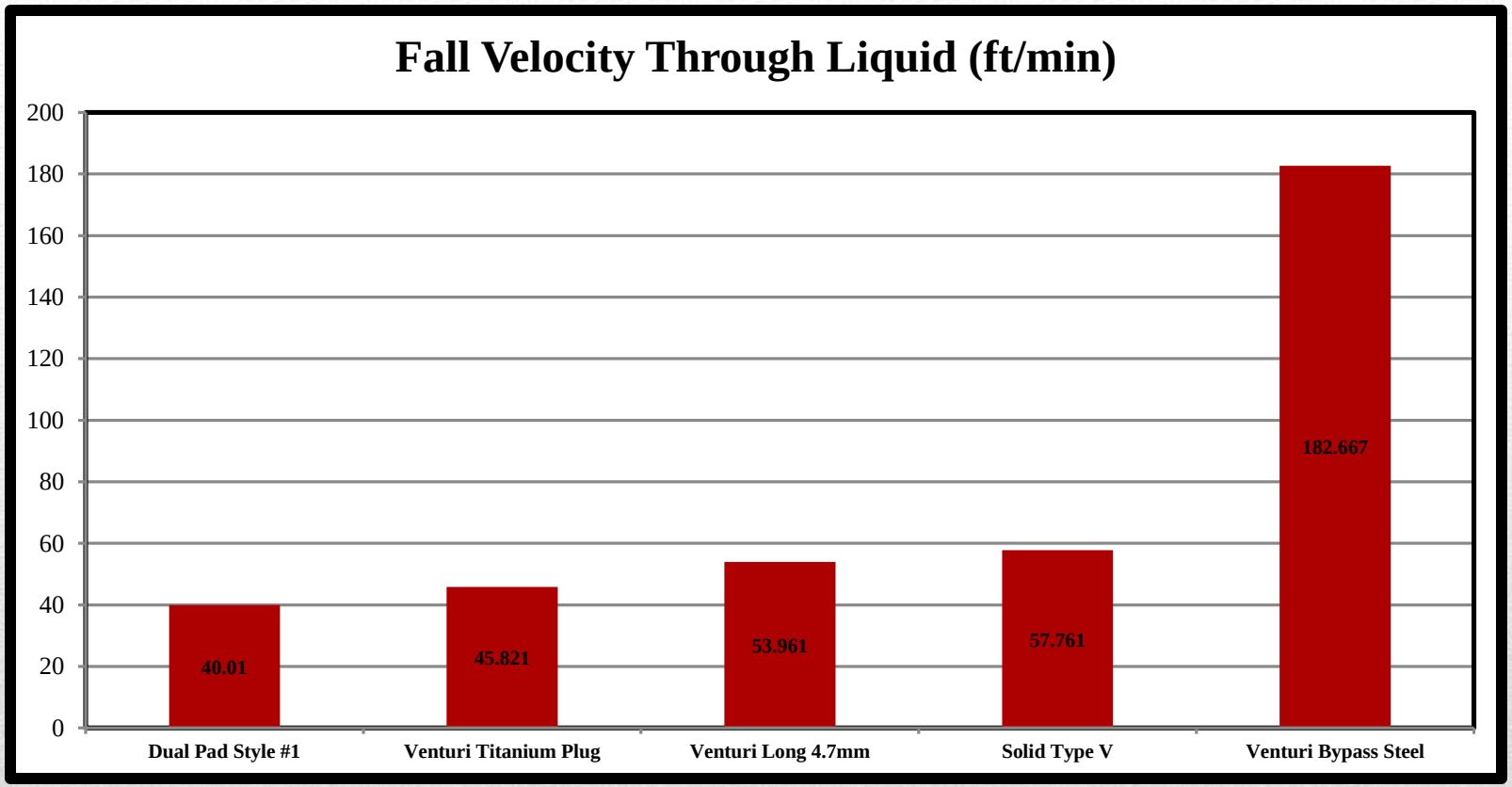
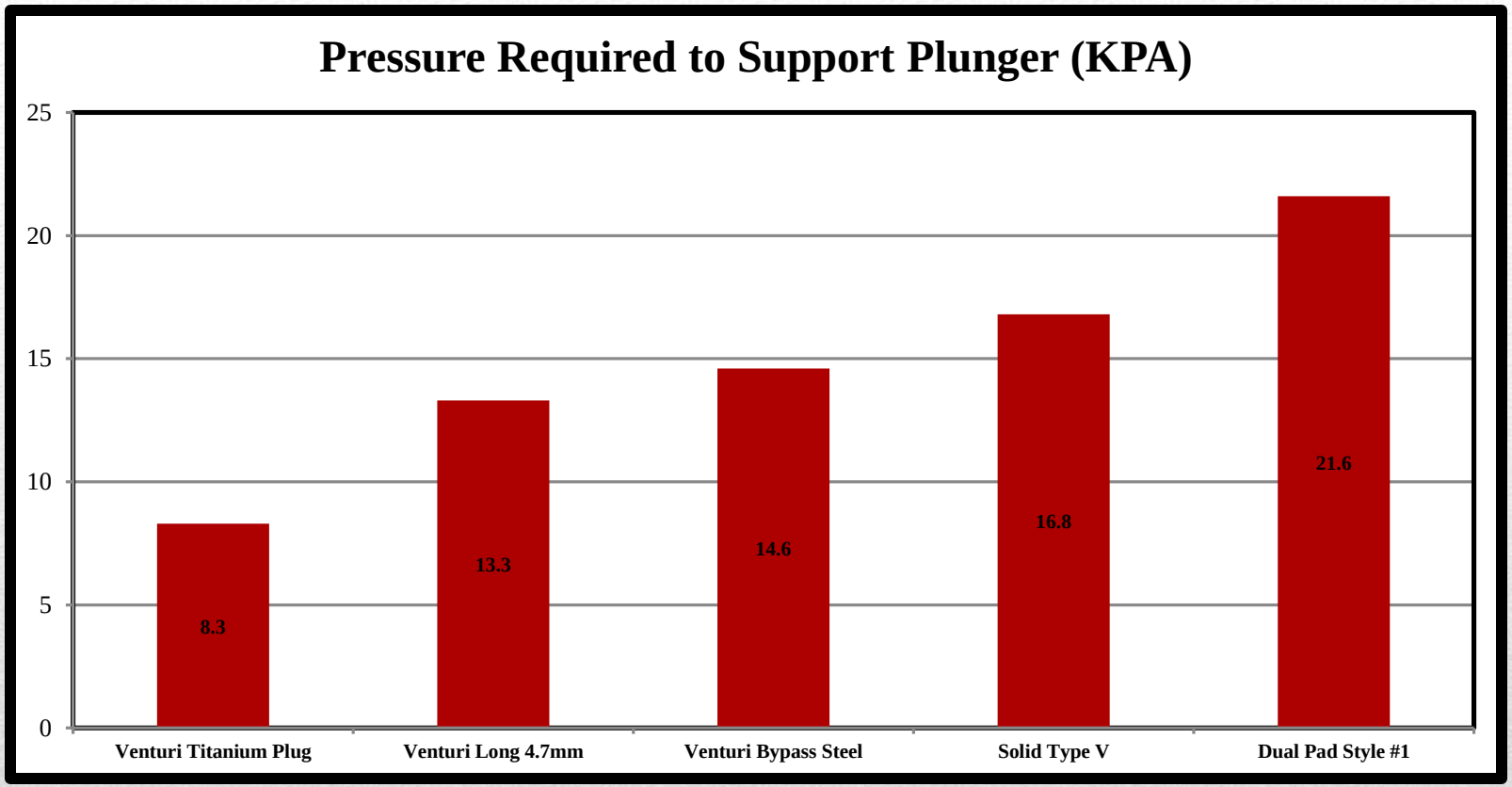
Plunger Efficiency Testing

T-RAM Canada Inc.



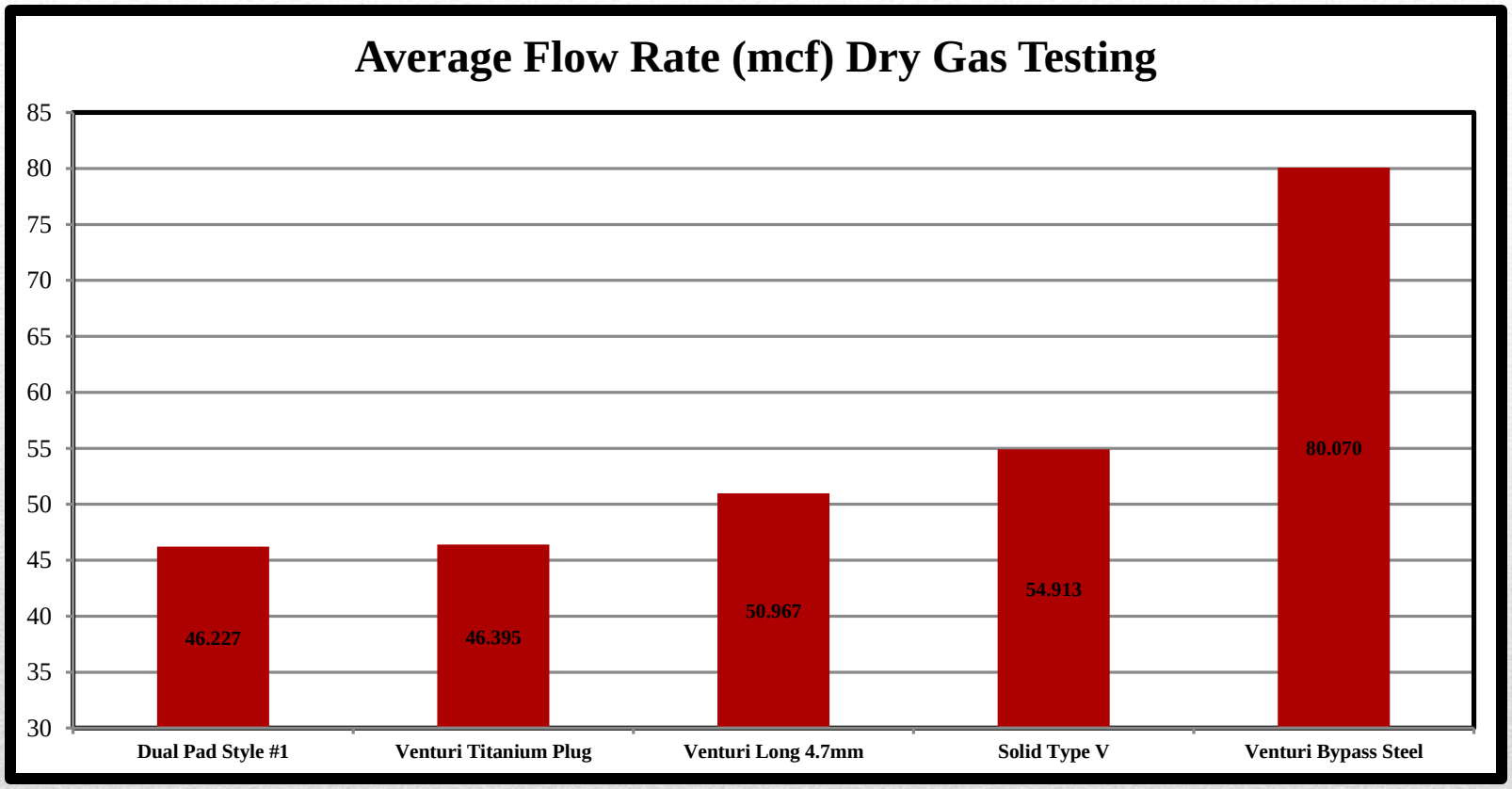
The Fall Velocity Through Liquid graph demonstrates actual fall rates through liquid in a static environment.

The results were a function of considerable time and effort utilizing a real life size well model. Plungers were simply dropped within the production string of the well model and the fall rate through liquid and data was collected to determine fall rates.



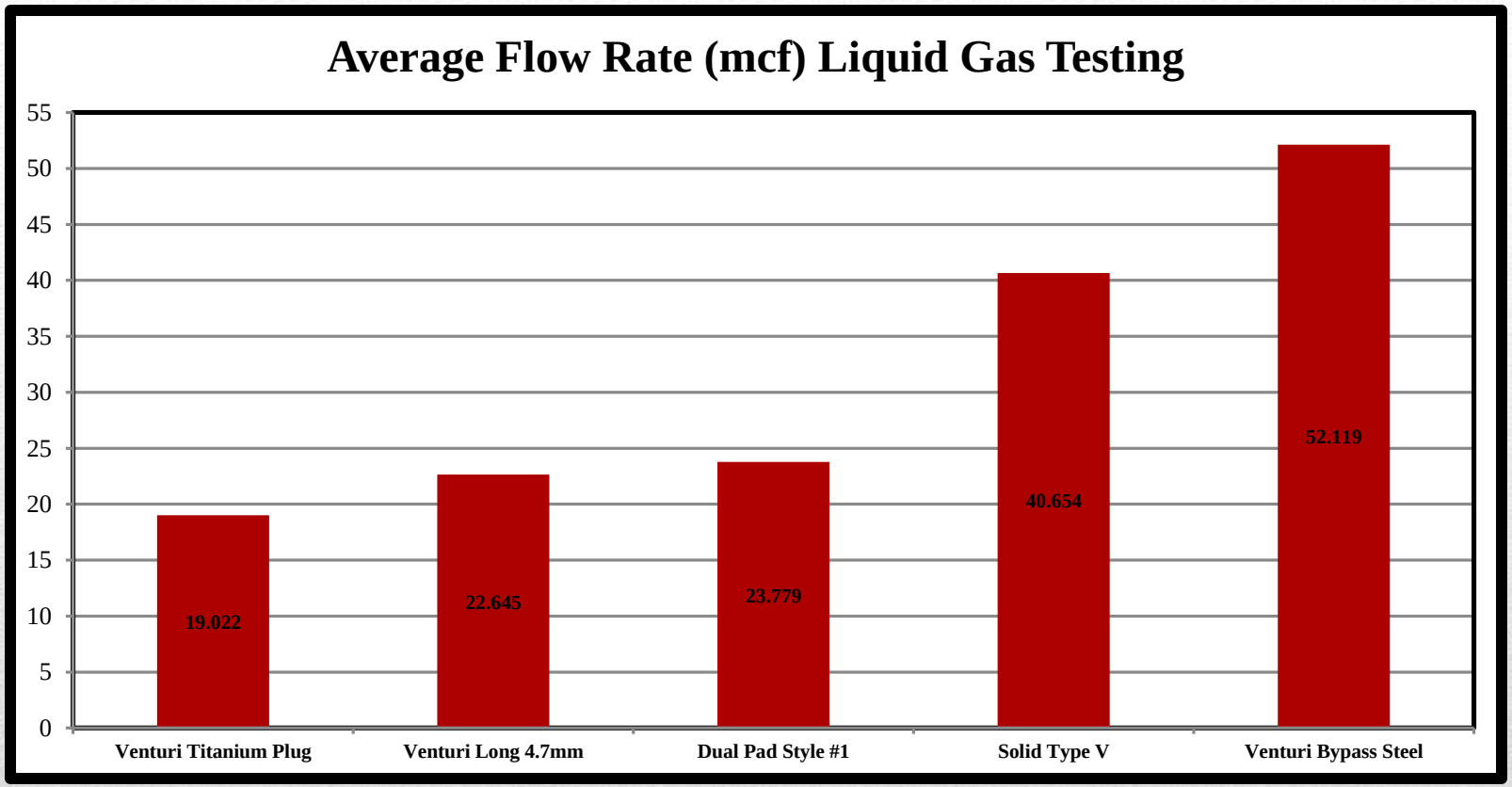
The Pressure Required to Support a Plunger graph demonstrates how much back pressure is introduced to a flowing well when a plunger is floating within the production tubing string.

The results were a function of considerable time and effort utilizing a real life size well model. Gas was introduced into the well and data was collected to determine the pressure required to "float" the various plungers at selected intervals. The lower values are a clear indication of *sealing efficiency* as well as the importance of *mass consideration* during the plunger selection process.



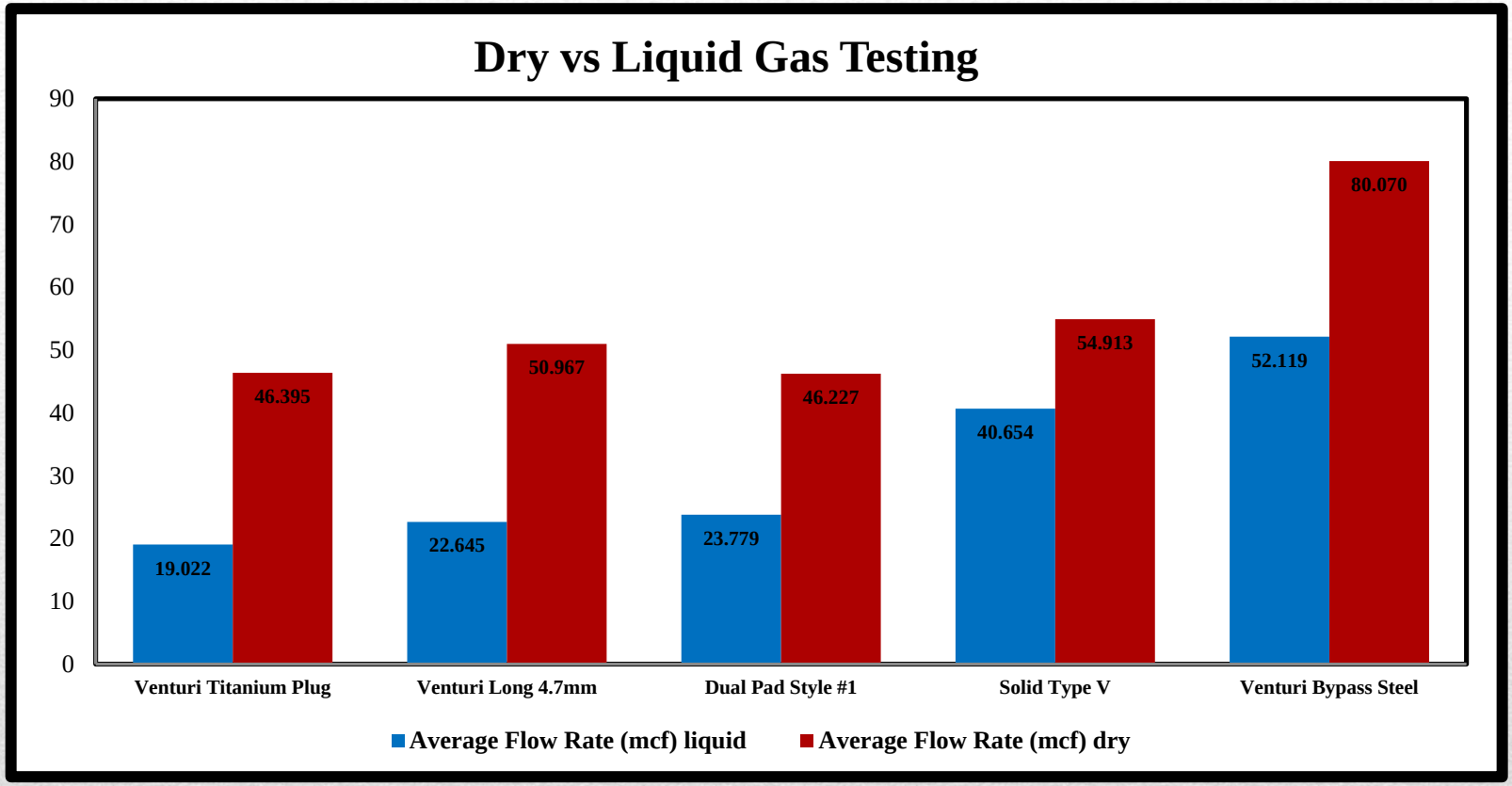
The Dry Gas Testing graph demonstrates gas rates required to "float" various plungers at selected intervals.

The results were a function of considerable time and effort utilizing a real life size well model. Gas was introduced into the well and data was collected to determine the gas rate required to "float" the various plungers at selected intervals. The lower values are a clear indication of *sealing efficiency* as well as the importance of *mass consideration* during the plunger selection process.



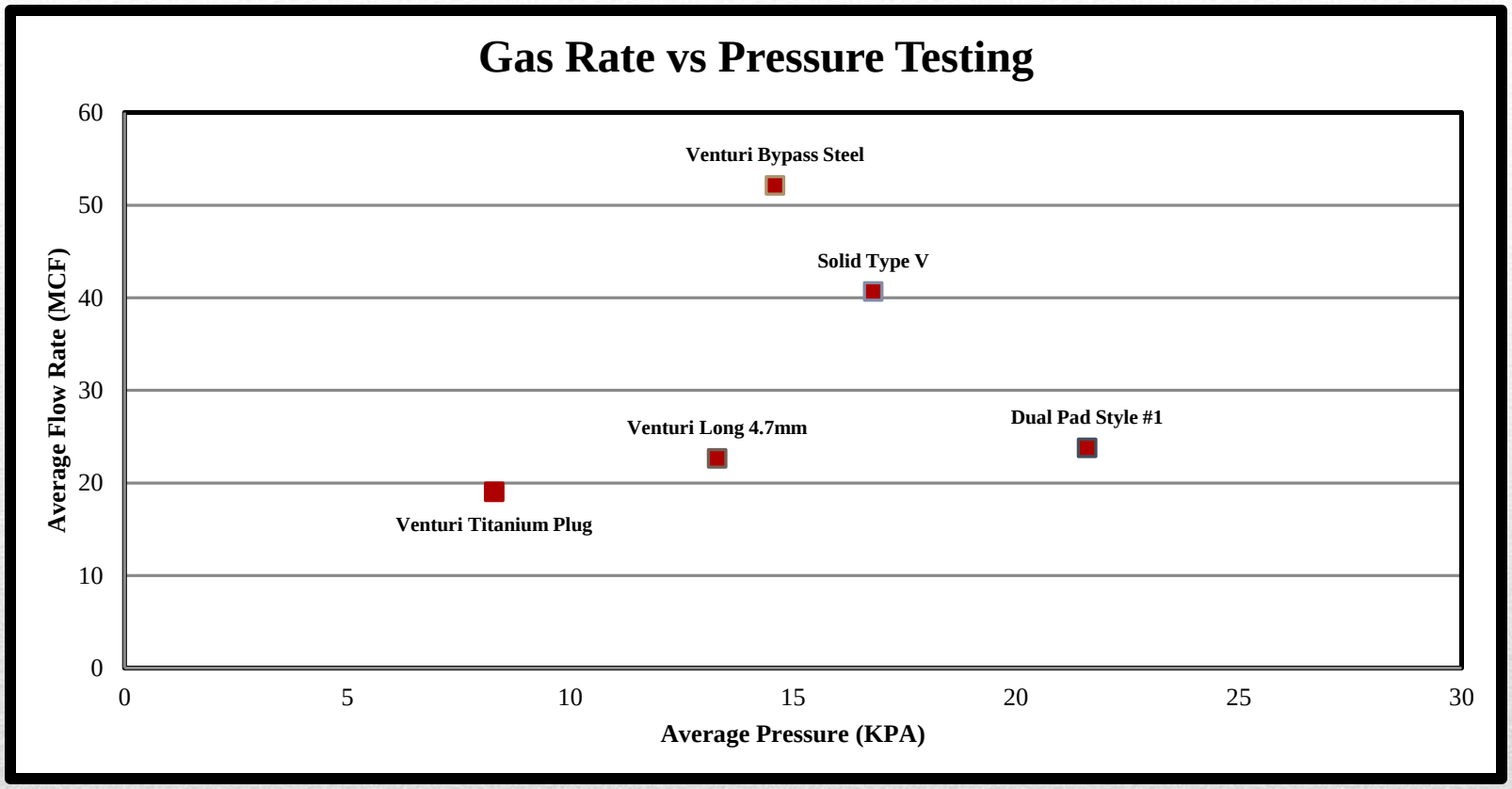
The Liquid Gas Testing graph demonstrates gas rates required to "float" various plungers at selected intervals. A small amount of liquid is placed on top of the plungers during the testing process.

The results were a function of considerable time and effort utilizing a real life size well model. Gas and liquid was introduced into the well and data was collected to determine the gas rate required to "float" the various plungers at selected intervals. The lower values are a clear indication of *sealing efficiency* as well as the importance of *mass consideration* during the plunger selection process.



The Dry vs Liquid Gas Testing graph demonstrates gas rates required to "float" various plungers at selected intervals both in a dry and wet environment. The "wet" environment had a small amount of liquid on top of the plungers during the testing process.

The results were a function of considerable time and effort utilizing a real life size well model. Gas and liquid was introduced into the well and data was collected to determine the gas rate required to "float" the various plungers at selected intervals. The lower values are a clear indication of *sealing efficiency* as well as the importance of *mass consideration* during the plunger selection process. This data also compliments the CFD data and theory as well as field results specific to the Venturi Plungers.



The Gas Rate vs Pressure Testing graph demonstrates gas rates and pressures required to "float" various plungers at selected intervals.

The results were a function of considerable time and effort utilizing a real life size well model. Gas was introduced into the well and data was collected to determine the gas rate and pressure required to "float" the various plungers at selected intervals. The lower values are a clear indication of *sealing efficiency* as well as the importance of *mass consideration* during the plunger selection process.