SPM™ EDGEX
VALVE AND CARBIDE SEAT

High-performance valves and seats for any standard fluid end

VALVE FEATURES

- Material and heat treat combination reduces and manages wear rate
- Valve body designed to wear deeper increasing product life
- Urethane material and design optimize seal performance through the life of the valve

SEAL FEATURES

- Patented tungsten carbide insert technology incorporates tungsten carbide into critical wear location
- Compatible with all standard seat taper fluid ends
- Field serviceable using standard tooling. Seat can be installed and removed on site

BENEFITS

- Valve life increased by up to 2X
- Seat life increased by 6X on average, removing the need to pull seats onsite
- Improves customer TCO by increasing the operating time between valve and seat maintenance intervals
- Reduced HSE risk with less maintenance required onsite

SIX TIMES LONGER SEAT LIFE, TWO TIMES LONGER VALVE LIFE

With patented tungsten carbide insert technology, SPM Oil & Gas' (SPM) innovative SPM™ EdgeX Carbide Seat consistently outlasts conventional steel seats by an average of six times, eliminating onsite maintenance and the associated downtime and risk. The SPM™ EdgeX Valve optimizes fluid and valve dynamics—for improved reliability and double the operating life.

THE BENEFITS OF CARBIDE WITHOUT THE RISK

The patented SPM™ EdgeX Carbide Seat incorporates tungsten carbide into the critical wear location to drastically increase product life while maximizing the benefits of a steel seat. The inserted design provides the wear resistance of tungsten carbide without the risks of other tungsten carbide products. With the performance of tungsten carbide, combined with the durability of steel, the EdgeX Carbide Seat delivers a reliable seat with a long life for the most demanding applications.

LESS MAINTENANCE, MORE PUMPING

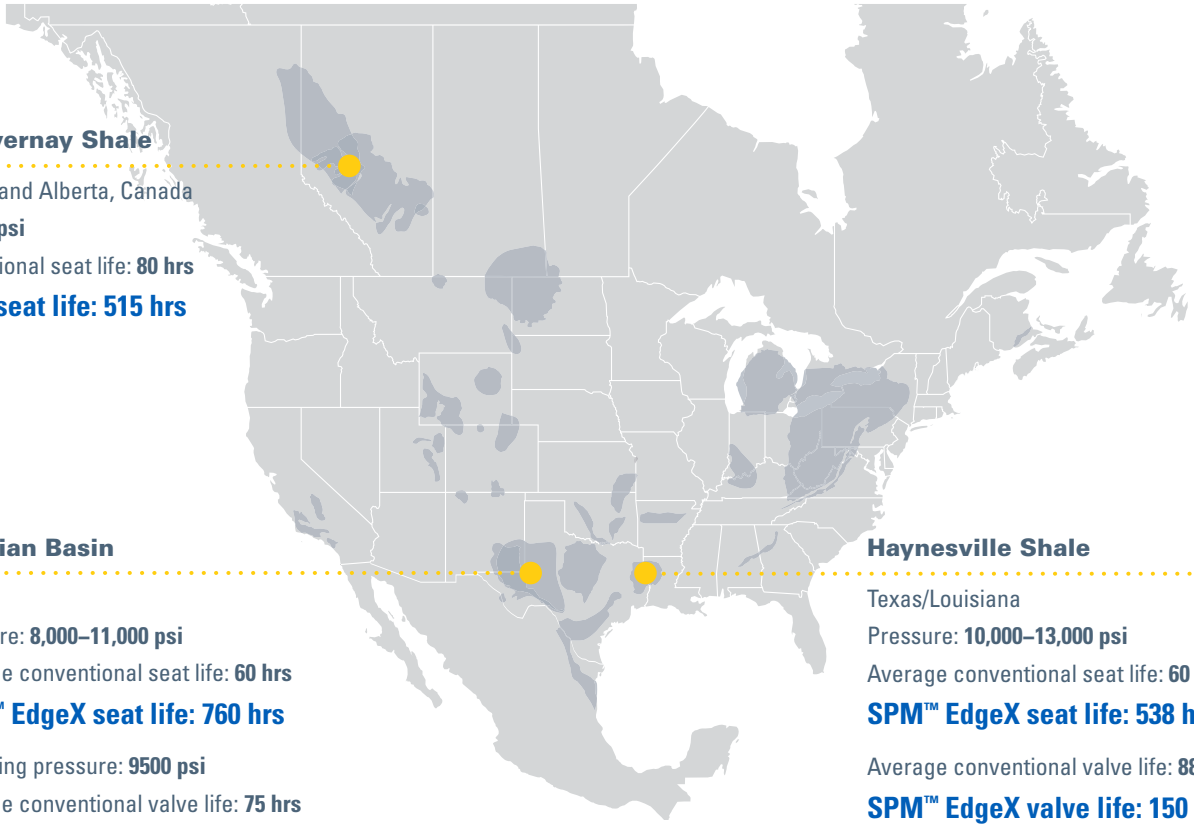
Standard valve and seats have an average maintenance interval of just 80 hours. The high-performance SPM™ EdgeX Valves and Carbide Seats are built to withstand wear, abrasion, and high pressure for extended periods of time—dramatically reducing maintenance, operations, HSE risk, and nonproductive time. In field testing, the SPM™ EdgeX Carbide Seats have lasted between 515 and 760 hours and the SPM™ EdgeX Valves have lasted over 200 hours in some of the industry's harshest conditions, saving hours of maintenance time per bore.

MANAGES WEAR TO DELIVER HIGHER PERFORMANCE

An industry-first material and heat-treated combination. From evaluating the optimal tungsten carbide alloy and designing an innovative insert technology to studying valve operation characteristics and failure modes, SPM engineered each element of the EdgeX Valve and Carbide Seat for maximum performance, life, and reliability. And its' backed up by rigorous testing—in the lab and the field.

MAXIMUM EQUIPMENT COMPATIBILITY AND INTERCHANGEABILITY

Employing the industry-standard 30° strike angle, the SPM™ EdgeX Valve and Carbide Seat is compatible with any fluid end and valve assembly.



Montney/Duvernay Shale

British Columbia and Alberta, Canada

Pressure: **12,500 psi**

Average conventional seat life: **80 hrs**

SPM™ EdgeX seat life: 515 hrs

Permian Basin

Texas

Pressure: **8,000–11,000 psi**

Average conventional seat life: **60 hrs**

SPM™ EdgeX seat life: 760 hrs

Operating pressure: **9500 psi**

Average conventional valve life: **75 hrs**

SPM™ EdgeX valve life: 217 hrs

Haynesville Shale

Texas/Louisiana

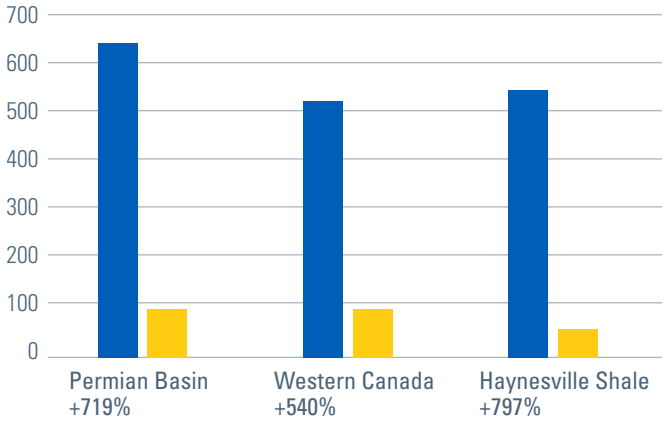
Pressure: **10,000–13,000 psi**

Average conventional seat life: **60 hrs**

SPM™ EdgeX seat life: 538 hrs

Average conventional valve life: **88 hrs**

SPM™ EdgeX valve life: 150 hrs



During field testing in the Permian Basin, Western Canada, and the Haynesville Shale, the SPM™ EdgeX Carbide Seats increased seat life up to 797% compared with conventional steel seats in the same play.

- Average SPM™ EdgeX seat life hours
- Average conventional steel seat life hours

TOGETHER, WE GET IT DONE.