

# RESTOR™ Series Safety Valve

Wireline Retrievable Safety Valve



## Applications:

- Oil and gas wells
- Critical location wells onshore
- Off shore wells in water to 1,000 ft deep
- Surface controlled via control line
- Wells with shut in pressure to 5,000 psi
- NACE approved material selection with temperatures from 40 deg F to 300 deg F [4 deg C to 149 deg C]

## Benefits:

- Long-term performance
- Cost-effective solution that is easy to run and retrieve
- Maximum reliability through fewer potential leak paths
- Reduce problems associated with solids and scale deposition

## Features:

- Flapper and seat with full metal-to-metal sealing
- Compliance with API and ISO criteria
- Thru flapper, self-equalizing system
- Concentric piston with a premium sealing system
- Optimal geometry and clearance between sliding components
- Suitable for setting depths to 1,000 ft Working pressures to 5,000 psi

## Description:

The RESTOR™ Series Wireline Retrievable SCSSVs are designed by Tejas Research & Engineering to control production flow in oil and gas wells that use API standard weight tubing. The RESTOR™ is self-equalizing and uses a Tejas flapper closure system with a field proven thru flapper equalizing system and is both reliable and versatile. The RESTOR™ is manufactured in compliance with API-14A and may be monogrammed upon request. Standard materials are NACE approved and may be specified to any customer requirements. The RESTOR™ features a large, straight-through bore for minimum restriction and has a certified five-year service life.

The RESTOR™ SCSSV is offered in sizes ranging from 2.375 to 7.000 in. These valves are designed to accept any manufacturers' locking mandrels and will set in any hydraulic landing nipple or tubing retrievable safety valve when equipped with the appropriate locking mandrel and lock adapter. For recommendations on the best combination of RESTOR™ safety system components to match your specific profile, contact Tejas Research & Engineering or your local service provider.

## Operation:

### *Equalizing, Opening, and Closing*

To open the RESTOR™, simply apply hydraulic pressure to the control line. This initiates flowtube movement, which contacts and opens the self-equalizing dart. The shut-in tubing pressure above the flapper will begin to increase and pressure will equalize across the flapper. To fully open the valve after equalization, apply the required amount of hydraulic control line pressure to hold the valve in the open position. Loss of control line pressure by any means, either manual or in emergency conditions, will close the valve.

### *Installation and Retrieval*

To install the RESTOR™, lower and lock the valve into the appropriate hydraulic landing nipple via wireline with the appropriate running tool and running prong. To retrieve the RESTOR™ SCSSV after equalizing, use the appropriate pulling tool and equalizing prong to pull the valve and lock.



RESTOR™ WRSV  
Open Position



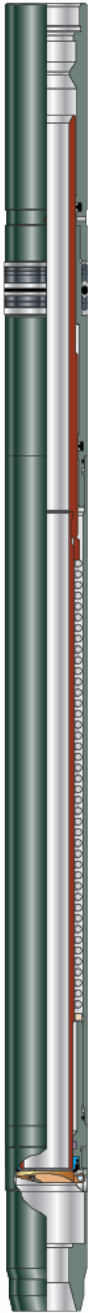
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## Wireline Retrievable Safety Valve



### Engineering Data:



RESTOR™ WRSV  
Closed Position

Tubing Size in [mm]	Nominal Valve Packing OD In [mm]	Max Metal OD in [mm]	Min ID in [mm]	Working Pressure psi [kPa]
2.375 [60.3]	1.875 [47.6]	1.870 [47.5]	0.719 [18.3]	10,000 [68,900]
2.875 [73.0]	2.312 [58.7]	2.307 [58.6]	1.125 [28.6]	10,000 [68,900]
3.500 [88.9]	2.812 [71.4]	2.807 [71.3]	1.562 [39.7]	10,000 [68,900]
4.500 [114.3]	3.812 [96.8]	3.734 [94.8]	2.125 [54.0]	10,000 [68,900]
5.500 [139.7]	4.625 [117.5]	4.615 [117.2]	2.562 [65.1]	7,500 [51,173]
7.000 [177.8]	5.937 [150.8]	5.927 [150.5]	3.562 [90.5]	7,500 [51,173]

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† The engineering data provided illustrate the scope of this product offering and are not all inclusive. Additional sizes and pressure ratings are available upon request.

Direct request for quotations to: [product.sales@tejasre.com](mailto:product.sales@tejasre.com)

