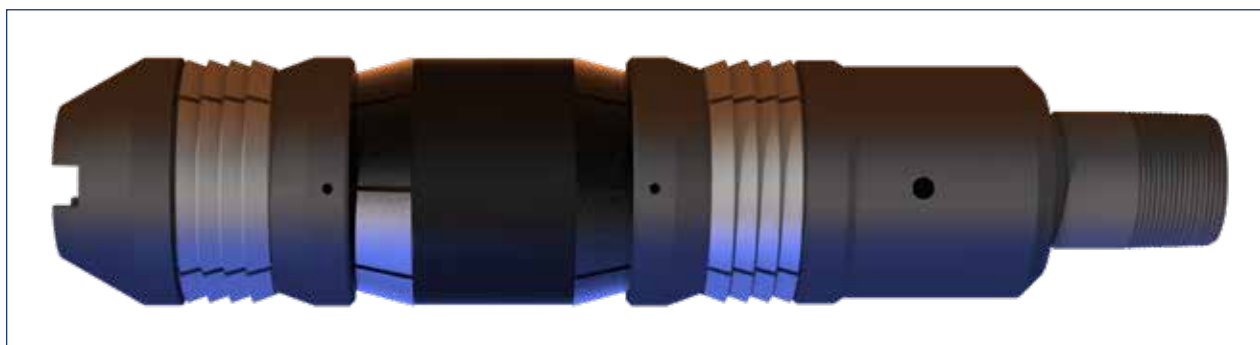


HYDRO-MECHANICAL BRIDGE PLUGS



SHIELD-HMBP

Hydro-Mechanical Bridge Plug is a hydraulically actuated, mechanically set bridge plug that is designed for easy drillout. It can be used in zonal isolation for squeeze cementing, fracturing, and plug and abandonment applications. The setting mechanism is built-in. A ball is placed in the tubing string plugging off the built-in equalizing ports. Pressure is then applied to set the top slip and then mechanical pull is applied to finish the set. Releasing the tubing string from the plug is done by simply turning to the right.



SPECIAL FEATURES

- The setting mechanism and controls are self-contained eliminating the need for a complex mechanical setting tool
- Eliminates the expense of wireline setting tool and equipment.
- Full tubing bore is available for unobstructed passage of fluids and wireline deployed perforating and logging equipment after the plug is set and tubing released.
- Can be run and set in tandem with retrievable production packers or squeeze packers
- Top equalizing during drill-out assures safe drill-out without the plug coming up the hole due to pressures contained below the plug
- Sets securely in all standard hardness casing
- Excellent for use in deviated applications
- Available in high pressure and low pressure on most sizes

CASING		SETTING RANGE		TOOL OD
OD (in)	Wt (pounds)	Min ID	Max ID	
4 ½	9.5-15.1	3.826	4.090	3.59
5	11.5-20.8	4.154	4.560	3.93
5 ½	13-23	4.580	5.044	4.31
6 5/8	17-32	5.595	6.135	5.37
7	23-35	6.000	6.366	5.68
7	17-23	6.366	6.358	6.00
7 5/8	20-39	6.625	7.125	6.31
9 5/8	29.3-58.4	8.435	9.063	8.12
13 3/8	48-80.7	12.175	12.715	11.88
20	94-133	18.730	19.124	18.37