

## STAGE STIMULATION TOOL (SST)

### PRODUCT 10-135

The **TechWest Stage Stimulation Tool (SST)** is a cup type selective tool designed to selectively treat pre-determined intervals of perforation. This SST uses heavy duty Casing Packer Cups with an additional Back-Up Cup to assure positive sealing. Specially designed Cups, a Retrievable Blanking Bar and a large built in Annular By-Pass make the SST easy to run and retrieve.

The tool is manipulated with tension/compression, to open and close the By-Pass Valve. A Spacer Assembly is available on request, which adds a third Packer Cup onto each end approximately 0.5 m behind the regular cups. This assembly is useful in applications where acid breaking back out of perforations is a concern.

The Model A Fluid Control Valve (Product 10-134) or Mechanical Fluid Control Valve (10-308) can be used with the SST for controlling injection volumes in low pressure reservoirs.

Other accessories include: By-Pass Valve (Product 10-100), SR-2 Packer (Product 20-237), Collar Locator (Product 10-111) and the Drag Assembly (Product 10-052).

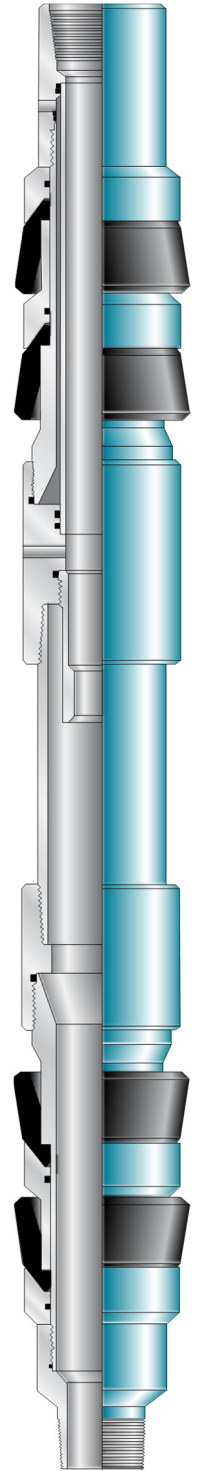
For high injection rate applications, a **High Flow SST (Product 10-035)** is available.

### OPERATION

The tool assembly is usually made up with the By-Pass Valve, Fluid Control Valve, SR-2 Packer and Selective Stimulation Tool. This assembly is run with the By-Pass Valve open. Positioned in blank casing, the By-Pass Valve is closed and the SST and Tubing are pressure tested. The SST is then moved to the first interval, the By-Pass Valve is opened and treating fluid is circulated to bottom.

If the SR-2 Packer was run with the SST, the packer is set and the By-Pass Valve is closed before swabbing so it is not necessary to swab the annular volume.

After the job is complete the By-Pass Valve is opened and the assembly is pulled from the well.



## SPECIFICATIONS

10-135 SPECIFICATION GUIDE												
CASING							PRODUCT NUMBER	PACKER				
O.D.	WEIGHT		MIN I.D.		MAX I.D.			Cup OD		Drop Bar Fish Neck	EUE THREAD	
in / mm	lb / ft	kg / m	in	mm	in	mm		in	mm	in / mm	in / mm	
4 1/2 114.3	15.1	22.5	3.826	97.2	N/A	N/A	10-135-2340	4.000	101.6	0.75 19.5	2 3/8 60.3	
	12.6-13.5	18.7-20.1	3.920	99.6	3.958	100.5	10-135-2345	4.080	103.6			
	9.5-11.6	14.1-17.3	4.000	101.6	4.090	103.9	10-135-2346	4.150	105.4			
5 127.0	18.0-21.4	26.8-31.8	4.126	104.8	4.276	108.6	10-135-2350	4.340	110.2			
	15.0-18.0	22.3-26.8	4.276	108.6	4.408	112.0	10-135-2351	4.620	117.3			
5 1/2 139.7	20.0-23.0	29.8-34.2	4.670	118.6	4.778	121.4	10-135-2354	4.980	126.5			
	17.0-20.0	25.3-29.8	4.778	121.4	4.892	124.3	10-135-2355	5.090	129.3			
	14.0-17.0	20.8-25.3	4.892	124.3	5.012	127.3	10-135-2357	5.200	132.1			
5 3/4	16.1-19.9	24.0-29.6	4.961	126.0	5.197	132.0	10-135-2360	5.280	134.1			
6 5/8 168.3	32	47.6	5.675	144.1	N/A	N/A	10-135-2765	5.830	148.1			1.188 30.2
	24.0-28.0	35.7-41.7	5.791	147.1	5.921	150.4	10-135-2766	6.010	152.7			
7 177.8	38.0-42.7	56.5-63.5	5.625	142.9	5.795	147.2	10-135-2769	6.010	152.7			
	32	47.6	6.094	154.8	N/A	N/A	10-135-2770	6.200	157.5			
	26.0-30.0	38.7-44.3	6.154	156.3	6.276	159.4	10-135-2771	6.380	162.1			
	22.0-26.0	32.7-38.7	6.276	159.4	6.398	162.5	10-135-2772	6.460	164.1			
	17.0-23.0	25.3-34.2	6.366	161.7	6.538	166.1	10-135-2774	6.620	168.1			
9 5/8 168.3	47.0-53.0	69.9-78.9	8.535	216.8	8.681	220.5	10-135-2795	8.850	224.8	1.188 30.2	2 7/8 73.0	
	40.0-47.0	59.5-69.9	8.681	220.5	8.835	224.4	10-135-2796	8.900	226.1			
	36.0-43.0	53.6-64.0	8.755	222.4	8.921	226.6	10-135-2797	9.050	229.9			
	29.3-36.0	43.6-53.6	8.921	226.6	9.063	230.2	10-135-2798	9.210	233.9			
	47.0-53.0	69.9-78.9	8.535	216.8	8.681	220.5	10-135-3595	8.850	224.8	1.188 30.2	3 1/2 88.9	
	40.0-47.0	59.5-69.9	8.681	220.5	8.835	224.4	10-135-3596	8.900	226.1			
	36.0-43.0	53.6-64.0	8.755	222.4	8.921	226.6	10-135-3597	9.050	229.9			
	29.3-36.0	43.6-53.6	8.921	226.6	9.063	230.2	10-135-3598	9.210	233.9			