



200° F+

**SAVE MONEY, MINIMIZE RISK AND
REDUCE TIME TO PRODUCTION**

Incredible compressive strength properties and dissolves at predictable rates with the presence of common wellbore temperatures

**RELIABLE FLOWBACK WITHOUT THE
NEED FOR COSTLY INTERVENTION**

MAGNUM VANISHING PLUG™ (HIGH TEMP) 200° F+

This product may be covered by one or more patents or pending patent applications.

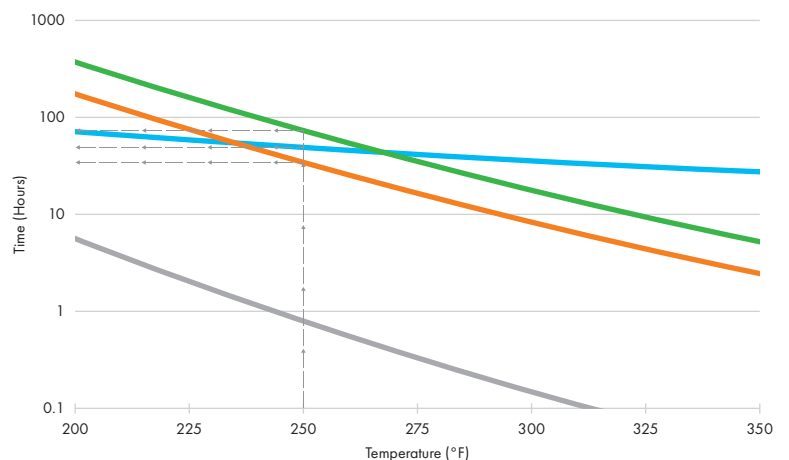
INNOVATION REVEALED

Your days of intervention are over—save money, minimize risk and reduce time to production with the Magnum Vanishing Plug™ (MVP). The Magnum Vanishing Plug™ (MVP) has incredible compressive strength properties and dissolves at predictable rates with the presence of common wellbore temperatures and fluid, offering reliable flowback without the need for costly intervention. It's just one more way Nine Energy Service enables operators to achieve greater efficiency.

Features

- Dissolvable slips
- Environmentally safe
- Eliminates the need for milling where tubing weight is a factor, such as in long laterals
- Less than one cubic inch of solids left behind when dissolved
- Fully dissolvable shearing mechanism
- Usage procedures and equipment identical to that of conventional composite plugs
- Efficient wireline deployment speeds of up to 400 feet per minute
- Proven anchoring and pack-off system design
- Wireline pumpdown compatible

Time for 5-½" Magnum Vanishing Plug™
High-Temperature (4.30) Degradation



— MVP™ HT Polymer Delay (hrs)
— MVP™ HT Polymer Degradation (hrs)
— MVP™ HT Alloy Degradation (hrs)
— Fastball™ HT Degradation (hrs)

Example: 4.30" O.D. MVP™ HT
Temperature = 250°F
MVP™ HT Polymer Degradation = 34.2 Hours
MVP™ HT Alloy Degradation = 48.9 Hours
Fastball™ HT Degradation = 71.8 Hours

Magnum Vanishing Plug - High Temp - BALL DROP									
CASING SPECS				PLUG SPECS					
O.D. inch (mm)	Weight Range lb/ft (kg/m)	Min. I.D. inch (mm)	Max. I.D. inch (mm)	O.D. inch (mm)	I.D. inch (mm)	Length inch (mm)	Ball Size inch (mm)	Setting Tool	Pressure Rating psi (Mpa)
3-1/2 (88.9)	9.3-10.2 (13.8-15.2)	2.92 (74.2)	2.99 (76.0)	2.73 (69.3)	0.46 (11.6)	13.7 (347.7)	1.00 (25.4)	Magnum A-1 or Owen	10k (68.9) Topside Only
4 (101.6)	11.6 (17.2)	3.43 (87.1)	3.43 (87.1)	3.13 (79.5)	0.74 (18.8)	15.7 (398.0)	1.75 (44.5)	Magnum A-1, Baker #10 or Owen	10k (68.9) Topside Only
4-1/2 (114.3)	15.10-17.10 (22.5-25.4)	3.75 (95.4)	3.83 (97.2)	3.44 (87.4)		14.4 (366.0)	1.75 (44.5) or 2.125 (54.0) optional		10k (68.9) Topside Only
	9.50-13.50 (14.1-20.1)	3.92 (99.6)	4.09 (103.9)	3.57 (90.7)	0.74 (18.8)	14.4 (366.0)	1.75 (44.5) or 2.125 (54.0) optional		9k (62.0) Topside Only
5 (127.0)	23.20 (34.5)	4.04 (102.7)	4.04 (102.7)	3.57 (90.7)				14.7 (372.1)	10k (68.9) Topside Only
	20.3-21.4 (30.2-31.8)	4.12 (104.8)	4.18 (106.3)	3.75 (95.3)		1.11 (28.2)	15.8 (401.6)	2.125 (54.0)	Magnum A-1, Baker #20 or Owen
5-1/2 (139.7)	23.00-28.40 (34.2-42.2)	4.44 (112.8)	4.67 (118.6)	4.13 (104.8)	15.9 (402.8)				
5-1/2 (139.7)	15.50-23.00 (23.1-34.2)	4.67 (118.6)	4.95 (125.7)	4.30 (109.2)					

Casing Specs are according to API Tubing/Casing Dimension Chart Information.

Magnum Vanishing Plug - High Temp - BALL IN PLACE									
CASING SPECS				PLUG SPECS					
O.D. inch (mm)	Weight Range lb/ft (kg/m)	Min. I.D. inch (mm)	Max. I.D. inch (mm)	O.D. inch (mm)	I.D. inch (mm)	Length inch (mm)	Ball Size inch (mm)	Setting Tool	Pressure Rating psi (Mpa)
3-1/2 (88.9)	9.3-10.2 (13.8-15.2)	2.92 (74.2)	2.99 (76.0)	2.68 (68.1)	0.75 (19.1)	14.6 (370.6)	1.00 (25.4)	Magnum A-1 or Owen	10k (68.9) Topside Only
				2.73 (69.3)	0.46 (11.6)	13.7 (347.7)			
4-1/2 (114.3)	15.10-17.10 (22.5-25.4)	3.75 (95.4)	3.83 (97.2)	3.44 (87.4)	1.13 (28.7)	14.4 (366.0)	1.75 (44.5)	Magnum A-1, Baker #10 or Owen	10k (68.9) or 12.5k (86.2) Topside Only
	9.50-13.50 (14.1-20.1)	3.92 (99.6)	4.09 (103.9)	3.57 (90.7)		15.0 (381.0)			
5 (127.0)	23.20 (34.5)	4.04 (102.7)	4.04 (102.7)	3.57 (90.7)		15.1 (383.5)			10k (68.9) Topside Only
	20.3-21.4 (30.2-31.8)	4.12 (104.8)	4.18 (106.3)	3.75 (95.3)	15.4 (390.7)				
	18.0 (26.8)	4.28 (108.6)	4.28 (108.6)	3.90 (99.1)					
5-1/2 (139.7)	23.00-28.40 (34.2-42.2)	4.44 (112.8)	4.67 (118.6)	4.13 (104.8)	1.50 (38.1)	15.8 (401.6)	2.125 (54.0)	Magnum A-1, Baker #20 or Owen	10k (68.9) or 13k (89.6) Topside Only
5-1/2 (139.7)	15.50-23.00 (23.1-34.2)	4.67 (118.6)	4.95 (125.7)	4.30 (109.2)	1.50 (38.1)	15.9 (402.8)		Magnum A-1, Baker #20 or Owen	10k (68.9) Topside Only

Casing Specs are according to API Tubing/Casing Dimension Chart Information.

Magnum Vanishing Plug - High Temp - BRIDGE PLUG							
CASING SPECS				PLUG SPECS			
O.D. inch (mm)	Weight Range lb/ft (kg/m)	Min. I.D. inch (mm)	Max. I.D. inch (mm)	O.D. inch (mm)	Length inch (mm)	Setting Tool	Pressure Rating psi (Mpa)
3-1/2 (88.9)	9.3-10.2 (13.8-15.2)	2.92 (74.2)	2.99 (76.0)	2.73 (69.3)	13.7 (347.7)	Magnum A-1 or Owen	10k (68.9) Top & Bottom Sides
5-1/2 (139.7)	15.50-23.00 (23.1-34.2)	4.67 (118.6)	4.95 (125.7)	4.30 (109.2)	19.0 (482.9)	Magnum A-1, Baker #20 or Owen	10k (68.9) Topside x 8k (55.2) Bottomside

Casing Specs are according to API Tubing/Casing Dimension Chart Information.

Optional pump down kit sizes available

For more information, and to find a representative near you, visit nineenergyservice.com