

Motor Gas Separator

These tools incorporate a rotary drum separator that removes the gas from energized flow before it reaches the downhole motor. Bypassing the gas allows operation of the motor at the design flow fluid flow rate while simultaneously running high gas flow rates.



U.S. Patent 7,677,308

High Efficiency Gas Separation

- Eliminates nitrogen from the motor flow.
- Prevents motor overspeed and premature failure.
- Provides extended motor life in deep hot wells.

Rotary Drum Separator

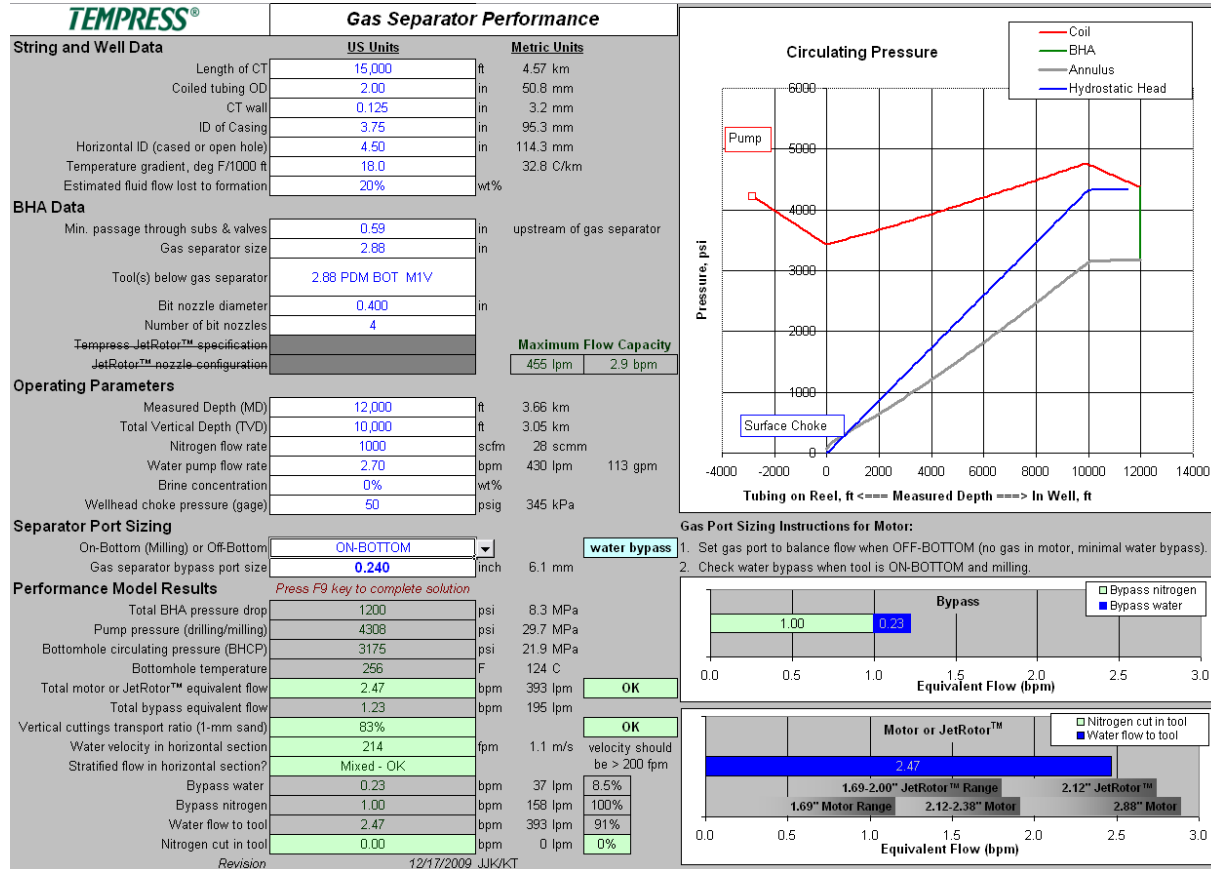
- Compact length simplifies setup of the BHA.
- Accommodates severe doglegs and multi-lateral completions.
- Compatible with common well service fluids.
- All units are sour gas compatible.

Specifications

MGS™ tool sizes	1.69" (43 mm)	2.12" (54 mm)	2.88" (70 mm)
Length (connected)	18" (460 mm)	18" (460 mm)	18" (460 mm)
Flow capacity (max commingled flow equivalent)	2.1 bpm 90 gpm (340 lpm)	2.1 bpm 90 gpm (340 lpm)	6.2 bpm 260 gpm (1000 lpm)
Max pressure loss from tool	< 70 psi (0.5 MPa)		
Max gas fraction at inlet	80%		
Typical gas cut at outlet	< 0.5%		
Max Temperature	400°F (200°C)		
Fluid compatibility	Clear fluids: water, 1% acid, 3% KCl, scale dissolvers, frac oil		
Gas compatibility	Nitrogen, air		

MGST™ Application Software

A proprietary analysis program is supplied with the tool that allows the operator to select the best separator performance range for your job. All pertinent parameters of the job requirements are entered. The program outputs the performance and operational range. MGS™ tools incorporate a changeable gas orifice that can be sized as needed. (see the screen shot below)



MGST™ operational parameter program screen shot

MGST™ Operating Guide

MGST™ tools are provided with a brief operational guide that explains how to change out the gas orifice as well as cleaning and inspection procedures for multiple runs between redresses.