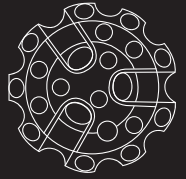


**STRATUM**  
DRILLING SOLUTIONS



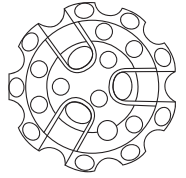
Stratum Drilling Solutions Ltd  
DTH Hammer Drilling Products

# SDS280 FOAM/MIST PUMP

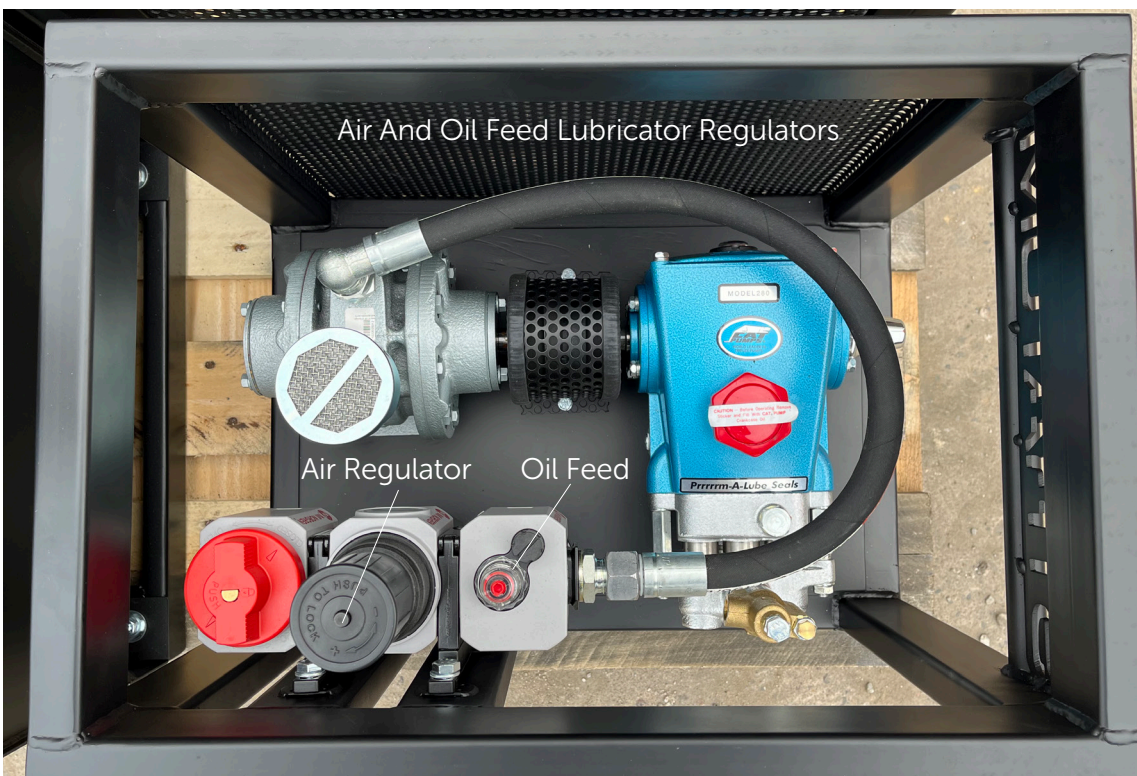
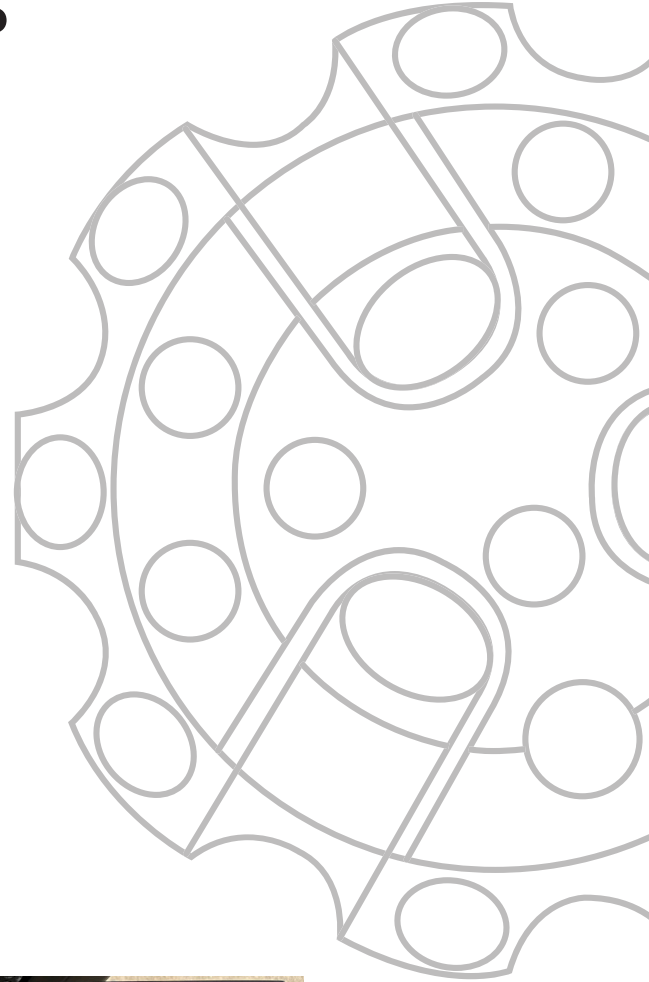
OPERATORS INSTRUCTIONS / AND SPARE PARTS LIST

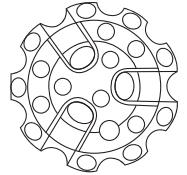


STRATUMDRILLINGSOLUTIONS.COM  
EMAIL: INFO@STRATUMDRILLINGSOLUTIONS.COM



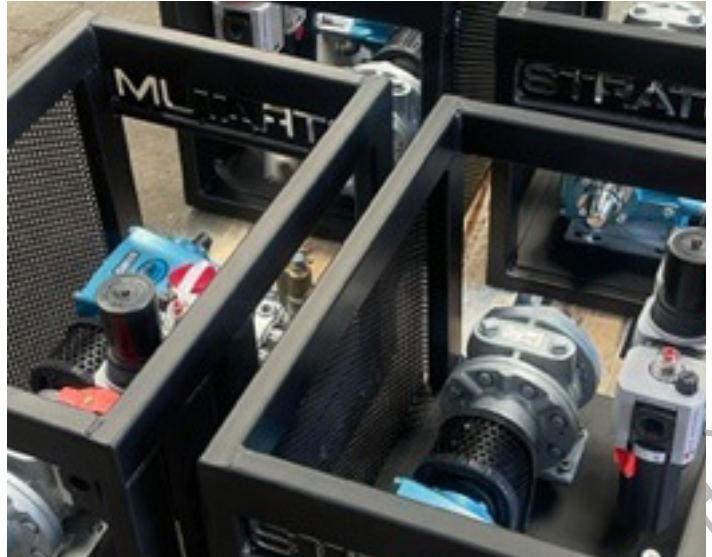
## SDS280 FOAM/MIST PUMP SET UP





## SDS280 FOAM/MIST PUMP SET UP

1. Fabricated Sturdy Frame
2. Gast Air Motor
3. CAT280 Piston Pump
4. Output Control Valve
5. Lubrication Control
6. Pressure Control
7. Air Inlet Connection
8. Water Trap Bowl
9. Lubricator & Oil Level Gauge



### OPERATIONAL USES

- Water Injection
- Foam Injection
- Dust Suppression
- Supply Flushing Water for shallow small diameter coring operations

### OUTSTANDING FEATURES

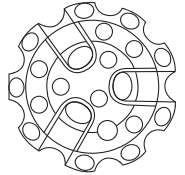
- Light, compact Robust unit
- Infinitely variable output
- Economical to operate
- Requires minimum of care and maintenance
- Provides a long dependable service

**DIMENSIONS: 50cm x 38cm x 35cm      WEIGHT: 35kg**

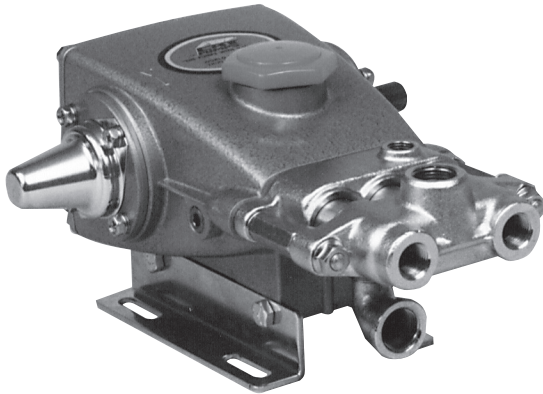
The Stratum Drilling Solutions Mist/Foam Injection Pump is designed to comply with all current European Safety requirements and if used in accordance with the operating instructions will not present any unforeseen hazards.

All Servicing And Repair Of Equipment Can Be Carried Out In House At Our Facility If Required





## SDS280 FOAM/MIST PUMP SET UP



(Rails and Shaft Protector sold separately)

**3 Frame  
Piston Pump  
Brass Models**

**Stainless Steel  
Models**

**280  
290  
281  
291**

### FEATURES

- Triplex UNIFLOW design provides a smooth, low-pulsation flow with strong suction capabilities.
- Hard chrome-plated 304S cylinders and sleeves provide long life with mild liquids within a range of 5-9 PH.
- Optional 316 Stainless Steel manifolds for added strength and corrosion resistance.
- Optional FPM and PTFE elastomers for liquid compatibility.

### COMMON SPECIFICATIONS

Inlet Pressure Range .....	-8.5 to 40 psi	(-0.6 to + 2.8 bar)
Bore.....	0.787"	(20 mm)
Crankcase Capacity .....	10 oz.	(.3 l)
Maximum Liquid Temperature .....	160°F	(71°C)
Above 130°F call CAT PUMPS for inlet conditions and elastomer recommendations.		
Inlet Port (1) .....	1/2" NPTF	(1/2" NPTF)
Chemical Injection Port (1) .....	1/4" NPTF	(1/4" NPTF)
Discharge Ports (2) .....	3/8" NPTF	(3/8" NPTF)
Discharge Port (1) .....	1/2" NPTF	(1/2" NPTF)
Pulley Mounting.....	Either side	(Either side)
Shaft Diameters.....	0.650"	(16.5 mm)
Dimensions (280).....	10.63 x 8.79 x 5.30"	(270 x 223x 134.5 mm)
Dimensions (290).....	10.83 x 8.79 x 5.30"	(275 x 223x 134.5 mm)

### CAUTIONS AND WARNINGS

All High Pressure Systems require a primary pressure regulating device (i.e. regulator, unloader) and a secondary pressure relief device (i.e. pop-off valve, relief valve). Failure to install such relief devices could result in personal injury or damage to pump or property. CAT PUMPS does not assume any liability or responsibility for the operation of a customer's high pressure system.

Read all CAUTIONS and WARNINGS before commencing service or operation of any high pressure system. The CAUTIONS and WARNINGS are included in each service manual and with each Data sheet. CAUTIONS and WARNINGS can also be viewed online at [www.catpumps.com/cautions-warnings](http://www.catpumps.com/cautions-warnings) or can be requested directly from CAT PUMPS.

### WARRANTY

View the Limited Warranty on-line at [www.catpumps.com/warranty](http://www.catpumps.com/warranty).

### SPECIFICATIONS

U.S. Measure

Metric Measure

#### MODEL 280 and 281

Flow .....	3.0 gpm	(11.4 l/m)
Pressure Range.....	100 to 1000 psi	(7 to 70 bar)
RPM.....	1330 rpm	(1330 rpm)
Stroke .....	0.394"	(10 mm)
Weight .....	11.7 lbs.	(5.3 kg)

#### MODEL 290 and 291

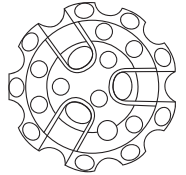
Flow .....	3.5 gpm	(13.2 l/m)
Pressure Range.....	100 to 1200 psi	(7 to 85 bar)
RPM.....	1200 rpm	(1200 rpm)
Stroke .....	0.472"	(12 mm)
Weight .....	12.1 lbs.	(5.5 kg)

### ELECTRIC HORSEPOWER REQUIREMENTS

MODEL	FLOW		PRESSURE			MOTOR PULLEY SIZE	
	U.S. gpm	l/m	psi 800	psi 1000	psi 1200	Using 1725 Nom. RPM Motor & 5.0" Pump Pulley O.D.	
			bar 55	bar 70	bar 85	rpm	Pulley O.D.
280	3.0	11.4	1.6	2.1	N/A	1330	3.9
	2.5	9.5	1.4	1.7	N/A	1108	3.2
	2.0	7.6	1.1	1.4	N/A	887	2.8
290	3.5	13.2	1.9	2.4	2.9	1200	3.5
	3.0	11.4	1.6	2.1	2.5	1029	3.0
	2.5	9.5	1.4	1.7	2.1	858	2.5

<b>DETERMINING THE PUMP R.P.M.</b>	$\frac{\text{Rated gpm}}{\text{Rated rpm}}$	=	$\frac{\text{"Desired" gpm}}{\text{"Desired" rpm}}$
<b>DETERMINING THE REQUIRED H.P.</b>	$\frac{\text{gpm x psi}}{1460}$	=	Electric Brake H. P. Required
<b>DETERMINING MOTOR PULLEY SIZE</b>	$\frac{\text{Motor Pulley O.D.}}{\text{Pump rpm}}$	=	$\frac{\text{Pump Pulley O.D.}}{\text{Motor rpm}}$

See complete Drive Packages [Incids: Pulleys, Belts, Hubs, Key] Tech Bulletin 003. Refer to pump **Service Manual** for repair procedure and additional technical information.



## SDS280 FOAM/MIST PUMP SET UP

### Product Specifications

Model Number	MAX. PRESS.		MAX. SPEED	HP	kW	Net Wt.	
	bar.	PSI				lbs.	kg
4AM-ARV-119	7.0	100	3,000 RPM	1.7	1.25	11	5.0
4AM-ARV-120	7.0	100	3,000 RPM	1.7	1.25	11	5.0

CONFORMS TO EUROPEAN STANDARD EN13463-1  
 NON-ELECTRICAL EQUIPMENT FOR EXPLOSIVE  
 ATMOSPHERES GROUP II CAT 2 (GAS & DUST),  
 PROTECTED BY CONSTRUCTION (SURFACE TEMP. RATED 135°C).

SOUND LEVEL 87 dB(A) MAX.

NORMAL AMBIENT +1°C. - 120°C.

RELATIVE HUMIDITY 0% - 100%

ENVIRONMENT HAZARDOUS AMBIENT COMBUSTIBLE  
GAS AND DUST +1°C TO +40°C

TECHNICAL DATA SUBJECT TO CHANGE WITHOUT NOTICE.

DIMENSIONS ARE FOR REF. ONLY UNLESS OTHERWISE SPECIFIED

