

Drilling Mud Agitators

The Model 20GT unit features a gearbox designed specifically for agitator service. This proven unit is designed to meet AGMA, OSHA, IEC, DIN, EU, and ATEX directives and provides cost effective and energy efficient mixing, maximizing your downhole drilling operations.



Mud Mixing Challenges

- Clay, polymers, rheology modifiers, and dispersing powders must be mixed thoroughly in the pits with no dead spots
- Material is Non-Newtonian and design must ensure no dead spots in the pit
- Drilling operations must be optimized by space and energy efficiencies

The Chemineer Solution

XE-3 Impeller

- Large diameter impellers at low speeds expands the mixing zone which efficiently controls the Non-Newtonian mud at low power levels
- Power savings equal to 50 to 60% over contour impellers, 60 to 70% over Canted/Pitched blade impellers, 70% over submersible mixers, 80 to 90% over flat blade impellers
- Low shear minimizes wear on impeller blades
- Lowers overall system weight, optimizing deck loading and mixer support designs

20GT Drive

- · Output Shaft Design
 - Larger output shaft design reduces deflections in gearbox associated with overhung mixing applications, thereby improving gear life
 - Large output bearings support output shaft providing a minimum of 100,000 hours B-10 life.
- · Housing and Lubrication
 - Cast housing with integral dry well seal provides sturdy and leak-proof seal eliminating gearbox lubrication failures
 - Bath lubrication ensures proper lubrication at all output speeds eliminating the need for internal or external lubrication pumps
 - Extra seal on dry well allows filling of unit with oil for transport and long term storage at the ship yard with minimal on-site preparation
 - Helical gearing provides high transmission efficiency and power savings while minimizing heat, noise, and wear prolonging gear life and unit power savings

- Shafting
 - Extension shafting can be supplied in various lengths for ease of installation by eliminating multiple pieces
 - Optional couplings are available to limit the length of shaft sections for installation
 - Shafting supplied with Slap Ring to prevent catastrophic shaft failure

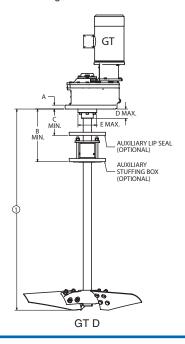
Inspections and Testing/ Documentation

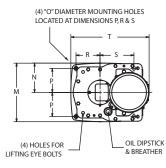
- Inspections on Chemineer manufactured gearbox ensures quality assembly for trouble free service
- Factory Acceptance Tests available for motor and gearbox assembly at rated speed allowing for check of noise, vibration, and temperature to ensure proper operation of the drive assembly
- Material Test Reports available for shaft and impeller

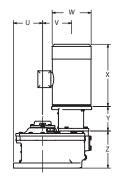
Product Specifications

Agitator Dimensions							
Case Size	Α	В	С	D	Е		
21GT	1.18	13.94	6.94	2.94	5.71		
22GT	2GT 1.38		8.00	4.00	7.48		
23GT	1.58	18.63	8.63	4.63	9.45		

- 1. Agitator output speed, shaft diameter and extension, impeller design and other optional features to suit application
- 2. Alternate flange sizes are available







Motor Dimensions									
Frame Size			.,	Υ					
		W	Х	21GT	22GT	23GT			
	140	7.75	13.11	3.98		_			
	180	9.25	16.24	5.51	6.02	_			
	210	11.00	17.96	5.51	6.02				
NEMA	250	12.75	22.25		6.85	7.01			
뵘	280	14.50	24.24		7.76	7.01			
	320	16.88	27.00	-	8.23	8.27			
	360	18.50	27.63	1		9.49			
	400	20.88	31.75	-	_	10.83			
	80	6.61	10.66	3.58	_	_			
	90	7.40	11.18	4.13	_	_			
	100	7.72	13.15	4.92	5.35	_			
	112	9.45	13.03	4.92	5.35	_			
EC	132	10.16	16.73	5.39	6.22	6.10			
	160	12.52	21.26	-	7.87	7.48			
	180	14.37	23.31	_	7.87	7.48			
	225	17.64	30.51	_	_	9.53			
	250	20.00	35.04			9.53			
	280	22.17	38.39			9.53			

Drive Assembly Dimensions										
Case Size	М	N	0	Р	R	S	Т	U	V	Z
21GT	12.77	6.45	0.84	5.56	5.56	7.81	17.91	6.73	6.69	8.47
22GT	16.97	8.48	1.00	7.06	7.06	10.06	26.00	8.50	9.06	10.75
23GT	21.97	10.99	1.00	9.65	7.68	2.17	31.15	9.25	11.41	14.80









Chemineer, Inc.

5870 Poe Avenue Dayton, Ohio 45414 Telephone: (937) 454-3200 Email: chemineer@nov.com

Chemineer, Ltd.

7 Cranmer Road, West Meadows Derby DE21 6XT, England Telephone: 44-1-332-546700 Email: chemineeruk@nov.com

Chemineer China

Room 2006. Modern Plaza 369 Xianxia Road Shanghai, China 200336 Telephone: 86-21-61240001 Email: chemineercn@nov.com

Chemineer, Inc.

125 Flagship Drive North Andover, MA 01845 Telephone: (978) 687-0101 Email: navinfo@nov.com

www.kenics.com www.greercomixers.com

Chemineer **International Sales** Offices:

Brazil Mexico Singapore

1-800-643-0641 • www.chemineer.com

National Oilwell Varco has produced this brochure for general information only, and it is not intended for design purposes. Although every effort has been made to maintain the accuracy and reliability of its contents, National Oilwell Varco in no way assumes responsibility or liability for any loss, damage or injury resulting from the use of information and data herein. All applications for the material described are at the user's risk and are the user's responsibility. All brands listed are trademarks of National Oilwell Varco.