

DREXELBROOK®

Level Solutions

FOR THE OIL AND GAS INDUSTRIES

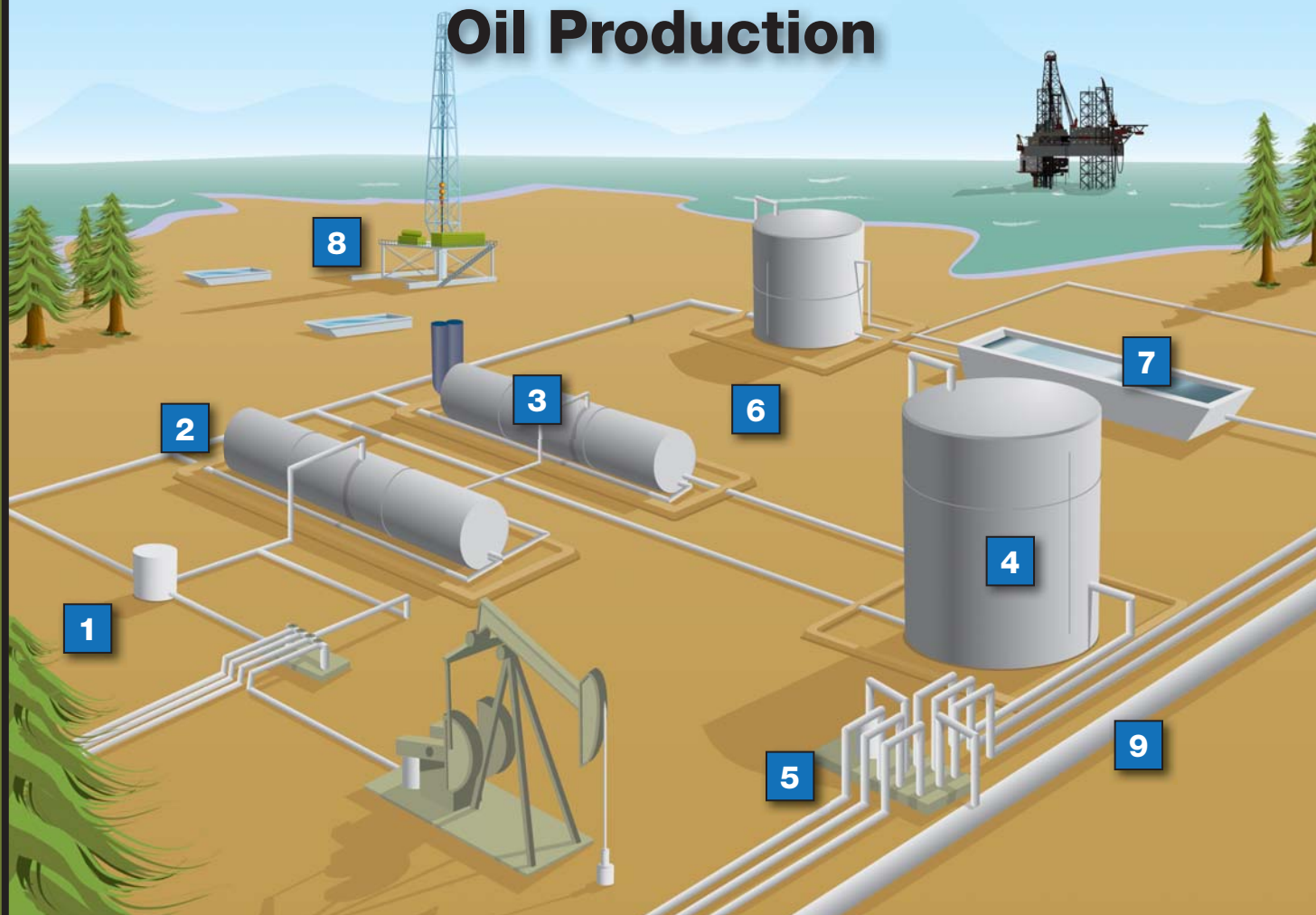
- Overfill Protection
- Water Cut
- Mud Pit Level
- Total Level
- Interface Measurement

PRODUCT AND APPLICATION GUIDE



AMETEK®

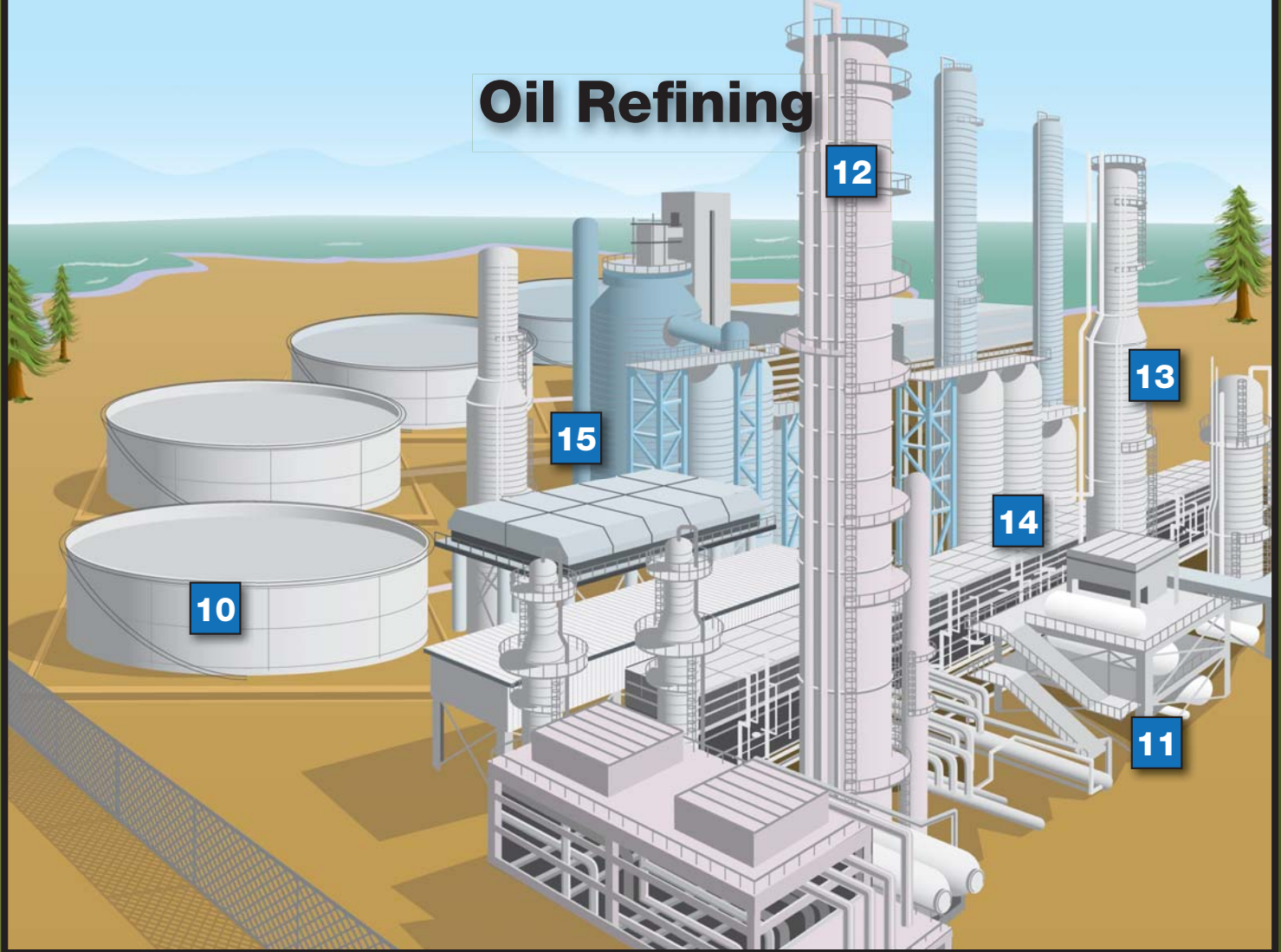
Oil Production



	APPLICATION	MEASUREMENT	DREXELBROOK SOLUTION
1	Automatic Well Testing	Interface Control Interface Alarm Water Cut High Level Alarm	Universal IV™ IntelliPoint™ Universal IV Cut Monitor IntelliPoint™ - RF Continuous Level Transmitter - RF Point Level Transmitter - BS&W water cut - RF Point Level Transmitter
2	Free Water Knock-Out	Interface Control Water Dump High Level Alarm Water Cut	Universal IV™ Dumpstar™ IntelliPoint™ Universal IV Cut Monitor - RF Continuous Level Transmitter - RF Oil / Water Interface Control - RF Point Level Transmitter - BS&W water cut
3	Heater Treater	Interface Control Water Dump High Level Alarm Water Cut	Universal IV™ Dumpstar™ IntelliPoint™ Universal IV Cut Monitor - RF Continuous Level Transmitter - RF Oil / Water Interface Control - RF Point Level Transmitter - BS&W water cut
4	Stock Tank	Interface Control Water Dump High Level Alarm	Universal IV™ Dumpstar™ IntelliPoint™ - RF Continuous Level Transmitter - RF Oil / Water Interface Control - RF Point Level Transmitter
5	Lease Automatic Custody Transfer (LACT)	Water Cut	Universal IV Cut Monitor - BS&W water cut
6	Skim Tank	Interface Control Water Dump High Level Alarm	Universal IV™ Dumpstar™ IntelliPoint™ - RF Continuous Level Transmitter - RF Oil / Water Interface Control - RF Point Level Transmitter
7	Flotation Cell	Interface Control	Universal IV™ - RF Continuous Level Transmitter
8	Drilling Mud	Pit Level Sensor	USonic™ - Ultrasonic Level Transmitter
9	Pipeline Slug Detection	Water Cut	Universal IV Cut Monitor - BS&W water cut

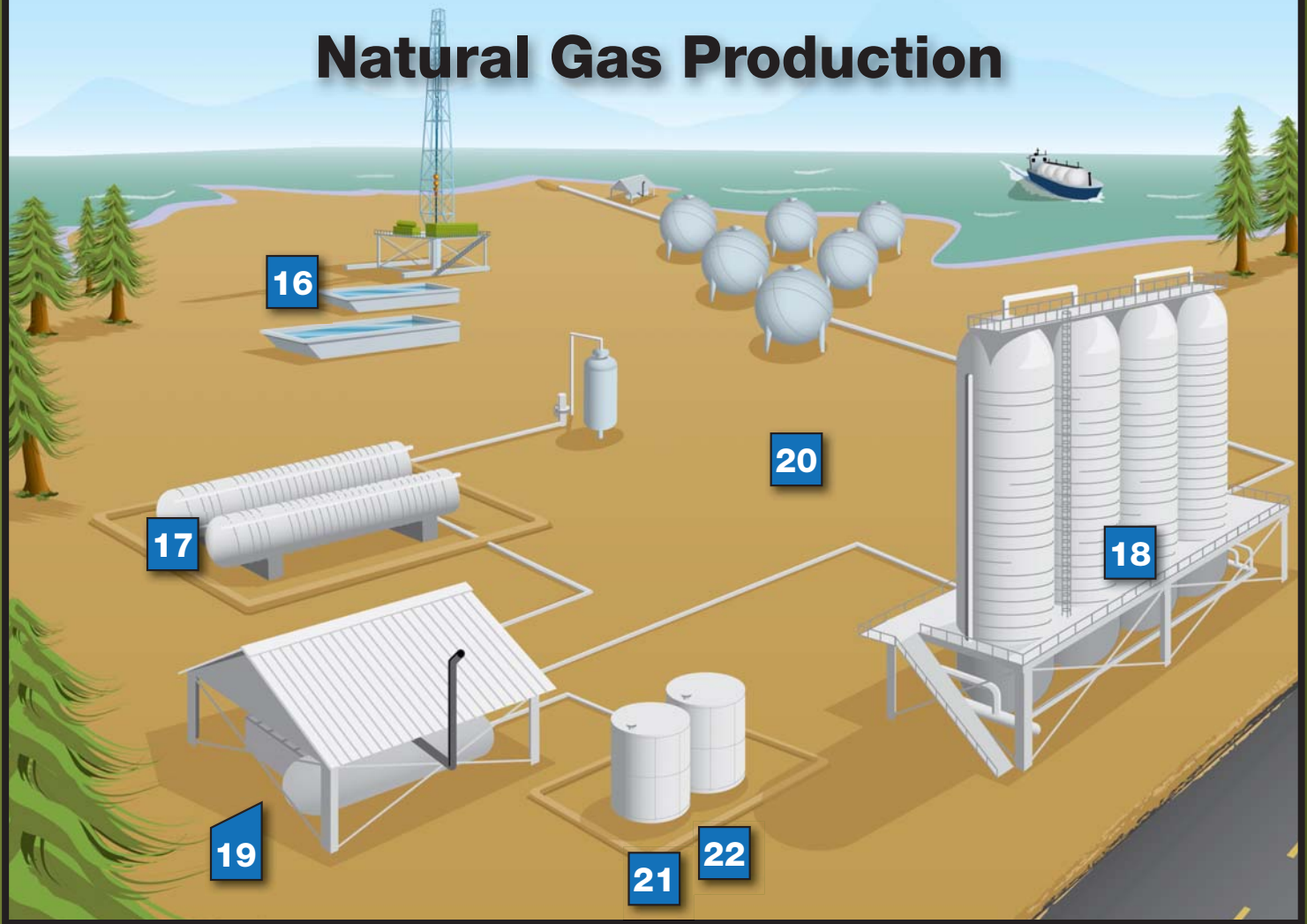
MODBUS AND LOW POWER DEVICES AVAILABLE

Oil Refining



APPLICATION		MEASUREMENT	DREXELBROOK SOLUTION	
10	Tank Farms	High Level Alarm Floating / Fixed Roof Water Bottom Water Cut Overfill/Low Level Alarm	IntelliPoint™ IntelliPoint™ Universal IV™ Universal IV Cut Monitor IntelliPoint™	- RF Point Level Transmitter - RF Point Level Transmitter - RF Continuous Level Transmitter - BS&W water cut - RF Point Level Transmitter
11	Desalter / Dehydrator	Grid - Interface Control Interface Backup Alarm Water Cut Grid Guard	Universal IV Cut Monitor Dumpstar™ Universal IV Cut Monitor Universal IV Cut Monitor	- BS&W water cut - RF Oil / Water Interface Control - BS&W water cut - BS&W water cut
12	Atmospheric & Vacuum Fractionating Columns	Interface Control	Universal IV Cut Monitor	- BS&W water cut
13	Alkylation Unit	Acid / Alkylate Interface Low Level Alarm % Acid in Alkylate Continuous Storage Level	Universal IV™ Dumpstar™ Universal IV Cut Monitor Universal IV™	- RF Continuous Level Transmitter - RF Oil / Water Interface Control - BS&W water cut - RF Continuous Level Transmitter
14	Coker	Drum Level	DR7000™	- Radar Level Transmitter
15	Lube Oil Plant	Interface Control Water Dump High Level Alarm	Universal IV™ Dumpstar™ IntelliPoint™	- RF Continuous Level Transmitter - RF Oil / Water Interface Control - RF Point Level Transmitter

Natural Gas Production



	APPLICATION	MEASUREMENT	DREXELBROOK SOLUTION	
16	Drilling Mud	Pit Level Sensor	USonic™	- Ultrasonic Level Transmitter
17	Field Dehydration	Separator Separator Condensate Tank Condensate Tank Water Storage Tank Water Storage Tank	Universal IV™ IntelliPoint™ DM231™ Impulse TDR Impulse TDR IntelliPoint™	- RF Continuous Level Transmitter - RF Point Level Transmitter - Magnetostrictive Level Transmitter - TDR Level Transmitter - TDR Level Transmitter - RF Point Level Transmitter
18	Gas Plant / Gas Fractionation	Liquid/Gas and Liquid/Liquid Control	Universal IV™	- RF Continuous Level Transmitter
19	Compressor Stations	Total Level & Interface	DM231™	- Magnetostrictive Level Transmitter
20	LNG Storage	Level Control Level Control High Level Alarm LNG Discharge Alarm	DR7100™ Impulse TDR IntelliPoint™ IntelliPoint™	- TDR Level Transmitter - TDR Level Transmitter - RF Point Level Transmitter - RF Point Level Transmitter
21	Condensate Storage	Total Level & Interface	DM231™	- Magnetostrictive Level Transmitter
22	Water Storage/Brine Storage	Water Level High Level Alarm	Impulse TDR IntelliPoint™	- TDR Level Transmitter - RF Point Level Transmitter

MODBUS AND LOW POWER DEVICES AVAILABLE

The Products You Need for the Oil & Gas Industry

BS&W Water Cut

FEATURES

- Durable: No spool piece required; reduces installation cost and maintenance
- 0-50% in Light Oil and 0-80% in Heavy Oil
- Accuracy: ± 0.03 Variance in 0 to 1% Range
- Approvals: Intrinsically Safe (IS), Explosion Proof (XP) without IS barrier, FM, FMC, ATEX, IECEx and CE Mark

APPLICATIONS: Automatic Well Testing, LACT units, Basic Sediment & Water, Separation Vessels, Pipeline Slug Detection, Truck Unloading



Universal IV
Cut Monitor

Overfill Protection for Floating Roofs

FEATURES

- Ideal for SIL 1 and SIL2 certifications
- No calibration or setpoint adjustments
- Automatically recognizes and ignores coating to prevent false alarms
- Universal power supply automatically detects input power source
- AutoVerify continuously checks electronics and sensing elements for faults
- ManualCertify checks that AutoVerify circuits are functioning
- Cote-Shield circuitry eliminates maintenance required with traditional mechanical switches

APPLICATIONS: Overfill/High Level Alarms, Floating Roof Tank



IntelliPoint

Interface Measurement

FEATURES

- Fourth generation RF Continuous system with Pro and Lite models available
- Pro model is applicable for: conductive, insulating, and heavy/light coating
- Measurement span as short as 1 in (25 cm) to 800 ft (244 m) with no dead zone areas
- Immune to tank obstructions such as nozzles, ladders, pipes and agitators

APPLICATIONS: Interface, Desalter/Dehydrators, Electrostatic Separators, Heater Treater, Free Water Knockout



Universal IV
Pro & Lite

Level Transmitter

FEATURES

- Two-Wire Loop Powered, HART
- Display is menu driven and easily configured without detailed procedures
- Units designed for either Intrinsically Safe or Explosion Proof in Class 1 Div 1, Zone 0 environments
- Response time: 300 milliseconds
- Range: up to 30 ft

APPLICATIONS: Mud Tanks, Logging, Frac Fluids



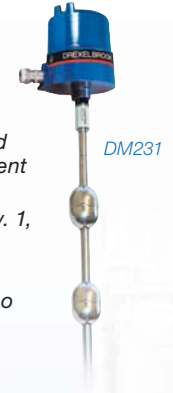
USonic

Magnetostrictive Liquid-Level Sensor

FEATURES

- High Accuracy: 0.01% of measured span and less than 1mm absolute, over full measurement range; Low Power option available
- Meets FM and CSA approvals for Class 1 Div. 1, Zone 1 Explosion Proof installations
- Modbus RTU/ASCII
- No calibration required; easy to install with no maintenance

APPLICATIONS: Total Level, Interface Level, Temperature – 5 sensors over active range



DM231

Oil/Water Interface Level Control

FEATURES

- Prevent dumping of valuable oil with water draw-off
- Install directly into existing vessel as retractable sensor will fit through a minimum opening of 7/8 in
- Time Delay: 0-90 seconds, standard

APPLICATIONS: Desalter/Dehydrator, Heater Treater, Stock Tank, Low Level Alarm, Automatic Well Testing, Free Water Knockout



Dumpstar

TDR Level Transmitter

FEATURES

- 2-wire, HART or Modbus communication
- Accuracy to ± 3 mm and Resolution to 1 mm
- Hazardous approvals, Intrinsically Safe, Explosion Proof and Non-Incendive approvals

APPLICATIONS: Brine Storage, Frac Trucks, Hydrocarbon Storage



Impulse

Other Oil and Gas products available; please contact us.

The Oil, Gas and Petrochemical industries are a major global market for Drexelbrook. Our RF Admittance point and continuous level instruments have met the extreme environments found in oil refineries, offshore platforms and chemical plants for nearly 50 years. Drexelbrook has a wide selection of products and technology offerings, and the expertise to apply them, affording Drexelbrook the unique position to provide the best possible solution to meet the instrumentation requirements specific to the Oil, Gas and Petrochemical Industries.



205 Keith Valley Road • Horsham PA 19044 U.S.A.

U.S.A. Sales: 800-553-9092

24-Hour Service: 800-527-6297

Domestic Sales Fax: 215-956-3815 or 215-956-3824

Main Fax: 215-674-2731

E-mail: drexelbrook.info@ametek.com

www.drexelbrook.com

Japan

Tel: +81-3-6809-2403 • Fax: +81-3-6809-2410

Email: drexelbrook-japan.info@ametek.co.jp

www.nihon-drexelbrook.jp

China

Tel: 86 10 8526 2111 • Fax: 86 10 8526 2141

www.ametek.com.cn

Brazil

Tel: +55 (19) 2107-411

www.ametek.com.br