POWER SOLUTIONS FOR AGRICULTURAL APPLICATIONS

POWER YOU CAN DEPEND ON

As a confinement grower, you are more dependent than ever on reliable electric power. Utility outages can disrupt your operations and cause serious financial losses.

That's why more and more agriculture operators are managing the financial risks of power outage by installing proven standby power systems. When it comes to selecting a standby power supplier, you want a partner with solid agriculture market knowledge and experience.

MTU Onsite Energy – through its agriculture-specific equipment brand, Katolight by MTU Onsite Energy – has been focused on grower applications since 1952. This long history makes MTU Onsite Energy a supplier that understands your operation and knows your concerns. We have also kept pace with technological advancements in agriculture by developing close working relationships with many of the leading builders and suppliers of ventilation, feeding and control equipment. As a result, MTU Onsite Energy is your most knowledgeable source of standby and prime power systems for agricultural applications.

POWER RANGE

Fuel	Power range (kW)	Frequency (Hz)
LP gas	30-400	60
Natural gas	30-400	60
Diesel	30-3,250	60
	30-2,500	50
Power take offs (PTOs)		
Single-phase	25-100	
Three-phase	45-135	

PROVEN PRODUCT LINEUP

Katolight by MTU Onsite Energy products are designed and tested to meet stringent industrial and commercial standards. But they also incorporate specific agricultural design criteria perfected over 60 years of agricultural market experience and focus – such as coated circuit boards for protection from moisture and dust, and rodent protection in key areas to help reduce downtime and nuisance failures due to rodent damage.

Our generator sets meet or exceed all applicable design and performance standards established by the industry, including ISO 8528, an international standard for reciprocating engine-driven generating sets. In addition, standards such as UL 2200 and certain design performance characteristics that are recognized by national insurance carriers provide added value by reducing insurance costs for fire and suffocation coverage. Katolight by MTU Onsite Energy generators – including diesel, liquid propane (LP), natural gas and power-take-off units – are specifically designed for agricultural applications. That means generators, transfer switches and controls are built from the ground up with your application in mind. The resulting power systems are:

// Simple to operate and maintain
// Quick to accept full load in power transfers
// Ideal for the demands of agricultural environments
// Clean, quiet and fuel efficient

UL 2200, IBC certification and OSHPD pre-approval are also available as options to insure our equipment meets the specific demands of your application.

Diesel powered
Rugged and dependable, diesel-powered generator sets from Katolight by MTU Onsite Energy range in size from 30 kW to 3,250 kW. Generator sets from 230 kW and above feature engines by MTU that incorporate the most advanced engine management systems in the world. These systems include third-generation common rail fuel injection, advanced electronic engine controls and very low exhaust emissions. Equally important, these generators accept full rated load in one step and deliver transient performance that is ideally suited for the type of electrical loads found in agricultural standby applications.

LP gas powered
In many agricultural applications where LP gas is already being used for heating or grain drying, LP can also be an economical fuel for standby generators. These units will also run on natural gas when it is available. Katolight by MTU Onsite Energy has LP/natural gas generators from 30 kW to 400 kW. They feature advanced, fuel-efficient engines with extremely low exhaust emissions and one-step load acceptance.

Power Take Off
The Power Take Off (PTO) series from Katolight by MTU Onsite Energy is the most complete selection in the industry with features that assure you of quality and dependability. Available in single-phase from 25 kW to 100 kW and in three-phase from 45 kW to 135 kW, these easy-to-use PTO units offer the ultimate in economy, portability and flexibility.

AGRICULTURAL MARKET KNOW-HOW

HOG CONFINEMENT

Whether you own a farrow-to-wean, farrow-to-finish or hog finishing operation, you know that having dependable electric power is one of your best hedges against economic risk. In farrowing operations, even 30 minutes without proper ventilation or heat can lead to increased animal mortality and lost revenue. Likewise, watering systems, feeding operations and manure handing equipment are all critical loads that need to have constant uptime for the best animal health. This is why so many growers have chosen to back up their hog confinement operations with dependable Katolight by MTU Onsite Energy generators.

"We have approximately 30,000 sows on multiple sow farms. Our main electrical loads are ventilating, heating, feeding lines and various controllers for the ventilation in the barns. In total, we have forty 60 kW Katolight LP-powered generators at our wean-to-finish barns which each hold 3,000 hogs. The heaters in those buildings are also LP-powered so that makes it convenient to also run the generators on LP. We also have nine sow farms, each with an 80 kW Katolight diesel unit. We bought our first Katolight generator in 2005 and they have been very high-quality machines for us."

Andy Meine, maintenance manager, Schwartz Farms, Sleepy Eye, Minnesota

"Every finishing site has a 40 kW Katolight generator set and our sow farms have 200 kW and 250 kW Katolight generator sets. We use Katolight because it was originally recommended by our electrician. Our biggest is a 300 kW Katolight unit at our feed mill because even if the power is out for an extended time, the pigs still need to eat. The critical loads in the hog buildings are heating and ventilation, pumping water as well as the feeding machinery. If we didn't have standby power, or a back-up curtain drop system, for example, we could start getting into some pretty serious mortality in a hurry."

Jerome Vittetoe, J.W. Vittetoe Pork, Washington, Iowa

"Katolight generators have been very reliable, and Katolight has an excellent service program. We chose Katolight because it is the predominant brand in Minnesota and we have sold numerous generators with our buildings over the past 18 years with virtually no problems."

Jim Nordquist, Ten Brook Farms, LLP, Morris, Minnesota

POULTRY OPERATIONS

Power needs in the poultry industry vary depending on whether you're producing pullets, eggs, broilers or turkeys. But like other animal confinement operations, dependable electric power is a must to maintain animal health. In critical pullet operations, loss of power at chick rearing times can lead to devastating results from either lack of heat or lack of ventilation. During the warmest or coldest times of the year especially, even 15 minutes without power can expose you to financial risk. That's why poultry growers depend on reliable power solutions from Katolight by MTU Onsite Energy.

"We raise them from chicks until they're ready to lay eggs and then we sell them to egg producers. Our most critical electrical load is ventilation, but we also need it for heating when we have chicks once a month. We have two 150 kW Katolight generators. They have worked very, very well and we recommend them to everybody. We chose Katolight because our livelihood depends on those generators. Reliability was the key factor we were looking for. In the warm summertime, we tell our staff that we have only 15 minutes before birds are at risk. So, it is absolutely necessary for us to have standby power."

Barb Frank, Pullet Connection, Danube, Minnesota

"The people at Katolight have been stupendous. We have one 300 kW Katolight generator and a smaller one for a satellite farm. The bigger genset backs up all ventilation and heat for the barns and also several dwellings. With Katolight's help, we designed a high-voltage distribution system that uses one generator to replace four other smaller generators. That way, I can run one big generator cheaper than I can run four little ones. This is the first installation of this type and the local Rural Electric Co-op says it is now going to be the model for other standby power installations in our area."

Kendall Paulsen, Anderson Pullets, Spencer, Iowa

"We have two 400 kW diesel units that back up the hog and poultry buildings and the dairy barn. The critical electrical loads are ventilation and all the milking and feeding operations. We also have a separate genset just for the house and shop area. I've been a Katolight user for many years and they have always worked super good. We just do regular oil and filter maintenance and they keep running just fine."

Solmar Hofer, Hutterite Community, Walsh, Alberta, Canada

DAIRY OPERATIONS

Dairy cows may truly be contented animals, but they still need to be milked twice a day and that milk has to be kept cool and fresh until it heads to the local dairy. That means that dairy farmers need a dependable standby power generator for those times when the local utility fails. Power is needed to ventilate barns, pump water, operate milking equipment, run feeding systems and refrigerate bulk tanks. Reliable Katolight by MTU Onsite Energy power systems can make the difference between crisis and contentment in the event of a utility power failure.

"When you're milking at this scale, it's a business requirement that crucial equipment is never without power," says Jim Nieland, project manager for Riverview. "We have at least 15 Katolight generators at our various farms and they have always been competitively priced and trouble-free. It's nice if you don't have to think about them a lot. When the new generator set arrived, it was ready to run very quickly because nearly everything was taken care of at the factory. You just take it off the truck, set it in place, and it's ready for wiring."

Jim Nieland, Riverview, LLP and West River Dairy, Morris, Minnesota

"I had a different 250 kVA generator and it used 14 gallons of fuel an hour and could hardly do the job as a standby generator. Now I have a 415 kVA Katolight generator and it uses only nine gallons per hour, so my savings are unreal. I am very happy with the results with my Katolight generator set."

Rueben Waldner, a large mixed farm near Castor, Alberta, Canada

"We sell emergency generators and we also rent them to local dairy producers. The area around Torreon has the biggest dairy farms in Mexico. Some of the farms in the area have anywhere from 1,000 to 3,000 dairy cows. There are also smaller farms. We chose to sell Katolight generators because we found that they worked very, very well. We have been selling them for at least 10 years, and we don't have any problems with them at all."

Ricardo Almanza, Equipos Lacteos in Torreon, Mexico

OTHER AGRICULTURAL MARKETS

In virtually every segment of agriculture, reliable electric power plays a critical role in maximizing production, reducing labor and improving the end products. Other segments that rely on Katolight by MTU Onsite Energy include:

// Greenhouses – electricity for hot-water (hydronic) heating systems, water pumping, supplemental lighting systems and pneumatically inflated roofs.

// Fish farming – to run aeration pumps, feeding systems and water treatment

// Aerobic digesters – constant power for aeration, pumping and mechanical agitation.

// Horse boarding – to run heating, cooling and ventilation.

"With 1.5 million square feet under cover, we have two critical loads. The first is our double-poly roofs that are inflated by air pressure. When there is an outage during a storm, the roofs could be quickly damaged by wind. The other critical load is the heating system for the greenhouses. We have wood-fired boilers that heat water and then we have pumps that circulate the heated water through the greenhouses. Without electricity, we have no heat. We have two 200 kW units and one 400 kW unit – all Katolight. We lose power here about three times a year, sometimes for days, so we can't afford to be without standby power."

Stan Vanderwaal, Rainbow Greenhouses, Chilliwack, British Columbia, Canada

CUSTOMER SERVICE SECOND TO NONE

Our dedicated sales and engineering support team is helping growers meet the increasing demand for reliable standby power. Working with you in cooperation with our extensive network of experienced distributors, we provide a complete power solution to meet your facility's requirements.

Our grower load survey compiles detailed information about your current unique standby power needs and your projections of future growth. With that information, we can size your standby generator for today's and tomorrow's electrical loads.

Complementing our quality products is a parts and service support structure that is the envy of the industry. We have a 24-hour/365-days-a-year technical support hotline (1-888-218-0298 after-hours) that will provide the answers and support you need to quickly get your critical emergency standby systems back up and running. In addition to the experienced personnel at MTU Onsite Energy and our distributors, we maintain a wide network of service locations through North America and the world. We fill your parts needs with only genuine OEM replacement parts directly from our headquarters or a distributor.

CALL ON YOUR SALES AND SUPPORT TEAM

Our product application experience in all agricultural markets assures you that your MTU Onsite Energy power system will perform as designed. Let your MTU Onsite Energy team assist you in determining your power system needs. We will work hard to create a packaged power system that is engineered to meet your specific load requirements.

DEPENDABLE POWER SOLUTIONS

AMPERAGE

kW	1 phase/1.0 PF 120/240V	208V	240V	480V	3 phase/0.8 PF 600V
25	105	87	75	38	30
30	125	104	90	45	36
35	146	121	105	53	42
40	167	139	120	60	48
50	208	173	150	75	60
60	250	208	180	90	72
80	333	278	241	120	96
100	417	347	301	150	120
125	521	434	376	188	150
150	625	520	451	226	180
180	750	625	541	271	217
200	959	694	601	301	241
230	–	798	692	346	277
250	–	867	752	376	301
275	–	954	827	413	331
300	–	1,041	902	451	361
350	1,458	1,214	1,052	526	421
400	1,667	1,388	1,203	601	481
450	–	1,561	1,353	677	541
500	–	1,735	1,504	752	601
550	–	1,908	1,654	827	662
600	–	2,082	1,804	902	722
650	–	2,255	1,955	977	782
750	–	2,602	2,255	1,128	902
900	–	3,123	2,706	1,353	1,083
1,000	–	3,470	3,007	1,504	1,203
1,250	–	4,337	3,759	1,879	1,504
1,500	–	–	–	2,255	1,804
1,750	–	–	–	2,631	2,105
2,000	–	–	–	3,007	2,406
2,250	–	–	–	3,383	2,706
2,500	–	–	–	3,759	3,007
2,800	–	–	–	4,210	3,368
3,000	–	–	–	4,511	3,609
3,250	–	–	–	4,887	3,909

FREE LOAD SURVEY

For a free load survey or the name of the Katolight by MTU Onsite Energy distributor nearest you, contact the Agriculture Sales Department at 1-800-325-5450. We appreciate the opportunity to be of service.

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MTU Onsite Energy Corp. (formerly Katolight Corporation) is a leading producer of diesel-powered generator sets from 30 kW to 3,250 kW and natural-gas-powered generator sets from 30 kW to 400 kW for standby, prime power and cogeneration applications. The company also provides automatic transfer switches, paralleling switchgear, controls and accessories for complete power system solutions.

MTU Onsite Energy Corp., a Tognum Group company based in Mankato, Minnesota, combines the expertise of Katolight and MTU Detroit Diesel Power Generation to meet the ever-increasing distributed power needs of customers in North America and around the world. MTU Onsite Energy Corp. is part of the Tognum Group's business unit, Onsite Energy and Components. For more information, visit www.mtu-online.com.