

New Product	Product Update	Product Information
Technical Information	Price Update	Marketing Information
No. 2016/21	Date July 18, 2016	Page 1/2

Advantages of MOTORTECH Electronic Ignition Systems Compared to ALTRONIC® Magnetos



In general, the MOTORTECH electronic ignition systems are maintenance free!

They do not have:

- X A mechanical drive
 - ▶ *This means less maintenance*
- X A plastic coupling that wears out due to temperature, oil and vibration
- X Moving parts in the ignition controller
- X They are not affected from heat produced by the engine
- X The output voltage to the coils corresponds to the speed of the engine.
 - ▶ *At cranking speeds the ignition magneto cannot deliver as much ignition energy*

MOTORTECH Electronic Ignition Systems offer the following features:

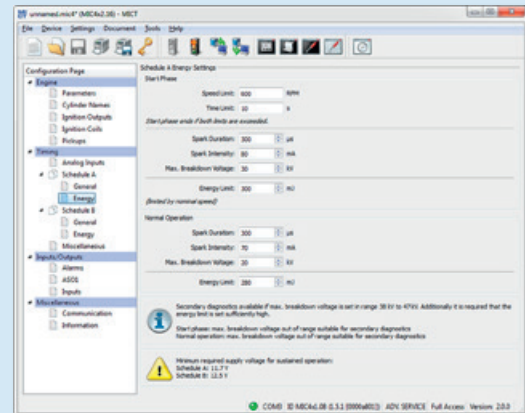
- ✓ They are powered by batteries or a power supply and make available full ignition energy from cranking to full speed
- ✓ They are less in cost
- ✓ Very accurate as they do not rely on a mechanical drive to trigger
- ✓ They use pickups (1 to 3) to sense the position of the crankshaft and camshaft and the speed.

DISTRIBUTION

Customers / others	No
Representatives and Sales Partners	Yes
OEM partners	No
MOTORTECH subsidiaries	Yes

Additional features offered by Microprocessor Controlled Ignition Systems:

- ✓ They can be programmed by the operator
- ✓ They calculate crankshaft/camshaft positions in real time depending on the power of the microcontroller
- ✓ They offer very accurate ignition timing (0.1° crankshaft)
- ✓ They offer features like
 - ▶ Programmable timing curves based on
 - Speed
 - Analog inputs
 - Potentiometers
 - Etc.
 - ▶ Programmable energy
 - Spark duration
 - Spark intensity
 - Spark energy
 - ▶ Programmable safety features
 - Over speed shutdown
 - Alarms
 - Temperature alarms and shutdowns
 - Etc.
 - ▶ Can be integrated into SCADA system
 - ▶ Designed to work with other components (DetCon detonation controller, etc.)
 - ▶ All data can be read via PowerView3 HMI module



MICT – MOTORTECH Integrated Configuration Tool
Sample Screens

Conclusion:

- ✓ MOTORTECH Electronic Ignition Systems offer the tools that are required to achieve:
 - ▶ Higher loads
 - ▶ Optimized combustion
 - ▶ Fine tuning of the engine
 - ▶ Higher efficiency of the engine
 - ▶ Higher availability of the equipment
 - ▶ Cost reduction on maintenance
 - ▶ Less components to stock in inventory

DISTRIBUTION

Customers / others	No
Representatives and Sales Partners	Yes
OEM partners	No
MOTORTECH subsidiaries	Yes