

**STITT**

# RUNNING TIMES<sup>30</sup>

## 7,000 HOURS STILL RUNNING



**STITT S-2SGN10BEX10-2** one-piece, extended-length, precious metal electrode spark plugs and **STITT USL2LE-24A** silicone-insulated secondary leads being operated at a natural gas processing facility outside of Crane, Texas, in the United States.

Engine is a slow speed, large bore 2-stroke, I-6 cylinder, Clark® BA-6 driving integral compressors.

This engine has a cylinder head design that requires the spark plug to be fitted into the combustion chamber at the bottom of a deep spark plug well. Using a more conventional, little spark plug and a plastic extension, such as the Dresser-Clark (now known as Dresser-Rand) factory specifies, spark plug life had been limited and unpredictable. The reasons were obvious: short flashover distance; rapidly thermally-distressed plastic insulation; and egress into the spark plug well of such conductive contaminants as lube oil and engine wash water. Our one-piece, extended-length spark plug provides this longer life because it successfully eliminates all the environmental and design flaws that shorten the life of the conventional, short spark plug in the bottom of a spark plug well.

- 1. LONGEST POSSIBLE FLASHOVER LENGTH.**
- 2. ELIMINATES THE REUSE OF EXTENSION COMPONENTS AT NO HIGHER COST TO THE OPERATOR.**
- 3. ISOLATES THE SECONDARY CIRCUIT FROM ENVIRONMENTAL CONTAMINANTS.**
- 4. OFFERS "HANDS-ON" INSTALLATION.**
- 5. THE STITT SOLUTION IS THE LEAST EXPENSIVE METHOD OF OPERATING THE DEEP SPARK PLUG WELL ENGINE.**

**STITT**<sup>®</sup>

**STITT SPARK PLUG COMPANY**

### 1. LONGEST POSSIBLE FLASHOVER LENGTH.

No short, 7/8"-18 spark plug offers anything close to the 2.125" flashover length of the Stitt "S-\_\_\_-2" series spark plugs. It is important to note that the longer the flashover distance, the longer the spark plug can operate. Consider that at sea level, it only requires a nominal 17kV to arc a 1.00" air gap. This is comparable to the voltage required to flashover a conventional spark plug insulator of equivalent flashover length. Good, remotely-located ignition coils typically have the capability to deliver open-circuit voltages of approximately 35kV. Only these long flashover length plugs from Stitt offer a flashover dimension compatible with the output voltages available from the best ignition coils.



### 2. ELIMINATES THE REUSE OF EXTENSION COMPONENTS AT NO HIGHER COST TO THE OPERATOR.

Consider that the conventional thinking dictates that the cheapest way to outfit a deep spark plug well engine is to use a short, conventional spark plug (frequently replaced) and an extension assembly (virtually never replaced). But for the critical service engine, in a Class 1, Group D, Division 2 area, we think the operator is not well-served by the idea of thinking that the reuse of plastic extension assemblies is a good idea. Are most engine mechanics qualified to assess the electrical characteristics of an extension assembly each time they are required to consider its reuse (i.e.; each spark plug change)? We don't think so.

Our idea solves the problem of a mechanic's guessing about an extension assembly's suitability for reuse. Every time that one of these one-piece, extended-length **S-2SGN10BEX10-2** spark plugs is changed, the extension is renewed. Without the mechanic having to think about it. This means that spark plugs have the chance to run as long as possible at every run. Because the spark plug run times will cease to be governed by the reuse of "deteriorating through reuse" extension components.

### 3. ISOLATES THE SECONDARY CIRCUIT FROM ENVIRONMENTAL CONTAMINANTS.

Because of the sealed design of this configuration down the spark plug well, the ignition secondary circuit is completely isolated from the life-shortening effects of conductive materials (water, lube oil, spark plug gasket blow-by condensation) entering the spark plug well. A short spark plug will always be victimized by these environmental antagonists.



### 4. OFFERS "HANDS-ON" INSTALLATION.

Because of the one-piece, extended-length design, these plugs operate consistently longer than the short, conventional variety. One of the reasons is that this design offers the mechanic the feature of installing these plugs by hand. Installing by hand has been the recommended procedure, always. Only this design offers the mechanic this ease of installation for the deep spark plug well application. But only this one-piece, extended-length "S-\_\_\_-2" design offers the operator a high voltage termination design that isolates the spark plug from the most routine exposures to performance-compromising handling.

### 5. THE STITT SOLUTION IS THE LEAST EXPENSIVE METHOD OF OPERATING THE DEEP SPARK PLUG WELL ENGINE.

No more costly than the short, RW80N spark plugs available from Cooper Champion®. And when the running times are contrasted, the Stitt solution is the least expensive method of operating this deep spark plug well engine.

**Interested in learning more about these spark plug innovations for your engines? Communicate with us and let us show you how to upgrade your operations in the most cost-effective, modern manner.**



**STITT SPARK PLUG COMPANY**  
Shipping Address:  
204 N. Loop, Hwy. 336 E, Conroe, Texas 77301

Mailing Address:  
P.O. Box 327, Conroe, Texas 77305

Phone: 936-756-7796 • 281-443-2279  
Outside Texas: 800-231-8006  
Fax: 936-539-9762  
E-mail: [sales@stitt-sparkplug.com](mailto:sales@stitt-sparkplug.com)  
Web: [www.stitt-sparkplug.com](http://www.stitt-sparkplug.com)