

The **MAGNA-SYGG** from S.U.N. Engineering, Inc. is truly a non intrusive pipeline pig detector. simple and rugged it can be strapped to the surface of a pipe or it can be used as a portable detector. You do not have to shut down the pipeline and wait for an expensive crew to install special fittings, the **MAGNA-SYGG** detector is ready to go to work.

The **MAGNA-SYGG Series 100** detectors feature a rugged weatherproof construction. The **Series 200** detectors have explosion proof, UL Listed, housings. The detector can be powered by its self-contained battery or by on-site 24 VDC. The detectors can be used to actuate a range of devices from simple manual reset flags to Supervisory Control and Data Acquisition (SCADA) systems.

The **MAGNA-SYGG** operates by reacting to changes in magnetic field strength (changes in magnetic flux density). A passing pig, that has been properly fitted with a suitable magnet, will induce a magnetic field within the detectors base. Upon detection of the magnetic field, the detector then activates a NO (Normally Open) or NC (Normally Closed) Relay, that has a 7 second reset delay. Contacts are rated 1/4 A / 24 VDC.

The **MAGNA-SYGG** detectors used in conjunction with a Super Pig equipped with S.U.N. Engineering's unique, flexible magnet arrangement have been successfully tested and used on 4" thru 48" pipelines.

Our special magnets can also be conveniently installed in poly foam pigs when required. For more information on use and special applications contact S.U.N. Engineering, Inc. direct or one of its authorized distributors.

S.U.N. Engineering, Inc. manufactures MAGNA-SYGG® DETECTOR • SUPERCASET PIG® • SUPER SPHERE® • SUPER PIG®

MAGNA-SYGG®



S.U.N. Engineering, Inc.



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MAGNA-SYGG

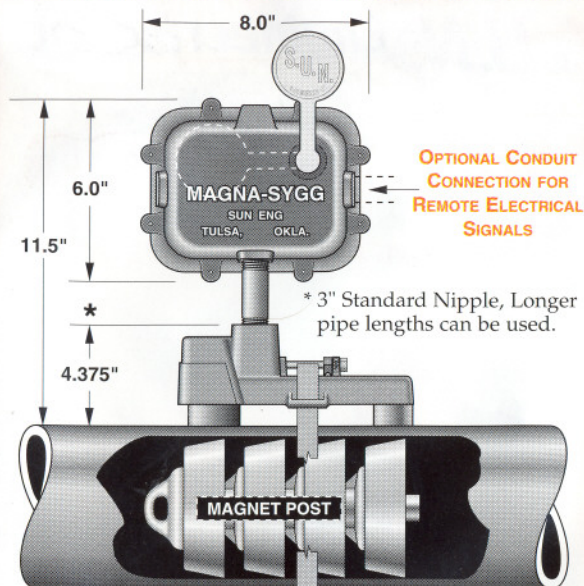
NON INTRUSIVE PIPELINE PIG DETECTOR



**WEATHER
PROOF
SERIES
100**

**EXPLOSION
PROOF
SERIES
200**





SERIES 100

WEATHER PROOF DETECTOR

- Base
- Battery Pack
- Timer
- Test Light
- Mechanical Flag
- NO/NC Relay
- 24 VDC Power
- Satellite Base
- Reset Switch

SERIES 200

WEATHER PROOF & EXPLOSION PROOF DETECTOR

- Base
- Test Light
- NO/NC Relay
- Portable Mount
- LED Light
- Glass cover
- Reset Button
- Battery Pack
- Timer/Counter
- Permanent Mount
- Reset Switch
- 24 VDC Power

WARRANTY

All **MAGNA-SYGG** products are warranted for eighteen (18) months from the date of sale, or twelve (12) months after the date of start-up service, whichever is sooner.

MAGNA-SYGG COMPARATIVE ADVANTAGES

MAGNA-SYGG

MECHANICAL PIG DETECTORS

QUICK AND EASY INSTALLATION

YES The **MAGNA-SYGG** can be installed permanently in less than five minutes. Simply strap it to the pipe using the built-in ratchet mechanism and a wrench. No special tools are needed.

NO Flow must be shut down or a hot tap specialist employed to perform cutting, fitting, and welding procedures. These procedures can be dangerous, time consuming, and expensive.

PORTABLE

YES The **MAGNA-SYGG** can also be attached temporarily. In addition to trap duty, the detector can be placed to verify pig passage through tees, valves, elbows or any "trouble spot". To prevent vandalism or theft, the **MAGNA-SYGG** can be easily removed after each use and safely stored away until needed again.

NO Once installed, most units are all but permanent. A misplaced or misaligned unit may require costly cut-out, repair, and reinstallation procedures. Often it is less costly to buy a new unit and install it nearby. However, too many probes in an area of low flow increases the likelihood of a pig becoming lodged.

NON INTRUSIVE

YES Since the **MAGNA-SYGG** does not penetrate the pipe wall, neither the structural integrity nor the flow efficiency of the pipeline will be compromised.

NO These units utilize intrusive probes that impede flow and act as depositories for paraffin and debris. This buildup can quickly impair the unit.

DURABLE

YES The weather proof **MAGNA-SYGG** has few moving parts to wear out and its durability is well established. In fact, the first units manufactured are still in permanent service today, having endured the harsh climates of rural Wyoming since 1990.

NO Actuation is caused by the pig striking the probe. This impact results in useful lives of only 3 to 9 months, depending on pigging frequency. Furthermore, a typical mechanical unit will not exhibit any signs of impending failure until after the fact.

EFFECTIVE WITH A VARIETY OF PIG TYPES

YES If outfitted with the proper reusable magnetic cartridge, any pig or sphere will be easily detected, even those with metal bodies, brushes or gauge plates.

NO Metal bodies, brushes, and gauge plates may damage these units on impact. Light foam pigs often deform under the stiff rod type probes and pass undetected.

EFFECTIVE WITH A VARIETY OF PIPELINES

YES One unit can be used on a wide range of line sizes, schedules, and locations. The **MAGNA-SYGG** can even be supplied with a remote base for sub-sea lines.

NO Permanent installation precludes claims of versatility. Models for buried pipelines are limited to relatively shallow cover and sub-sea duty is not possible.

EFFECTIVE WITH A VARIETY OF PRODUCTS

YES Gases, liquids, sludges, slurries, or gel slugs: The **MAGNA-SYGG** is **not** influenced by the product's density, viscosity or by the presence of suspended solids.

NO Some paddle type probes are so sensitive that slight drag forces generated by flow, or the action of suspended solids striking the probe, may cause actuation.