

SAN ANTONIO, TEXAS 78217 Tel: 210-657-7607



Buying a Well-Head Tubing Inspection System

1. Make sure the well head inspection system can detect open AND closed splits! Systems using "proprietary" air chamber systems to detect holes and splits can easily miss a closed split, which is a very common defect.

Remember – the split or hole has to be large enough to leak a substantial amount of air out of the air chamber while pulling pipe at up to 150 FPM! Not much air is going to leak at that speed, even if it is a thru-wall hole.

The ARTIS-4 TRIP TOOL detects both open AND closed splits *MAGNETICALLY* – no AIR required!

The operator can even park on a split and obtain a constant high signal for EXACT defect location even when the split is tightly closed and covered in paraffin or oil and visually undetectable.

Short Open
Split



Tight, "Closed Lip" Split



2. Make sure the well head inspection system can properly display internal and external pitting independently on separate charts! Everyone knows internal pitting and external pitting have signals of different amplitudes, even if the pit is identical in size. A system that cannot process those defect signals separately will ALWAYS provide incorrect results.

The ARTIS-4 TRIP TOOL displays detected internal and external pitting on two separate charts. This method allows for signal processing to be optimized and indicate ID and OD pitting signals at separate signal levels and provides a more accurate evaluation of the pipe!



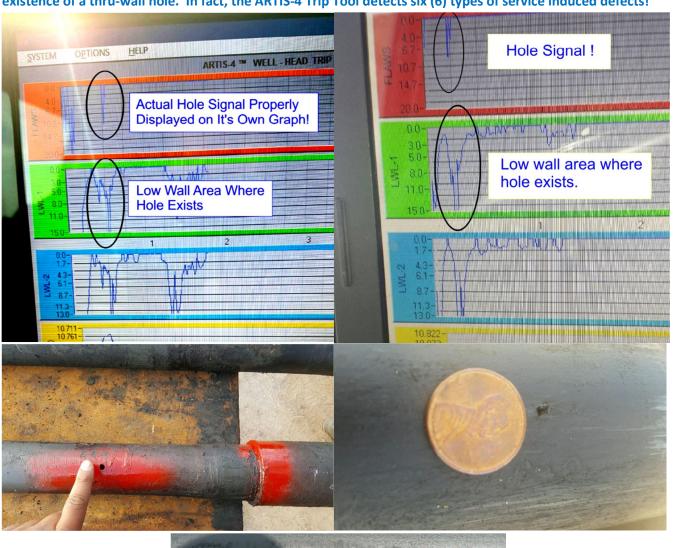






3. Make sure the well head inspection system can display thru-wall hole signals separately from all other signals! It's great if you can detect the small hole when you know it exists. But when you cannot tell a small hole from a 50% deep pit on the fly, the hole will get missed EVERY TIME! Competitive products blend all signals together on a single chart and call it a feature – we call it a limitation. See our VOLUMETRICS paper and video for more information.

The ARTIS-4 TRIP TOOL displays detected thru-holes on a dedicated chart while using separate charts for the ID and OD pitting functions. This makes it easier to determine the severity of pitting independently from the existence of a thru-wall hole. In fact, the ARTIS-4 Trip Tool detects six (6) types of service induced defects!





4. Make sure the well head inspection system will not cost you "an arm and a leg" to maintain! In these slower economic times, a TRUE non-contact design is essential to reducing the quantity of spare parts consumed and paramount to keeping your operating costs low! And make sure cleanup and pipe size change over does not take more than 10-15 minutes. If you have to spend hours cleaning the system just to avoid excessive wear and tear, the cost overhead is going to increase dramatically!

The ARTIS-4 TRIP TOOL is a TRUE non-contact device. NO CONTACT can occur between the electronic sensors and the pipe or couplings! We built close contact systems for years and learned this was not the best way to provide durability and therefore customer cost effectiveness. Since the year 2000, our <u>exclusive</u> TRUE non-contact system includes features to virtually eliminate electronic sensor exposure to the well environment, providing the MOST UPTIME and MOST RETURN ON INVESTMENT! NO OTHER PRODUCT provides the durability and exacting performance like an ARTIS-4 Trip Tool!

NOTHING CAN COMPARE TO THE CAPABILITIES OF AN ARTIS-4 TRIP TOOL

5. Make sure the well head inspection system you purchase is the safest system in the marketplace. The system should not expose electrical devices and cabling directly to the well environment. Proper grounding and short circuit protection should be standard. Safety testing for Class I Division 2 (Zone 2) and Class I Division 1 (Zone 1) should be available because everyone needs to go home safe at night.

The ARTIS-4 TRIP TOOL is a TRUE non-contact device which eliminates ALL direct electrical & electronic device contact from any part of the pipe string under inspection. No physical contact is possible between the powered electrical devices and the tubing string (or couplings). ARTIS-4 Trip Tool systems are the ONLY systems built with oil field safety certification available off-the-shelf!







Celebrating 37 Years of Innovation.