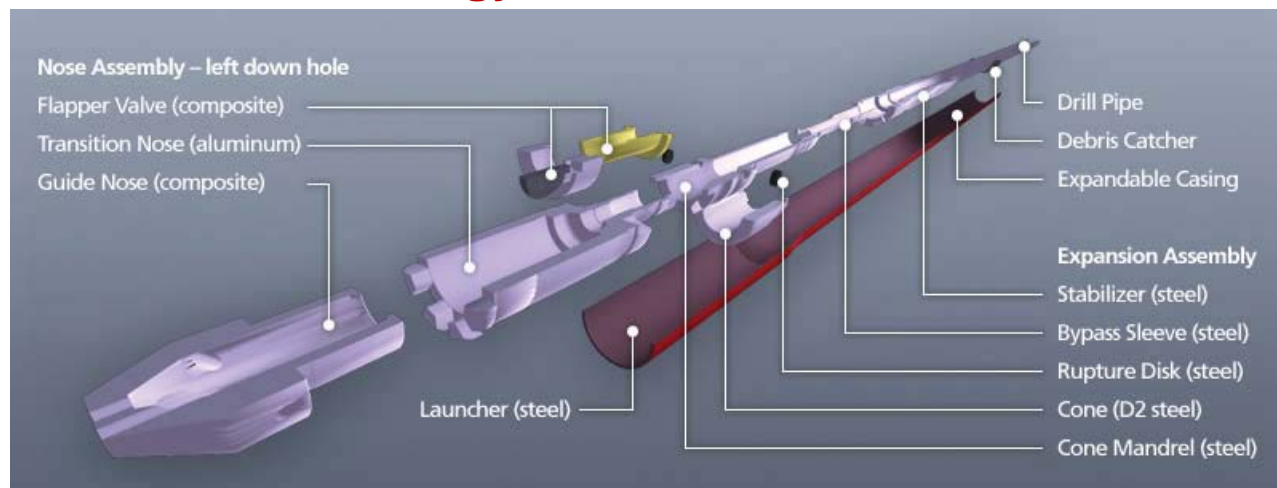


## How SET<sup>®</sup> Technology Works



**SET technology is the result of a cold-working process that permanently deforms the pipe without any additional heat.**

The procedure inherent to expanding tubulars takes the steel beyond its elastic limit into the plastic region of the stress-strain curve, while remaining safely below ultimate yield. Our unparalleled level of industry expertise enables us to apply the technology safely and with a high degree of reliability.

The pipe used in SET Systems, EX-80, meets standards beyond those specified by API for oil and gas well use, but with pre-expansion properties similar to those of API L-80 material. The metallurgical composition of the pipe allows greater ductility while still retaining its strength properties. Enventure utilizes electric resistance welded (ERW) pipe, which provides greater uniformity of wall thickness and ovality, required for consistent expansion results.

To facilitate the expansion process, the wellbore section is drilled and often underreamed, after which the expandable casing is run. In cased-hole applications the existing casing is cleaned to ensure successful expansion.

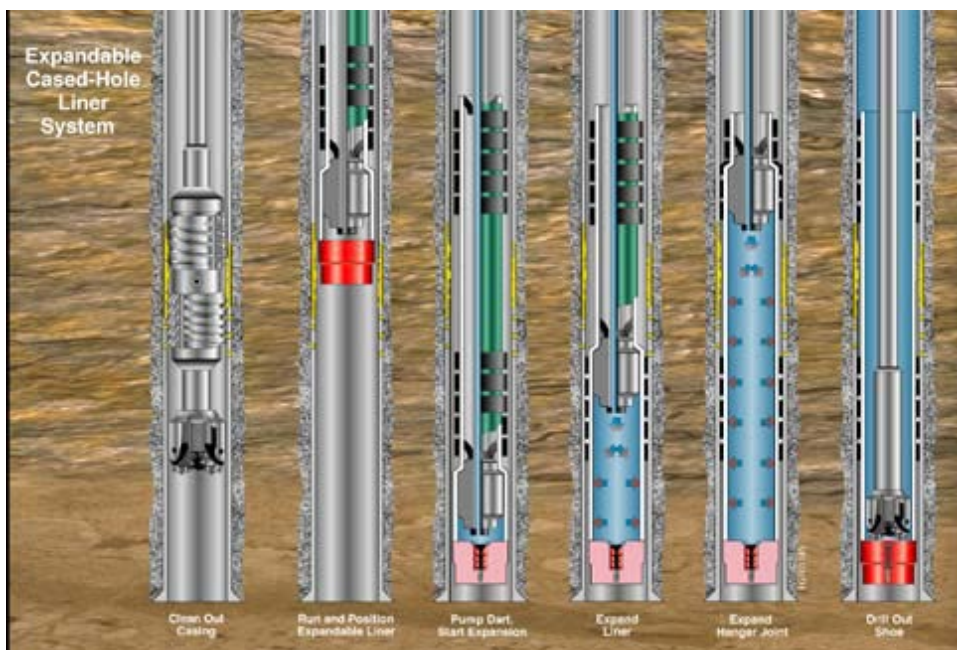
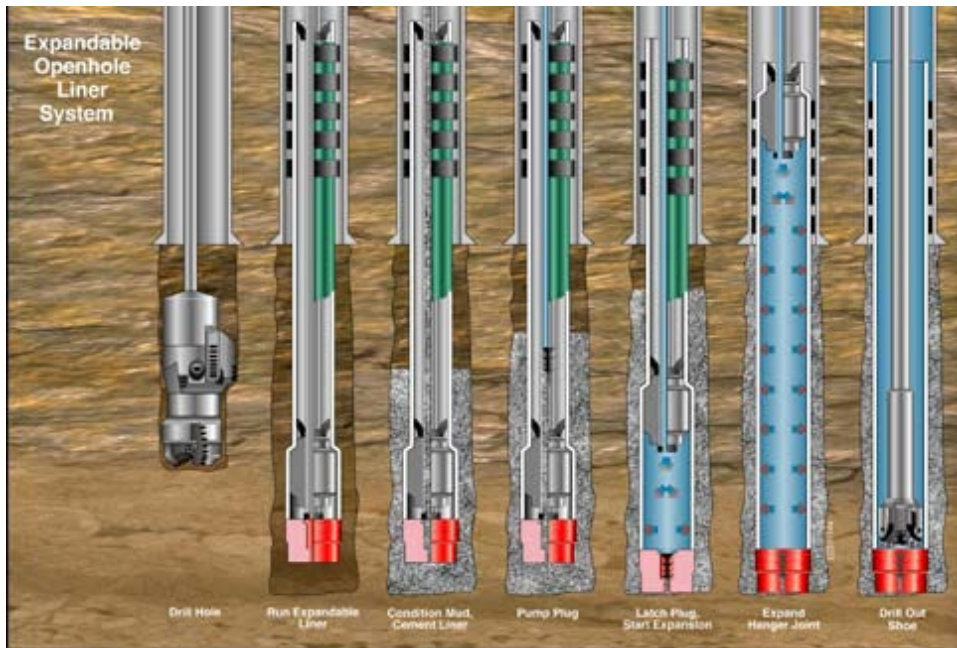
The housing at the bottom of the SET system, known as the launcher, contains an expansion assembly as well as a float assembly and is typically constructed of thin-wall, high-strength steel.

The custom-designed expansion assembly contains a solid cone that is driven through the expandable tubulars using hydraulic pressure or mechanical force, or a combination of both, which enlarges the pipe radially. During the expansion process, the enlargement of the pipe diameter causes the overall pipe length to shorten from the top as a result of material balance. As the liner is expanded, its outer diameter (OD) increases significantly, while the wall thickness decreases only slightly. This preserves the greatest post-expansion burst and collapse values possible.

### Enventure Global Technology

15995 North Barkers Landing, Suite 350 | Houston, Texas 77079  
 Tel 281.552.2200 | Fax 281.552.2201 | [www.EnventureGT.com](http://www.EnventureGT.com)

The cone moves up from the bottom of the liner through the EX-80 pipe which has a proprietary coating on the inside diameter and proprietary pin-up connections. This bottom-to-top expansion process is completed when the anchor hanger seals the expandable liner against the previous pipe string referred to as the base casing. Enventure is able to tailor pipe expansion and wall thickness to exact needs. The expandable system provides a positive seal in the liner lap, thus eliminating often needed cement squeeze at the liner top.



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