Tandem Seal -vs- Double Seal

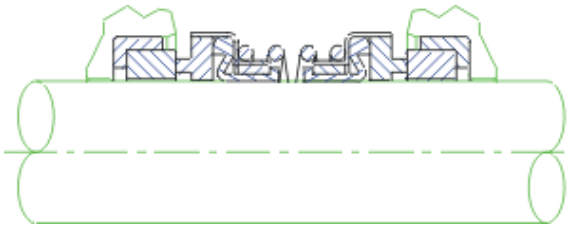
Some specifications call for pumps with seals in tandem and others for a double seal pump. What is the correct terminology, and which is better? According to the Fluid Sealing Association:

Tandem Seals:

two seals that are orientated in the same direction

Double Seals:

two seals that are orientated in the opposite direction



Zoeller Engineered Products utilizes tandem seals whenever we offer a pump with more than one seal. An advantage to a tandem design is it includes two completely independent seals that do not depend on the other one for sealing. In addition, the seals orientated in this configuration can withstand much higher pressures in the pump casing when compared to a double seal pump. Manufacturers that use the double seal arrangement usually limit the amount of head on the seals by only building smaller, low-head pumps with this type of seal.

So, the question is, why use the double seal arrangement at all? It boils down to cost. A double seal pump is less costly to purchase and install than a tandem seal pump, but as is the case most of the time, you get what you pay for. Zoeller Engineered Products and most of the industry agree that a tandem seal is a superior way of sealing a pump motor from the outside elements.

Updated August 2018