

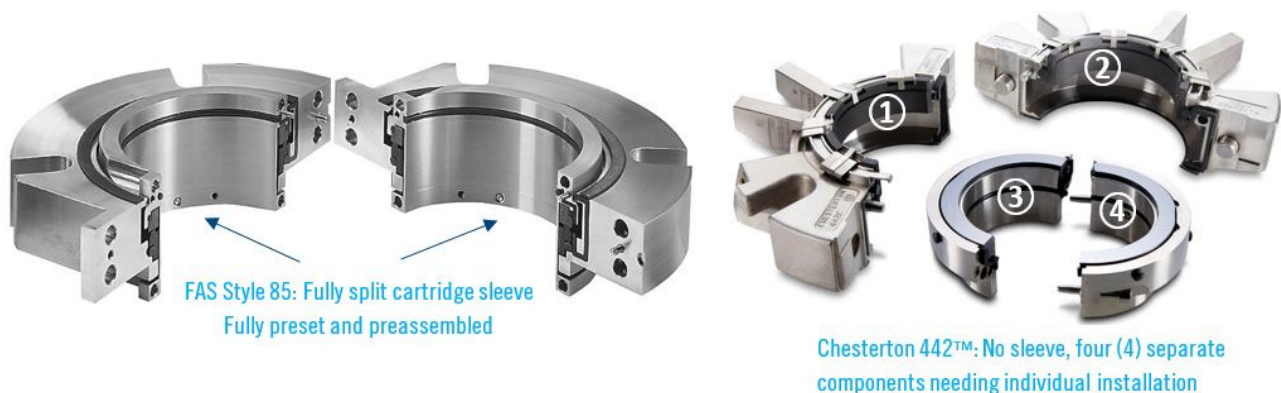
MAKE THE RIGHT SPLIT SEAL CHOICE

The Flex-A-Seal Style 85 and the Chesterton 442C™ are often presented as options for the same applications and industries. A.W. Chesterton now markets the 442C™ seal as a “cartridge split mechanical seal” which they claim is “easy to install and is engineered to enhance sealing reliability like no other cartridge split seal” on the market (Form No. EN23193 442C Seal Brochure 04/16.) To clear up any confusion and to give you all the facts, we have prepared this outline with information taken from both the Flex-A-Seal and Chesterton split seal installation instructions.

First, let’s define the term **cartridge seal**. According to both the *Guideline for the Use of Technical Terms in the Sealing Industry* (1995) published by the Society of Tribologists and Lubrication Engineers and *Mechanical Seals for Pumps: Application Guidelines* (rev. 2006) by Hydraulic Institute, a cartridge seal is:

A completely self-contained unit, including seal, gland, sleeve, mating ring, etc., which is preassembled and preset before installation. (*underscore added*)

Here are pictures of the Style 85 and the 442C™. The 442C™ has no sleeve; therefore by these authorities’ definition, it is not a cartridge seal design or a self-contained unit. This means any preassembly and presets done by A.W. Chesterton before the seal is shipped could be compromised when an operator begins the installation at your facility.



The next two pages analyze the installation instructions for both the 442C™ and Style 85 in a side-by-side comparison. Our intent is for you to make your own decision – based on the facts - as to which split seal is easier to install.

Once you review the data, we believe you will quickly understand why the Flex-A-Seal Style 85 fully split cartridge mechanical seal *is* the right choice for -

- **Sealing Integrity**
- **Superior Performance**
- **Easy Installation**

FLEX-A-SEAL STYLE 85 vs. CHESTERTON 442C™



MAKE THE RIGHT SPLIT SEAL CHOICE

	AW CHESTERTON 442C™	FLEX-A-SEAL STYLE 85
Installation guide and steps	19 steps AWC Form No EN14068 Rev 7	7 steps FAS SK1070
Number of components	19 components, many of which need to be handled by the operator during installation. AWC Form No EN14068 Rev 7: 3.1 Parts Identification, Figure 1 Preparation sections 4.0.3, 4.0.5, 4.0.6-12, Installation sections 5.0.1, 5.0.4, 5.0.6-18	17 component parts which are secured and contained within the seal assembly. Only two self-contained seal halves to handle at installation FAS SK1070: section IV.1
Additional components needed for assembly	<ul style="list-style-type: none"> • Hex keys • Lubricant • Rotary holder installation spacer • Gland installation tool • Cleaning wipes for seal faces. AWC Form No EN14068 Rev 7: sections 3.1, Figure 2 and 4.2	<ul style="list-style-type: none"> • Hex keys • Lubricant FAS SK1070: section I
Sealing integrity	Operator must handle/touch components such as faces and O-rings during installation process, increasing the potential for damage. AWC Form No EN14068 Rev 7 - Preparation sections 4.0.7-10, 12 Installation sections 5.01.1, 5.0.8, 5.0.10-11 In addition, the operator is tasked with ensuring components are <u>properly placed</u> and/or handled during installation. AWC Form No EN14068 Rev 7 - Holder gaskets 4.0.4, Spring lifter 4.0.11, Seal faces 5.0.4, 5.0.8, 5.0.10, 5.0.13, and Gland gasket 5.0.16 Sealing integrity compromised??	No need to handle faces and O-rings – they are already positioned and secured in the cartridge halves. Assembled and pressure tested at the factory; the seal is intact when it arrives on-site ready for installation. We build the seal so you don't have to! Sealing integrity ensured!

FLEX-A-SEAL STYLE 85 vs. CHESTERTON 442C™



MAKE THE RIGHT SPLIT SEAL CHOICE

	AW CHESTERTON 442C™	FLEX-A-SEAL STYLE 85
Operator responsibility	<ol style="list-style-type: none"> Disassembling seal for installation, ensuring all components are in their correct location within the seal. AWC Form No EN14068 Rev 7: sections 4.0.1 - 12 Lubricating parts: sections 4.0.4, 4.0.7, 5.0.1, 5.0.10 Installation & removal of spacers and guides: sections 4.0.3, 5.0.6, 5.0.9, 5.0.16 Cleaning seal faces: 5.0.8, 5.0.11 Ensuring all 9 "Caution" and "Important" installation notes are addressed (see below) 	<ol style="list-style-type: none"> not applicable Lubrication of sleeve O-ring FAS SK1070 section III.A.1 not applicable not applicable Only 2 notes to address (see below)
"Cautions" and "Important" installation notes	<p>AWC Form No EN14068 Rev 7 -</p> <ul style="list-style-type: none"> 4.0.1: Do not glue O-rings or gaskets 4.0.3: Do not push on rotary faces 4.0.4: Set screws may cause damage 5.0.1: Dirt particles on seal faces, do not rotate rotary holder 5.0.2: Do not use rotary holder spacers as handles 5.0.3: Do not rotate rotary holder on the shaft 5.0.4: Do not push directly on seal face 5.0.8: Do not push on seal face 5.0.10: Dirt particles on seal faces <p>TOTAL: 9</p>	<p>FAS SK1070 -</p> <ul style="list-style-type: none"> III.A.1: Do not get lube on split ends of O-rings IV.3: Do not over-tighten gland studs <p>TOTAL: 2</p>