

Technical datasheet

OTS Supercritical & Liquid CO₂ Flushing Unit. (SCCO₂ Unit)

OTS ID.: 9000-456

Introduction

The Supercritical CO₂ flushing system (SCCO₂) fits perfect for control lines and umbilical's, because of the low-pressure drop over long distances, which can exceed 20 km, with a small inner diameter lower than ¼". This means that turbulent flow can be maintained all the way thru, and a cleanness of AS4059 Class 3 / ISO 4407 12/9 has made proof of concept in testing. However, it can also be fitted to other appliances.

The reason of this cleanness and low-pressure drop is that Supercritical CO₂ has the same carrying capacity as oil, but the viscosity is 10 times lower than water. This makes it a lot better than the conventional flushing systems that has a pressure drop of over 60.000 PSI over ¼" OD 13.000-meter Control-Line, were SCCO₂ has a drop of below 3.000 PSI and maintains a Reynolds No. of approximately 20.000.

To maintain a turbulent flow, you need a Reynolds number higher than 3000, and in long distances, this is not possible with conventional flushing.

The state "supercritical" is a state that is not gas, and not fluid, but a state in between these two. This means that it has the same benefits as both of those two states.



Features

- Dissolves Wax and Grease
- Can clean for long distances, while maintaining turbulent flow.
- Cleans to a AS4059 Class 3 (ISO 4407 12/9)
- 7 and 2-micron high flow filtration
- Extremely Environmental Friendly
- All type of internet connection, incl. SAT internet
- PLC Controlled, with extensive log possibilities
- 24" Touch Screen
- Can be connected to other units, and have a flow higher than 400kg/h

Specifications

Power supply	400V, 50Hz, 63A
Max. working pressure	550 bar
Max Flow CO ₂	120kg/h (400kg/h)
Design temperature.	120°C/-20°C
CO ₂ Detector	

Approvals

- CE marked in accordance with EC/2006/42; Machinery Directive
- Directive 97/23/EC
- Can come in a 2.7-1 Container on request

Weight & dimensions

What is it in:	10 feet container
Length	300 cm
Width	244 cm
Height	260 cm