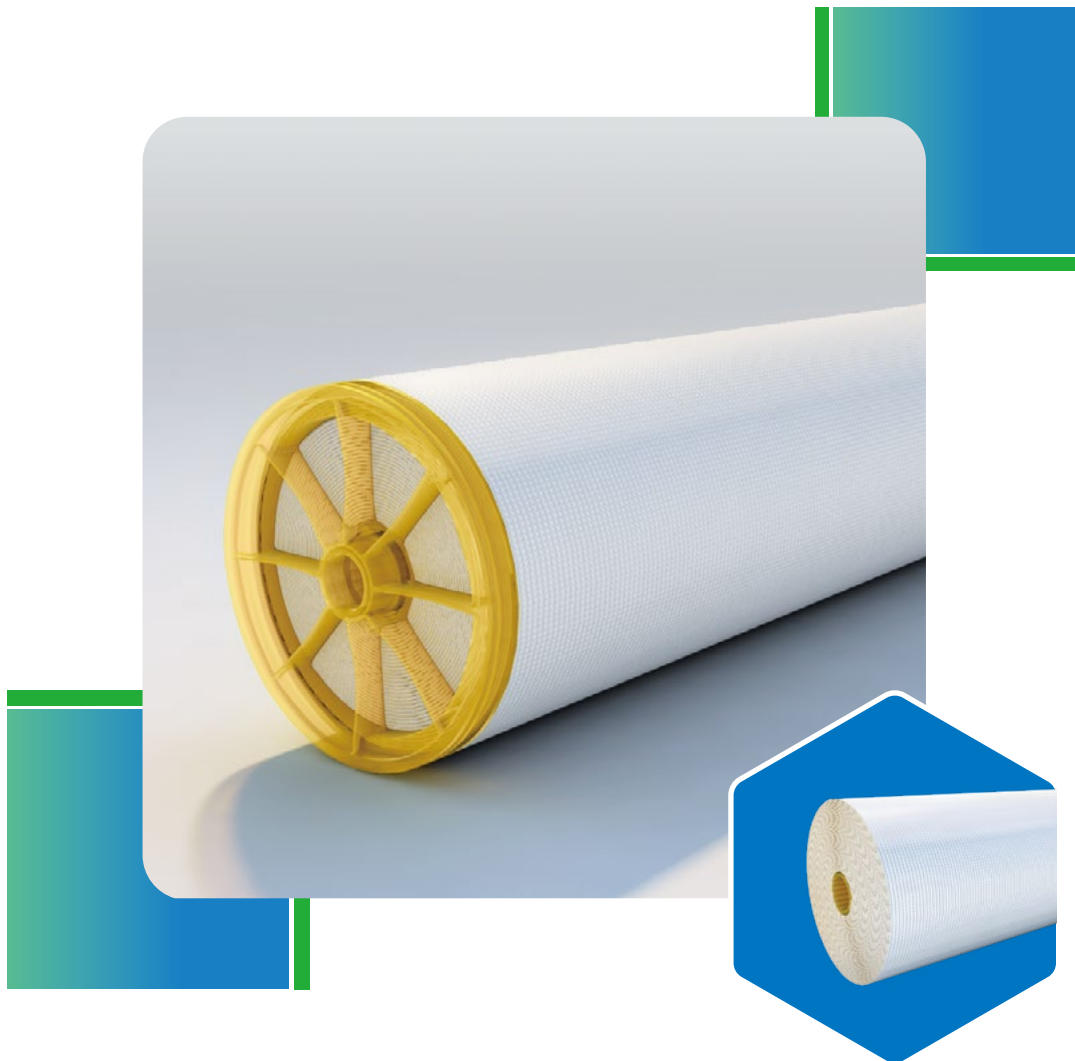


# Spiral Wound Elements



Wide range



High temperature  
and pH

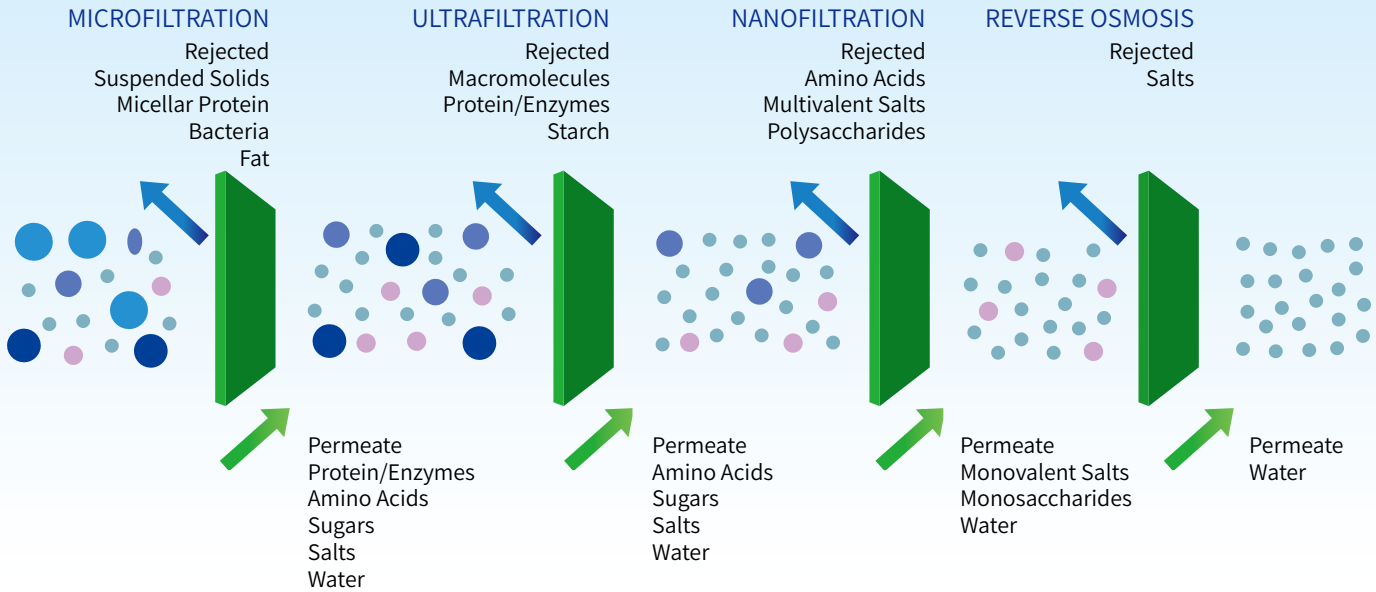


FDA Compliant  
Materials



Custom-made

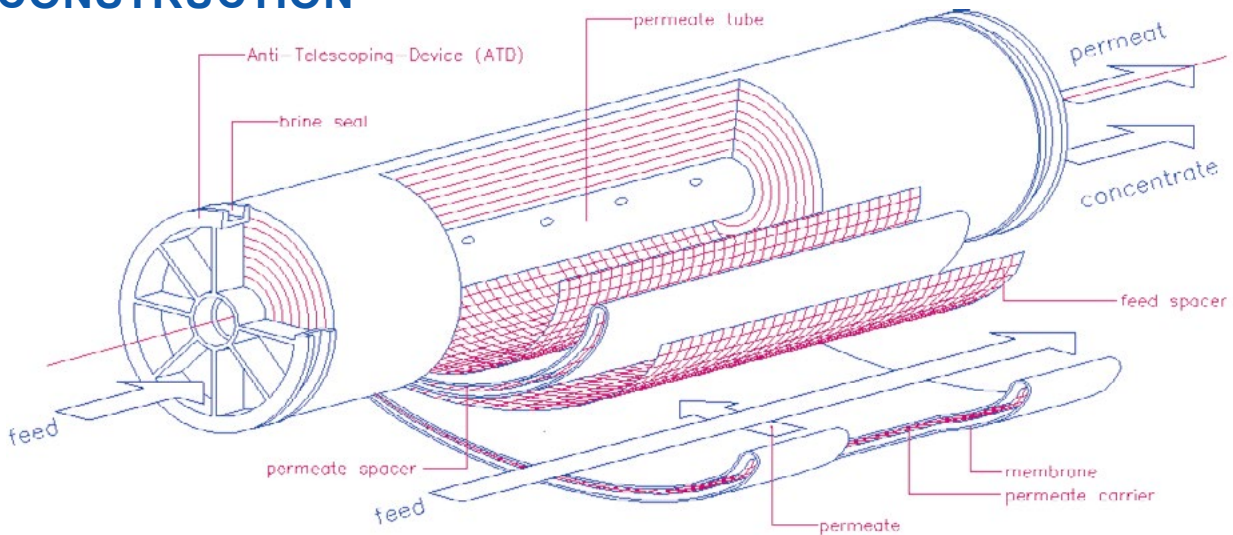
To cover the high variety of applications, UNISOL provides the complete spectrum of MF, UF, NF and RO spiral wound elements, the module design stretches from standard elements to fully customized specialty products.



## EXAMPLES OF APPLICATIONS

E-coat	Standardization of milk	Cream cheese production
Concentration of protein and gelatin	Whey concentration processing	Clarification of cheese brine
Enzymes, fermentation broths	Clarification of soy sauce	Acid recovery
Caustic recovery	Industrial water	Oil / Water emulsions






## SPIRAL WOUND ELEMENT CONSTRUCTION



# PRODUCT CODES FOR SPIRAL WOUND ELEMENTS

SN	UPS010	8038	C
Design / Application	Membrane Type / MWCO	Diameter / Length	Feed spacer
<p>SN Sanitary Design SH Sanitary Design ID Industrial Design EC Electro Coating PD Pharmaceutical Design FG Fiberglass CR Caustic Resistant AR Acid Resistant HP High Pressure Resistant TR Temperature Resistant</p> <hr/> <p><b>Example</b> Sanitary Design</p>	<p>Membrane Materials</p> <ul style="list-style-type: none"> <li>UPS Polyethersulfone</li> <li>USP Polysulfone</li> <li>UPV Polyvinylidene Flouride</li> <li>MPV Polyvinylidene Flouride</li> <li>NFDK/NFDL Piperazinamide</li> <li>SW3013 Polyamide</li> </ul> <hr/> <p><b>Example</b> Polyethersulfone MWCO 10kDa</p>	<p>Standard Dimensions</p> <ul style="list-style-type: none"> <li>2540</li> <li>3838</li> <li>4040</li> <li>4333</li> <li>6338</li> <li>8038</li> <li>8040</li> <li>8338</li> </ul> <hr/> <p><b>Example</b> Diameter 8.0inch Length 38inch</p>	<p>Standard Feed Spacers</p> <ul style="list-style-type: none"> <li>A 34mil (parallel)</li> <li>B 31mil (diamond)</li> <li>C 46mil (diamond)</li> <li>D 51mil (parallel)</li> <li>E 65mil (diamond)</li> <li>F 80mil (diamond)</li> <li>G 80mil (parallel)</li> <li>H 60mil (parallel)</li> <li>J 28mil (diamond)</li> <li>M 34mil (diamond)</li> </ul> <hr/> <p>1 mil = 0.001 inch 1 mil = 0.0254 mm</p> <hr/> <p><b>Example</b> 46mil diamond</p>

## ADVANTAGES

 FDA Compliant Materials	 Wide range of membrane types	 High temperature resistance
<p><b>pH</b> High pH, solvent resistance</p>	 Great mechanical strength	 Customization

## OPERATING CONDITION FOR SPIRAL WOUND ELEMENTS

	SN/ID/PD	SH	FG	EC	CR	AR	HP	TR
Max. operating pressure loss (bar)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Max. operating pressure loss (psi)	14.5	14.5	14.5	14.5	14.5	14.5	14.5	14.5
Max. Temperature (°C)	50	80	50	50	50	50	50	80
Max. Temperature (°F)	122	176	122	122	122	122	122	176
pH range during filtration	2-10	2-11	2-11	2-10	3-13	1-12	2-11	2-10
Outer wrap	Net Wrap	Net Wrap	FRP	Net Wrap	FRP	FRP	FRP	FRP



### China

UNISOL Membrane Technology (Xiamen) Co., Ltd.  
#1670, Butang Mid Rd, Tong'an District, Xiamen  
361112, China  
+86 592 6301318  
infochina@unisol-global.com

### Germany

WTA UNISOL GmbH  
Fritz-Bothmann-Str. 1, 99867 Gotha, Germany  
+49 (0) 3621 73 77 920  
info@wta-unisol.com  
www.wta-unisol.com

### USA

UNISOL LLC  
108 W.13th street suite 100,  
WILMINGTON, Delaware 19801, USA  
+1 786 716 3204  
infousa@unisol-global.com

### India

+91 98330 90670  
Mumbai, India  
infoindia@unisol-global.com

### Singapore

+65 91822555  
Singapore  
infosg@unisol-global.com

### Vietnam

+84 983 537 155  
198 N7 Street, Dong Tang Long, Truong  
Thanh ward, Thu Duc, Ho Chi Minh City,  
Vietnam  
infovn@unisol-global.com

UNISOL MEMBRANE TECHNOLOGY reserves the right to change specifications without prior notification.  
For the latest version, please refer to the internet.  
www.unisol-global.com | info@unisol-global.com