



Get More from Your Process



Uniflo Static Mixer (USM)

Uniflo Static Mixers (USM) provide continuous in-line mixing for polymers, colorants, adhesives, and other fluids. Highly polished, alternating 90° helical elements (alternating bow-tie twists) provide radial and axial blending over a short length to assure total mixing of compounded materials or to flatten melt temperature gradients. USM mixers are made with high-strength elements, have no moving parts, and produce an exceptionally low drag coefficient. The mixing element is easy to remove for fast material changeovers and convenient maintenance.



Features

- Constant mixing
- Eliminates in-process thermal gradients
- Highly polished high-flow stainless-steel mixing elements
- Removable mixing element for quick material change
- Short residence time
- No dead spaces for product to hang up or degrade
- No moving parts
- Easily adapted to most melt pipes with customizable inlet and outlet flanges
- Removes memory from extrusion process for high viscosity materials

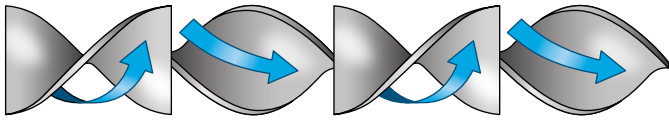
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Options

- Stainless-steel barrel and flanges
- Chrome or nickel plating
- External jacketing for fluid heat/cool
- High temperature up to 850°F [454°C]
- Housing-mounted junction box

Accessories

- Adaptors
- Heat control
- Pressure Instruments



Material flow over each element in the Uniflo Static Mixer simultaneously splits, blends, and changes direction, ensuring a homogeneous output.



Each successive element splits the flow such that the number of splits squares the previous number. For example, the first element splits the flow in two. The second element splits this result into four, the next into eight.

- A 6-element mixer splits the flow 2^6 (64) times.
- A 9-element mixer splits the flow 2^9 (512) times.

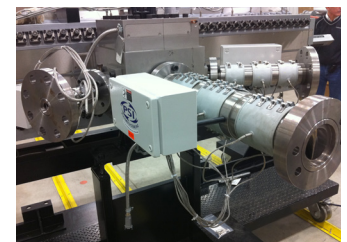
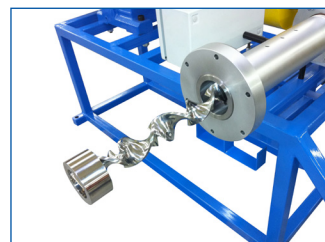


Flow is non-linear. Constant directional change within the static mixer moves material at the center out to the wall and from the wall inward to the center.

Technical

Specifications	Standard
Element diameters	.75-inch to 4-inch (19 mm -100 mm)
Elements per mixer	6 or 9
Heating	Electric
Barrel construction	Alloy Steel

No. Elements	Diameter (inch)	Extruder Output	
		Lb/hr	Kg/hr
6	1.00	50-800	25-365
6	1.25	100-1,750	45-800
6	1.50	200-2,500	90-1,135
6	2.00	500-4,000	230-1,815
6	2.50	600-6,500	270-3,000
6	3.00	1,000-10,000	455-4,550
6	4.00	1,800-18,000	800-8,000
9	1.00	50-200	25-90
9	1.25	50-450	35-200
9	1.50	100-850	45-390
9	2.00	300-2,000	135-910
9	2.50	800-2,500	365-1,135
9	3.00	1,000-5,000	455-2,270
9	4.00	1,800-9,000	800-4,000



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