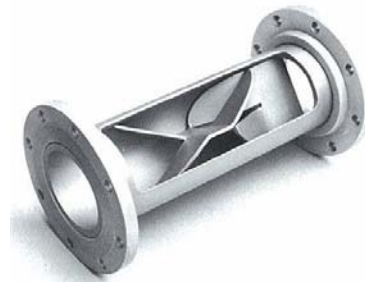


The Growco SM Series Static Mixer is an exceptionally efficient in-line mixer that contains no moving parts. It is easily installed in new and existing pipelines and offers both low installation and low operating costs. With no moving parts to wear out, it is completely trouble free, requires no maintenance and has lifetime equals the pipe alongside. Its special design provides adequate mixing in the flow regime of a pipeline with relatively low pressure drop. The SM Series mixer are installed upstream of the sampling point in a crude oil transfer line. They assure that the bottom sediment and water ( B, S & W ) is thoroughly dispersed throughout the crude oil stream. An even water droplet size and distribution occurs over a wide flow range. This means that the automatic sampler takes a truly representative sample. It can be in accordance with ISO 3171 and API Chapter 8 Section 2 that are commonly used for custody transfer application. They are typically used at crude oil loading terminals, rail cars, bio-diesel blending or related processing installations.

➤ **TYPICAL FEATURES OF SM SERIES:**

- Stable and rugged operations.
- Simple connection to the pipe system.
- Short installation length.
- Low pressure drop.
- Low operating cost.
- No maintenance.
- No moving parts.
- No power required.

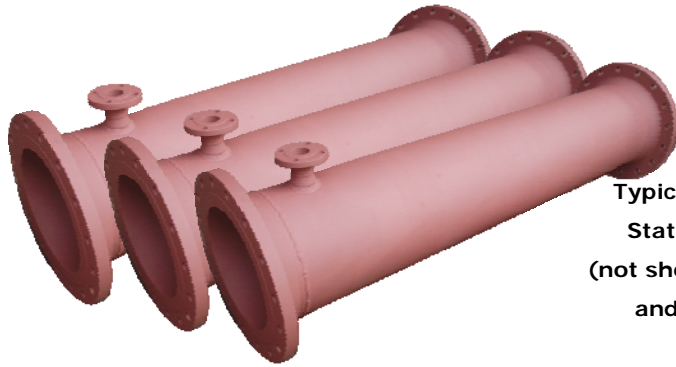


**Typical Photograph of Static Mixer  
with Mixing Element**

➤ **GENERAL SPECIFICATIONS**

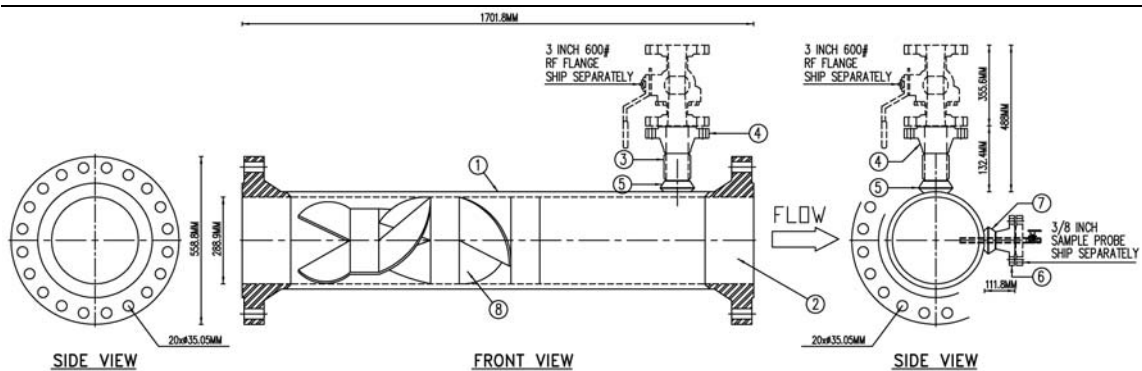
- Sizes Range : 2" to 48".
- Pressure Ratings : ANSI 150 & higher ratings available.
- Standard Materials : Carbon Steel & other materials available.
- Automatic Sampler Port Available : 3" or other sizes available.
- Manual Sampling Port Available : 3/8" or other sizes available.
- Mixing Elements : 1 or more elements available.

**TYPICAL PHOTOGRAPH**



Typical Photograph of Growco SM Series 18" Static Mixers with 3 Mixing Elements inside (not shown) and with Top Port Opening option and painted with red primer oxide coating.

**TYPICAL GA DRAWING OF GROWCO SM SERIES 12" STATIC MIXER**



ITEM NO	QTY	PART NO	DESCRIPTIONS	MATERIAL
1	1	---	HOUSING, 12 INCH DIAMETER, (SCHEDULE 80)	A106 GRADE B
2	2	---	FLANGE, 12 INCH RFWM CLASS SOULS, (SCHEDULE 80)	A106 B16L5
3	1	---	HOUSING, 3 INCH DIAMETER, (SCHEDULE 80)	A106 GRADE B
4	1	---	SAMPLE PORT FLANGE, 3 INCH RFWM CLASS SOULS, (SCHEDULE 80)	ASME B16.5
5	1	---	WELDOLET, 3 INCH FITTING	---
6	1	---	SAMPLE PORT FLANGE, 2 INCH RFWM CLASS SOULS, (SCHEDULE 80)	ASME B16.5
7	1	---	WELDOLET, 2 INCH FITTING	---
8	2	---	MIXING ELEMENTS	AS41 CARBON STEEL
9	---	---	PAINT, RUST INHIBITIVE RED OXIDE PRIMER	(INTERNAL)
10	---	---	PAINT, RUST INHIBITIVE RED OXIDE PRIMER	(EXTERNAL)



TITLE  
12 INCH STATIC MIXER  
( SM SERIES )

DATE	REVISION	CHANGE NO./BY/REASON	AUTHORED	DRAWN	CHECKED	DRAWN BY	DATE	SHEET NO.
						MS	27072010	1 OF 1
						VC	SCALE	0
							1:10	
							OUR REF	SAMPLE ONLY



**CAUTIONS FOR THE INSTALLATION:**

- ❑ Welding slug, foreign particles, etc. in the pipe must be cleared up before the static mixer is installed.
- ❑ Install the static mixer correctly.
- ❑ Please also follow any required local standard recommendations of pipelines installations to ensure compliance to local safety requirements.

**TOTAL MEASUREMENT SOLUTIONS PROVIDER**



Serve Globally, Act Locally®

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Printed in Singapore.



➤ **REQUIRED DATA FOR QUOTATION and/or ORDERING:**

<b>1</b>	Pipe Diameter in inches:				Schedule:	
	Mat'l of Construction for Housing:				Mat'l of Construction for Elements:	
	Mat'l of Construction for End Fittings:				Type of End Fittings on Housing:	
	Removal Elements ?	YES		NO	Number of Elements:	
	No. of side ports:				Size of side ports:	
	Type of End Fittings for side ports:				Location of side port(s):	Upstream
						Downstream
<b>2</b>	Flowrate (Max.) in m3/hr:				Flowrate (Min.) in m3/hr:	
	Flowrate (Nor.) in m3/hr:				Max Acceptable Pressure Drop across static mixer in psig.:	
	Operating Pressure (Max.) in psig.:				Design Pressure in psig.:	
	Operating Temp (Max.) in °C:				Design Temp in °C:	
	Type of Primary Fluid Media:				Density of Primary Fluid Media:	
	Any Suspended Solids: If YES, pls provide details.	YES		NO	Viscosity of Primary Fluid Media:	
<b>3</b>	Describe the Process: (Please provide a sketch, if possible).					

Notes : If there are more than one size with varying quantities, please provide all details required and send to us.