

## Kleerwater Oil Water Separator Sizing

Determine the amount of rainfall (flow rate in gallons per minute) capable of flowing through the oil water separator.

Formula: Gallons per minute

(gpm) = Area to be collected x 25 year rain fall expectancy x 0.0104

Examples:

Local with 3.2" of anticipated rain fall. (See 25 year rain map)

Area of affected site = 300 ft x 300 ft = 90,000 square feet

Expected 1 hour rain fall for area = 3.2" (See 25 year rain map)

$\text{gpm} = 90,000 \times 3.2 \times 0.0104$

$\text{gpm} = 2995.2$

gpm rounded off is 3000 gallons per minute

Require Kleerwater oil water separator size = 15,000 gallon size

Local with 2.1" of anticipated rain fall. (See 25 year rain map)

Area of affected site = 300 ft x 300 ft = 90,000 square feet

Expected 1 hour rain fall for area = 2.1" (See 25 year rain map)

$\text{gpm} = 90,000 \times 2.1 \times 0.0104$

$\text{gpm} = 1965$

gpm rounded off is 2000 gallons per minute

Require Kleerwater oil water separator size = 10,000 gallon size

Notes:

Change the required area as needed.

Vary the anticipated rain fall as illustrated on 25 year rain map

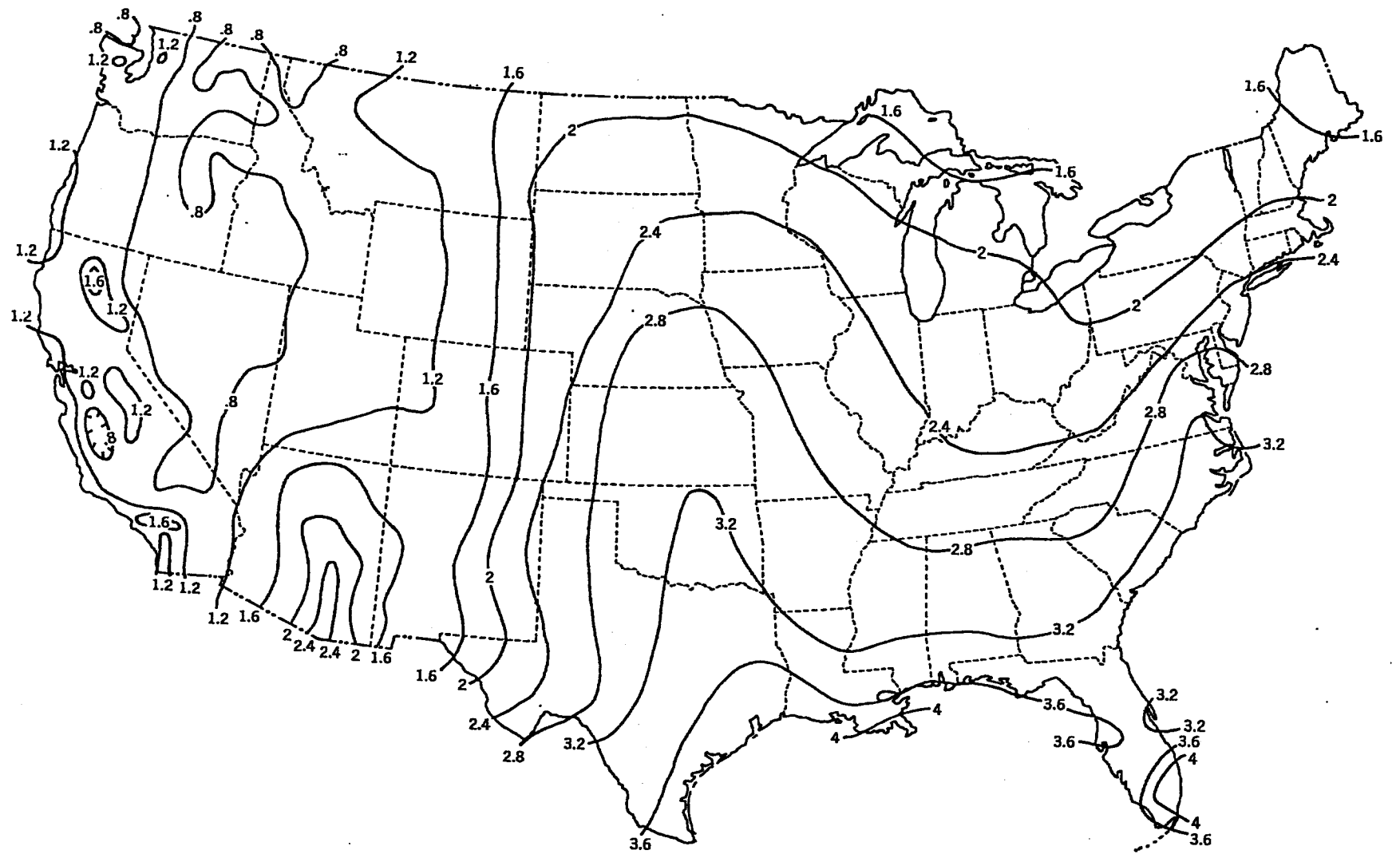
Calculate the flow rate.

Review the Kleerwater Oil Water Separator brochure, on our website, and determine the size of separator required based on the calculated flow rates.

Please note: Oil water separators are designed to remove free floating oils and greases as described in our literature. Our oil water separators are not designed to remove VOC, volatile organic solvents, or highly dissolved solids. The use of general detergents will emulsify oils and greases and will not allow them to separate adequately in our oil water separators. This will lower the oil water separators efficiency.

Disclaimer:

Many factors effect the proper operation of oil water separators. Although the sizing examples listed above are believed accurate and reliable, Modern Welding Company, Inc. makes no warranties, expressed or implied, as to concepts or guidance used in this information, or as to the performance of the apparatus represented until reviewed by Modern Welding Company.



*One-hour rainfall to be expected once on the average in 25 yr. (National Weather Service)*

## Kleerwater Oil Water Separators Capacities

Separator Size (gal)	Tank Diameter (in)	Tank Length (in)	Max. Flowrate (gpm)	Inlet Pipe Size (in)	Outlet Pipe Size (in)	Oil Storage Capacity (gal)
150	30	65	30	2	2	60
285	38	72	57	3	3	114
550	42	115	110	4	4	220
1000	48	154	200	4	4	400
2000	64	173	400	6	6	800
3000	64	259	600	6	6	1200
4000	64	346	800	8	8	1600
5000	72	346	1000	8	8	2000
6000	72	410	1200	8	8	2400
8000	84	403	1600	10	10	3200
9000	96	346	1800	10	10	3600
10000	96	389	2000	10	10	4000
12000	96	461	2400	12	12	4800
15000	96	576	3000	12	12	6000
20000	120	490	4000	14	14	8000
25000	126	562	5000	16	16	10000
30000	126	677	6000	18	18	12000
Kleerwater™ oil water separators are not designed for use in applications where cleaning detergents are involved unless the detergents are supplied and furnished by Kleerwater™ LLC technologies.						
Solvents or highly dissolved solids, such as untreated sanitary sewers, should not be introduced into Kleerwater™ separators.						
Kleerwater™ separators will not separate chemical emulsions, dissolved hydrocarbons or volatile organic hydrocarbons.						