Above Ground Rectangular Oil Water Separators

- Low maintenance costs
- Easy cleaning through removable vapor-tight covers
- No moving parts
- No power consumption
- No consumable wearing elements
- No chemicals or absorbent mesh packs to remove, replace, or dispose
- Compact size
- Solids storage capability
- Optional integral oil storage

Hydro Quip's Above Ground Rectangular Oil Water Separators are designed for the separation of free and dispersed (non-emulsified) oil and settleable solids. For pumping to downstream treatment, a model design with Effluent Pump Out Chamber is available.

FABRICATION

The oil water separator is a special purpose prefabricated parallel-corrugated plate, rectangular, gravity displacement, type oil water separator. The separator shall be comprised of a tank containing an inlet compartment, separation chamber, sludge chamber, and clean water outlet chamber.

TANK

The tank shall be a single wall construction conforming to ASTM A240, type 304 stainless steel or carbon steel. Welding will be in accordance with AWS D1.1 to provide a watertight tank that will not warp or deform under load. Pipe connections to the exterior shall be as follows:

PIPE CONNECTIONS

All connections 3" and smaller are FNPT couplings. All connections 4" and larger are raised face flanges with ANSI 150 pound standard bolt circle. Use flanged piping connections that conform to ANSI B16.5.

SEPARATOR CORROSION PROTECTION (for carbon steel only)

After shop hydrostatic test has been successfully completed, a coating system will be applied to the interior and exterior surfaces of the separator. Interior and exterior shall be sandblasted to SSPC-SP10 & SSPC-SP6; Interior lined with Tnemec Series 61 liner to 9 mils MDFT; Exterior coated with polyamide epoxy to 6 mils MDFT.

LIFTING LUGS

The tank shall be provided with

properly sized lifting lugs for handling and installation.

COVERS

The tank will be provided with vapor-tight covers for vapor control. Gas vents and suitable access openings to each compartment will be provided. The covers shall be constructed of marine grade aluminum and will be fastened in place. A gasket shall be provided for vapor tightness. ⅜" bolts and threaded knobs will be provided for cover attachment.

INLET COMPARTMENT

The inlet chamber shall be comprised of a non-clog diffuser to distribute the flow across the width of the separation chamber. The inlet compartment shall be of sufficient volume to effectively reduce influent suspended solids, dissipate energy and begin separation. The media will sit elevated on top of a sludge baffle.

SEPARATION CHAMBER

The oil separation chamber shall contain the appropriate coalescing media specific media specific to your application. The media when installed in cross-flow OWS shall meet US EPA Method 1664 Rev. A and also European Standard 858-1 for oil water separators.

BAFFLES

An oil retention, underflow weir, and overflow weir will be provided. Underflow weir shall be positioned to prevent re-suspension of settled solids.

SLUDGE BAFFLE

The sludge chamber shall be located prior to the coalescing compartment for the settling of any solids. It shall also prevent any solids from entering the clean water chamber.

OIL SKIMMER

The oil separation chamber will be provided with a rotating pipe skimmer for gravity decanting of the separated oil to an external product storage tank or an optional integral product storage tank. Other various types of skimmers can be provided as an additional option.

CLEAN WATER CHAMBER

The tank will be provided with a clean water chamber, which allows the water to leave the separator by gravity flow through the clean water outlet port.

For models using Effluent Pump Out Chamber, water will leave separator by pumped flow. The chamber will be of sufficient volume to turn pump on/off.

VENTS

Appropriately sized vents will be provided.

ABOVE GROUND SEPARATORS SIZES

Estimated sizes based on standard flow rates, which is dependent on the type of oil.

Configurations can be modified to satisfy your site-specific requirements.

Above Ground OWS	Flow Rate	Size
AGS Series	up to 20 gpm	4' long
AGM Series	20–60gpm	5' long
AG Series	35–2000gpm	6'–20' long

AG MODEL

SPECIFICATIONS

*Dimensions are approximate and flow rates are dependent on the type of oil, media, and temperature in your application.

Model	Flow Rate (GPM)	Diameter	Width	Length	Height	Capacity (GAL)
AGS SERIES						
AGS-1	2–6	2"	16"	48"	28"	60
AGS-2	3–11	2"	28"	48"	28"	120
AGS-3	5–20	2"	40"	48"	28"	180
AGM SERIES						
AGM-1	3–11	2"	16"	60"	28"	75
AGM-2	6–22	2"	28"	60"	28"	150
AGM-3	9–33	2"	40"	60"	28"	225
AGM-1-1H	6–20	2"	16"	60"	40"	86
AGM-2-1H	12–40	2"	28"	60"	40"	172
AGM-3-1H	18–60	2"	40"	60"	40"	258
AG SERIES						
AG-2	50	3"	28"	72"	40"	269
AG-3	75	3"	40"	72"	40"	403
AG-4	100	4"	52"	72"	40"	718
AG-4-1H	150	4"	52"	84"	52"	837
AG-5	200	6"	64"	120"	64"	1870
AG-6	300	8"	76"	120"	64"	2244
AG-7	400	8"	88"	144"	64"	3141
AG-7-1H	500	8"	88"	144"	76"	3770
AG-8	600	10"	100"	144"	88"	4308
AG-8-1H	700	10"	100"	144"	100"	5026
AG-9	800	10"	112"	144"	100"	5655
AG-9-1H	900–1000	12"	112"	168"	100"	6597
AG-9-1H-2L	1200	14"	112"	192"	100"	8617
AG-10	1500	16"	124"	192"	100"	9574
AG-10-1H	2000	20"	124"	216"	112"	12117

AG MODEL WITH EFFLUENT PUMP OUT CHAMBER

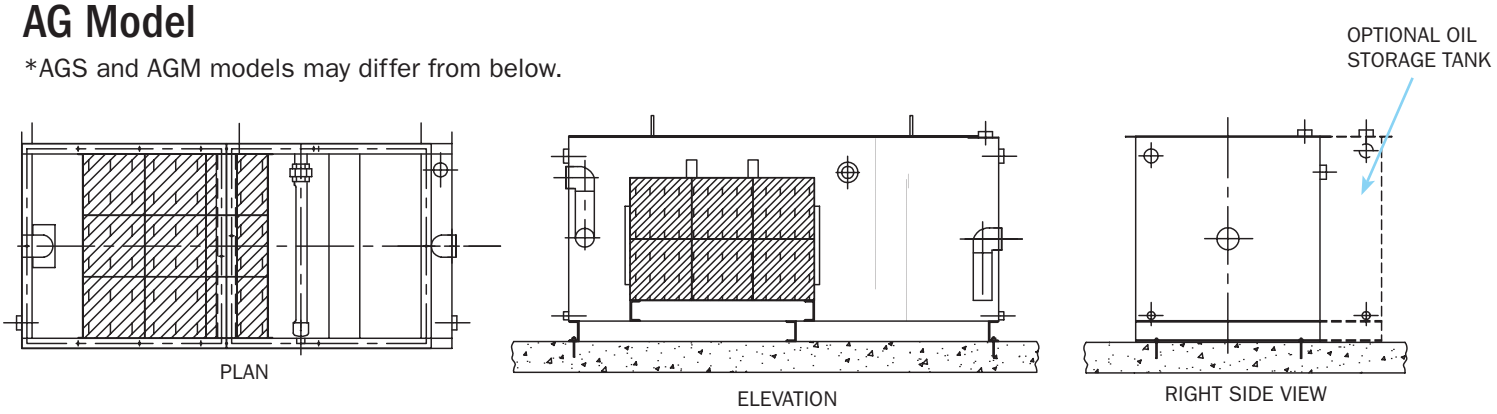
SPECIFICATIONS

*Dimensions are approximate and flow rates are dependent on the type of oil, media, and temperature in your application.

Model	Flow Rate (GPM)	Diameter	Width	Length	Height	Capacity (GAL)	Clean Water Chamber Capacity
AGS SERIES							
AGS-1SS-30V	2–6	2"	16"	48"	48"	75	30
AGS-2SS-60V	3–11	2"	28"	48"	48"	174	60
AGS-3SS-90V	5–17	2"	40"	48"	48"	270	90
AGM SERIES							
AGM-1SS-30V	3–11	2"	16"	60"	48"	105	30
AGM-2SS-60V	6–22	2"	28"	60"	48"	210	60
AGM-3SS-90V	9–33	2"	40"	60"	48"	279	90
AGM-1SS-36V-1H	6–20	2"	16"	60"	58"	142	36
AGM-2SS-90V-1H	12–40	2"	28"	60"	58"	217	90
AGM-3SS-150V-1H	18–60	2"	40"	60"	58"	325	150
AG SERIES							
AG-2	50	3"	28"	72"	56"	419	150
AG-3	75	3"	40"	72"	56"	628	225
AG-4	100	4"	52"	72"	56"	1018	300
AG-4-1H	150	4"	52"	84"	72"	1287	450
AG-5	200	6"	64"	144"	64"	2470	600
AG-6	300	8"	76"	156"	64"	3144	900
AG-7	400	8"	88"	168"	64"	4341	1200
AG-7-1H	500	8"	88"	168"	76"	5270	1500
AG-8	600	10"	100"	180"	88"	6108	1800
AG-8-1H	700	10"	100"	192"	100"	7126	2100
AG-9	800	10"	112"	204"	100"	8055	2400
AG-9A-1H	900	12"	112"	204"	100"	9297	2700
AG-9-1H	1000	12"	112"	210"	100"	9597	3000
AG-9-1H-2L	1200	14"	112"	228"	100"	12217	3600
AG-10	1500	16"	124"	246"	100"	14074	4500
AG-10-1H	2000	20"	124"	264"	112"	18117	6000

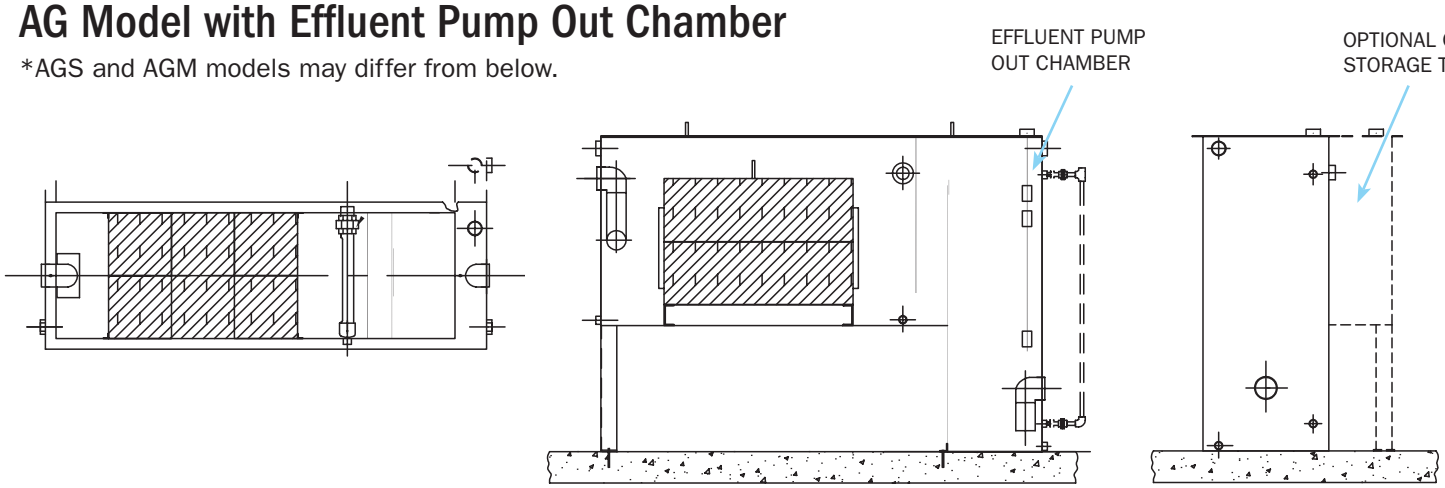
AG Model

*AGS and AGM models may differ from below.



AG Model with Effluent Pump Out Chamber

*AGS and AGM models may differ from below.



Related Models

For collecting settleable solids and DNAPL, see Hydro Quip's Hopper Oil Water Separator.

Whether an off-the-shelf unit or customized equipment, we'll help you determine the best solution for your application and site-specific needs.

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