



**SALT RIVER PIMA-MARICOPA INDIAN COMMUNITY
PUBLIC WORKS DEPARTMENT**
10005 East Osborn Road, Scottsdale, Arizona 85256-9722
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OIL/SAND/WATER INTERCEPTOR SIZING WORKSHEET

Oil/Sand/Water Interceptor Requirements:

- * Precast concrete grease interceptors are not acceptable, shall be constructed of plastic, fiberglass or polyethylene.
- * Shall be no smaller than a 50-gallons volume capacity.
- * Shall be sized to be pumped no less than 90 days.
- * Shall require engineering design if greater than 2500-gallons.

Customer/Contractor Information:

Date:		Plan Check No.:	
Customer Information/Company Name:		Contact Person:	
		Contact Number:	
Service Address:	OSWI Location:		

Step #1: Calculate the square footage of the facility areas that drains to the interceptor (ft²):

Enter the square footage.	Total Facility Areas (ft²):	8800
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Step #2: Determine the Treatment Capacity Factor (ft²):

Use Table 10-1 to determine the Treatment Capacity Factor for the type of facility.	Treatment Capacity Factor (ft²):	100
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Table 10-1: Treatment Capacity Factor

Type of Facility	Oil/Sand/Water Interceptor Treatment Capacity Factor (per cubic foot, ft ³)
Car Wash, Trucks or Heavy Equipment	15 ft ²
Car Wash, Automatic Bay or Conveyor	50 ft ²
Car Wash, Hand Held Spray	75 ft ²
Automotive Shop or Machine Shop	100 ft ²
Parking Garage	3200 ft ²

Step #3: Calculate the volume of the Oil/Sand/Water interceptor size in gallons:

The minimum capacity for an Oil/Sand/Water Interceptor shall not be less than 6 ft³ or 45 gallons. It requires 6 ft³ of volume for the first 100 ft² of floor area and 1 ft³ of volume for each additional 100 ft² floor area thereafter.

Facility areas subtracted the first 100 ft² for the minimum 6 ft³ of volume requirement, divided by the facility treatment capacity factor, ft² then multiplied by 1 ft³ volume for each additional 100 ft² floor area. Additional volume, ft³ plus the first 6 ft³ of volume requirement, then convert the total volume in cubic foot to gallons by multiplying 7.48 gallons per ft³.

Formula:
$$\left(\frac{(\text{Total facility areas, ft}^2 - \text{first 100 ft}^2 \text{ of floor area})}{\text{Facility Treatment Capacity Factor}} \times 1 \text{ ft}^3 \right) + \left(6 \text{ Ft}^3, \text{ required volume,} \right)$$

then, $\times \left(7.48 \text{ gallons / ft}^3 \right) = \text{required gallons capacity interceptor.}$

Oil/Sand/Water Interceptor Capacity (gallons):**696****Oil/Sand/Water Interceptor Information:**

Enter Oil/Sand/Water interceptor information – round up to the next larger size and the minimum size OSW allowed is 50 gallons capacity.

Manufacture / Model	Capacity Volume (gallons)	Flow Rate (gpm)	Grease Capacity (pounds)	Plumping Frequency (days)

SRPMIC PLAN REVIEW

Plan Submittals Shall Include:

Any food establishment, commercial kitchen, commercial, industrial, agricultural and managed property that will or may require a pretreatment device is required to submit design documents for plan review. This applies for all new installations, renovations and upgrades to existing systems.

In general, submittal of design documents shall include:

1. The plumbing floor plans and schematic plans for the grease waste lines to pretreatment devices.
2. The plans should also show that all Grease Bearing Fixtures (GBF) are routed to appropriately sized grease interceptor(s) and a plumbing fixtures schedule.
3. Show all GBF on the plans that are within the facility, including floor sinks, floor drains, mop sinks, trough sinks, trough drains, pre-wash sinks, prep sinks, pot sinks, dishwashers, etc.
4. The name of the manufacturer, the model number and size of the pretreatment device.
5. The grease interceptor sizing worksheets:
 - Gravity Grease Interceptor – [7.WR.PT_02R1_GGI Sizing Worksheet-Final](#).
 - Hydromechanical Grease Interceptor – [7.WR.PT_03R1_HGI Sizing Worksheet-Final](#).
 - Oil/Sand/Water Interceptor – [7.WR.PT_04R1_OSW Sizing Worksheet-Final](#).

Design Criteria for Pretreatment Devices:

1. GGI shall be no smaller than a two-compartment container rated at 500-gallons capacity and no larger than a three-compartment container rated at 2500-gallons capacity.
2. GGI greater than 2500-gallons shall require engineering design.
3. HGI shall be rated no smaller than 50-gallons per minute and a 100-pounds grease capacity and no larger than a three-compartment container rated at 1500-gallons capacity.
4. Oil/Sand/Water Interceptor shall be rated no smaller than a 50-gallons volume capacity.
5. The grease interceptor must be an approved model from Salt River Pima-Maricopa Indian Community, Public Works Department.
6. Precast concrete or metal grease interceptors are not acceptable. Grease interceptors shall be constructed of plastic, fiberglass, polyethylene or SRPMIC approved.
7. Grease interceptors shall have a grease efficiency removal rate of 95 percent or greater.
8. SRPMIC reserves the right to accept or decline any make, model or size of grease interceptor.