OIL REMOVAL

D&P GROUP

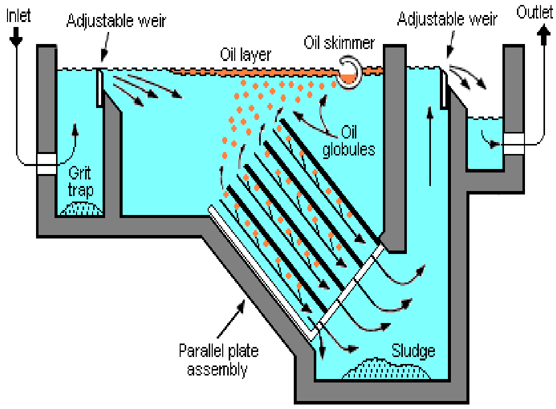
DEP-ORC COALESCING OIL REMOVER

D&P GROUP

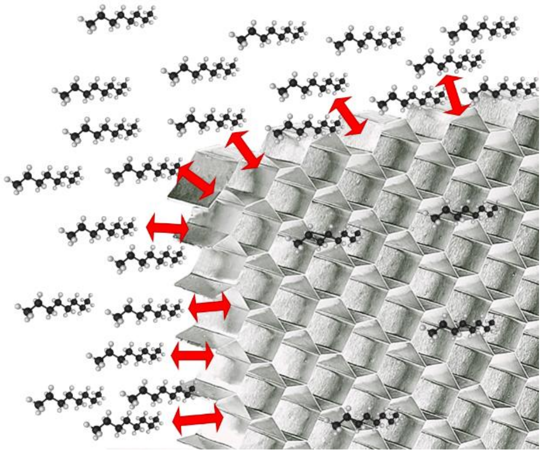
TECHNICAL INFORMATION

Coalescence is the physical phenomenon by which droplets of a liquid, bubbles of an aeriform, or particles of a solid come together to form larger entities.

Specifically, the volume of the resulting entity is equal to the sum of the volumes of the individual starting entities, while the surface area of the resulting entity is less than the sum of the surface areas of the individual entities. This means that coalescence results in a decrease in the total area relative to the surface areas of the interface separating the two phases (the dispersed phase, consisting of the coalescing entities, and the continuous phase, in which those entities are immersed). This results in a decrease in the energy related to surface tension and thus a decrease in the total energy of the system, so thermodynamically, coalescence is a spontaneous process (i.e., it does not require energy input at the expense of the environment to take place).



Coalescence filtration working diagram



Chemical interaction between hydrocarbons and the alveolar structure of the coalescing filter

PUBLISHED RESEARCH BY SCIENTISTS ON COALESCENCE TECHNOLOGY, ON WHICH D&P GROUP BASED ITS TECHNOLOGY
Robert Walter George Shipman, *Rapid coalescence of two mercury drops in water*, Cornell University, 1984.
Sidney B. Lang, *A hydrodynamic mechanism for the coalescence of liquid drops*, University of California, 1962.
William T. Scott, *Analytic studies of cloud droplet coalescence*, Desert Research Institute, Dept. of Physics, University of Nevada, 1965.
James Hidde Vanderveen, *Coalescence and dispersion rates in agitated liquid-liquid systems*, Berkeley, University of California, 1961.

DEP-ORC COALESCING OIL REMOVER

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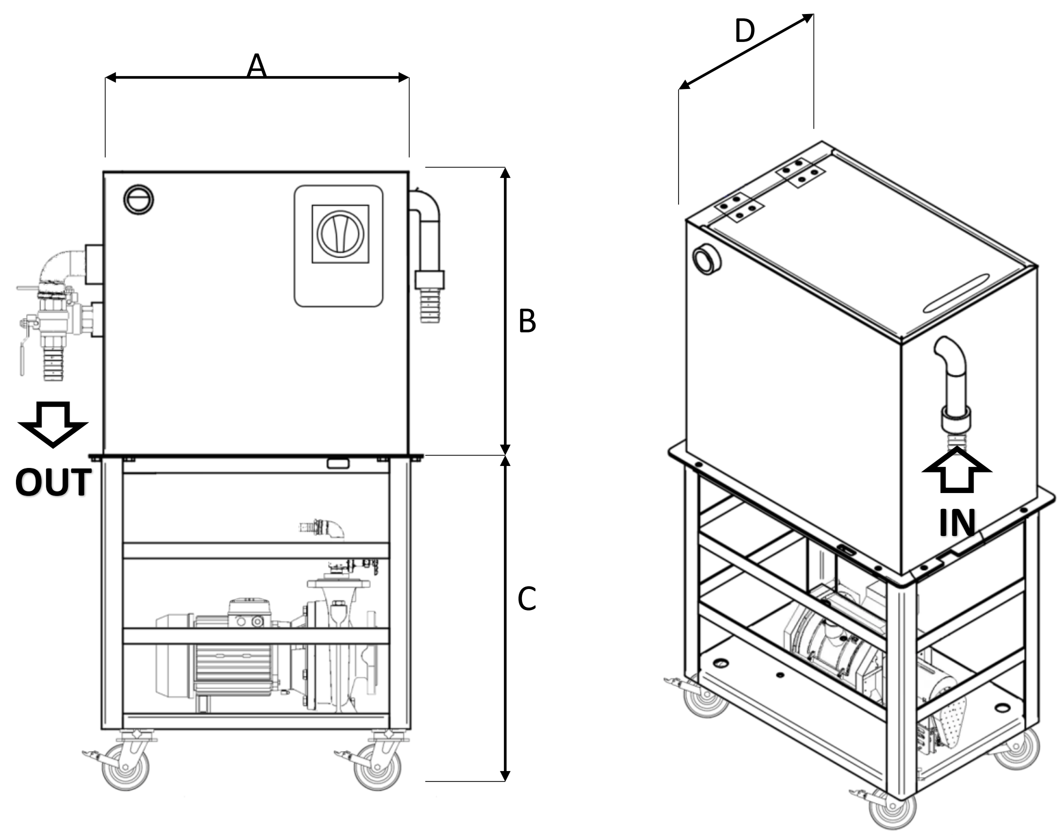
MODEL	Voltage V (*)	Hz	Power kW	HP	MAX FLOW GPM
DEPORC300	230V / 110V	50/60	0.44	0.6	79
DEPORC650	230V / 110V	50/60	0.44	0.6	171
DEPORC2000	230V / 110V	50/60	0.44	0.6	528
DEPORC3000	230V / 110V	50/60	0.44	0.6	792
DEPORC5000	230V / 110V	50/60	0.44	0.6	1320
DEPORC7500	230V / 110V	50/60	0.75	1	1981
DEPORC10000	230V / 110V	50/60	0.75	1	2641



The images shown are for illustration purposes only and may not be an exact representation of the product

MODEL	A inches	B inhces	C inches	D inches
DEPORC300	7.8	9.8	6	9.8
DEPORC650	18.6	15.9	15.4	12.3
DEPORC2000	23.9	20	15.6	14.3
DEPORC3000	25.3	23.7	15.9	17.3
DEPORC5000	41	39.5	29.5	41.1
DEPORC7500	60.8	51.3	29.5	29.3
DEPORC10000	80.5	78.9	29.5	60.8

Dimensions and details shown in the models may not reflect the actual dimensions or details of a particular part due to tooling changes, drawing errors or other reasons. D&P reserves the right to change any portion of the models without notice at any time.

DEP-MINI SKIMMER OIL REMOVER

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Model	Draft inches	Belt width inches	Extraction capacity GPM	Voltage V	Hz
DEPMINI-A200	7.9	1	0.013	230/110	50/60
DEPMINI-A600	23.6	1	0.022	230/110	50/60
DEPMINI-A1400	55.1	1	0.035	230/110	50/60

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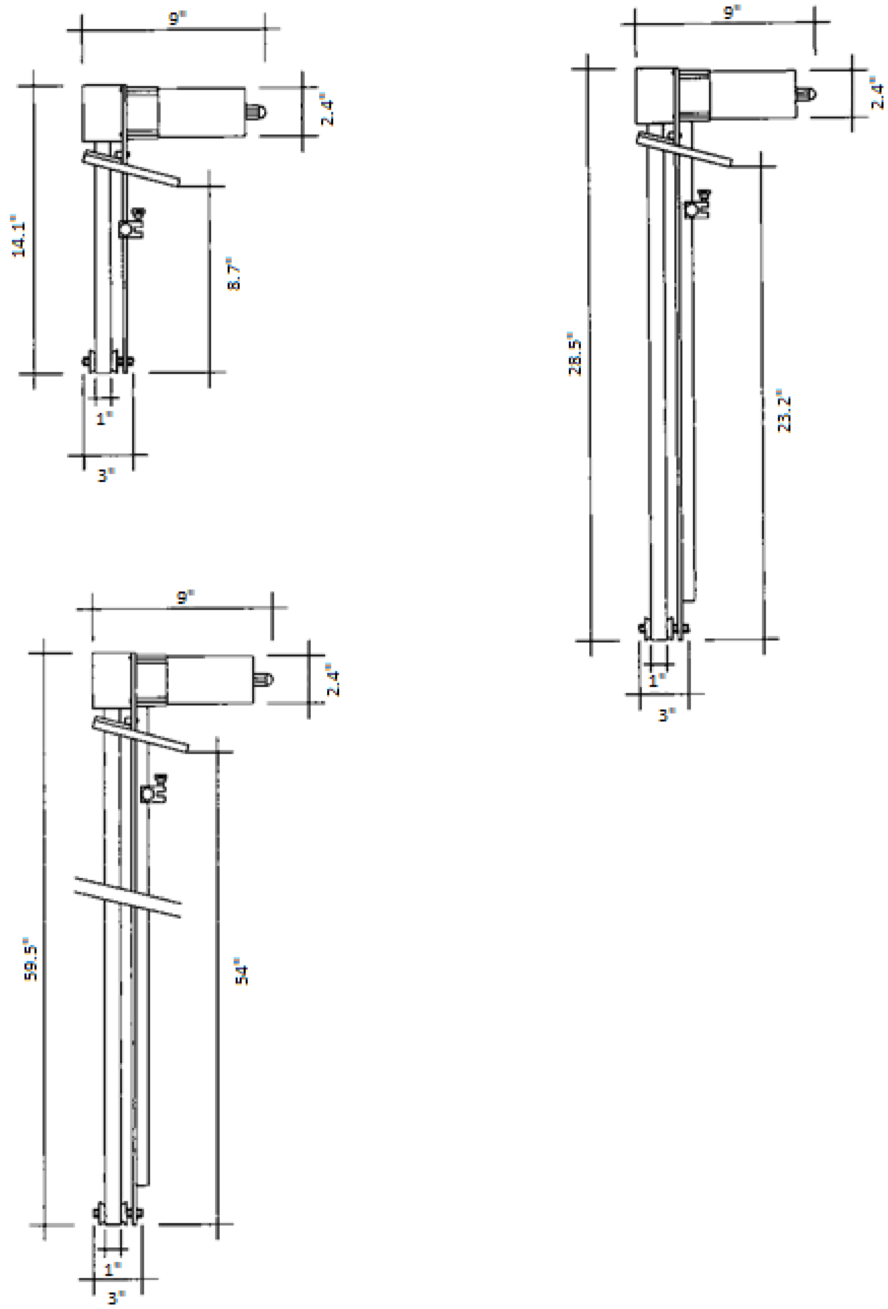
DEP-MINI



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