

Two-stage compact separation technology · Low-cost installation · By big amounts of oil or by high oil density

**Areas of application**

Operations with big amount of mineral oil products in wastewater or high oil density (e.g. motor vehicle operations in the areas of service, maintenance, repair; community and military operations; industry and industrial businesses, airports, etc.).

**Nominal sizes**

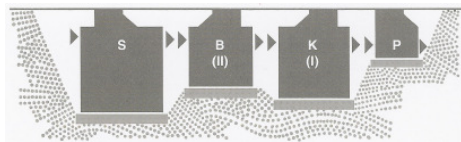
NG 3 to 40

**Components and plant equipment**

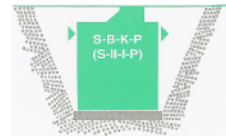
Two-stage coalescence separation plant with Sludge trap (S)  
Petrol separator (II)  
Coalescence separator (I)  
Sampling shaft (P)

**Construction**

Conventional separation plants consist of four single constructions.



BENE QUINTON has comparatively to that a very compact construction:



**Functional description**

Separation of oils and light liquids from wastewater in two stages (no adding of chemicals). In the first stage it works through gravity itself (petrol separator, class-II). In the second stage (coalescence separator, class-I) with additional purifying through the accumulation of the thinnest oil droplets (dispersion) on the surface of the coalescence material (adsorption). Through unification of those droplets (coalescence) the oil rises up to the surface of the separator. This is where the separated oil is stored. Thanks to the two stage compact construction there are many far-reaching advantages for the user:

**Advantages for the builder:**

- big oil storage, long disposal intervals.
- small volume, low costs for disposal
- low building costs
- fast construction
- minimum of required space

**1. Advantages for the planner:**

- Safety through compact construction
- Planning service from BENE.
- Plants from competent partner of separation technology
- Dimensioning of BENE QUINTON always with density factor 1, independent of the accumulating density of light liquids

**2. Advantages for the constructor:**

- small pit.
- quick installation
- fast connecting
- few connections at the construction site
- pit on the one level.
- cost saving by groundwater lowering
- handy constructions in robust type of construction.

**3. Advantages for all:**

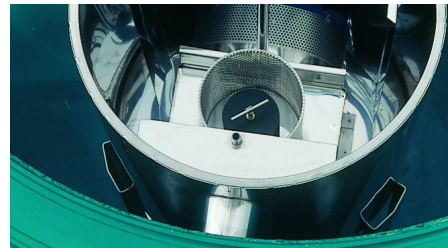
- Reliability by big amounts of light liquids.
  - Reliability by high oil density
- no necessity of increasing the nominal size

**Text of bids**

S-II-I-P-coalescence separator plant BENE QUINTON in accordance with EN 858. DIBt: Z-54.8-372, or -348, subject of approval: sludge trap, class-II- (petrol-) and class-I- (coalescence-) -separator in accordance with EN 858, sample taking device. (plants, that put no additional petrol separator to the coalescence separator are not approved!) Separator plant for high oil density and big oil amounts in accordance with EN 858-2, § 4.3.2.2 and appendix B  
NG / sludge collector / oil storage = \_ / \_ / \_  
-total oil storage minimum: \_\_ [l]  
-total volume to be disposed maximum: \_\_ [l]  
-Height difference between input and output max. 2 cm.

Outside coating made of reinforced concrete B45, in accordance with DIN 4281, inside construction made of stainless steel. Taring for light liquid with density of: \_\_ [g/cm³],  
Maximum single weight: \_\_ [to],  
Inflow depth Z: \_\_ [mm], pipe connections EN 295 DN: \_\_ [mm], cover class D

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**BENE Services**

We are always prepared to offer additional services to our customers:

- Installation supervision
- Commissioning
- Instruction
- Expert training
- Maintenance and inspection

A technical advisor from BENE will be glad to visit your location for a non-binding consultation. Just give us a call.

**Your advantage lays in this approval:**

In contrast to compact separators without this approval the density factor is according to EN 858 by BENE QUINTON always 1.

Nominal size	GPM	48	48	48	48	63	63	95	95	95	95	127	127	127	127	159	159	159	159	238	238	238	317	317	317	476**	476**	476**	634**	634**
Sludge trap volume	[gal]	171,7	317,0	660,4	792,5	660,4	1320,9	660,4	660,4	1320,9	1585,0	660,4	660,4	1320,9	1585,0	660,4	660,4	1320,9	1585,0	792,5	1320,9	2113,4	792,5	1320,9	2113,4	1056,7	1717,1	2377,5	1188,8	1849,2
Oil tank volume	[gal]	143,4	143,4	308,0	308,0	308,0	364,8	175,1	308,0	364,8	364,8	175,1	308,0	364,8	364,8	175,1	308,0	364,8	364,8	461,0	461,0	730,4	461,0	461,0	730,4	317,0	317,0	317,0	338,1	338,1
D inside	[ft]	4,72	4,72	5,71	5,71	5,71	7,35	5,71	5,71	7,35	7,35	5,71	5,71	7,35	7,35	5,71	5,71	7,35	7,35	7,35	7,35	9,19	7,35	7,35	9,19	9,19	9,19	9,19	9,19	9,19
DN input and output	[in]	5,91	5,91	5,91	5,91	5,91	5,91	5,91	5,91	5,91	5,91	5,91	5,91	5,91	5,91	5,91	5,91	5,91	5,91	7,87	7,87	7,87	7,87	7,87	7,87	9,84	9,84	9,84	11,81	11,81
H	[ft]	4,43	6,04	7,35	7,41	7,35	7,61	6,53	7,35	7,61	8,60	6,53	7,35	7,61	8,60	6,53	7,35	7,61	8,60	5,97	7,94	7,94	5,97	7,94	7,94	5,81	7,45	9,09	7,38	8,92
Inflo depth (standard) Z*	[ft]	2,30	2,30	2,30	2,30	2,30	2,30	2,30	2,30	2,30	2,30	2,30	2,30	2,30	2,30	2,30	2,30	2,30	2,30	3,77	3,77	3,94	3,77	3,77	3,94	4,10	4,10	4,10	4,27	4,27
Maximum single weight	[to]	2,44	2,98	4,69	4,69	4,69	6,71	4,48	4,69	6,71	7,31	4,48	4,69	6,71	7,31	4,48	4,69	6,71	7,31	5,51	6,71	10,49	5,51	6,71	10,49	9,85	11,31	12,76	11,71	13,19
Total weight	[to]	3,21	3,79	6,85	6,85	6,85	8,8	6,63	6,85	8,8	9,38	6,63	6,85	8,8	9,38	6,63	6,85	8,8	9,38	7,44	8,8	14,3	7,44	8,8	14,3	13,65	15,11	16,59	15,51	16,99

\* Take a note of the local frost-free depth, as a rule 70 to 120 cm. Other feed depths on request. The table value is valid to cover Class D. The dimension is reduced by 4 cm for Class B.

\*\* National technical approval of DIB: Z-54.8-348

Other supply sizes on request.