TABLE B-1. Boom Data, 1993 and 1997.

ENVIRONMENT	TYPE	MODEL
Calm Water	Curtain	Mark II
Calm Water Protected Water	Curtain	Mark II
Calm Water	Curtain, external foam	Globeboom ED 14"
		Globeboom ED 18"
		Globeboom LWU-14"
		Globeboom LWU-18"
		Globeboom LWU-24"
		MK 10-12 inch
		MK 10-14 inch
		MK 10-16 inch
		Jackson Net Boom - Inshore
		MK 7-30
		Offshore 1.5 m
		Offshore 2.0 m
		PERMA-GUARD PG 18
		PERMA-GUARD PG 24
		PERMA-GUARD PG 36
Calm Water	Curtain, inflatable/foam	NAV PAK 7/11
		10" First Response
		18" Standard
		18R" Fast River
		Iteecran 450
		Mark IIB
		Model O-RD (Reg Duty)
		NAV PAK 1/11
		OCB-24CP (24" series)
		OCB-24RP (24" series)
		OCB-24RP/T (24" series)
		Gamma I A
		Inner Series
		OCB-24CP/T (24" series)
		4 X 6 Boom
		A1-6-12s
		AI-6-18s
		Alpha I
		Alpha II
		Bantam
		Basin
		Beta I A
		Beta I B
		Beta I C
		Beta II A
		Beta II B
		Delta I
		F100
		Fast Response S-B
		General Purpose 6/12
Calm Water	Curtain, internal foam	HV1530 FF
		Inner Series
		Inner Series - Fence
		Lambda I/18 B
		Lambda I/18A
		Mark I
		Mark I-A
		Mark IIA
		Mark I-PAC
		Mini A3
		Mini A4
		Mini A5
		Mini Sea Boom
		Mini-Boom
		Mini-Boom
		Minimax
		Mk E-10"
		Mk E-18"
		OCB 12RP (12" series)
		OCB -18CP (18" series)

TABLE B-1. Boom Data, 1993 and 1997 (*Continued*).

ENVIRONMENT	TYPE	MODEL
Calm Water	Curtain, internal foam (*Continued*)	OCB-10CP/T (10" series)
		OCB-10RP (10" series)
		OCB-10RP /T (10" series)
		OCB-12CP (12" series)
		OCB-12CP/T (12" series)
		OCB-12RP/T (12" series)
		OCB-18CP/T (18" series)
		OCB-18RP (18" series)
		OCB-18RP/T (18" series)
		OCP-10CP (10" series)
		Performance Boom
		PocketBoom BLD 1.50406 EF
		Pol-E-Boom A1-6-12R
		Pol-E-Boom A1-6-18R
		R
		River 6/6
		River Boom
		River Boom Mk RB 6/6
		River Boom Mk RB 7/8
		River Boom Mk RB 9/11
		Riverflex 6/13
		SeaCurtain BHD 61208 RF
		Seagull TXB-10
		Seagull TXB-14
		Seagull TXB-18
		Shore Protection, A1-4-10R
		Shore Protection, A1-5-12R
		Simplex
		Static 350G
		Super Swamp Boom
		450
		10181
		10221
		10222
		10241
		10242
		14223
		14224
		18221
		18222
		18223
		18224
		18241
		18242
		18243
		18244
		19221
		19222
		19241
		19242
		22223
		22224
		22243
		22244
		4 inch Skorboom
		8 inch Skorboom
		ABSU61207RF
		ABSU81207RF
		Basic 18" Mark II-C
		FLEXI 350
		FLEXI 500
		HV 1225 FB (Flat Boom)
		Hv 1320 FF (Foam Filled)
		HV 1634 FB (Flat boom)
		HV 817 FB (Flat Boom)
		LiteFlex 6/18 F
		Maxx-Mini

TABLE B-1. Boom Data, 1993 and 1997 (*Continued*).

ENVIRONMENT	TYPE	MODEL
Calm Water	Curtain, internal foam (*Continued*)	MK E 12"
		Pol-E-Boom A1-6-18
		River
		Riverflex 6/18
		Troilboom 450 Curtain
		Troilboom 750 Curtain
		Walboom Fence 300
		OCB-24RP/T (24" series)
Calm Water Protected Water	Curtain, internal foam	6 x 12 Heavy Duty
Calm Water Protected Water	Curtain, internal foam	Contractor Boom
Calm Water Protected Water	Curtain, internal foam	O.K. Corral 6 X 12
Calm Water Protected Water	Curtain, internal foam	OCB-24CP/T (24" series)
Calm Water	Curtain, pressure-inflated	River Model Auto Boom II
Calm Water	Curtain, pressure-inflated	12B
Calm Water	Curtain, pressure-inflated	20B
		Maxipak
		Minipak
		River Sentinel
		HI Sprint 350
		Minipak XL
		River Auto Boom
		River Boom
		RO-BOOM 610
		Sentinel 400
		Sentinel 500
Calm Water	Curtain, self-inflatable	Compactible Boom
		HV1320 C
		HV 1530 C (Collapsible)
		NAV PAK 7/11
		NEO-1
		NEO-2
		NEO-3
		SIB 1A
		Auto Boom River Model
		MKE 12 inch
		MKE 18 inch
		Gamspill 1000
		Gamspill 1500
Calm Water	Fence	Fence Boom
		Fireguard hd
		Globeboom UHW-16"
		Oilfence 16
		Troilboom - 450 River
		Troilboom - 750 River
		Troilboom -GP 450
		24991
		36991
		BARRIER REEF BRTX-18
		BARRIER REEF BRTX-24
		BARRIER REEF BRTX-36
		GS 1000
		GS 800
		Marina Boom
		MK 16-16" U (HW)
		MK 16-16" U(LW)
		MK 16-18" PVC
		MK 8-24" (HW)
		MK 8-24" PVC
		MK 8-24" U (LW)
		MK 8-36" (HW)
		MK 8-36" PVC
		MK 8-36" U (LW)
		SpillMaster Original
		SpillMaster Original
		Troilboom GP 750
		Hoyle 300
		Hoyle Protector

TABLE B-1. Boom Data, 1993 and 1997 (*Continued*).

ENVIRONMENT	TYPE	MODEL
Calm Water	Fence (*Continued*)	Inshore 12
		Inshore 18
		Permanent Harbour 18
		Hard Boom Type 1
		Hard Boom Type 2
		Hard Boom Type 3
		Warden 470
Calm Water	Fire Containment	12 inch
		8 inch
		23-INCH
		35-INCH
		47-INCH
		18 inch
Calm Water	Tidal Seal	Mini Shore Guardian
		Shore Guardian
		Shore/Tidal Guard
		324-42
		324-54
		Beachflex 65
		Jackson 2.0 MTR Tidal Pollution Net [1]
		Land-Sea Boom
		RO-BOOM Beach
		Shore Guardian 400
		Shore Guardian 550
		Shore Seal Boom
		Intertidal STXB - 14
		Intertidal STXB - 20
		Intertidal STXB - 26
		Intertidal STXB 30
Open Water Protected Water	70" Open Water	OSC-70
Open Water	Curtain	Omega II A
Open Water	Curtain	Omega II B
Open Water	Curtain, air inflatable	RDCB 61625
Open Water	Curtain, internal foam	36" Offshore
		Open Water Fence Series
		SeaCurtain BHD 2436 DF
		HV4060 C
		HV4060 FF
		HV6090 FF
		Outer Series
		Petrel TXB-40-TTC
		Petrel TXB-50-TTC
		Petrel TXB-60-TTC
		SeaCurtain BHD 182308 RF
		SeaCurtain BHD 243608 RF
		Supermax II
		5075 FF (Foam Filled)
		FLEXI 1100 MP OR SYM
		FLEXI 1500 MP OR SYM
		HV 3550 FF (Form Filled)
		CG Open Water Boom
		Mark III
		Mark III-A
		Mark III-B
		Maximax II
		Outer Fence Series
Open Water	Curtain, pressure-inflated	Deep Sea Model Auto boom II
		Offshore Model Auto Boom II
		A450
		A670
		AIB 242450 U
		DEE-BOOM 48
		HI Sprint 1500
		HI Sprint 1800
		Hydra Boom
		MB-36
		MB-48

TABLE B-1. Boom Data, 1993 and 1997 (*Continued*).

ENVIRONMENT	TYPE	MODEL
Open Water	Curtain, pressure-inflated (*Continued*)	MB-60
		NOFI 1000 X
		NOFI 600 X
		NOFI 800 X
		Norwegian Oil Trawl PL 600
		Norwegian Oil Trawl PL 800
		Norwegian Oil Trawl PL1000
		Ocean Guardian
		Offshore 18/24
		Offshore 24/44
		Offshore Guardian
		Offshore Sentinel
		Ro-Boom 1500 Bay
		Ro-Boom 2000 Ocean
		Ro-Boom 3500
		Sea Sentry II 14-24
		Sea Sentry II 20-30
		Sea Sentry II 23-44
		Sea Sentry II Rapid Deployment
		Zoom 24/24
		AFB-130S
		AFB-185S
		Airflex 100
		Airflex 100S
		Airflex 130
		Airflex 130S
		Airflex 185
		Airflex 185S
		Airflex 200
		BALEAR 333
		Deep Sea Auto Boom
		Deep Sea Fast Sweep
		HI SPRINT 1000
		HI SPRINT 1200
		HI SPRINT 2000
		Lori Oil Boom, LOB 1370
		Lori Oil Boom, LOB 850
		NO-1000-R
		NO-1370-R
		NO-450-S
		NO-600-R
		NO-600-S
		NO-800-R
		NOFI 450
		NOFI VEE-SWEEP 450/1000
		NOFI VEE-SWEEP 600/1000
		NOFI VEE-SWEEP 800/1000
		Offshore
		Offshore Auto Boom
		Offshore Fast Sweep
		SENTINEL 1000
		SENTINEL 1250
		SENTINEL 1500
		Trellboom Ocean Boom
		Trellboom Sea Boom
Open Water	Curtain, self-inflatable	Expandi 4300 (Sea Boom)
		Expandi 7000 (Ocean)
		HV4060 SC
		HV5075 SC
		Offshore 1000
		Offshore 1500
		Offshore 600
		SeaCurtain Compactible BHD 1823DF
		SeaCurtain ReelPak BPHD 1823 RP
		SeaCurtain ReelPak HI-Seas SPHD 2436 RPM
		SeaCurtain ReelPak HI-Seas SPHD 3242 RPM
		SeaCurtain Super Compactible BH 1823 CHF

TABLE B-1. Boom Data, 1993 and 1997 (*Continued*).

ENVIRONMENT	TYPE	MODEL
Open Water	Curtain, self-inflatable (*Continued*)	HV 3550 C (Collapsible)
		HV 3550 SC (Super Collapsible)
		HV 4060 C (Collapsible)
		HV 6090 SC (Super Collapsible)
		NEO-8
		NEO-9
		SIE 1A
		WALBOOM 350
		WALBOOM 450
Open Water	Fence	H1SEA Guard
Open Water Protected Water	Fence	Oil Fence 48
Open Water	Fire Containment	Offshore Auto Boom Fire Model
Open Water	Jackson Trawlnet Curtain, external foam	2 Meter Boom
Protected Water Calm Water	Curtain internal foam	Spilldam 180
	Curtain, air inflatable	61650
	Curtain, air inflatable	RDCB 61650
Protected Water	Curtain, external foam	Mk 7-30"
		Globeboom UHW - 24"
		Globeboom UHW - 33"
		Mk 10-18 inch
		Mk 10-24 inch
		Mk 7-24"
		Mk 7-36"
		T
		GM 550
Protected Water	Curtain, internal foam	24" Medium Duty
		30" Heavy Duty
		D2
		Iteecran Fresh Water
		Model O-BD (Bay Duty)
		Model O-HD (HV/Duty)
		Model O-HD-II
		Seagull Riverine TXB-22-TTC
		Seagull Riverine TXB-26-TTC
		A1-10-30R
		A1-7-20R
		A1-7-20SR
		A1-8-24R
		A1-8-24SR
		F190
		F250
		F380
		Fast Current 1
		Fast Current 2
		Fast Current 3
		Gamma I A
		Gamma II A
		Gamma II B
		General Purpose 12/18
		General Purpose 8/12
		Globeboom ED 24"
		Globeboom ED 36"
		Harbor Boom
		HV2040 FF
		HV3045 FF
		Intermediate Series
		Intermediate Series - TC
		Kappa I A
		Kappa II A
		Kappa II B
		Kkappa I B
		Lambda I/24 A
		Lambda I/24 B
		Liteflex 10/36
		Liteflex 8/24
		Log I
		Log II

TABLE B-1. Boom Data, 1993 and 1997 (*Continued*).

ENVIRONMENT	TYPE	MODEL
Protected Water	Curtain, internal foam (*Continued*)	Mark II-B
		Mark II-C
		Mk E-24
		Mk E-36
		OCB-30CP (30" series)
		OCB-30CP/T (30"series)
		OCB-30RP/T (30"series)
		OCB-36CP (36" series)
		OCB-36CP/T (36" series)
		OCB-36RP (36" series)
		OCB-36RP/T (36" series)
		Omega I A
		Omega I B
		Omega II A
		Omega II B
		Optimax II
		Petrel TXB-30-TTC
		River
		River 7/11
		River 9/11
		SeaCurtain BHD 101608 RF
		SeaCurtain BHD 122408 RF
		SeaCurtain BHD 141808 RF
		SeaCurtain BHD 81208RF
		Seagull TXB-22-TTC
		Seagull TXB-24-TTC
		Spilldam 360
		T16 Foam-Filled
		T8 Foam-Filled
		500
		750
		1000
		24221
		24222
		24241
		24242
		24261
		36221
		36222
		36241
		36242
		18" MARK II-P
		20" MARK II-P w/cable
		24" MARK II-P CLASS II
		A1-6-18
		ABSU101607RF
		EPSILON 1A
		Flexi 1100
		FLEXI 500 MP OR SYM
		Flexi 750
		Flexi 900
		General Purpose
		HV2540 FF (foam filled)
		Log I-C
		Log II-C
		MAXX I-18
		MAXX I-24
		MAXX I-36
		NOFI 250 EP
		NOFI 350 EP
		NOFI 400 EP
		OCB-24CP
		OCB-24RP
		Open Water Fence Series
		RIVERINE RTXB-22-TTTC
		RIVERINE RTXB-24-TTC
		RIVERINE TRXB-26-TTC

TABLE B-1. Boom Data, 1993 and 1997 (*Continued*).

ENVIRONMENT	TYPE	MODEL
Protected Water	Curtain, internal foam (*Continued*)	SEAFENCE
		S
		Spilldam 240
		A1-12-36R
		O.K Corral 12 x 24
		O.K. Corral 12 x 24
Protected Water	Curtain, pressure-inflated	Bay Model Auto Boom II
		Harbor Model Auto II
		Ro-Boom 610 River
		61625
		"Nessie"
		"Nessie" half size
		12-24 Offshore
		A190
		A310
		A380
Protected Water	Curtain, pressure-inflated	DEE-BOOM 18
		HarborPak
		Hi Sprint 750
		Hi Sprint 950
		M Barrier MB-25
		M Barrier MB-35
		Offshore 12/18
		Offshore 8/12
		PN2
		Port Sentinel
		Ro Boom 1100
		Ro Boom 1300
		Ro-Boom 1000
		Sea Sentinel
		Sea Sentry II Shoreline
		800
		1200
		1500
		36261
		42261
		AFB-065S
		AFB-085S
		AFB-1002
		Airflex 65
		Airflex 65S
		Airflex 85
		Airflex 85S
		Airflex 90
		Airflex 90S
		Balear 312
		Balear 323
		Bay
		Bay Auto Boom
		Harbor
		Harbor Auto Boom
		Hi Sprint 500
		River
		SENTINEL 600
		SENTINEL 750
		9-18 Pier Boom
		Deep Sea
Protected Water	Curtain, self-infl./foam	Nav-Pak 12/18
		Nav-Pak 9/15
		Reelpak BPHD 82 RP
		SeaCurtain ReelPak FireGuard 1115 FG
		Expandi 2000 (Harbor)
		Expandi 3000 (Harbor)
		HV2040 C
		HV2040 SC
		HV3045 C
		HV3045 SC

TABLE B-1. Boom Data, 1993 and 1997 (*Continued*).

ENVIRONMENT	TYPE	MODEL
Protected Water	Curtain, self-inflatable	SeaCurtain ReelPak FireGuard BTTP 1418 FG
		SeaCurtain Barrel-O-Boom BOB 100
		SeaCurtain Barrel-O-Boom BOB 125
		SeaCurtain Barrel-O-Boom BOB 150
		SeaCurtain Compactible BHD 1115 DF
		SeaCurtain Compactible BHD 1418 DF
		SeaCurtain Compactible BHD 812 DF
		SeaCurtain ReelPak BPHD 1115 RP
		SeaCurtain ReelPak BPHD 1418 RP
		SeaCurtain ReelPak FireGuard BTTP 1823 FG
		SeaCurtain SuperCompactible BHD 1115 CHF
		SeaCurtain SuperCompactible BHD 1418 CHF
		Super Compactible BHD 812 CHF
		Zoom Boom 12/18
		Zoom Boom 8/12
		Zoom Boom 8/18
		HV 2540 SC
		HV2540 C (Collapsible)
		NEO-4
		NEO-5
		NEO-6
		NEO-7
		SeaCurtain ReelPak FireGuard 1215 FG
		SeaCurtain SuperCompactible Reelpak BPHD 812 RI
		SIG 1A
Protected Water	Curtain, self-inflatable Fire Containment	SeaCurtain ReelPak FireGuard BTTP812 FG
Protected Water	Fence	Hard Boom Type 2
		Hard Boom Type 3
		no name
		Permaflex
		SSB-600 Steel Barier
		SSB-800 Steel Barrier
		Troilboom GP 750
		Zaboom 700
		BP Dura
		GS 600
		Harborflex 24
		Harborflex 36
		Hoyle 600
		Hoyle 900
		Oil Fence 24
		Oil Fence 36
		Perm A Fence 24 Series
		Perm A Fence 36 Series
		Permafence
		Sigma I/18
		Sigma I/24
		Sigma I/36
		Sigma I/48
		Troilboom GP 1100
		Warden 720
Protected Water	Fence	Airfence
		Harborflex 30
		Permaflex 75
		Permaflex 90
		SpillMaster SUPERFLEX
		SpillMaster SUPERFLEX
		VERSAFENCE
		Hard Boom Type 1
		A2-12-36
		A2-6-18
		A2-8-24
		Dura Boom 18P
		Dura Boom 24P
		Dura Boom 36P
		Mk 8-24"
		Mk 8-36"

TABLE B-1. Boom Data, 1993 and 1997 (*Continued*).

ENVIRONMENT	TYPE	MODEL
Protected Water	Fence (*Continued*)	OCB-18/D
		OCB-18/R
		OCB-24/D
		OCB-24/R
		OCB-36/D
		Permafence 24
		Permafence 36
		R11
		R11V
		SpillMaster 24 inch
		SpillMaster 36 inch
		Inshore 24
		Inshore 36
		Permanent Harbour 24
		Permanent Harbour 30
		Permanent Harbour 36
		Petro Barrier 18 inch
		Petro Barrier 24 inch
		Petro Barrier 36 inch
		Troilboom 1100 Compact
		Troilboom 750 Compact
Protected Water	Fence, Permanent	GS 600I
Protected Water	24" River Harbor, Fence	OSC - 24
Protected Water	36" Harbor/Offshore, Fence	OSC - 36
Protected Water		River Boom Mk RB 12/17
Protected Water	Fire Containment	12" flotation by 18" skirt
		18" flotation by 24" skirt
		8" flotation by 12" skirt
		20 Inch
		30 Inch
Protected Water	Jackson Trawlnet	1 Meter Boom
Protected Water	Jackson Trawlnet Curtain, external foam	1 Meter Boom

Note: 1997 catalog is represented by the sum of the pink and green data. Pink, data not listed in the fourth edition (1993) but listed in the sixth edition (1997). Green, data listed in the fourth (1993) and sixth (1997) editions. Black, data listed in the fourth edition (1993) but not listed in the sixth edition (1997). 1993 data can be obtained by combining the green and black data.

Source: Schulze (1993, 1997).

TABLE B-2. Comparison of 1993 and 1997 Boom Availability Data.

ENVIRONMENT	TYPE	1993 [1]	1997 [2]	NEW [3]	PREEXISTING [4]	NO LONGER LISTED [5]
Calm Water	Internal Foam	77	114	44	70	15
	Self-Inflatable	3	10	6	4	3
	Inflatable Foam	0	0	0	0	0
	External Foam	8	15	7	8	0
	Fence	12	36	24	12	0
	Tidal Seal	7	14	9	5	2
	Fire Containment	3	6	3	3	0
	Pressure Inflated	6	12	7	5	1
	Curtain	8	1	0	1	1
Total		124	208	100	108	22
Protected Water	Internal Foam	75	107	39	68	9
	Self-Inflatable	27	34	9	25	2
	Inflatable Foam	0	0	0	0	0
	External Foam	6	8	0	8	1
	Fence	57	58	7	51	8
	Tidal Seal	0	0	0	0	0
	Fire Containment	3	4	4	0	3
	Pressure Inflated	24	48	24	24	3
	Curtain	14	0	0	0	0
	Jackson Trawlnet	0		0	1	1
Total		206	259	83	177	27
Open Water	Internal Foam	19	20	4	16	3
	Self-Inflatable	10	21	9	12	0
	Air Inflatable Foam	3	0	0	0	0
	External Foam	0	0	0	0	0
	Fence	2	2	0	2	0
	Tidal Seal	0	0	0	0	0
	Fire Containment	0	1	1	0	0
	Pressure Inflated	29	64	35	29	2
	Curtain	7	1	0	1	3
	Jackson Trawlnet	2	1	0	1	0
	Nessie	2	1	0	1	0
Total		74	111	49	62	8
Total		**404**	**578**	**232**	**347**	**57**

[1] 1993 data can be obtained by combining the preexisting and no longer listed columns.

[2] 1997 is represented by the sum of the new and preexisting columns.

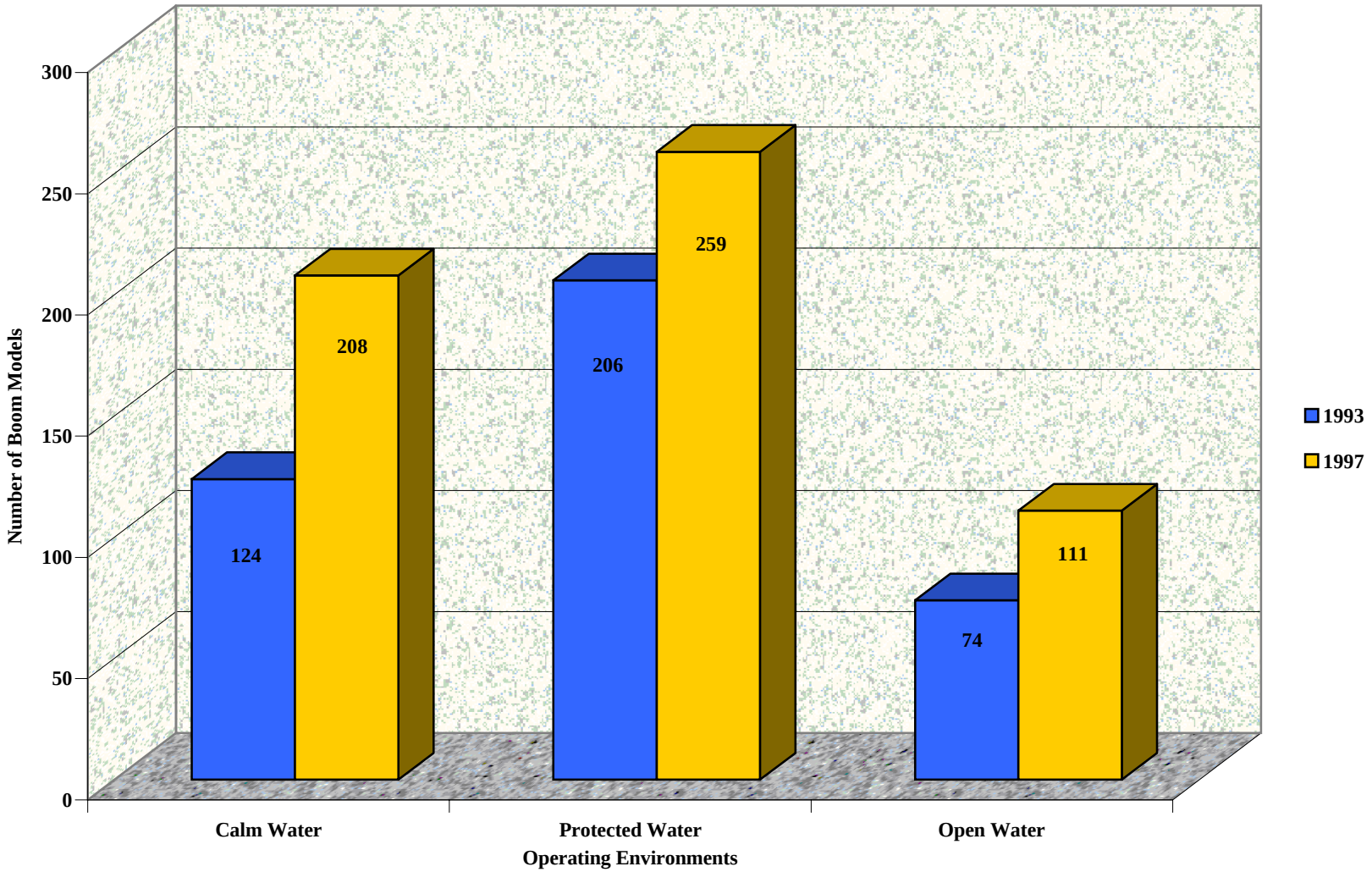
[3] New, not listed in the fourth edition (1993) but listed in the sixth edition (1997).

[4] Preexisting, listed in the fourth (1993) and sixth (1997) editions.

[5] No longer listed, listed in the fourth edition (1993) but not in the sixth edition (1997).

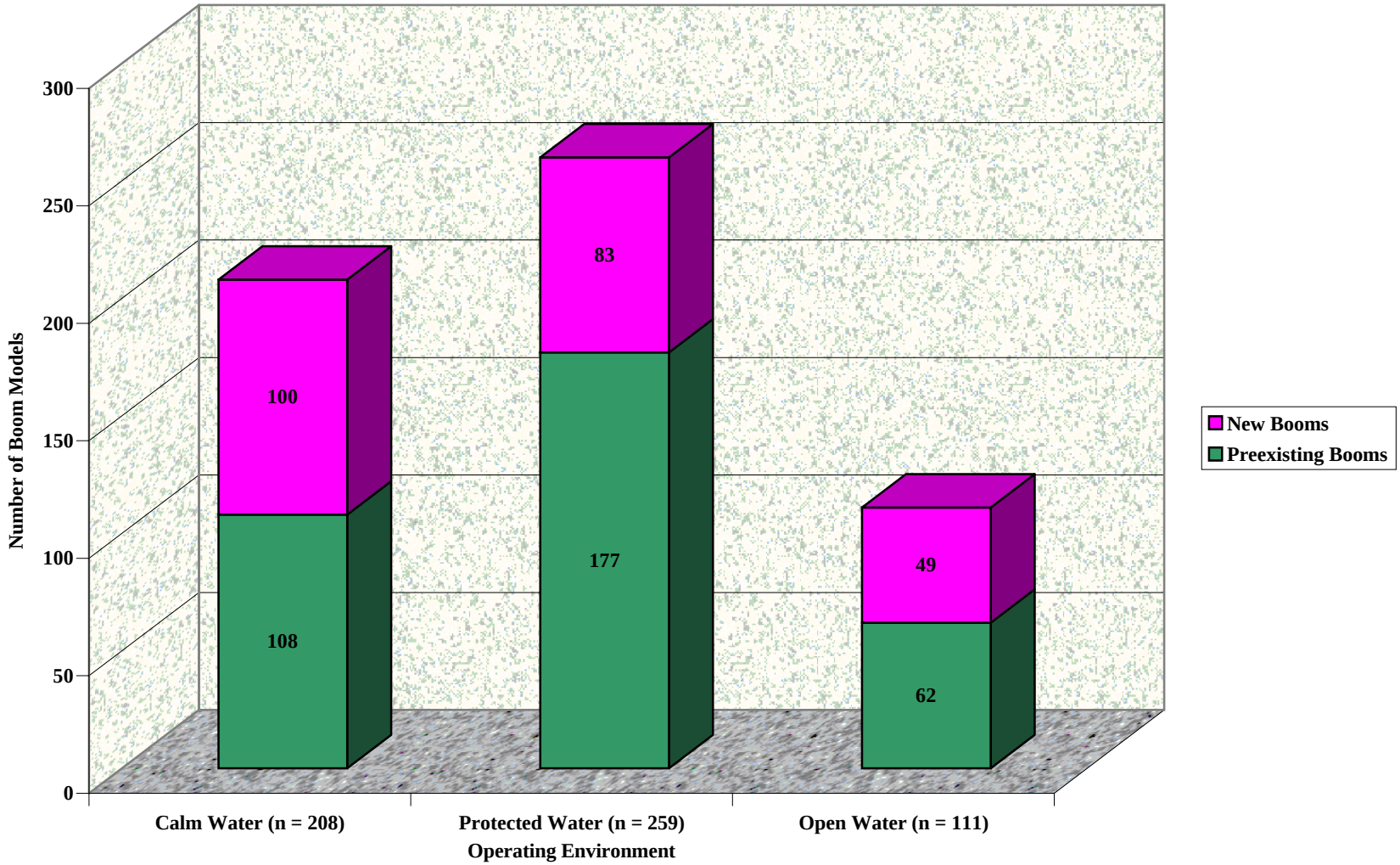
Source: Schulze (1993, 1997).

FIGURE B-1. Comparison of 1993 and 1997 Boom Availability Data[1].



[1] Compiled from totals in Table B-2.

FIGURE B-2. Composite of 1997 Available Booms[1].



[1] Compiled from totals in Table B-2.

TABLE B-3. Skimmer Data, 1993 and 1997.

ENVIRONMENT	TYPE	MODEL	SKIMMING SPEED KTS (M/S)	SWEEP WIDTH FT (M)	SPILL ENCOUNTER RATE = 1-MM SLICK BPH (M^3/HR)	BEST IN OIL TYPES [1] CODE = VISCOSITY cSt
Calm Water	Weir	FS50SK-17E				I
		FSV-5				I, II
		FS400ASK-39T				I
		FSV-39T				I
		FS400ASK-51T				I
		FSV-51T				I
		Nenufar N050	Stationary	5.2 (1.6)		II, III
		SOS/SPG Skimmers				Hydrocarbon only
		Oil Stalker				
		Plastic		1.0 (0.3)		I, II, III
		Stainless Steel		1.0 (0.3)		I, II, III
		OELA III				I, II
		SEAVAC 330 Delta				I, II
		SEAVAC 330HD Delta				I, II
		Oil Skimming		5.1 (1.6)		I, II
		Puddle Mop		0.6 (0.2)		I, II
		Beta skimmer		1.0 (0.3)		I, II
		Alpha Skimmer		0.6 (0.2)		I, II
		COMBI-Skimmer				I
		KIEL				I
		Dragonfly		4.6 (1.4)		II
		Slurp Skimmer (aluminum)	0.5 (0.3)			I
		Slurp (stainless steel)	0.5 (0.3)			I
		Circular Weir Skimmer 12 in		1.0 (0.3)		I, II
		Circular Weir Skimmer 24 in		2.0 (0.6)		I, II
		Circular Weir Skimmer 36 in		3.0 (0.9)		I, II
		Model B	0			I, II
		PEDCO 2-FOOT		2.0 (0.6)		I, II
		PEDCO 4-FOOT		4.0 (1.2)		I, II
		PEDCO 8-FOOT		8.0 (2.4)		I, II
		Desmi Mini-Max		2.7 (0.8)		I, II, III
		DELTA				Diesel-driven transfer pump unit
Calm Water	Weir\Vortex	Cyclonet S-100	1.0 (0.5) Stationary	9.3 (2.8)	33.0 (5.2)	II, III
		Cyclonet S-050	1.0 (0.5)	4.6 (1.4)	16.0 (2.6)	
		WALOSEP WM		13.1 (4.0)		I, II
Calm Water	Weir, flow controlled	Skim-Pak 650 SH 304 Stainless Steel		0.3 (0.1)		I, II
		Skim-Pak 2200 SH Fiberglass		0.7 (0.2)		I, II
		Skim-Pak 2500 SH 304 Stainless Steel		0.6 (0.2) 0.7 (0.2)		I, II
		Skim-Pak 4200 SH Fiberglass		1.0 (0.3)		I, II
		Skim-Pak 4500 SH 304 Stainless Steel		1.0 (0.3)		I, II
Calm Water	Weir, fixed	Skim-Pak 2700 SH 304 Stainless Steel		0.6 (0.2) 0.7 (0.2)		I, II
		Skim-Pak 4700 SH 304 Stainless Steel		1.0 (0.3)		I, II
		Skim-Pak 670 SH 304 Stainless Steel		0.3 (0.1)		I, II
Calm Water	Weir, paddle belt	HMC 50				I, II, III, IV, V

TABLE B-3. Skimmer Data, 1993 and 1997 (*Continued*).

ENVIRONMENT	TYPE	MODEL	SKIMMING SPEED KTS (M/S)	SWEEP WIDTH FT (M)	SPILL ENCOUNTER RATE = 1-MM SLICK BPH (M^3/HR)	BEST IN OIL TYPES [1] CODE = VISCOSITY cSt
Calm Water	Weir/Screen	Filter Scavenger	Stationary			I
		Small Diameter Scavenger	Stationary			I
		Filter Bucket	Stationary			I
Calm Water	Weir, suction	AARD-VAC 300/D				I, II
		AARD-VAC 300/DY				I, II
		AARD-VAC 300/EY				I, II
		AARD-VAC 800/D	1.0-4.0			I, II
		AARD-VAC 800/DY	1.0-4.0			I, II
		AARD-VAC 800/EY	1.0-4.0			I, II
Calm Water	Weir water jet	P.U.P. C-18	0-1.5 (0.8)	1.5 (0.5)	5.3 (0.9)	I, II
		P.U.P. C-18	0-1.5 (0.8)	1.5 (0.5)	5.3 (0.9)	I, II
		P.U.P. C-18 Offload	0-1.5 (0.8)	1.5 (0.5)	5.3 (0.9)	I, II
		P.U.P. C-24	0-1.5 (0.8)	2.0 (0.6)	7 (1.1)	I, II, III
		P.U.P. C24	0-1.5 (0.8)	2.0 (0.6)	7 (1.1)	I, II, III
		P.U.P. C-24 Offload	0-1.5 (0.8)	2.0 (0.6)	7 (1.1)	I, II, III
Calm Water	Weir, separator	Seahawk II		2.0 (0.6)		I, II
		SSK-2				I, II
		SSK-3				I, II
		SSK-4				I, II
		TDS 200 Shallow Skimmer		Sweeping boom width		II, III, IV
		TDS 250 Shallow Skimmer				II, III, IV
Calm Water	Advancing weir	MINI-FASFLO	6 (3)	9.9 (3.0)	213 (33)	
Calm Water	Rope Mop	Q-13		Depends on mop length		II, I, III
		Z-14		Depends on mop length		II, I, III
		A-14		Depends on mop length		II, I, III
		Z-14 EL				I, II, III
		A-14-G				I, II, III
		A-14-D				I, II, III
		TW-24		3-15 (0.9-4.6)		II, I, III
		TS-24		3-15 (0.9-4.6)		II, I, III
		TXS-24		3-15 (0.9-4.6)		II, I, III
		TW-24 EL		20 (6.1)		I, II, III
		TS-24 EHT		20 (6.1)		I, II, III
		TXS-24 EHM		20 (6.1)		I, II, III
		B		Depends on mop length		II, III, I
		K-25		Depends on mop length		II, III, I
		KS-25		Depends on mop length		II, III, I
		Reclaim 100 ELEC				I, II, III
		Reclaim 300 EL/DIE				I, II, III
		Reclaim 800 EL/DIE				I, II, III
		CAA4F		1.0 (0.3)		I, II
		CAA6F		2.0 (0.6)		I, II
		JMW-13VSI		Varies, 100 (31) max		I, II, III
		JMW-14E		250 (76)		I, II, III

TABLE B-3. Skimmer Data, 1993 and 1997 (*Continued*).

ENVIRONMENT	TYPE	MODEL	SKIMMING SPEED KTS (M/S)	SWEEP WIDTH FT (M)	SPILL ENCOUNTER RATE = 1-MM SLICK BPH (M^3/HR)	BEST IN OIL TYPES [1] CODE = VISCOSITY cSt
Calm Water	Rope Mop (*Continued*)	JMW-14ESP		250 (76)		I, II, III
		JMW-24E		300 (91)		I, II, III
		Mark I-4ESP		250 (76)		I, II
		Mark I-4E		250 (76)		I, II
		Mark I-4D		250 (76)		I, II
		Series 2000	2.0 (1.0)	Depends on mop length		I, II, III
		Reclaim 600 EL/DIE				I, II, III
		PW-12	2.0 (1.0)	Mop length		I, II
Calm Water	Stationary Rope Mop	MW41	0.9 (0.5)	150.0 (74)		II, III
		MW41-LW				II, III, I
		VMW-61-2	4.0 (1.2)			II, III, I
		Mopmatic-Wringer Type 1003/02 EX		Mop length		I, II
		Series 552		Depends on mop length		I
		Series 1104		Depends on mop length		I
		H.V.		Depends on mop length		I
		PW-6	2.0 (1.0)	Mop length		I, II
		PW-9	2.0 (1.0)	Mop length		I, II
		Moppet		197.0 (60)		I, II, III
		OM 140		295 (90)		I, II, III
		RM-040D				III, IV, V
		C-13		35 (11) [1]		I, II, III
		C-14		250 (76) [1]		I, II, III
		C-24		300 (91) [1]		I, II, III
		E 100		Depends on mop length		I, II
		E 150		Depends on mop length		I, II
		E 200		Depends on mop length		
		E 225		Depends on mop length		
		E 300		Depends on mop length		
		E 450		Depends on mop length		
Calm Water	Boom Rope Mop	FRM-PW-4	<2	Depends on boom length		I, II
		FRM-PW-6	<2	Depends on boom length		I, II
		FRM-PW-9	<2	Depends on boom length		I, II
		PW-4T		Mop Length		
		PW-6T		Mop Length		
		PW-9T		Mop Length		
Calm Water	Rope mop/ weir	ZRV-300				I, II
Calm Water	Suspended Rope Mop	B-14 EL		Depends on mop length		I, II, III
		Q-13-EL		Varies with mop length		I, II, III
		Q-13EL/VS		Varies with mop length		I, II, III
		Q-13 EL/VS-2		Varies with mop length		I, II, III
		AVS-24.26				I, II, III
		AVS-24/36				I, II, III
		AVS-34/46				I, II, III
		AVS-26/22				I, II, III

TABLE B-3. Skimmer Data, 1993 and 1997 (*Continued*).

ENVIRONMENT	TYPE	MODEL	SKIMMING SPEED KTS (M/S)	SWEEP WIDTH FT (M)	SPILL ENCOUNTER RATE = 1-MM SLICK BPH (M^3/HR)	BEST IN OIL TYPES [1] CODE = VISCOSITY cSt
Calm Water	Suspended Rope Mop (*Cont.*)	AVS-36/39				I, II, III
		AVS-46/49				I, II, III
		AVS-29/212				I, II, III
		AVS-39/312				I, II, III
		AVS-49/412				I, II, III
		Model A	0			I, II
		PW-2		Mop length		I, II
		PW-3		Mop length		I, II
		PW-4		Mop length		I, II
		Foxtail V.A.B. 2-6		2.1 (0.7)		I, II, III (< 350,000)
		Foxtail V.A.B. 4-6				I, II, III (< 350,000)
Calm Water	Drum	1-A Mini Skimmer				I, II
		MINI-SKIMMER				I, II
		2-E Mini Skimmer				I, II
		Maximum 15				I, II
		TDS-118				I, II
		TDS - 136				I, II
		TDS-118	< 1 (0.5)	4.0 (1.2)	14.2 (2.3)	I, II, III
		TDS-136	< 1 (0.5)	8.0 (2.4)	28.4 (4.5)	I, II, III
		Magnum 100				I, II
		Super Skimmer Model 12		1.3 (0.4)		V, IV, III, II, I
		Super Skimmer Model 24	1 (0.5)	2.0 (0.6)	7 (1.1)	V, IV, III, II, I
		Super Skimmer Model 36	1 (0.5)	3.0 (0.9)	10.6 (1.7)	V, IV, III, II, I
		Super Skimmer Model 48	1.0 (0.5)	4.0 (1.2)	14.2 (2.3)	V, IV, III, II, I
		Super Skimmer Model 60	1.0 (0.5)	5.0 (1.5)	17.8 (2.8)	V, IV, III, II, I
		1D-18		3.3 (1.0)		I, II
		2D-36		6.0 (1.8)		I, II
		4D-18		6.0 (1.8)		I, II
		MINI-MAX				I, II
		COV 100	1.0 (0.5)	7.3 (2.2)	25.9 (4.1)	I, II, III, IV, V
		UNISEP-401		2.3 (0.7)		III, IV, V
		MOSQUITO		2.3 (0.7)		III, IV, V
Calm Water	Drum Brush	RBS-5				I, II, III, IV, V
		RBS-10/2				I, II, III, IV, V
		RBS-10/1				I, II, III, IV, V
		RBS-20				I, II, III, IV, V
		RBS-40				I, II, III, IV, V
		RBS-1				I, II, III, IV, V
		LAMOR MINI SKIMMER	0 - 3 (0 - 1.5)	16.4 (5)	5.2 (0.8)	
		SAMOR STEADY SKIMMER	0.5 - 3.0 (0.3 - 1.5)	6.6 - 164.0 (2.0 - 50)		
		MULTIPURPOSE BELT MACHINE	0.5 - 3.0 (0.3 - 1.5)	3.3 (1.0)		
		LBD-2	3.0 (1.5) [2]	1.3 (0.4)	14.2 (2.3)	III, II, I, IV
		LBD-3	3.0 (1.5) [2]	2.0 (0.6)	21.3 (3.4)	III, II, I, IV

TABLE B-3. Skimmer Data, 1993 and 1997 (*Continued*).

ENVIRONMENT	TYPE	MODEL	SKIMMING SPEED KTS (M/S)	SWEEP WIDTH FT (M)	SPILL ENCOUNTER RATE = 1-MM SLICK BPH (M^3/HR)	BEST IN OIL TYPES [1] CODE = VISCOSITY cSt
Calm Water	Drum Brush (*Continued*)	LBD-4	3.0 (1.5) [2]	2.7 (0.8)	28.4 (4.5)	III, II, I, IV
		LSC-2 SIDE COLLECTOR	2.5 (1.3) [1]	12.0 (3.7)	107 (17)	III, II, I, IV
Calm Water	Drum Brush	LSC-3 SIDE COLLECTOR	3.0 (1.5) [1]	18.0 (5.5)	192 (30)	III, II, I, IV
		LSC-4 SIDE COLLECTOR	3.5 (1.8) [1]	26.0 (7.9)	323 (51)	III, II, I, IV
		LORS-2 RECOVERY VESSEL	2.5 (1.3) [1]	12.0 (3.7)	107 (17)	III, II, I, IV
		LORS-3 RECOVERY VESSEL	3.0 (1.5) [1]	18.0 (5.5)	192 (30)	III, II, I, IV
		TURBO-1	2.0 (1) [1]	2.8 (0.8)	19.5 (3.1)	III, II, I, IV
Calm Water	Suction	OS-101				I, II, III
		OS-150				I, II, III
		FFPEB				I, II, III
	Suction (submerged)	SSS-4	Variable	4.0 (1.2)	Variable	I, II, III
	Suction (submerged)	SSS-8	Variable	8.0 (2.4)	Variable	I, II, III
		Spillvac S.V.O. Model		Uses various tools in kit		I, II, III
		Spillvac S.V.H.				
		Spillvac S.V.O. Heavy Duty				I, II, III
	Suction/Probe	Probe Scavenger	Stationary			I
	Suction/Probe	DNAPL P-SCAN	Stationary			I
		Pan Skimmer		0.8 (0.3)		I, II, III, IV
	Suction 0.5 or 1.0 in	Flexible Manta Ray	0.5 (0.3) (current velocity)	3.1 (0.9)	5.5 (0.9) [1] 4.3 (0.7)	I, II
	Suction 0.5 or 1.0 in	Rigid Manta Ray	0.5 (0.3) (current velocity)	4.0 (1.2) 6.3 (1.9)	7.1 (1.1) [1] 7.4 (1.7)	I, II
	Suction 0.5 to 2.0 in	High Capacity	0.5 (0.3) (current velocity)			I, II
		Model 60 Pump		Depends on skimmer		I, II, III
		Model 160 Pump		Depends on skimmer		I, II, III
		Trans Vac 500-D		Depends on skimmer		I, II, III
		Oil Skimmer				I, II
		AARD-VAC 100 D				I, II, III
		AARD-VAC 100 DY				I, II, IV
		AARD-VAC 100 EY				I, II, III
		AARD-VAC 300/D				I, II
		AARD-VAC 300/DY				I, II
		AARD-VAC 300/EY				I, II
Calm Water	Disc	SIRI 10 F		3.0 (0.9)		I, II
		SIRI 15 Y		3.8 (1.2)		I, II
		SIRI 30 Y		3.8 (1.2)		I, II
		S4 75/01				I, II
	Disc/ Industrial	Float Discoil 15				I, II, III
		M1-2C		3.8 (1.2)		I
		M4 110/01				I, II
		M6 110/01				I, II
		L10 110/01				I, II
		M1-2		12 (3.7)		
		MI-18C		4.8 (1.5)		II
		MI-11/18C		4.0 (1.2)		I, II
		MI-15/18C		5.0 (1.5)		I, II

TABLE B-3. Skimmer Data, 1993 and 1997 (*Continued*).

ENVIRONMENT	TYPE	MODEL	SKIMMING SPEED KTS (M/S)	SWEEP WIDTH FT (M)	SPILL ENCOUNTER RATE = 1-MM SLICK BPH (M^3/HR)	BEST IN OIL TYPES [1] CODE = VISCOSITY cSt
	Disc/ Industrial (*Continued*)	MI-11/24		12.0 (3.7)		I, II
		OSKIM Type I				II, III
		OSKIM Type II				II, III
Calm Water	Disc/Drum	UNISEP-401		2.3 (0.7)		III, IV, V
	Disc/Drum	Mosquito		2.3 (0.7)		I, II, III, IV, V
		KEBAB 1500		2.0 (0.6)		I, II
		KEBAB 2000		2.5 (0.8)		I, II
		KEBAB 9X				I, II
		KEBAB T9FXP				I, II, III
		KEBAB T9FXNP				I, II, III
		KEBAB T9FLT				I, II, III
		KEBAB T14FXP				I, II, III
		KEBAB T14FXNP				I, II, III
		KEBAB T14FLT				I, II, III
		T5-I (M)				I, II
		T5				I, II
		T12				I, II
		T18P (NP)				I, II
		T18				I, II
		Floating KEBEB				I, II
		Fixed KEBAB				I, II
		MDS-5				I, II, III
Calm Water	Disc	MDS-03Y		3.0 (0.9)		I, II, III
Calm Water	Belt	RRV-300	2 (1)			I, II ,III
		Skim Kleen TS-106				II, III, I
		Skim Kleen TS-112				II, III, I
		Skim Kleen TS-124				II, III, I
Calm Water	Paddle Belt	B-11 Small Field Unit	0-1.0 (0-0.5	2.3 (0.7)	8.0 (1.3)	I, II, III
		D-12 Large Field Unit	0-1.0 (0-0.5	7.0 (2.1)	25 (4)	I, II, III
		S-23 API Separator	Stationary			
Calm Water	Submersion Belt	Dip 400 (VOSS)	0-3 (1.5)	10 (3) w/sweep arm	36 (5.6)	I
		DIP 402 (VOSS)	0-3 (1.5)	20 (6) w/sweep arm	71 (11.3)	I, II
	Submersion belt/industrial	Submersion Belt		1.2 (0.4) 0.7, 1.0, 1.2, (0.2, 0.3, 0.4)		I, II
Calm Water	Drum Brush					
Calm Water	Brush	Multi-Purpose Skimmers	2-3 (1-1.5)	26.6 (8.0)	190 (30)	I, II
Calm Water	Sorbent Lifting Belt	Series 5000		6.0 (1.8)		III, IV, V
		EFMOPOL RSH 90		0.7-2.7 (0.2-0.8)		I, II, III
		Skim Kleen TS-106				II, III, I
		Skim Kleen TS-112				II, III, I
		Skim Kleen TS-124				II, III, I
Calm Water	Vortex/Weir	WALOSE WM		13.1 (4.0)		I, II
Calm Water	Boom Skimmer					
Calm Water	Chain Brush					

TABLE B-3. Skimmer Data, 1993 and 1997 (*Continued*).

ENVIRONMENT	TYPE	MODEL	SKIMMING SPEED KTS (M/S)	SWEEP WIDTH FT (M)	SPILL ENCOUNTER RATE = 1-MM SLICK BPH (M^3/HR)	BEST IN OIL TYPES [1] CODE = VISCOSITY cSt
Calm Water	Floating tube	6 V				II, III, IV, I
		5 H				II, III, IV, I
Calm Water	Special	SpeedMop SWF-SM100		6.0 (1.8)		II
Calm Water	Fixed submersion plane	UNISEP 560 S	2 (1)	1.6 (0.5)	11.4	I, II, III
Protected Water	Weir	Surface Scavenger tm	Variable	Variable	Variable	I, II, III
		Bluefriend T.U.1	5.0 (2.5)	18.0 (5.5)	151.0 (24.0)	II, III
		Bluefriend T.U.2	5.0 (2.5)	24.0 (6.4)	194.1 (30.9)	II, III
		Bluefriend T. U. 3	5.0 (2.5)	25.0 (7.6)	215.7 (34.3)	II, III
		"Amalia" Mini Skimmer System		1.8 (0.6)		I, II
		Seavac 660 Heli-Skimmer	5.0 (2.5)	15.0 (4.6)	107 (17)	I, II
		Seavac 660 Trawl	Sweep width of boom catenary	15.0 (4.6)	107 (17)	I, II
		VOSS-500	1 (0.5)	5.0 (1.5)	21 (3.4)	I, II, III
		VOSS-1000	1 (0.8) 2 (1)	6.0 (1.8)	21 (3.4)	I, II, III
		VOSS-2000	1 (0.5) 2 (1)	6.0 (1.8)	21 (3.4)	I, II, III
		150 Power Skimmer	1 (0.5)	2.3 (0.7)		I, II, III, IV, V
		Mini-Fasflo	3-4 (1.5-2.1)	13 (40)	138 (22)	I, II
		Fasflo	3-4 (1.5-2.1)	16.4 (5.0)	175 (27.8)	I, II
		VIKOSKIM	1.0-2.0 (0.5-1.0)	980 (300)		I, II, III
		SSK-7				I, II
		SSK-8				I, II
		SRX-ERV-OSRV	1.0 (0.5)	10.0 (3.0)	355 (56)	I, II, III, IV, V
		HRX-ERV-OSRV	1.0 (0.5)	31.0 (9.4)	110 (17.5)	I, II, III, IV, V
		Harbourmate mini skimmer				I
		RST-2400	0.8 (0.4)	24.5 (7.5)	65 (10.4)	I, II, III, IV
	Weir, flow controlled	Skim-Pak 18,000 SH Fiberglass	1.0 (0.5)	50 (15) 1.7 (0.5)	173 (27)	I, II
	Weir, flow controlled	Skim-Pak 18,500 SH Stainless Steel	1.0 (0.5)	50 (15) 1.5 (0.5)	173 (27)	I, II
	Weir, separator	Portland 20	1.0 (0.5)			II, III
	Weir, separator	Portland 24				II, III
	Weir, separator	Partland 44	0-3.0 (0-1.5)			II, III
	Weir, separator	Floater 10	1.2 (0.6)	39.3 (12.0)	170 (27)	I, II, III
	Weir, separator	ORAS I oil Recovery Barge (towing)	1.6 (0.8)	16.4 (5.0)	86.3 (13.7)	I, II, III
	Weir, separator	ORAS IA Recovery Barge (self-propelled)	1.6 (0.8)	16.4 (5.0)	86.3 (13.7)	I, II, III
	Weir, velocity alteration	Combo 27	0-2.0 (1.0)	14.0 (4.3)	100 (16)	I, II, III
		SKIM-PAK 18,700 SH		1.7 (0.5)		I, II
Protected Water	Weir	SKIM-PAK 93	4.0 (2.0)	100.0 (30.0)	710.0 (112.9)	I, II, III, IV
Protected Water	Weir, flow controlled	93		2.0 (0.6)		I, II, III
Protected Water	Weir, suction, disc	Bluefriend 1	5.0 (2.5)	25.0 (7.6)	251.7 (34.3)	II, III
		Bluefriend 2	5.0 (2.5)	28.0 (8.5)	258.8 (41.2)	II, III
		Bluefriend 3	5.0 (2.5)	36.0 (11.0)	323.6 (51.5)	II, III
Protected Water	Weir, paddle belt	HMC 500 Skim Cat	0-3 (1.5)	8	28.4 (4.5)	I, II, III, IV, V
		HMC 1500 Skim Cat	0-3 (1.5)	12.3	43.7 (7)	I, II, III, IV, V
Protected Water	Weir water jet	P.U.P D-44	0-1.5 (0-0.8)	3.6 (1.1)	13 (2)	I, II, III
		P.U.P D-64	0-1.5 (0-0.8)	7.0 (2.0) 3.6 (1.1)	25 (4)	I, II, III
		P.U.P. D-64 Offload	0-1.5 (0-0.8)	7.0 (2.0)	25 (4)	I, II, III

TABLE B-3. Skimmer Data, 1993 and 1997 (*Continued*).

ENVIRONMENT	TYPE	MODEL	SKIMMING SPEED KTS (M/S)	SWEEP WIDTH FT (M)	SPILL ENCOUNTER RATE = 1-MM SLICK BPH (M^3/HR)	BEST IN OIL TYPES [1] CODE = VISCOSITY cSt
Protected Water	Weir and Disc	Skim Mark II DAH		8.9 (2.7)		I, II, III
		Skim Mark I DAH	1.5 (0.7)	4.6 (1.4)	25 (3.9)	I, II, III
Protected Water	Weir concentrator	P.U.P. C-44 Offload	0-1.5 (0-0.8)	3.6 (1.1)	13 (2)	I, II, III
Protected Water	Submersion plane/Weir	33	1.6-3 (0.8-1.5)	10 (3) greater w\ hearding equ.	107 (17)	I, II, III
		35	1.8 (0.9)	10.0 (3.0)	64 (10)	I, II, III
Protected Water	Advancing Weir	ESCA 17M3 BARGE	1.0 (0.5)	3.9 (1.2)		I, II, III, IV, V
		AKTEA	3 (1.54)	26.6 (8.1)	283 (45)	I, II, III, IV, V
		MINI SKIMMER	0.3 (1.5)			I, II
		Mini Circus	0-4 (2.1)	Sweeping boom width		I, II
Protected Water	Weir Vortex	JASKI 32		23 (7)		I, II
		JASKI 64		27 (8.2)		I, II
		JASKI 100		34 (10)		I, II
Protected Water	Stationary Rope Mop	W-26		Depends on mop length		II, III, I
		W-29		Depends on mop length		II, III, I
		RM-060D				III, IV, V
		RM-090D				III, IV, V
		C-26		1,000 (305)		I, II, III
		C-29		1,500 (457)		I, II, III
		PW-12	2.0 (1.0)	Mop length		I, II
		SERIES 2000	2.0 (1.0)	Depends on mop length		I, II, III
		Mop Cassette				I, II, III
		Mark II-4V		300 (91)		I, II, III
		Mark II-4D		300 (91)		I, II, III
		Mark II-9VE		2,000 (610)		I, II, III
		OM 240		591.0 (180)		I, II, III
		OM 260		787.0 (240)		I, II, III
		OM 290		787.0 (240.)		I, II, III
		KS-25		Depends on mop length		I, II, III
Protected Water	Rope Mop	Petro Mop 2/29	3.5 (1.8)	6.4 (2.0)	80 (12.6)	I, II, III
		4-In Rope Mop		Rope Length		I, II, III
		9-In Rope Mop		Rope Length		II, III
		VMW92-4				
		VMW92-8				
		JMW-26		5,001 (1,524)		I, II, III
		JMW-29E		2,000 (610)		I, II, III
		Foxtail V.A.B. 2-9		3.6 (1.1)		I, II (< 350 cSt)
		Foxtail V.A.B. 2-9		4.3 (1.3)		I, II (< 350,000 cSt)
		Mark II-9D		2,000 (610)		I, II, III
		Force 3	2.0 (1.0)			I, II
		Octopus 600	2(1)	6.0 (1.8)	43.1 (6.9)	I, II, III
		Foxtail V.A.B. 4-6				I, II, III (<350,000)
		Foxtail V.A.B. 4-9				I, II, III (<350,000)
		Policat-15	5.0 (2.5)	4.6 (1.4)	64.7 (10.3)	I, II

TABLE B-3. Skimmer Data, 1993 and 1997 (*Continued*).

ENVIRONMENT	TYPE	MODEL	SKIMMING SPEED KTS (M/S)	SWEEP WIDTH FT (M)	SPILL ENCOUNTER RATE = 1-MM SLICK BPH (M^3/HR)	BEST IN OIL TYPES [1] CODE = VISCOSITY cSt
Protected Water	Rope Mop	Policat-18	5.0 (2.5)	4.9 (1.5)	69.0 (11.0)	I, II
		Policat-10	1.0 (0.5)			I, II
		Seamop 3040		Variable		I, II, III
		Seamop 5060		Variable		I, II, III
Protected Water	ZRV rope mop	SWS-6	1-2 (0.5-1)	12.0 (3.7)	86 (14) 43 (6.8)	I, II, III
		SWS-9	2 (1.0)	12.0 (3.7)	86 (14) 43 (6.8)	I, II, III
		W-212	4.0 (2.0)	4.5 (1.4)	64 (10.2) [1]	I, II, III
		C46M CATAMARAN	3.0 (1.5)			
		ZRV	4 (2)	12 (3.7)	170.4 (27.1)	I, II
		E900	4 (2)	6.6 (2.0)	93 (14.8)	I, II
		Pollcat-15	5.0 (2.5)	4.9 (1.5)	87 (13.8)	I, II, III
		Pollcraft	1.0 (0.5)			According to skimmer
		Pollcat-10	1.0 (0.5)			I, II
Protected Water	Suspended Rope Mop	VMW92-4				
		VMW92-8				
		C-V46H		160 (49)		I, II, III
		LSS-1 Sea Snake		5.0 (1.5)		III, IV, V, II, I
		Octopus 100	2 (1)	4.0 (1.2)	28 (4.5)	I, II, III
		Octopus 300	2 (1)	6.0 (1.8)	43.1 (6.9)	I, II, III
		Octopus 800	2 (1)	6.0 (1.8)	43.1 (6.9)	I, II, III
Protected Water	Stern deployed rope mop	Force 3 E450	2.0 (1.0)			I, II
		Fore 5 E900	3.5 (1.8)			I, II
Protected Water	Drum	Magnum 200				I, II
		Rollerskimmer	1 kt - various	8.0 (2.4)	35.5 (5.6)	II, I
		402	1.0 (0.5)	4.9 (1.5)	17.4 (2.8)	IV, V
		602	1.0 (0.5)	6.6 (2.0)	21.3 (3.4)	IV, V
		252				IV, V
		AVS - 100 DY	1 (0.5)	20 (6.1)	71 (11.2)	I, II, III
		AVS - 200 DY	1 (0.5)	20 (6.1)	71 (11.2)	I, II, III
		AVS - 400 DY	1 (0.5)	20 (6.1)	71 (11.2)	I, II, III
		COV 10	1 (0.5)	7.3 (2.2)	25.9 (4..1)	I, II, III, IV, V
		COV 200	2 (1)	10.6 (3.2)	75.2 (12.0)	I, II, III, IV, V
		ROTO Drum 30	2.5 (1.3)	26.2 (8.0)		
		ROTO Drum 70	2.5 (1.3)	52.5 (16.0)		
		ROTO Drum 130	2.5 (1.3)	52.5 (16.0)		
Protected Water	Submersion drum	WP-1-30	1.0 (0.5)	4.0 (1.2)	15 (2.4)	II, III, IV
Protected Water	Helical drum	Roto Drum Oil Skimmer	Variable	4.0 (1.2)	15 (2.4)	II, III, IV
	Drum /Separator Helical drum	WP-1-30	1.0 (0.5)	4.0 (1.2) 3.0 (1.0)	15 (2.4)	V, IV, III, II, II
Protected Water	Drum skimmer 48"	TDS-118	< 1 (0.5)	4.0 (1.2)	14.2 (2.3)	I, II, III
	Drum skimmer 96"	TDS-136	< 1 (0.5)	8.0 (2.4)	28.4 (4.2)	I, II, III
	Drum Skimmer	Johnny Cat 30G	1.5-2.0 (0.8-1)	4.5-24.5 (1.4-7.5)	23.7-129.4 (3.8-20.6)	I, II
	Drum Skimmer	Johnny Cat 25G	1.5-2.0 (0.8-1)	4.5-24.5 (1.4-7.5)	23.7-129.4 (3.8-20.6)	I, II
Protected Water	Advancing Drum Skimmer	Johnny Cat 25A	1.5 (0.8)	4.5-24.5 (1.4-7.5)	24-130 (3.8-20.7)	I, II

TABLE B-3. Skimmer Data, 1993 and 1997 (*Continued*).

ENVIRONMENT	TYPE	MODEL	SKIMMING SPEED KTS (M/S)	SWEEP WIDTH FT (M)	SPILL ENCOUNTER RATE = 1-MM SLICK BPH (M^3/HR)	BEST IN OIL TYPES [1] CODE = VISCOSITY cSt
Protected Water	Suction	OS-200	0-6.0 (3.0)	8.0 (2.4)	28.0 (4.5)	I, II
		ESCA 0.40 "I"		1.3 (0.4)		I, II, III
		ESCA 0.80 "I"		2.6 (0.8)		I, II, III, IV
		AARD-VAC 800/D	1.0-4.0 (0.5-2.0)			I, II
		AARD-VAC 800/DY	1.0-4.0 (0.5-1.0)			I, II
		AARD-VA 800/EY	1.0-4.0 (0.5-1.0)			I, II
		TRANS VAC 220D		Depends on skimmer		I, II, III
		TRANS VAC 300DH		Depends on skimmer		I, II, III
		TRANS VAC 500D		Depends on skimmer		I, II, III
Protected Water	Disc	SIRI 40 Y		7.5 (2.3)		I, II
		SIIRI-50Y				I, II
	Suction/Disc	ECO-110	0-2.5 (0-1.3)	16 (4.9)	142 (22.6)	I, II, II
	Suction/Disc	ECO 800	0-2.5 (0-1.3)	49 (15)	435 (69)	I, II, III
		MI-11/24		12.0 (3.7)		I, II
		MI-18C	Stationary	4.8 (1.5)		II
		MI-11/18C		4.0 (1.2)		I, II
		MI-15/18C		5.0 (1.5)		I, II
		MI-30	Stationary	6.0 (1.8)		II
		OSKIM Type III	2.0 (1.0)	8.0 (2.4)	28.0 (4.5)	I
	Discs, thick	RO-Disc 15		5.9 (1.8)		I, II, III
		RO-Disc 15P				I, II, III
		KOMARA 12K		13 (4) 11.5 (3.5)		I, II
		KOMARA 30K		16 (4.9) 13.1 (4.0)		I, II
		Sea Devil				III, IV, V
		Harbour Scavenger	1.0 (0.5)	24 (7.4) 21.3 (6.5)	86 (14) 75.6 (12.0)	I, II
		DS-70	<1.0 (0.5)	66 (20)	237 (38) 234 (37)	I, II
		MDS-8				I, II, III
		MDS-15				I, II, III
		MDS-20				I, II, III
		MDS-30				I, II, III
		MDS-30Y		7.5 (2.3)		I, II, III, IV
		MDS-08Y		6.2 (1.9)		I, II, III
		MDS-15Y		7.5 (2.3)		I, II, III
		MDS-20Y		7.5 (2.3)		I, II, III
		ORD		3.3 (1.0)		I, II
		ORD MAGNA		24.0 (7.3)		I, II
		Float Discoil 15				I, II, III
		DDS 15S2				I, II
		DDS30S4				I, II
Protected Water	Disc	DDS50L3				I, II
Protected Water	Belt					
Protected Water	Paddle Belt	Foxband Heavy Oil Skimmer				I, II, III, IV, V 300,000 to 1 million cST
		EGMOPOL 1041 DAHW	1.5 (0.8) 0-3 (0-1.5)	9.8 (3.0)	52 (8.2)	II, III, IV, V
		SPEEDYPOLL MK 1	0-3 (0-1.5)	11 (3.3) [5]	58.2 (9.2) [6]	I, IV, V, II, III

TABLE B-3. Skimmer Data, 1993 and 1997 (*Continued*).

ENVIRONMENT	TYPE	MODEL	SKIMMING SPEED KTS (M/S)	SWEEP WIDTH FT (M)	SPILL ENCOUNTER RATE = 1-MM SLICK BPH (M^3/HR)	BEST IN OIL TYPES [1] CODE = VISCOSITY cSt
Protected Water	Paddle Belt (*Continued*)	SEAPOLL MK 1	0-3 (0-1.5)	11.2 (3.4) [5]	60.4 (9.6) [6]	I, IV, V, II, III
		AMPHIPOLL MK 1	0-3 (0-1.5)	11.2 (3.4) [5]	60.4 (9.6) [6]	I, IV, V, II, III
		HMC 500 SKIM CAT	1 (0.5)	8	28.4 (4.5)	I, II, III, IV, V
		HMC 1500 SKIM KING	1 (0.5)	12.3	43.7 (7)	I, II, III, IV, V
Protected Water	Drum Brush	TURBO-2	2.0 (1.0)	3.0 (0.9)	21.3 (3.4)	III, II, I, IV
Protected Water	Brush					
Protected Water	Sorbent Lifting Belt	Harbor 28	0-2.0 (1.0)	7.5-200 (2.3-61)	1420(226) 53-1065(8.5-170)	V, IV, III, II, I
		Harbor 30	0-2.0 (1.0)	14.0-200 (4.3-61)	1420(226) 99-1065(15.8-170)	V, IV, III, II, I
		Harbor Voss Sidewinder	2.0 (1.0)			V, IV, III, II, I
		Heavy Oil Belt Simmer (HOBS)	0.6 (0.3)	4.0 (1.2)	8.5 (1.4)	II, III, IV, V
Protected Water	Vortex	Cyclonet 050	2 (1) 0.5-4 (0.3-2.1)	5.0 (1.5) + 0.7 x beam	43.1 (6.9)	I, II
		Cyclonet 070	2 (1) 1-5 (0.5-2.6)	7.2 (2.2) + 0.7 x beam	43.1 (6.9)	I, II
Protected Water	Boom Skimmer	Ecoflo Type 11	1 (0.5)	72 (21.9)	256 (41)	I, II, III
		Ecoflo Type 22	1 (0.5)	144 (43.8)	511 (82)	I, II, III
		Type 7	1.0 (0.5)	12.0 (3.7)	43 (7)	I, II, III
		Type 14	1.0 (0.5)	24.0 (7.3)	86 (14)	I, II, III
		2010 (10,000 GPH)	0.8 (0.4)	16 (4.9)	43 (6.8)	I, II, III
		4020 (20,000 GPH)	0.8 (0.4)	36 (11.0)	107.9 (17.2)	I, II, III
		VIKOSKIM 750	1.0 (0.5)	980 (300)	3429 (553)	I, II, III
		VIKOSKIM 950	1.0 (0.5)			I, II, III
		VIKOSKIM 1500	1.0 (0.5)			I, II, III
Protected Water	Sweeping arm weir	MK2/5.5	1.8 (0.9)	14.8 (4.5)	94.6 (15)	I, II, III
		MK2/8.00	1.8 (0.9)	22.6 (6.9)	144 (23)	I, II, III
Protected Water	Chain Brush	LORI Side Collector LSC-2	1-3 (0.5-1.5)	15 or 30 (4.6 or 9.1)	107 or 213 (17 or 34)	II, III, IV, V
		LORI Side Collector LSC-3	1-3.6 (0.5-1.8)	22 or 44 (6.7 or 13.4)	156 or 312 (24 or 48)	II, III, IV, V
		LORI Side Collector LSC-4, Custom	1-4 (0.5-2.0)	30 or 60 (9.1 or 18.3)	213 or 426 (34 or 69)	II, III, IV, V
		LORI Bow Collector LBS-2	1-2.5 (1.5-1.3)	10-12 (3.0)	64.7 (10.3)	II, III, IV, V
		LORI Bow Collector LBS-3	1-2.5 (1.5-1.3)	16-18 (5.0)	107.9 (17.2)	II, III, IV, V
		LORI Bow Collector LBS-4, custom	1-2.5 (1.5-1.3)	22+ (7.0+)	151.0 (24.0)	II, III, IV, V
		LORS-2 Recovery Vessel	2.5 (1.3)	12.0 (3.7)	107 (17)	V, IV, III, II, I
		LSC-2 Side collector	2.5 (1.3)	12.0 (3.7)	107 (17)	V, IV, III, II, I
		LSC-3 Side Collector	3.0 (1.5)	18.0 (5.5)	192 (30)	V, IV, III, II, I
		LBC-2 Bow Collector	2.5 (1.3)	16.0 (4.9)	142 (23)	V, IV, III, II, I
		LBC-3 Bow Collector	2.5 (1.3)	16.0 (4.9)	142 (23)	V, IV, III, II, I
		LBC-4 Bow Collector	2.5 (1.3)	16.0 (4.9)	142 (23)	V, IV, III, II, I
		LBC-5 Bow Collector	2.5 (1.3)	16.0 (4.9)	142 (23)	V, IV, III, II, I
		LBC-2 Beaver Bow Collector	3.0 (1.5)	9.5 (2.9)	101 (16)	V, IV, III, II, I
		LBC-3 Beaver Bow Collector	3.0 (1.5)	10.3 (3.1)	110 (17)	V, IV, III, II, I
		LSF-2/100 Skimmer Barge	3.0 (1.5)	1.8 (0.6)	19.17 (3.1)	V, IV, III, II, I
		LSF-3 Floating Skimmer	3.0 (1.5)	4.4 (1.3)	46.9 (7.5)	V, IV, III, II, I
		LSF-4 Floating Skimmer	3.0 (1.5)	4.6 (1.4)	49 (7.8)	V, IV, III, II, I
		LFS-5 Floating Skimmer	3.0 (1.5)	5.0 (1.5)	53.3 (8.5)	V, IV, III, II, I
Protected Water	Sorbent submersion belt	Belt Skimmer MK-7	3.0 (1.5) 0-4	12.0 (3.7)	128 (20)	I, II
		MK 3	1.5 (0.8) 0.5-3.0 (0.3-1.5)	12 (3.6) 2/12 (0.6/3.6)	64 (10)	I, II, III, IV, V
		MK 6	1.5 (0.8) 0.5-3.0 (0.3-1.5)	18 (5.5) 4/18 (1.2/5.5)	96 (15)	I, II, III, IV, V

TABLE B-3. Skimmer Data, 1993 and 1997 (*Continued*).

ENVIRONMENT	TYPE	MODEL	SKIMMING SPEED KTS (M/S)	SWEEP WIDTH FT (M)	SPILL ENCOUNTER RATE = 1-MM SLICK BPH (M^3/HR)	BEST IN OIL TYPES [1] CODE = VISCOSITY cSt
Protected Water	Submersion belt	DIP 4200 FR	0-3 (0-1.5)	14.0 (4.3)	149 (23.7)	I, II, III
		DIP 3500 FR	0-3 (0-1.5)	14.0 (4.3)	149 (23.7)	I, II, III
		DIP 3003	0-3 (0-1.5)	18.0 (5.5)	192 (30.5)	I, II, III
		DIP 402 Transporter	0-3 (0-1.5)	8.0 (2.4)	85 (13.5)	I, II
		DIP 4002 (VOSS)	0-3 (0-1.5)	40.0 (12.0)	142 (23)	I, II
Protected Water	Submersion moving plane	DIP 420/400	3 (1.5)	8.0 (2.4)	56 (8.9)	I, II, III
		DIP 430/400	3 (1.5)	8.0 (2.4)	56 (8.9)	
		DIP 2600	3 (1.5)	8.5 (2.6)	90 (14)	I, II, III
		DIP 2900	3 (1.5)	10 (3)	108 (17)	I, II, III, IV, V
		DIP4500	3 (1.5)	15 (4.6)	160 (25)	I, II, III, IV, V
		DIP 4200 FR	1 (0.5)	14.0 (4.3)	149 (23.7)	I, II, III
		DIP 3500 FR	1 (0.5)	14.0 (4.3)	149 (23.7)	I, II, III
		DIP3003	1 (0.5)	18.0 (5.5)	192 (30.5)	I, II, III
Protected Water	Fixed submersion plane	HIB R20	4.0 (2.0)	8.0 (2.4)	114 (18)	I, II, III
		HIB R20	4.0 (2.0)	8.0 (2.4)	114 (18)	I, II, III
		HIB R20 SELF-PROPELLED	3 (1.5)	6.5 (2.0)	69 (10)	I, II, III
		HIB 020	4 (2.1)	8.0 (2.4)	113.6 (18.1)	I, II, III
		HIB 028	5 (2.5)	8.0 (2.4)	142 (22.5)	I, II, III
		HIB R28	5.0 (2.5)	8.0 (2.4)	142 (22.6)	I, II, III
		HIB R28	5.0 (2.5)	8.0 (2.4)	142 (22.6)	I, II, III
Protected Water	Dynamic Skimmer	ZRV	0-6.0 (0-3.1)	12 (3.7)	170.4 (27.1)	I, II
Protected Water	Independent Power	Diesel power pack	< 1 (0.5)			I, II, III
Open Water	Weir	DS-150	1.0 (0.5)	16 (5)	57 (9)	I, II, III, IV
		DESMI 250	1.0 (0.5)	16 (5)	57 (9)	I, II, III, IV
		DESMI-TERMINATOR	1.0 (0.5)	16 (5)	56.8 (9.0)	I, II, III
		"Ocean"	1.0 (0.5)	16 (5)	57 (9)	I, II, III, IV
		SSC 1000 Oil Crab	3 (1.5) 0-3	105 (32)	1,118 (178) 932 (148)	I, II, III, IV
		SSC 1500 Oil Crab	3 (1.5) 0-3	115 (35)	1,224 (195) 1020 (162)	I, II, III, IV
		SSC 3000 Oil Crab	3 (1.5) 0-3	131 (40)	1,395 (222) 1162 (185)	I, II, III, IV
		Skim-Pak 2,000	2.0 (1.0)	20 (61)	142 (23)	I, II, III, IV, V
		Skim-Pak 94	4.0 (2.0)	10-100 (3-30)	35.5-355.0 (5.6-56.5)	I, II, III, IV, V
		Skim-Pak 19,300	2.0 (1.0)	20 (6)	142 (23)	I, II, III, IV
		Weir 200	3.0 (1.5)	2.7 (0.8)	9.6 (1.5)	II-V
		TDS 150	0-3 (1.5)	Sweeping boom width		II, III, IV
		TDS 200	0-3 (1.5)	Sweeping boom width		II, III, IV
		TDS 250	1 (0.5) 3.0 (1.5)	Sweeping boom width 2.7 (0.8)	9.6 (1.5)	II, III, IV II-V
		FADEPOR SS60	1.5 (0.8)	65.6 (20.0)	345 (55)	I, II, III
		GT-260 Oil Recovery System	0-3.0 (1.5)			I, II, III
		GT-185 Oil Recovery System	0-3.0 (1.5)			I, II, III
		GT-185 Economy Skimmer	0-3.0 (1.5)			I, II, III
		Ocean circus	0-4 (2.1)	Sweeping boom width		II, III, IV
		Sea Cirus	0-4 (2.1)	Sweeping boom width		II, III, IV
	Weir/Separator	SIRENE 20	2 (1) 2-3 (1-1.5)	65 (20)	461 (73) 233 (37)	I, II
		CASCADE LP3000	1.0 (0.5)	10.2 (3.1)	36 (5.8)	I, II, III, IV
Open Water	Weir/Separator	SSC 125 Oil Crab	2.5 0-3	49 (15)	435 (69)	I, II, III, IV

TABLE B-3. Skimmer Data, 1993 and 1997 (*Continued*).

ENVIRONMENT	TYPE	MODEL	SKIMMING SPEED KTS (M/S)	SWEEP WIDTH FT (M)	SPILL ENCOUNTER RATE = 1-MM SLICK BPH (M^3/HR)	BEST IN OIL TYPES [1] CODE = VISCOSITY cSt
		SSC 250 Oil Crab	2.5 0-3	66 (20)	586 (93)	I, II, III, IV
		SSC 500 Oil Crab	2.5 0-3	82 (25)	728 (116)	I, II, III, IV
		ORAS Section	1.6 (0.8)	115 (35)	490 (78) 653 (103)	I, II, III
		FADEPOR SS50	1.5 (0.8) 1.8 (0.8)	52.5 (16)	280 (45) 345 (55)	I, II, III
		Harbor Cleaning Vessel ORAS II	1.2 (0.6)	53 (16)	226 (36)	I, II, III
		THOR	1.0 (0.5)	102 (31)	362 (57.6)	I, II, III
		BOTTSAND	1.0 (0.5)	138 (42)	490 (78)	I, II, III
		ECOPEMEX/Eversand	1.0 (0.5)	151 (46)	536 (85)	I, II, III
Open Water	Weir, flow-controlled	25000		3.0 (0.9)		I, II, III, IV
		94		3.0 (0.9)		I, II, III
		Skim-Pak 19,300 SH Stainless Steel	2.0 (1.0)	3.0 (0.9)	21.3 (3.4)	I, II, III, IV
Open Water	Weir/Disc/Belt	TRANSREC 350	1.0 (0.5)	7.5 (2.3)	21.6 (3.4)	II, III
		TRANSREC 250	1.0 (0.5)	7.5 (2.3)	21.6 (3.4)	II, III
		TRANSREC 200	1.0 (0.5)	5.9 (1.8)	21.0 (3.3)	II, III
Open Water	Weir, velocity alteration	COMBO 60	0-3 (1.5)	14.0 (4.3)	150 (24)	I, II, III
Open Water	Weir, vacuum/inverted	NP1000	Variable	20.8 (6.3) w/ outriggers	110 (17.6)	I
Open Water	Weir vortex	Walosep W2		26.3 (8.0)		I, II
		Walosep W4		32.8 (10.0)		I, II
Open Water	Sweeping arm weir	MK 15/12.60	1.8 (0.9)	35.8 (10.9)	229 (39)	I, II, III
		MK 15/13.50	1.8 (0.9)	38.4 (11.7)	245 (39)	I, II, III
		MK 15/15.00	1.8 (0.9)	42.7 (13.0)	273 (43)	I, II, III
		MK 2/20.00	1.8 (0.9)	56.8 (17.3)	363 (58)	I, II, III
		MK 2/22.00	1.8 (0.9)	62.3 (19.0)	398 (63)	I, II, III
Open Water	Advancing Weir	FASFLO	6 (3)	21.3 (6.5)	453 (72)	I, II, III
Open Water	Rope Mop	Petro Mop 2/29	3.5 (1.8)	6.4 (2.0)	80 (12.6)	I, II, III
		Petro Mop ZRV-2/29	4.0 (2.1)	6.4 (2.0)	19 (14.5)	I, II, III
		TX HOSS (VOSS)	0.1-0.2 (0.05-0.1)	20 (6)	14 (2.3)	I, II, III
Open Water	Stationary Rope Mop	Mark IV-160DP		2,000 (600)		I, II, III
		Force 7 Series 2	4.0 (2.0)	50.0 (15.2)	711.8 (113.2)	II, III
		Policat	6.0 (3.0)	0.0032	69.0 (11.0)	I, II
Open Water	Suspended Rop Mop	Texas Hoss	1.0 (0.5)	20.0 (6.1)	71 (11)	I, II, III
		OM 12			To use with booms	I, II, III
		OM 24			To use with booms	I, II, III
		RDSS	1.0 (0.5)	Variable		I, II, III, IV, V
		SEA MOP 4090		Variable		I, II, III
		SEAMOP 8090		Variable		I, II, III
		Foxtail V.A.B. 8-9		7.9 (2.4)		I, II, III
		Faxtail V.A.B. 8-14		7.9 (2.4)		I, II, III
Open Water	Stern deployed rope mop	FORCE 7 SERIES 2	4.0 (2.1)	50.0 (15.2)	711.8 (113.2)	II, III
Open Water	ZRV rope mop	POLLYCAT-18 ZRV ROPE MOP	5.0 (2.5)	4.9 (1.5)	87 (14)	I, II, III
		POLLYCAT-24 ZRV ROPE MOP	5.0 (2.5)	4.9 (1.5)	87 (14)	I, II
Open Water	Drum/Separator	COV 100	2.0-3.0	40.0 (12.2)	284.2 (45.2)	I, II, III
		COV 40	2.0-3.0	26.0 (7.9)	185 (29)	I, II, III

TABLE B-3. Skimmer Data, 1993 and 1997 (*Continued*).

ENVIRONMENT	TYPE	MODEL	SKIMMING SPEED KTS (M/S)	SWEEP WIDTH FT (M)	SPILL ENCOUNTER RATE = 1-MM SLICK BPH (M^3/HR)	BEST IN OIL TYPES [1] CODE = VISCOSITY cSt
Open Water	Drum	FuB 0,3048 m	1.0 (0.5)	26.2 (8.0)	86.3 (13.7)	II, III
		COV 400	3.0 (1.5)	26.0 (7.9)	277 (44)	
		COV 1000	4.0 (2.0)	40.0 (12.2)	568 (90.4)	
Open Water	Suction					
Open Water	Disc	SIRI-50Y				I, II
	Disc/Drum	FuB 0,3948 m	0.2-1.0 (0.1-0.5)	26.2 (8.0)	86.3 (13.7)	II, III
		L10 110/01				I, II, III
		Float Discoil 15/S	1 (0.5)	6.2 (1.9)	23.5 (3.7)	I, II, III
		Float Discoil 30	1 (0.5)	7.2 (2.2)	25.6 (4.1)	I, II, III
		Float Discoil 50	1 (0.5)	7.2 (2.2)	25.6 (4.1)	I, II, III
		Float Discol 300	1.0 (0.5)	11.5 (3.5)	40.8 (6.5)	I, II, III
		ECOIL 13				
		ECOIL 16				
	Disc/drum	UNISEP-602		6.5 (2.0)		I, II, III, IV, V
		Seaskimmer 50		23.0 (7.0)		I, II, III
		Seaskimmer 100k		39.4 (12.0)		I, II
		Seawolf				II, III, IV, V
		MDS-40Y		10.8 (3.)		I, II, III, IV
		MDS-50Y		7.9 (2.4)		I, II, III, IV
		MDS-65Y		10.5 (3.2)		I, II, III, IV
		MDS-85Y		15.4 (4.7)		I, II, III, IV
		MDS-100Y		16.1 (4.9)		I, II, III, IV
		MDS-65YD				I, II, III
		MDS-65YD/OP				I, II, III
		MDS-50				I, II, III
Open Water	Disc	ECOIL 13 M1 EB	3 (1.5)	16.7 (5.1)		
		ECOIL 15 M2 EB	3 (1.5)	28.0 (8.5)		
		ECOIL 16 M2 EB	3 (1.5)	20.0 (6.1)		
		RO-DISC 40P				I, II, III
		RO-DISC 60P				I, II, III
		SEADEVIL	1 (0.5)	6.6 (2)	23.4	II, III, IV, V
Open Water	Belt					
Open Water	Paddle Belt					
Open Water	Drum Brush	LAMOR CATAMARAN	3 (1.5)	16 (5)	170 (27)	III, IV, V
		LAMOR OPV (VOSS)	3 (1.5)	49 (15)	522 (84)	III, IV, V
		MULTI-PURPOSE SKIMMER	2.0 (1.0)	26.6 (8.0)	190 (30)	III, IV, V
		Recovery Vellel LORS-4	3.5 (1.8)	26.0 (7.9)	324 (52)	III, II, I, IV
		Recovery Vessel LORS-5	3.5 (1.8)	34.0 (10.4)	423 (68)	III, II, I, IV
		Oil Pack Cassette OPC 2	2 (1) 2-3 (1-1.5)	40 (12)	284 (45)	III, IV, V I, II
		Oil Pack OPC 4	2 (1) 2-3 (1-1.5)	53 (16)	376 (60)	III, IV, V I, II
		Oil Pack OPC 6	2 (1) 2-3 (1-1.5)	67 (20)	476 (76)	III, IV, V I, II
Open Water	Brush	Giant Skimmer	2-3 (1-1.5)	330-3,300 (100-1,000)	1,172 (186)	I, II

TABLE B-3. Skimmer Data, 1993 and 1997 (*Continued*).

ENVIRONMENT	TYPE	MODEL	SKIMMING SPEED KTS (M/S)	SWEEP WIDTH FT (M)	SPILL ENCOUNTER RATE = 1-MM SLICK BPH (M^3/HR)	BEST IN OIL TYPES [1] CODE = VISCOSITY cSt
Open Water	Sorbent Lifting Belt	Offshore 36 (Formerly Class V)	0-3 (1.5)	12-200 (3.7-61)	128-1065 (20)	I, II, III, IV, V
		Offshore 50 (Formerly Class VII)	0-3 (1.5)	24-200 (7.3-61)	256-1065 (41)	I, II, III, IV, V
		Offshore 75	0-3 (1.5)	42-200 (12.8-61)	447-1065 (72)	I, II, III, IV, V
		Coastal 42	0-3 (1.5)	23-200 (7-61)	237-1065 (38-170)	I, II, III, IV, V
		Coastal 48	0-3 (1.5)	8-200 (2.4-61)	86-1065 (14-170)	I, II, III, IV, V
		Offshore 19 VOSS	0-3 (1.5)	70-200 (21-61)	745-1065 (120-170)	I, II, III, IV, V
		Offshore 20 VOSS	0-3 (1.5)	70-200 (21-61)	745-1065 (120-170)	I, II, III, IV, V
		Offshore 19 COMBI	0-3 (1.5)	70-200 (21-61)	745-1065 (120-170)	I, II, III, IV, V
Open Water	Vortex	Cyclonet 100	3.0 (1.5) 1.0-6.0 (0.5-3.1)	9.8 (3.0) + 0.7 x beam	107.9 (17.2)	I, II
		cyclonet 120	3.0 (1.5) 1.0-6.0 (0.5-3.1)	11.8 (3.6) + 0.7 x beam	129.4 (20.6)	I, II
		Cyclonet 150	3.0 (1.5) 1.0-6.0 (0.5-3.1)	15.0 (4.6) + 0.7 x beam	151.0 (24.0)	I, II
	Vortex/Weir	WALOSEP W2		26.3 (8.0)		I, II
	Vortex/Weir	WALOSEP W4		32.8 (10.0)		I, II
Open Water	Boom Skimmer	MK15/12.60	1.8 (0.9)	35.8 (10.9)	229 (36)	I, II, III
		MK15/13.50	1.8 (0.9)	38.4 (11.7)	245 (39)	I, II, III
		MK15/15.00	1.8 (0.9)	42.7 (13.0)	273 (43)	I, II, III
		MK2/20.00	1.8 (0.9)	56.8 (17.3)	363 (58)	I, II, III
		MK2/22.00	1.8 (0.9)	62.3 (19.0)	398 (63)	I, II, III
Open Water	Boom/Weir	3 Weir	1.5 (0.8) 3.0 (1.5)	77 (23.6)	410 (65) 2,620 (417)	II, I
		5 Weir	1.5 (0.8) 3.0 (1.5)	88 (27)	469 (74.6) 470 (75) 3,500 (557)	II, I
		10 Weir	3.0 (1.5)	123 (37.5)	655 (104) 1,294 (206)	II, I
		RO BOOM 1500/2000				I, II, III, IV
Open Water	Chain Brush	LSC 24	1-2 (0.5-1)			II, III
		LSC 36	1-3 (0.5-1.5)			II, III
		LSC 48	1-4 (0.5-2)			II, III
		LORS 50	0-4 (0-2)			II, III
		LORS 75	0-4 (0-2)			II, III
		LORS 100	0-4 (0-2)			II, III
		Floating skimmer LFS-6	3.0 (1.5)	6.0 (1.8)	63.9 (10.2)	V, IV, III, II, I
		Floating skimmer LFS-8	3.0 (1.5)	7.0 (2.1)	74.5 (11.8)	V, IV, III, II, I
		LIC ICE CLEANER	2.0 (1.0)	16.4 (5.0)	116.4 (18.5)	V, IV, III
		Recovery Vessel LORS-3	3.0 (1.5)	18.0 (5.5)	192 (30.5)	V, IV, III, II, I
		Recovery Vessel LORS-4	3.5 (1.8)	26.0 (7.9)	323 (51)	V, IV, III, II, I
		Recovery Vellsel LORS-5	3.5 (1.8)	34.0 (10.4)	422 (67)	V, IV, III, II, I
		Side Collector LSC-4	3.5 (1.8)	26.0 (7.9)	323 (51)	V, IV, III, II, I
		Side Collector LSC-5	3.5 (1.8)	34.0 (10.4)	422 (67)	V, IV, III, II, I
		Beaver Bow Collector LBC-4	3.0 (1.5)	11.0 (3.4)	117 (19)	V, IV, III, II, I
		Beaver Bow Collector LBC-5	3.0 (1.5)	11.8 (3.6)	125 (20)	V, IV, III, II, I
Open Water	Sorbent Submersion Belt					
Open Water	Submersion Belt	DIP 5001	0-3 (1.5)	17 (5.2)	181 (29)	I, II, III
Open Water	Oil head weir	Dredge Skimmer 600	2.0 (1.0)	33 (10)	234 (37)	I, II, III, IV
		Dredge Skimmer 700	2.0 (1.0)	40 (12)	284 (45)	I, II, III, IV
		Dredge Skimmer 900	2.0 (1.0)	50 (15)	355 (56)	I, II, III, IV
		DREDGE SKIMMER 550	2.0 (1.0)	51.8 (17)	368 (58.5)	I, II, III, IV, V

TABLE B-3. Skimmer Data, 1993 and 1997 (*Continued*).

ENVIRONMENT	TYPE	MODEL	SKIMMING SPEED KTS (M/S)	SWEEP WIDTH FT (M)	SPILL ENCOUNTER RATE = 1-MM SLICK BPH (M^3/HR)	BEST IN OIL TYPES [1] CODE = VISCOSITY cSt
Open Water	Fixed Submersion plane/Weir	66	2.8 (1.4)	22.0 (6.7)	216 (34)	I, II
		110	4.2 (2.1)	100.0 (30.5)	1,510 (240)	I, II
		220	6.0 (3.0)	200.0 (61.0)	4,314 (686)	I, II
	Net Sock	Jackson Trawl Net Oil Collection System 18 ft (5.5 m)	2.5 (1.1)	17.0 (5.2)	151 (24)	V, IV, III
		Jackson Trawl Net Oil Collection System 30 ft (9 m)	2.5 (1.1)	30.0 (9.1)	266 (42)	V, IV, III
Open Water	Submersion moving plane	DIP 400 VOSS	3 (1.5)	8.0 (2.4)	56 (8.9)	I, II, III
		DIP 402 VOSS	3 (1.5)	20.0 (6.1)	142 (22.6)	I, II, III, IV, V
		DIP 5001 (steel)	3 (1.5)	17.0 (5.2)	181 (29)	I, II, III
		DIP 6001 (steel)	3 (1.5)	28.0 (8.5)	298 (47)	I, II, III
		DIP 1300 VOSS	3 (1.5)	35.0 (10.7)	373 (59)	I, II, III
Open Water	Air conveyor	ORCA	3 (1.5)	9.8 (3.0)	104 (16.5)	II, III, IV, V

Note: 1997 catalog is represented by the sum of the pink and green data. Pink, data not listed in the fourth edition (1993) but listed in the sixth edition (1997). Green, data listed in the fourth (1993) and sixth (1997) editions. Black, data listed in the fourth edition (1993) but not listed in the sixth edition (1997). 1993 data can be obtained by combining the green and black data. Kts, knots; bph, barrels per hour; cSt, centistokes.

[1] I=150-250; II=1,500-2,500; III=17,000-23,000; IV=50,000-70,000; V=130,000-170,000.

Source: Schulze (1993, 1997).

TABLE B-4. Comparison of 1993 and 1997 Skimmer Availability Data.

ENVIRONMENT	TYPE	1993 [1]	1997 [2]	NEW [3]	PREEXISTING [4]	NO LONGER LISTED [5]
Calm Water	Weir	30	32	2	30	0
	Weir/Vortex	2	3	1	2	0
	Weir, flow Controlled	5	5	0	5	0
	Weir, fixed	3	3	0	3	0
	Weir, paddle belt	1	1	0	1	0
	Weir/Screen	3	3	0	3	0
	Weir, suction	7	N/A	0	0	6
	Weir concentrator	6	N/A			
	Weir Water Jet	N/A	6	0	6	0
	Weir, separator	1	6	5	1	0
	Advancing weir	N/A	1	1	0	0
	Rope Mop	45	17	7	10	13
	Stationary Rope Mop	N/A	21	11	10	0
	Boom Rope Mop	N/A	6	0	6	0
	Rope Mop/weir	1	1	0	1	0
	Suspended Rope Mop	0	18	13	5	1
	Drum	6	19	15	4	2
	Drum Brush	0	18	18	0	0
	Suction	17	23	6	17	1
	Disc	20	27	16	11	9
	Belt	4	1	0	1	3
	Paddle Belt	3	3	0	3	0
	Submersion Belt	3	N/A	0	0	3
	Drum Brush	0	N/A	0	0	0
	Brush	1	N/A	0	0	1
	Sorbent Lifting Belt	2	5	3	2	0
	Vortex/Weir	1	N/A	0	0	1
	Boom Skimmer	0	N/A	0	0	0
	Chain Brush	0	N/A	0	0	0
	Floating Tube	2	2	0	2	0
	Special	1	N/A	0	0	1
	Fixed Submersion plane	N/A	1	1	0	0
Total		164	222	99	123	41
Protected Water	Weir	13	24	9	15	7
	Weir Flow Controlled	3	N/A	0	0	1
	Weir, suction, Disc	3	N/A	0	0	3
	Weir, separator	6	N/A			
	Weir, velocity alteration	1	N/A			
	Weir, paddle belt	2	N/A	0	0	2
	Weir concentrator	4	N/A			
	Weir water jet	N/A	3	0	3	0
	Weir and Disc	2	2	0	2	0
	Weir concentrator		N/A	0	0	1
	Submersion plane/Weir	2	2	0	2	0
	Advancing Weir	N/A	4	4	0	0
	Weir Vortex	N/A	3	3	0	0
	Stationary Rope Mop	N/A	16	7	9	0
	Rope Mop	27	8	3	5	11
	Rope Mop-Brush	1	N/A			
	ZRV Rope Mop	N/A	9	7	2	0
	Suspended Rope Mop	0	7	6	1	0
	Stern deployed rope mop	N/A	2	2	0	0
	Drum	2	12	11	1	1
	Submersion drum	1	N/A	0	0	1
	Helical drum	N/A	2	1	1	0
	Drum Skimmer	4	N/A	0	0	4
	Advancing Drum Skimmer	1	1	0	1	0
	Drum/Separator	1	N/A			
	Suction	1	9	8	1	0
	Disc	13	27	18	9	4
	Belt	0	N/A	0	0	0
	Paddle Belt	2	7	5	2	0

TABLE B-4. Comparison of 1993 and 1997 Skimmer Availability Data (*Continued*).

ENVIRONMENT	TYPE	1993 [1]	1997 [2]	NEW [3]	PREEXISTING [4]	NO LONGER LISTED [5]

Protected Water	Drum Brush	0	1	1	0	0
(*Continued*)	Brush	0	N/A	0	0	0
	Sorbent Lifting Belt	2	4	2	2	0
	Vortex	2	2	0	2	0
	Boom Skimmer	4	7	7	0	2
	Sweeping Arm Weir	N/A	2	0	2	0
	Chain Brush	6	13	13	0	6
	Sorbent submersion belt	3	3	0	3	0
	Submersion belt	5	N/A	0	0	5
	Submersion moving plane	N/A	8	8	0	0
	Fixed submersion plane	N/A	7	7	0	0
	Dynamic Skimmer	1	N/A	0	0	1
	Independent Power	1	N/A	0	0	1
Total		113	185	122	63	50
Open Water	Weir	11	21	10	11	1
	Weir, separator	10	9	0	9	0
	Weir, flow-controlled	3	N/A	0	0	3
	Weir/ Disc/ Belt	3	3	0	3	0
	Weir, velocity alteration	1	1	0	1	0
	Weir, vacuum/inverted	1	N/A	0	0	1
	Weir vortex	N/A	2	2	0	0
	Sweeping Arm Weir	N/A	5	5	0	0
	Advancing Weir	N/A	1	1	0	0
	Rope Mop	8	2	0	2	1
	Stationary Rope Mop	N/A	1	0	1	2
	Suspended Rope Mop	0	8	6	2	0
	Stern deployed Rope Mop	N/A	1	1	0	0
	ZRV Rope Mop	N/A	2	2	0	0
	Drum/Separator	2	N/A	0	0	2
	Drum	N/A	3	3	0	0
	Suction	0	N/A	0	0	0
	Disc	10	22	17	5	5
	Belt	0	N/A	0	0	0
	Paddle Belt	0	N/A	0	0	0
	Drum Brush	0	8	5	3	0
	Brush	4	N/A	0	0	1
	Sorbent Lifting Belt	8	8	0	8	0
	Vortex	5	3	0	3	2
	Boom Skimmer	8	N/A	0	0	5
	Boom/ Weir	N/A	4	1	3	0
	Chain Brush	6	10	10	0	6
	Sorbent Submersion Belt	0	N/A	0	0	0
	Submersion Belt	1	N/A	0	0	1
	Oil head weir	N/A	4	1	3	0
	Submersion plane	6	N/A			
	Fixed/submersion plane/ we	N/A	3	0	3	0
	Net Sock	N/A	2	2	0	0
	Submersion moving plane	N/A	5	5	0	0
	Air conveyor	N/A	1	1	0	0
Total		87	129	72	57	30
Total		**364**	**536**	**293**	**243**	**121**

Note: N/A indicates that this category *name* for model *types* was not listed in the catalog, but does not indicate that the *model* was not listed.

[1] Because of a change in the catalog's organization of skimmer *types*, 1993 *types* do not correlate with 1997 *types*, although the *models* still correlate. 1993 totals can be obtained by combining the preexisting and no longer listed columns.

[2] 1997 is represented by the sum of the new and preexisting columns.

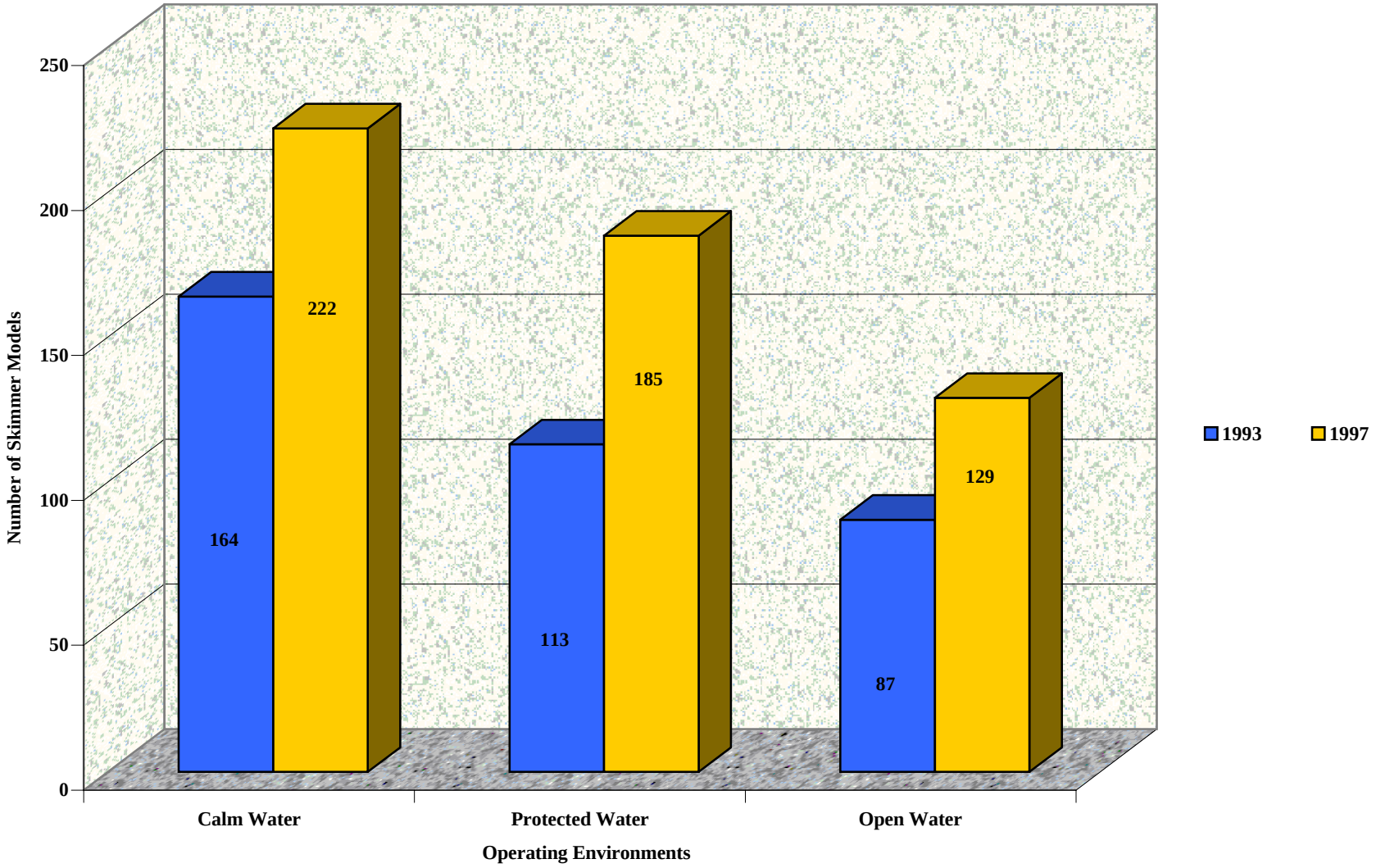
[3] New, not listed in the fourth edition (1993) but listed in the sixth edition (1997).

[4] Preexisting, listed in the fourth (1993) and sixth (1997) editions.

[5] No longer listed, listed in the fourth edition (1993) but not in the sixth edition (1997).

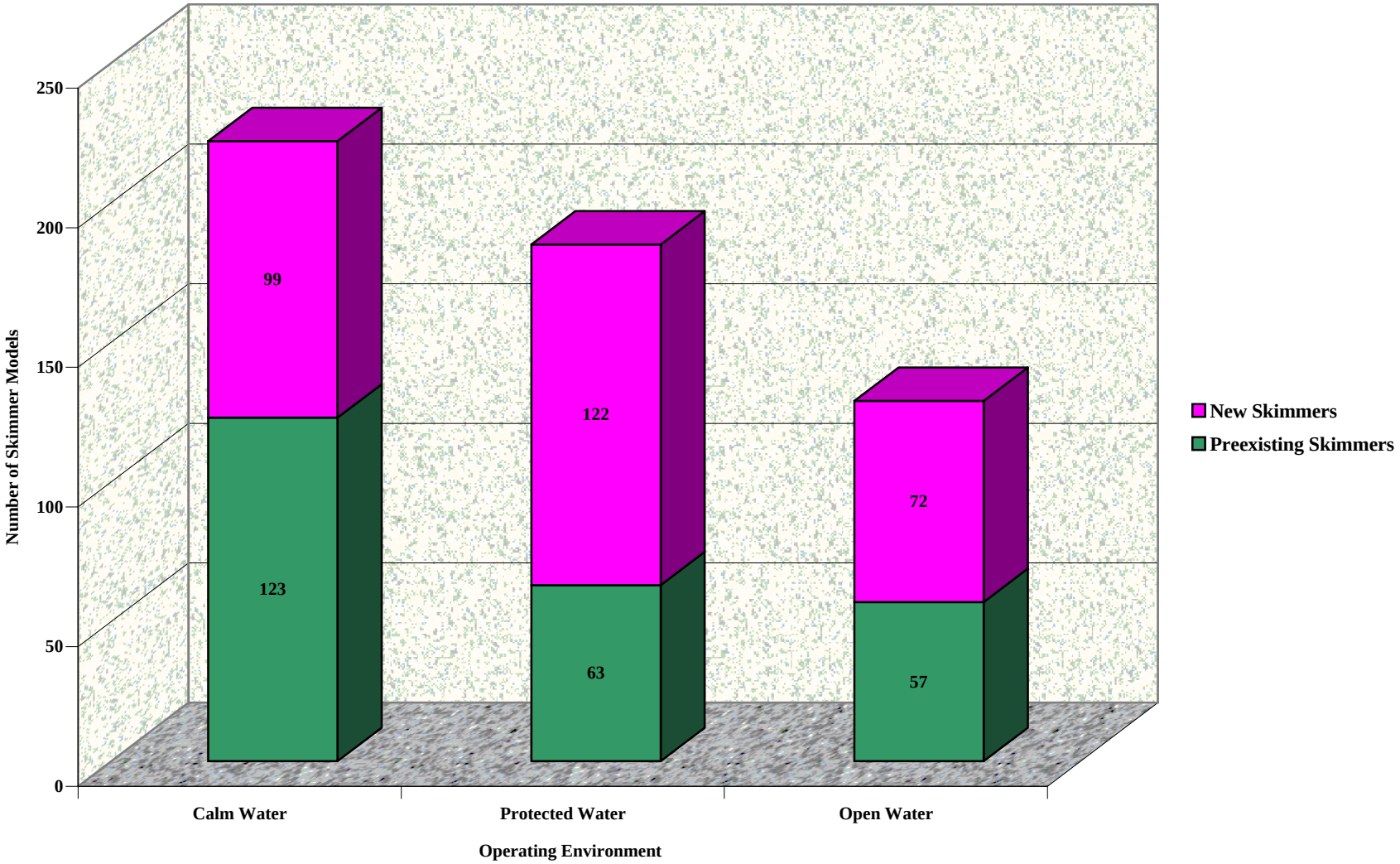
Source: Schulze (1993, 1997).

FIGURE B-3. Comparison of 1993 and 1997 Skimmer Availability Data[1].



[1] Compiled from totals in Table B-4.

FIGURE B-4. Composite of 1997 Available Skimmers[1].



[1] Compiled from totals in Table B-4.

TABLE B-7. Separator Data, 1993 and 1997.

TYPE	MODEL	FLOW CAPACITY BPH (M^3/HR)	DEBRIS TOLERANCE IN (MM)	EFFLUENT PPM OIL
Gravity	ACO Drain		10 (250)	
	ACO Drain		10 (250)	
	ACO Drain		10 (250)	
	Lonardo			
	SKIM PILE	417 (66)	0.5 (12.7)	≤ 25
	P.U.P.-C-18-S	100 (16)	Unaffected	
	P.U.P.-C-24-S	186 (30)	Unaffected	
	P.U.P.-44-S	350 (56)	Unaffected	
	P..U.P.-64-S	501 (81)	Unaffected	
	P.U.P./API-S	100 (16)		
			Large	
	WEBSTER BARNES 20	6,500 (1,034)	3.0 (76.2)	[2]
	WEBSTER BARNES 28	8,600 (1,367)	3.0 (76.2)	[2]
Floating gravity separator	OWS 200	20 (4.6) 29 (4.6)		< 50 ppm <15
	OWS 1000	100 (23) 143 (23)		< 50 ppm <15 ppm
Gravity porous media	OWS 100	10 (2.3) 14 (2.3)		<15 ppm
	OWS 200	20 (4.6) 29 (4.6)		<15 ppm
	OWS 300	30 (6.9) 43 (6.9)		<15 ppm
	OWS 500	50 (12) 72 (12)		<15 ppm
	OWS 750	75 (17) 107 (17)		<15 ppm
	OWS 1000	100 (23) 143 (23)		<15 ppm
	100CP	100 (23) 143 (23)	5 (127) max.	10.0-50.0
	200CP	200 (45) 286 (45)	7 (178) max.	10.0-50.0
	500CP	500 (115) 715 (115)	11 (179) max.	
Floating gravity separator	OWS 10,000	1,000 (230)		< 50 ppm
Gravity, coalescing	6000	2.0 (0.5) 2.9 (0.5)	1/8 (3.2)	15
	6300	11.0 (2.5) 15.7 (2.5)	1/8 (3.2)	15
	6500	44 (10.1) 63 (10.1)	1/8 (3.2)	15
	SEPA	220-4,400 (50-1,000) 315-6,292 (50-1,000)		<100 ppm <15 ppm [2]
	Alpha 2500	25 (6) 35 (6)	(+/- 1/4") (+\- 6.4)	14 ppm @ 25gpm 14 ppm @36 BBL/hr
	Alpha 1500	15 (3) 21 (3)	(+/- 1/4") (+/- 6.4)	15 ppm @ 15 gpm 15 ppm @ 21 BBL/hr
	Noltemat System "H"			[1]
	MODEL 5	5.7 (0.9)		50
	TRIDAIR INDUCED-GAS FLOTATION DL-100	417 (66)	0.06 (1.6)	≤ 10
	MATRIX PLATE SEPARATOR MDRC -3	417 (66)	0.13 (3.2)	20
	CORRUGATED PLATE INTERCEPTOR CDRC-1	417 (66)	0.25 (6.4)	20
	UPFLOW CORRUGATED PLATE INTERCEPTOR CURC-1	417 (66)	0.25 (6.4)	
Gravity, coalescing	SEPCON 10-FT 50/14 GSH 10.5	314 (50)		< 15 [2]
	OILMASTER 2 GPM	3 (0.5)	None	15
	OILMASTER 5 GPM	6 (1)	None	15
	OILMASTER 10 GPM	14 (2.3)	None	15
	OS-2	8.6 (1.4)	0.25 (6.4)	10 or less

TABLE B-7. Separator Data, 1993 and 1997 (*Continued*).

TYPE	MODEL	FLOW CAPACITY BPH (M^3/HR)	DEBRIS TOLERANCE IN (MM)	EFFLUENT PPM OIL
Gravity, coalescing (*Continued*)	OS-12	1 - 64 (0.2 - 10)	0.25 (6.4)	10 or less
	OS-36	143 (23.0)	0.5 (12.7)	10 or less
	OWS-20	29 (4.5)	1.0 (25.4)	10
	OWS-50	72 (11.3)	1.0 (25.4)	10
Gravity, Coalescence, Depression	SEPCON 20-FT 100/20-GSH 10.50	440 (100) 629 (100)		<100 ppm <15 ppm [2]
	SEPCON 40-FT 200/40-GSH 10.50	880 (200) 1,258 (200)		<100 ppm <15 ppm [2]
Gravity/Coalescence/Pressure	SEPTA 7/1.3 FD-3.100	33 (7.5) 47 (7.5)		<15 ppm
	SEPTA 100/19 GDE-10.100	440 (100) 629 (100)		< 100 ppm <15 [2]
	SEPTA 350/66 GDE-10.00	1,540 (350) 2,202 (350)		< 100 ppm <15 [2]
Coalescing Gravity coalescing	Oilmaster	2 -10 (0.5 - 2.3) 3 - 14 (0.5-2.3)	N/A	< 15 ppm
	Oilmaster - EXP	10 (2.3) 14 (2.3)	N/A	< 15 ppm
	Bilgemaster	2 -10 (0.5 - 2.3) 3-14 (0.5-2.3)	N/A	< 15 ppm
Coalescing Plates Gravity coalescing	TPL/IPL 5	5 (1.2) 7 (1.2)	1/2 (12) 0.5 (13)	15
	TPL/IPL 50	50 (11.5) 72 (11.5)	1/2 (12) 0.5 (13)	15
	TPL/IPL 150	150 (35) 215 (35)	1/2 (12) 0.5 (13)	15
Coalescing Separator Gravity coalescing	SRC-15	15 (3.4) 21 (3.4)	0.25 (6)	20 ppm
	SRC-30	30 (6.8) 43 (6.8)	0.25 (6)	10 ppm
	SRC-50	50 (11.4) 72 (11.4)	0.25 (6)	10 ppm
	SRC-100	100 (23) 143 (23)	0.25 (6)	20 ppm
	SRC-200	200 (45) 286 (45)	0.25 (6)	10 ppm
	SRC-300	300 (68) 429 (68)	0.25 (6)	10 ppm
Coalescing Oil Water Separator Gravity coalescing	SRC-M-2	2 (0.5) 3.0 (0.5)	None	10 ppm
	SRC-M-4	4 (0.9) 6.0 (1.0)	None	10 ppm
	SRC-M-6	6 (1.4) 9.0 (1.4)	None	10 ppm
Coalescing Oil Water Separator	SRC-M-8	8 (1.8) 11 (1.8)	None	10 ppm
	SRC-M-16	16 (3.6) 23 (3.6)	None	10 ppm
	SRC-M-24	24 (5.5) 34 (5.5)	None	10 ppm
High efficiency coalescing grid Gravity coalescing	OSC-400			<10ppm/ 20 Micron or larger
	OSC-3000			<10ppm/ 20 Micron or larger
	OSC-1000			<10ppm/ 20 Micron or larger
	Steel/ F/G OCS-0153/OCS-015F			<10ppm/ 20 Micron or larger
	Steel/ F/G OCS-0505/OCS-050F			<10ppm/ 20 Micron or larger
	OCS-500			<10ppm/ 20 Micron or larger
	OCS-2000			<10ppm/ 20 Micron or larger
Gravity coalescing	OCS-1500			<10ppm/ 20 Micron or larger
Submersion plane/weir/skimmer/separator	35	1,100 (250)	Not affected	
	66	3,430 (779)	Not affected	
Gravity, parallel plate	Several Models 10 to 4,000 GPM 2.3-920m 3/hr)			
	Several Models 40 to 5,720 BBL (6.4 - 920 m3/hr)			
Parallel Plate/Coalescing Gravity, parallel plate Gravity, coalescing	SSCS -1	1 (0.2)	1/16 (0.2) (1.6)	10
	SSCS - 5	5 (1.2) 7 (1.4)	1/16 (0.2) (1.6)	10

TABLE B-7. Separator Data, 1993 and 1997 (*Continued*).

TYPE	MODEL	FLOW CAPACITY BPH (M^3/HR)	DEBRIS TOLERANCE IN (MM)	EFFLUENT PPM OIL
Parallel Plate/Coalescing Gravity, parallel plate Gravity, coalescing (*Continued*)	SSCS - 10	10 (2.3) 14 (2.3)	1/16 (0.2) (1.6)	10
	SSCS-15	15 (3.5) 21 (3.5)	1/16 (0.2) (1.6)	10
	SSCS-20	20 (4.6) 29 (4.6)	1/16 (0.2) (1.6)	10
Parallel Plate/Coalescing Gravity, parallel plate Gravity, coalescing	SSCS-25	25 (5.8) 36 (5.8)	1/16 (0.2) (1.6)	10
	SSCS - 30	30 (7) 43 (7)	1/16 (0.2)	10
	SSCS - 35	35 (8) 50 (8)	1/16 (0.2)	10
	SSCS - 40	40 (9) 57 (9)	1/16 (0.2)	10
	SSCS - 50	50 (12) 72 (12)	1/16 (0.2)	10
	SSCS - 75	75 (17) 107 (17)	1/16 (0.2)	10
	SSCS - 100	100 (23) 143 (23)	1/16 (0.2) (1.6)	10
	SSCS - 125	125 (29) 179 (29)	1/16 (0.2) (1.6)	10
	SSCS - 150	150 (35) 215 (35)	1/16 (0.2) (1.6)	10
	SSCS - 200	200 (46) 286 (46)	1/16 (0.2) (1.6)	10
Gravity, parallel plate Gravity, coalescing		750 (119)	0.004 (0.1)	10.0-50.0
No-Crude-Refined Crude only	5,10,20 & 30 GPM	5, 10, 20, 30, (1.2, 2.3, 4.6, 6.9) 7, 14, 29, 43 (1.2, 2.3, 4.6, 6.9)		
Oil/Water	Surge Settler CPS Down Flow	10 (2.3) 14 (2.3)	1.0 (25)	C 10 ppm
	Tridair Flotation CRU DL 500 IGF	10 (2.3) 14 (2.3)	500 U	C 5 ppm
Solids	Surge Settler SC - 100 up flow	10 (2.3) 14 (2.3)	500 U	C 20 Micron solids
Coalescing	P-5	5 (1.2)	1/8 (0.03)	10
	P-25	25 (5.8)	1/8 (0.03)	10
	P-50	50 (12)	1/8 (0.03)	10
	OS 192	772.2	-124.2	10 ppm 2 30u
Centrifugal	CINC V-5 SEPARATOR	2.9-8.6 (0.5-1.4)	0.13 (3.18)	> 1% OIL
	CINC V-10 SEPARATOR	14.3-42.9 (2.3-6.9)	0.19 (4.78)	> 1% OIL
	CINC V-16 SEPARATOR	42.9-128.7 (6.9-20.7)	0.38 (9.53)	> 1 % OIL
	CINC V-20 SEPARATOR	114.4-286 (18.4-46)	0.44 (11.13)	> 1% OIL
Centrifugal/Weir	INTR-SEPTOR 250	350 (58.7)	0.25 (6.35)	> 40 [2]
	INTR-SPETOR 10	14.2 (2.3)	0.25 (6.35)	> 20 [2]
Submersion plane	35	1,573 (250)	Not affected	[2]
	66	4,905 (779)	Not affected	[2]
No Name	MEGATOR HIGH CAPACITY	14 - 343 (2 - 55)	1 (25.4)	10
	500	3 (0.5)		15
	1000	6 (1)		15
	2000	13 (2)		15
	2500	19 (3)		15
	5000	25 (4)		15
	10000	31 (5)		15
	FLOCCULATION TANK	208 (33)	0.25 (6.4)	100 - 150
	SD-1XL	72 (11.3)	1.0 (25.4)	10

Note: 1997 catalog is represented by the sum of the pink and green data. Pink, data not listed in the fourth edition (1993) but listed in the sixth edition (1997). Green, data listed in the fourth (1993) and sixth (1997) editions. Black, data listed in the fourth edition (1993) but not listed in the sixth edition (1997). 1993 data can be obtained by combining the green and black data. Bph, barrels per hour; ppm, parts per million.
Source: Schulze (1993, 1997).

TABLE B-8. Comparison of 1993 and 1997 Separator Availability Data.

TYPE	1993 [1]	1997 [2]	NEW [3]	PREEXISTING [4]	NO LONGER LISTED [5]
Gravity	4	24	9	15	0
Floating Gravity Separator	3	N/A	0	0	1
Gravity, Coalescing	7	52	14	38	0
Gravity, Coalescence, Depression	2	N/A	0	0	0
Gravity/Coalescence/Pressure	3	N/A	0	0	0
Submersion plan/Weir/Skimmer/Separator	2	N/A	0	0	2
Gravity, parallel plate	1	1	1	0	1
Parallel plate, Coalescing	15	N/A	0	0	0
Gravity porous media	9	N/A	0	0	0
No-Crude-Refined Crude Only	1	1	0	1	0
Oil/Water	2	2	0	2	0
Solids	1	1	0	1	0
Coalescing	6	1	1	0	3
Coalescing Plates	3	N/A	0	0	0
Coalescing Separator	6	N/A	0	0	0
Coalescing Oil Water Separator	6	N/A	0	0	0
High efficiency coalescing grid	8	N/A	0	0	0
Centrifugal	N/A	4	4	0	0
Gravity, parallel plate Gravity, coalescing	N/A	16	1	15	0
Centrifugal/Weir	N/A	2	2	0	0
Submersion Plane	N/A	2	2	0	0
No Type Name	N/A	9	9	0	0
Total	**79**	**115**	**43**	**72**	**7**

Note: N/A indicates that this category *name* for model *types* was not listed in the catalog, but does not indicate that the *model* was not listed.

[1] 1993 data can be obtained by combining the no longer listed and preexisting columns.

[2] 1997 is represented by the sum of the new and preexisting columns.

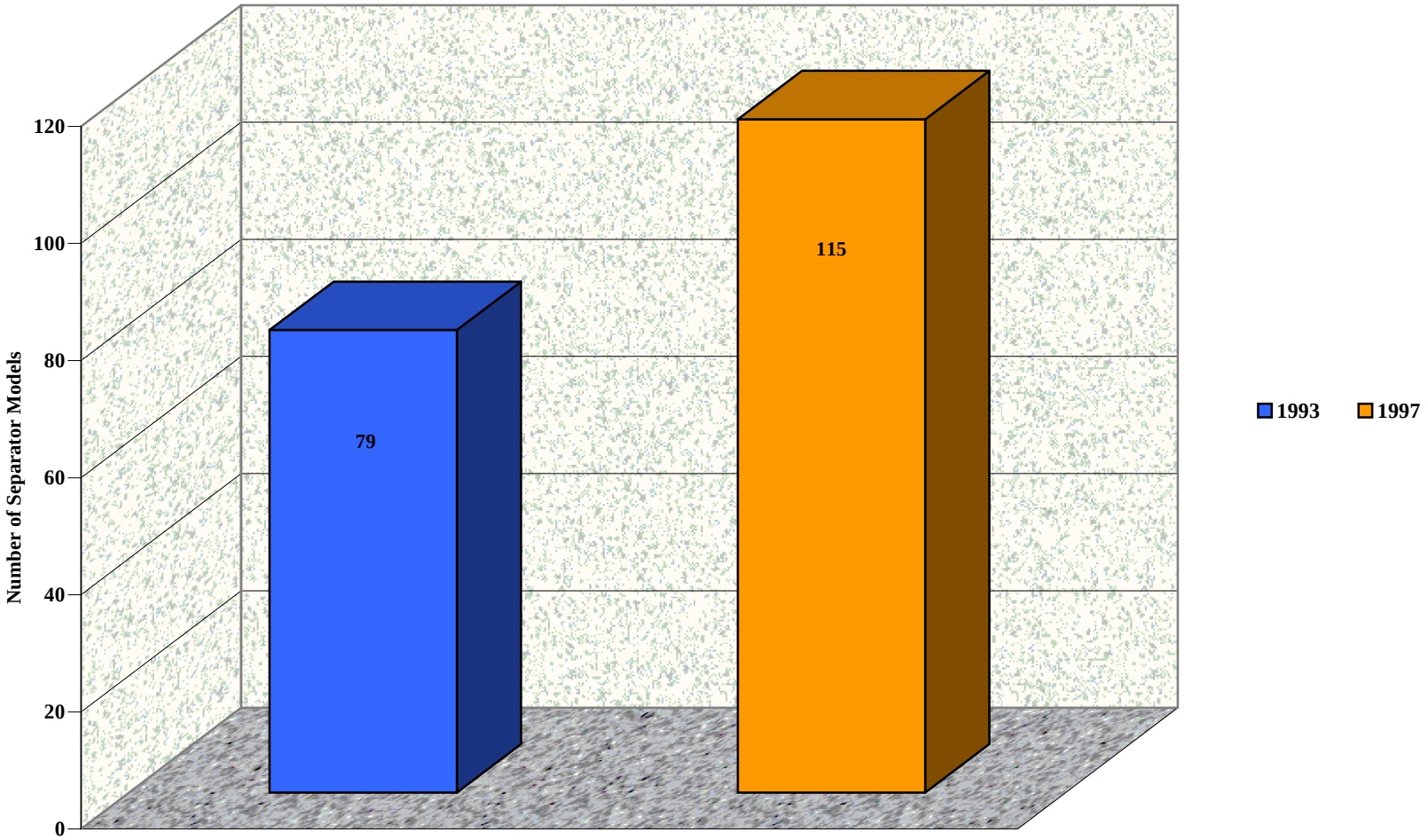
[3] New, not listed in the fourth edition (1993) but listed in the sixth edition (1997).

[4] Preexisting, listed in the fourth (1993) and sixth (1997) editions.

[5] No longer listed, listed in the fourth edition (1993) but not in the sixth edition (1997).

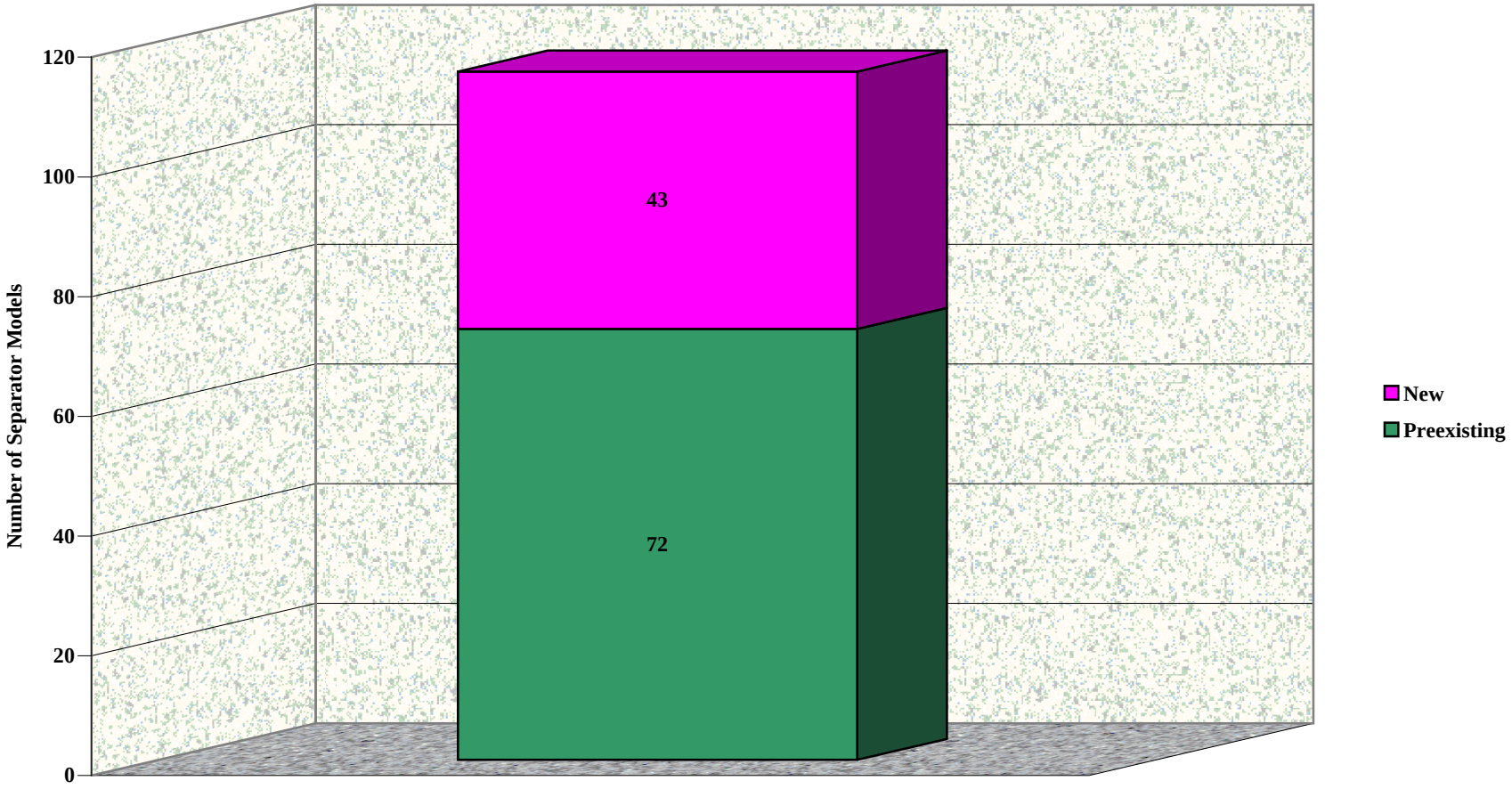
Source: Schulze (1993, 1997).

FIGURE B-7. Comparison of 1993 and 1997 Separator Availability Data[1].



[1] Compiled from totals in Table B-8.

FIGURE B-8. Composite of 1997 Available Separators[1].



[1] Compiled from totals in Table B-8.

TABLE B-5. Pump Data, 1993 and 1997.

TYPE	MODEL	CAPACITY VS. TOTAL HEAD[1]	EMULSION FORMATION %	DEBRIS TOLERANCE IN (MM)
Bladeless	A-005G-PC-06-P	65-100 gpm (15-23 m^3/hr)	Low-none	0.12 (3.2)
	A-010G-PC-07-P	75-120 gpm (17-28 m^3/hr)	Low-none	0.19 (4.8)
	A-020G-PC-08-P	85-175 gpm (20-40 m^3/hr)	Low-none	0.25 (6.4)
Bladeless HF-LH	A-400D-PC-22-S	10,000 gpm (2,300 m^3/hr)	Low-none	0.38 (9.6)
Bladeless HF-LH	A-200D-PC-20-S	5,000 gpm (1,150 m^3/hr)	Low-none	0.38 (9.6)
Bladeless HF-LH	A-100D-PC-18-S	2,500 gpm (575 m^3/hr)	Low-none	0.38 (9.6)
Diaphragm		13 gpm (3 m^3/hr)		0.6 (15)
		33 gpm (7.6 m^3/hr)		0.01 (3)
		40 gpm (9.2 m^3/hr)		0.24 (6)
	134	135 gpm (31 m^3/hr)	Moderate	
	Unstallables Pump		No	to 0.25 (6.4)
	UL-Listed Pump		No	to 0.25 (6.4)
	High Pressure Pump		No	0.13 (3.2)
Pro. Cavity	WALOSEP P30	44 gpm (10 m^3/hr)	15	Backflush
	WALOSEP P60	198 gpm (45 m^3/hr)	15	Backflush/knives
	WALOSEP P80	396 gpm (90 m^3/hr)	15	Backflush/knives
	TDS 150		Low	1.6 (40) Reverse capability and cutting knives
	VS-50 Transfer System Hybrid pumping system			2 (51)
	DOP-160 - smaller version of the DOP-250			
Progressive Cavity	TDS 200	286/328 ft (65/100 m) (C-D)	Low	2 (50) Reverse capability and chopper (cutting) knives
Progressive Cavity	TDS 250	572/328 ft (130/100 m) (C-D)	Low	2.8 (70) 2 (50) Reverse capability and chopper (cutting) knives
	Moyno 2000	Variable 1,800/1,000 ft (414/305 m)	Low	2 (51) diameter
P.C. (double screw) Pro. Cavity	"W" 200	295 ft (90 m)	No	2 (50)
P.C. (double screw) Pro. Cavity	"W" 200	262 ft (60) m	No	1.5 (40)
Allweiler Pro.Cavity	SEP	up to 1,300 gpm (300 m^3/hr)	No turbulence	up to 2 (51)
Allweiler Pro.Cavity	USNH	up to 1,700 gpm (390 m^3/hr)	No turbulence	Minimal
Houttuin 2-Srew Pro.Cavity	236	up to 7,000 gpm (1,600 m^3/hr)	No turbulence	Minimal
Vertical Archimedes' Screw Pro. Cavity	DOP-250	335 ft (102 m)	Low	2 (50)
Positive Displacement	HW 304	1,584/164 ft (360/50 m)	Low/Medium	3 (75)
	HW 204	880 gpm (200 m^3/hr)	Low/Medium	
	HW 104	440 gpm (100 m^3/hr)	Low/Medium	
Pos. Displmt. Rotary Gear	2400	150 gpm (34m^3/hr)	Low	0.5 (12.7)
Pos. Displmt. Rotary Gear	3400	200 gpm (45.5 m^3/hr)	Low	0.5 (12.7)
Pos. Displmt. Rotary Gear	4400	300 gpm (68 m^3/hr)	Low	0.5 (12.7)
Pneumatic	AP-4 Family	8 gpm (1.8 m^3/hr)	Refined hydrocarbon only	
Piston	Hydrocarbon Only 2020-02 DA	1.5/320 ft (0.3/98 m)	Very low	0.1 (2.5)
	Total Fluids 2030-06-DC	2.5/320 ft (0.6/98 m)	Very low	0.1 (2.5)
	Sinker Only 2010-02-DA	1.5/320 ft (0.3/98 m)	Very low	0.1 (2.5)
	Water Table Depression 2040-06-DC	320 ft (98 m)	Very low	0.1 (2.5)
Dual Piston	Sinker Only w/Inwell Separator 1000-02-5A	320 ft (98 m)	Very low	0.1 (2.5)
	3x12-C-P			2.3 (57)
	4x12-C-P			3.5 (89)
	Sinker Only w/Inwell Separator 1000-02-5S		Very low	0.1 (2.5)
Peristaltic/Hose Hose	MG-5	88/132 ft (20/40 m)	Low	0.5 (12)
	ME-3	110/132 ft (25/40 m)	Low	0.5 (12)
	MD-5	88/132 ft (20/40 m)	Low	0.5 (12)
Peristaltic hosepump	SP/80-SP/100	100-150 gpm (23-35 m^3/hr)	No	1 (25)

TABLE B-5. Pump Data, 1993 and 1997 (*Continued*).

TYPE	MODEL	CAPACITY VS. TOTAL HEAD[1]	EMULSION FORMATION %	DEBRIS TOLERANCE IN (MM)
Chemical hose pump Hose	Type LZ 50			
	Type GZ 40			
Hose	Sala Roll Pump SRP 50			1.2 (30)
	IP and M		Low	up to 2 (51)
Bailer	Quick Response Auto Skimmer		Very low	0.1 (2.5)
Vane	HYDE-VAC 2415	102 gpm (23 m^3/hr	No	5.9 (150)
	HYDE-VAC 3325	561 gpm (129 m^3/hr)	No	9.8 (250)
	HYDE-VAC 3515	411 gpm (95 m^3/hr)	No	
	HYDE-VAC 3525	822 gpm (189 m^3/hr)	No	9.8 (250)
	HYDE-VAC 4715	953 gpm (219 m^3/hr)		
	HYDE-VAC 4725	1,905 gpm (438 m^3/hr)	No	9.8 (250)
Sliding-shoe	L 150	27/100 ft (6/30 m)		
	L 300	90/100 ft (20/30 m)		
	L 400	180/100 ft (40/30 m)		
Trash\Viscous Oil Centrifugal/Chopper	PD-1000TC	1,000 gpm (230 m^3/hr)	Inquire	Varies
Trash\Viscous Oil Centrifugal/Chopper	PD-2000TC	2,000 gpm (460 m^3/hr)	Inquire	Varies
Trash/Viscous Oil	PD-1000	1,000 gpm (230 m^3/hr)	Varies	High
Trash/Viscous Oil	PD-2,000	2,000 gpm (460 m^3/hr)	Varies	High
Vertical Archimedes' Screw	Desmi-Sweeper			
	Desmi-Doas			
Centrifugal	TK-150	880/262 ft (200/80 m)	Medium	1 (30)
	TD-200	3,000/115 ft (700/35 m)	Medium	1 (30)
	TK-6	2,200/100 ft (500/30 m)	Medium	1.6 (40)
	14A2-TS2	700/112 ft (161/34 m)	Low	2 (51)
	16C2-F4L	1,500/130 ft (345/40 m)	Low	3 (76)
	3D-13	78/50 ft (18/15 m)	Low	2.3 (58)
	U-OHO Capsulpump	350/105 ft (80/32 m)		2 (51)
	U-103 Capsulpump	800/25 ft (184/8 m)		4 (102)
	VS-50 Transfer System	280/100 ft (64/31 m)		2 (51)
	L40-2C (AM Series)			0.4 (9.5)
	L40-3C (AM Series)			0.75 (19.1)
	L40-S2 (HL Series)			Silt - 10% volume
	L40-2FM8 (FM Series)			0.5 (12.7)
	L40-2FM8-B (FM Series)			0.5 (12.7)
	L60-3FM15 (FM Series)			0.75 (19.1)
	L60-3FM15-B (FM Series)			0.75 (19.1)
	L40-2PD5E (FP Series)			
	FPD-500		Inquire	Inquire
	FPD-1200		Inquire	Inquire
	FPD-2500		Inquire	Inquire
	CCN100-2C		Medium	0.8 (19)
	CCN150-7C		Medium	1.0 (25)
	U-040 Capsulpump			2 (51)
	KMA 333			265 (81)
	VSP		Not available	0.38 (9.5)
	4LT		Not available	3 (76)
	6LT		Not available	3 (76)
Reciprocating	Spate 75 C	140/130 ft (32/40 m)	Moderate	0.25 (6)

TABLE B-5. Pump Data, 1993 and 1997 (*Continued*).

TYPE	MODEL	CAPACITY VS. TOTAL HEAD[1]	EMULSION FORMATION %	DEBRIS TOLERANCE IN (MM)
Gear	2400		Low	0.5 (12.7)
	3400		Low	0.5 (12.7)
	4400		Low	0.5 (12.7)
Trash	L40-2T (AM Series)			1.1 (28.6)
	L60-3T (AM Series)			1.5 (38.1)
	L100-4T-E (AM Series)			2 (51)
	L40-TP2 (HL Series)			1 (25.4)
	L40-TP2-E (HL Series)			1 (25.4)
	L60-TP3 (HL Series)			1.5 (38.1)
	L60-TP3-E (HL Series)			1.5 (38.1)
Centrifugal/pressure	L70-2HHLF-B (FP Series)			0.25 (6.4)
	L90-FP250 (FP Series)			
	L90-FP250E			
No Type Name	PIT HOG 950			3 (76)
	PIT HOG 1000			3 (76)
	PIT HOG 2000			3.5 (89)

Note: 1997 catalog is represented by the sum of the pink and green data. Pink, data not listed in the fourth edition (1993) but listed in the sixth edition (1997). Green, data listed in the fourth (1993) and sixth (1997) editions. Black, data listed in the fourth edition (1993) but not listed in the sixth edition (1997). 1993 data can be obtained by combining the green and black data.

[1] Because the catalog was reorganized, these data are no longer printed in the sixth edition (1997).

Source: Schulze (1993, 1997).

TABLE B-6. Comparison of 1993 and 1997 Pump Availability Data.

TYPE	1993 [1]	1997 [2]	NEW [3]	PREEXISTING [4]	NO LONGER LISTED [5]
Bladeless	6	6	0	6	0
Diaphragm	4	7	3	4	0
Pro. Cavity	11	18	6	12	0
Positive Displacement	3	3	0	3	0
Pos. Displmt. Rotary Gear	3	N/A	0	0	3
Pneumatic	1	1	0	1	0
Piston	4	4	0	4	0
Dual Piston	1	3	3	0	1
Peristaltic/Hose	4	N/A			
Chemical hose pump	2	N/A			
Bailer	1	1	0	1	0
Vane	6	6	0	6	0
Sliding-shoe	3	3	0	3	0
Trash/Viscous Oil	4	2	0	2	0
Vertical Archimedes Screw	3	N/A	0	0	2
Centrifugal	9	25	18	7	2
Reciprocating	1	1	0	1	0
Gear	N/A	3	3	0	0
Trash	N/A	N/A	7	0	0
Centrifugal/pressure	N/A	3	3	0	0
Hose	N/A	8	2	6	0
Centrifugal/Chopper	N/A	2	0	2	0
No type Name	N/A	3	3	0	0
Total	**66**	**99**	**48**	**58**	**8**

Note: N/A indicates that this category *name* for model *types* was not listed in the catalog, but does not indicate that the *model* was not listed.

[1] Because of a change in the catalog's organization of pump *types*, 1993 *types* do not correlate with 1997 *types*, although the *models* still correlate. 1993 data can be obtained by combining the green and black data.

[2] 1997 is represented by the sum of the new and preexisting columns.

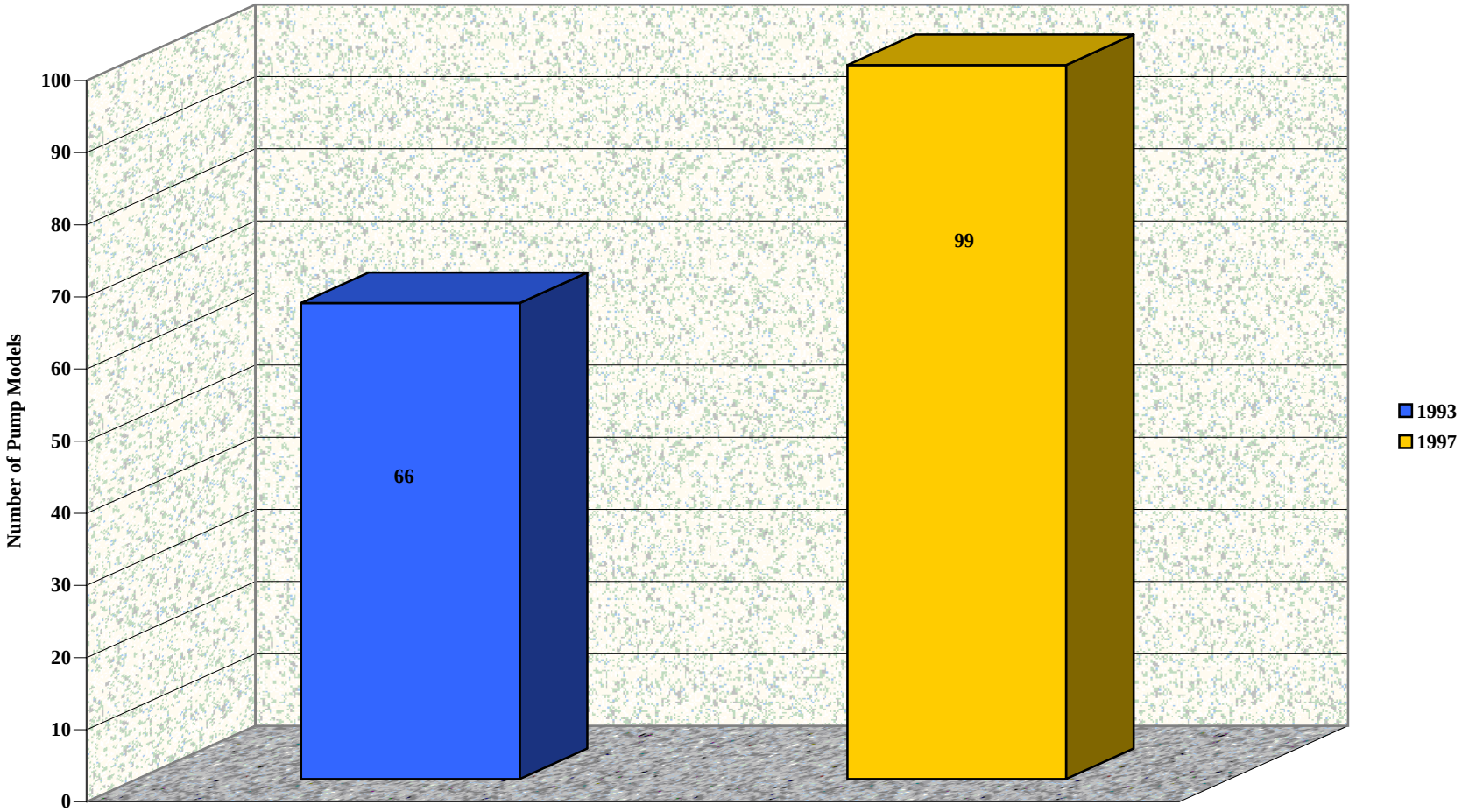
[3] New, not listed in the fourth edition (1993) but listed in the sixth edition (1997).

[4] Preexisting, listed in the fourth (1993) and sixth (1997) editions.

[5] No longer listed, listed in the fourth edition (1993) but not in the sixth edition (1997).

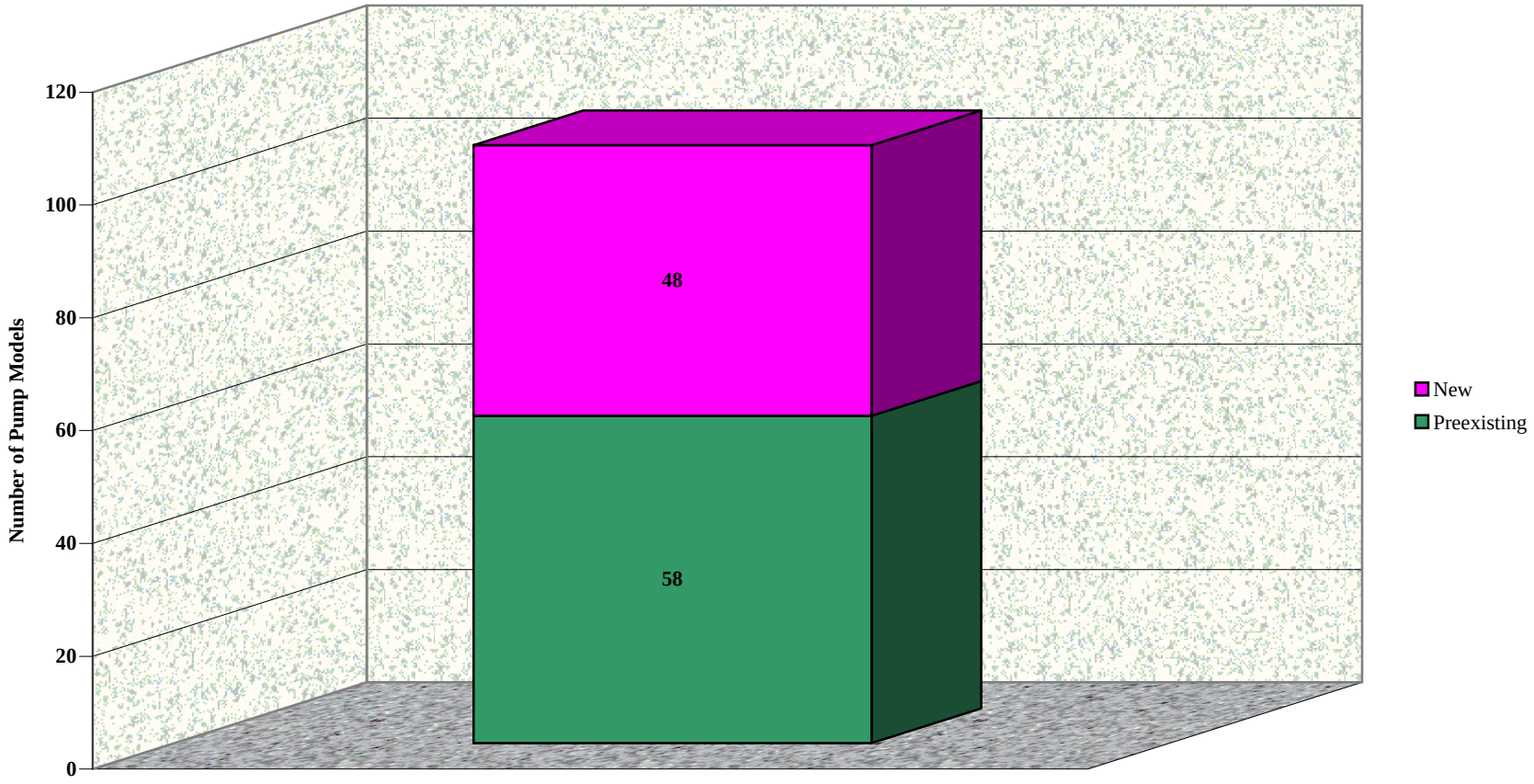
Source: Schulze (1993, 1997)

FIGURE B-5. Comparison of 1993 and 1997 Pump Availability Data[1].



[1] Compiled from totals in Table B-6.

FIGURE B-6. Composite of 1997 Available Pumps[1].



[1] Compiled from totals in Table B-6.

TABLE B-11. Dispersant Application Equipment Data, 1993 and 1997.

METHOD OF APPLICATION	MODEL	VOLUME DISPERSED/ LOADING GALS (M^3)	SPRAY WIDTH FT (M)	APPLICATION RATE GPA (L/HECTARE)	SIZE OF VESSEL/ AIRCRAFT
Surface Vessel	DSSM64D/12	3000 gals (11,355 L) 3,000 (11.4)	64 (20) using two booms 64 (19.5) using two booms	2-10 (18.7-93.5) 10 (93.5) 2 10 (19-94)	80-ft (24-m) vessel
	DSSM64E/12	3000 gals (11,355 L) 3,000 (11.4)	64 (20) using two booms 64 (19.5) using two booms	2-10 (18.7-93.5)	80-ft (24-m) vessel
	DSBM40G/12		40 (12.2) using two booms	2-10 (19-94) 10 (94) 2-10 (19-94)	50 ft (15.2 m)
	DSBM40D/12		40 (12.2) using two booms	2-10 (19-94) 10 (94) 2-10 (19-94)	50 ft (15.2 m)
	DSBM40E/12		40 (12.2) using two booms	2-10 (19-94) 10 (94) 2-10 (19-94)	50 ft (15.2 m)
Surface Vessel/Shore Line	DOMIL	None in ship mount, 62 gals (237 L) on ship mount. None in ship mount, 63 (0.24) on shore unit	Beam of the boat 60 (18) using two booms plus the beam of the boat.	Depends on dispersant	60-150 ft (18-46 m) length 105 ft (32 m) length 60-150 ft (18-46 m) length
Surface Vessel	Seaspray 1		20 (6) 28 (8.5) using two booms	10 (94)	6.5-16 ft (2-5 m) beam 16-66 ft (5-20 m) length
Surface Vessel	Seaspray 2		Vessel using two booms 28 (15). 59 (18) plus beam of vessel using two booms.	10 (94)	10-ft (3-m) beam. Can suite large vessels. Vessel min. length 25 ft (7.5 m)
Surface Vessel	Spillspray		Corresponding to boom size, using two booms. 59 (18), 79 (24), 98 (30).	10 (94)	Vessel min. length 25 ft (7.6 m), 10-ft (3-m) beam. Can suite large vessels.
Surface Vessel	Clearspray		40 (12), 46 (14) using two booms	10 (94)	Minimum 20-ft (6-m) vessel
Surface Vessel	SlickSpray	None	42 (13) using two booms	2-10 (19-94) 8 (74) 2-10 (19-94)	Supply vessel Harbor work boats to offshore
	Surface Vessel-Shoreline Cleanup			2 (19)	
	DSBT15G/6		30 (9) using two each boom (p/s)	10 (94) 2-10 (19-94)	20-ft (6.1-m) flat boat
	DSBT15D/6		30 (9) using two each boom (p/s)	10 (94) 2-10 (19-94)	20 ft (6.1m) flat boat
	DSBT15E/6		30 (9) using two each boom (p/s)	10 (94) 2-10 (19-94)	20-ft (6.1-m) flat boat
	DS-B2	423 gpm (1,600 L/min)	29.5 (9) not including beam of vessel	10 (94)	Minimum length 27 ft (8 m)
	SPRAYVAC in Dispersant Application Mode			10 (94)	On deck
	SEASPRAY 2000		28 (8.5) plus beam of vessel using two booms	10 (94)	Vessel min. length 25 ft (7.6m), 10-ft (3-m) beam. Can suit large vessels.
	CLEARSPRAY 2000		40 (12), 46 (14) using two booms	10 (94)	Minimum 20-ft (6-m) vessel

TABLE B-11. Dispersant Application Equipment Data, 1993 and 1997 (*Continued*).

METHOD OF APPLICATION	MODEL	VOLUME DISPERSED/ LOADING GALS (M^3)	SPRAY WIDTH FT (M)	APPLICATION RATE GPA (L/HECTARE)	SIZE OF VESSEL/ AIRCRAFT
	BOATSPRAY		25 (7.6) varies from 20-30 (6-9)	10 (94)	Work boats etc. - min. length 20 ft (6 m)
	BOATSPRAY 2000		40 (12), 46 (14)	10 (94)	Work boats etc. - min. length 20 ft (6 m)
Vessel of Opportunity Surface Vessel	L 10	211 (0.8)	164 (50) 100-164 (30-50); two units with double width	4.5-53 (70-5,000) 53 (500) 7.5-53 (70-500)	
	DS-D 207	Various; inquire			
	DS-E 258	Various; inquire			
	DJETSPRAY 1		Spreading width 33 (10)	6.9-40 (65-375)	
	DJETSPRAY 2		Spreading width 33 (10)	5.3-57.8 (50-540)	
	DJETSPRAY 3		Spreading width 33 (10)	5.3-57.8 (50-540)	
	KPDS		15 (4.6)/arm; two arms + vessel beam		
Tug/utility vessel/barge/supply boat Surface vessel	DSE-S	Bow location	80 (24) 20-80 (6-24)		Bow of vessel
	VIKOSPRAY 2000		46 (14) + vessel beam	Adjustable to suit conditions	Small-medium
Work Boat	0	0	0	0	0
Work Boat/bay or harbor Surface vessel work boat/bay or harbor	DSE-B	15-30 gpm	15 (4.5) 10-20 (3-6)	Per above	23 ft (7 m) 16-30 ft (5 x 9 m)
Surface Vessel Tugs & work boats with at least 5-ft (1.5-m) freeboard	Mini-Wide Spray		28 (9) plus beam of boat using two booms		
Large tugs and tenders Surface vessel Large tugs and tenders	Widespray		52 (16) plus beam of boat using two booms		
Boom-mounted on vessel or jetty	Spillclear		Conical spray pattern up to 20 (6) diameter	4.5 1pm (1.18 gpm or 22.5 1pm (6 gpm)	
Tanker or other surface vessel	Chemspray Educator			10 10 (94)	Power available Any size vessel provided water
Helicopter	DHT16G/34	240 gals (908 L)	34 (10) using two booms		Bell 412
	TC 3 MK III	240 gals (910 L)	98 (30) or 148 (45) using two booms	10 (94) short; 5 (47) long	
	TC 5 MK II	660 gals (2500 L)	98 (30) or 148 (45) using two booms	10 (94) short; 5 (47) long	
	TC 3 MK IV	TC 5	98 (30) 98 (30) or 148 (45) using two booms	10 (94) short; 5 (47) long	
	TC 3	240 (0.91)	> 100 (30)	10 (94) 5-10 (47-94)	Helicopter lift requirement - 7 bbls fully loaded
Helicopter, Super Puma		800 gals (3,000 L)	65 (20)	10 acres/min (4 hectare/min); 22 (200)	
Helicopter	6860		50-120 (15-37) 120 (37) 50-120 (15-37)	Can handle a wide range of application rates	
Helicopter		800 (0.3)	65 (20)	22 (200)	
Shoreline\Land	DSDW20G/2		6 (1.8) 2-6 (0.6-1.8)	0-20%	
	DSDWD/2		2-6 (0.6-1.8)	0-20%	
	DSDW10G/1		1-3 (0.3-0.9)	0-6%	

TABLE B-11. Dispersant Application Equipment Data, 1993 and 1997 (*Continued*).

METHOD OF APPLICATION	MODEL	VOLUME DISPERSED/ LOADING GALS (M^3)	SPRAY WIDTH FT (M)	APPLICATION RATE GPA (L/HECTARE)	SIZE OF VESSEL/ AIRCRAFT
Shoreline/Land	DSDW10D/1		1-3 ft (0.3-0.9 m)	0-6%	
	DSDW10E/1		1-3 (0.3-0.9)	0-6%	
Hand-pushed, wheel barrow-type mount	Shorespray Beach Cleaner	22 in (0.6 m)	3.3 (1.1)	0.0007 gal/ft (0.028 L/m^2)	
1) Shore/Land 2) Surface Vessel	Containment Systems Dispersant Sprayer		24 (7) using two booms	0-20%	
Air Fixed Wing Air Craft	DSE-A-A	20-40 ft (6-12 m)	40 (12) 20-40 (6-12)		
Air Fixed Wing Air Craft	DSE-A-H	20-30 ft (6-9 m)	25 (7.5) 20-30 (6-9)		Standard
C-130 Aircraft Fixed Wing Air Craft	ADDS pack	5,500 gals (20.8 m^3)	150-250 (46-76) 84	12 (112) 1-12 (9.4-112	C-130
DC-4 Aircraft		2,500 gals (9.5 m^3)	125 (38)	1-7 (9.4-65)	DC-4
Airspraying from G222 or C130/L100	AIRSPRAY	500 gals per pallet (1.9)	30 (10)	10 (94)	Can suit large aircraft
Fixed-wing aircraft		2,500 (9.5)	125 (38)	7 (65) 1-7 (9.4-65)	DC-4
Manual	DSE-M	Hand (1)	Ballon	Per above	
Manual				2 (19)	
Hand Manual	DS-50	145 gpm (550 L/min)	Variable	5 (47)	N/A
Mixed spray	KPDS				1
Power Shoreline	DSE-D	2-10 ft (0.6-3.0 m) long, 1 nozzle/arm	Ballon	Per above	
Inshore Vessels	Vikospray 2		50 (15) using both booms		
Shoreline	DSD20EWD/2		6 (1.8) 2-6 (0.6-1.8)	0-20%	
Surface vessel/Shoreline	VIKOSPRAY 1000		20 (6) + vessel beams	Adjustable to suit conditions	Small
Pressure washer, manual, power sprayer	ENVIRO SAFE DISPERSANT			No detectable VOC's	

Note: 1997 catalog is represented by the sum of the pink and green data. Pink, data not listed in the fourth edition (1993) but listed in the sixth edition (1997). Green, data listed in the fourth (1993) and sixth (1
in the fourth edition (1993) but not listed in the sixth edition (1997). 1993 data can be obtained by combining the green and black data. Gpa, gallons per acre; gpm, gallons per minute; ADDS, Airborne Dispersa
Source: Schulze (1993, 1997).

PERSONNEL FOR DEPLOYMENT
3
3
2
2
2
2 to 3 men
2
2
2
2
2
1

PERSONNEL FOR DEPLOYMENT
2
2
2
2
0
1
1
2
1 pilot, copilot optional; 1 ground - load attachment man
1 pilot, copilot optional; 1 ground -load attachment man
1 pilot, copilot optional; 1 ground-load attachment man
2, including helicopter marshall
1
1
1

PERSONNEL FOR DEPLOYMENT
1
1
1
2
2
1
1
2
1 or 2
1
Beach 1; Inshore 2

997) editions. Black, data listed
nt Delivery System.

TABLE B-12. Comparison of 1993 and 1997 Dispersant Application Equipment Availability

TYPE	1993 [1]	1997 [2]	NEW [3]	PREEXISTING [4]	NO LONGER LISTED [5]
Surface Vessel	11	29	16	13	1
Surface Vessel Work boat/bay or harbor	2	1	0	1	1
Surface Vessel Tugs and Work boats with at least 5 ft (1.5 m) freeboard	1	1	0	1	0
Surface Vessel Large Tugs and Tenders	1	1	0	1	0
Tug/Utility vessel/barge/supply boat	1	N/A			
Boom-Mounted on vessel or jetty	1	1	0	1	0
Tanker or other surface vessel	1	1	0	1	0
Helicopter	5	6	3	3	2
Shoreline/Land	5	4	0	4	1
Hand-pushed, wheel barrow-type mounted	1	N/A	0	0	1
1)Shore/Land 2) Surface Vessel	1	1	0	1	0
Air	4	N/A			
Manual	1	3	2	1	0
Vessels-of-opportunity	1	N/A			
Mixed Spray	1	N/A	0	0	1
Power	1	N/A			
Inshore Vessels	1	N/A	0	0	1
Shoreline	N/A	1	0	1	0
Fixed Wing Aircraft	N/A	5	2	3	1
Surface Vessel/Shoreline	1	1	1	0	0
Pressure washer, manual, power sprayer	N/A	1	1	0	0
Total	**40**	**56**	**25**	**31**	**9**

Note: N/A indicates that this category *name* for model *types* was not listed in the catalog, but does not indicate that the *model* was not listed.

[1] Because of a change in the catalog's organization of dispersant application equipment *types*, 1993 *types* do not correlate with 1997 *types*, although the *models* still correlate. 1993 totals can be obtained by

[2] 1997 is represented by the sum of the new and preexisting columns.

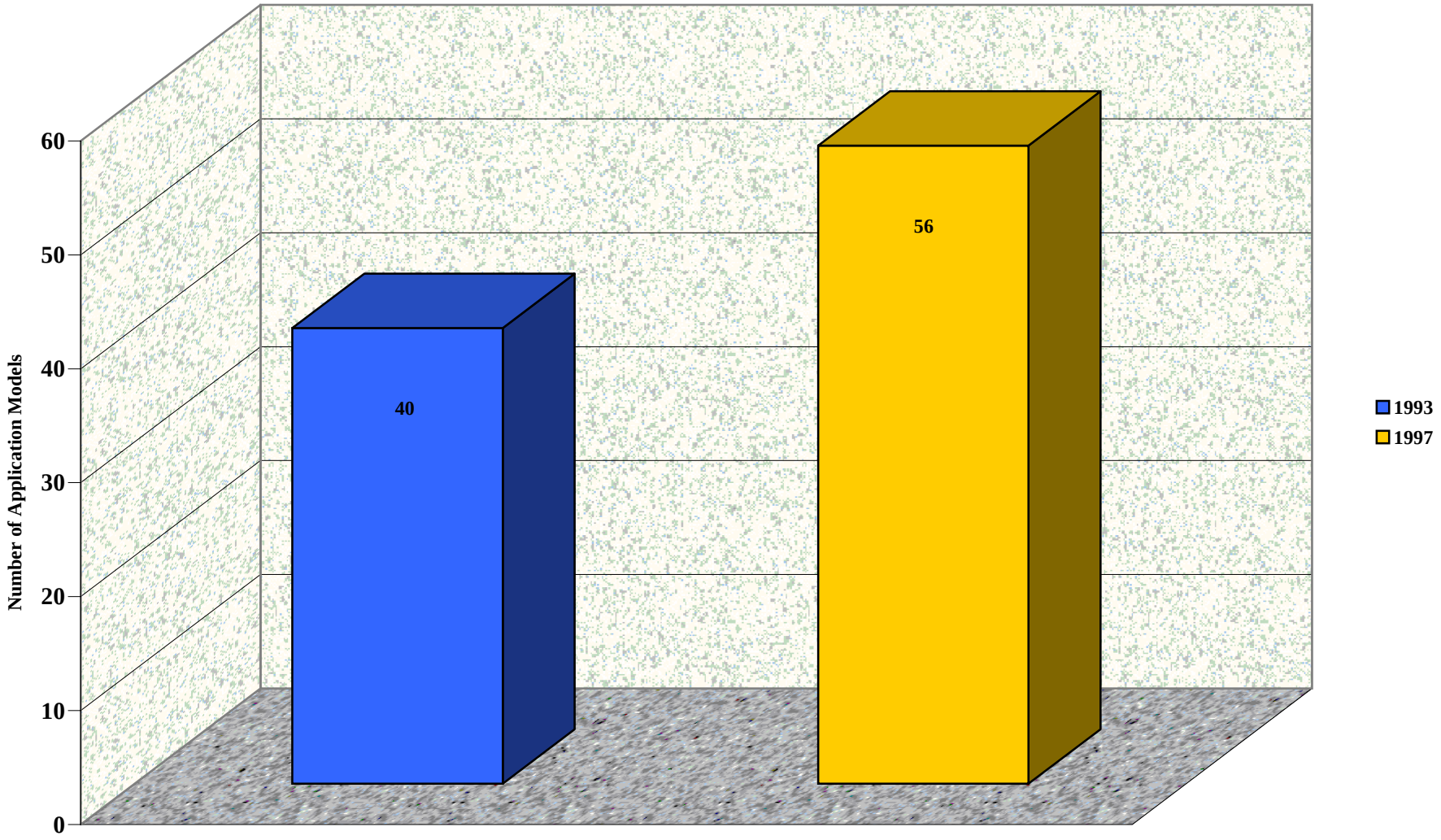
[3] New, not listed in the fourth edition (1993) but listed in the sixth edition (1997).

[4] Preexisting, listed in the fourth (1993) and sixth (1997) editions.

[5] No longer listed, listed in the fourth edition (1993) but not in the sixth edition (1997).

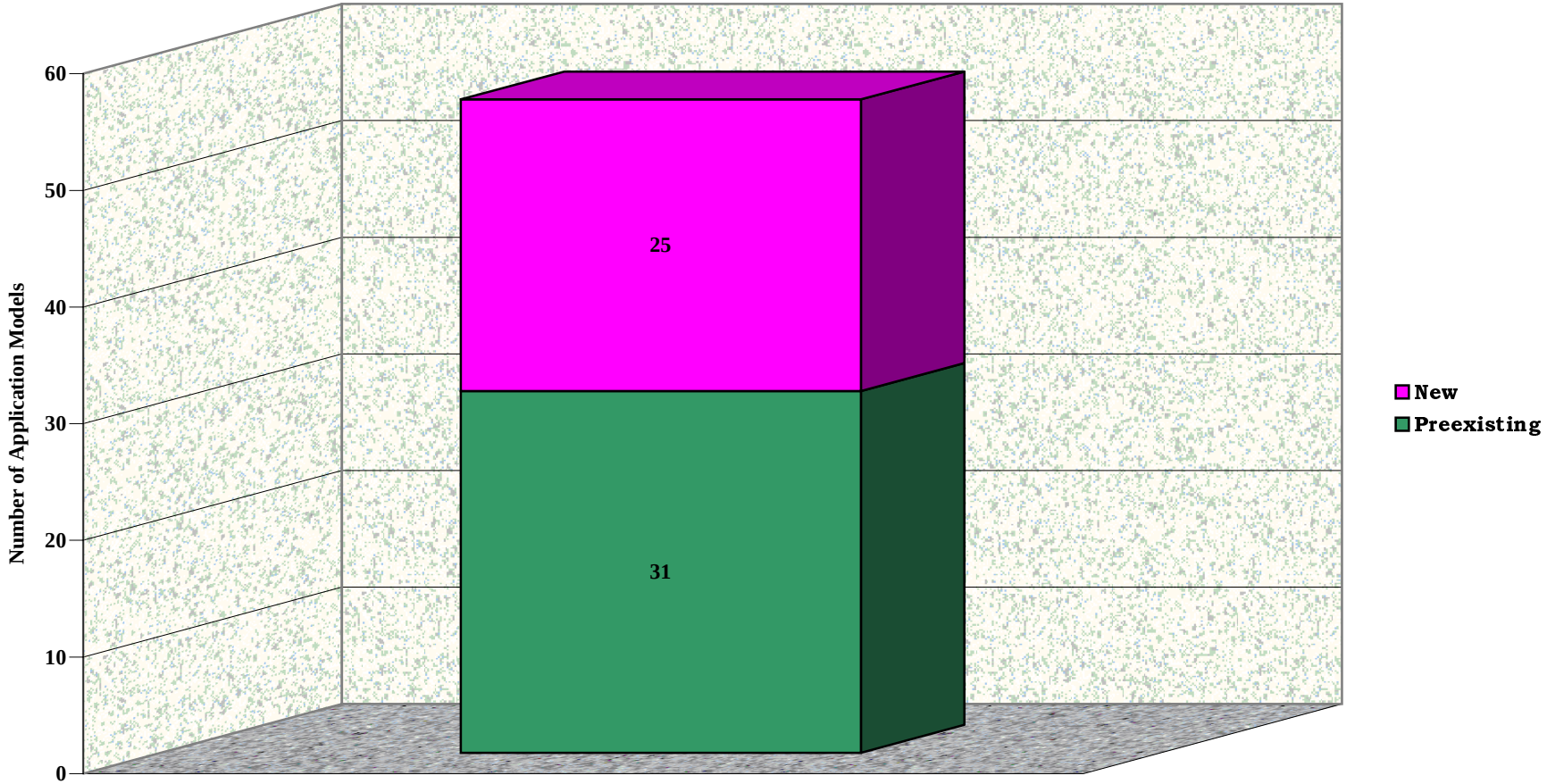
Source: Schulze (1993, 1997).

FIGURE B-11. Comparison of 1993 and 1997 Dispersant Application Equipment Availability Data[1].



[1] Compiled from totals in Table B-12.

FIGURE B-12. Composite of 1997 Available Dispersant Application Equipment[1].



[1] Compiled from totals in Table B-12.

TABLE B-9. Storage Data, 1993 and 1997.

ENVIRONMENT	TYPE	MODEL	TOTAL VOLUME BBLS (M^3)
Protected/Calm Water	Open Pool	KT-3	3 (0.5)
		KT-5	7.6 (1.2)
		KT-8	20 (3.2)
		KT-10	29 (4.6)
		KT-12	48 (7.6)
		KT-14	64 (10.2)
		KT-16	83 (13.2)
		KT-18	107 (17)
		KT-20	133 (21.1)
		Slicktank	7.1 (1.1)
		Slicktank	14.3 (2.3)
		Slicktank	28.6 (4.5)
		Slicktank	47.6 (7.6)
		Slicktank	71.4 (11.4)
		Slicktank	7.1 (1.1)
		Slicktank	14.3 (2.3)
		Slicktank	28.6 (4.5)
		Slicktank	47.6 (7.6)
		Slicktank	71.4 (11.4)
		Texatank	8 (1.3)
		Texatank	60 (9.5)
		Texatank	124 (20)
		Versatank Model 1000	28.6 (4.5)
		Versatank Model 1500	43 (6.8)
		OT-5	31 (5.0)
		OT-10	62 (10)
		QET 500	12 (1.9)
		QET 1400	33.3 (5.3)
		QET 2750	65 (10.3)
		FAST ERECT POOL	38.5 (6.1)
		OAT-3	2.3 (0.4)
		OAT-20	107.1 (17.0)
		F-PD-600	14.2 (2.3)
		F-PD-3400	80.9 (12.9)
		A-600-FDT	14.3 (2.3)
		A-2500-FDT	59.5 (9.5)
		A-5000-FDT	119 (18.9)
	Open pool/collapsible tanks, square Open pool	Fastank 2000	63 (10)
		FASTANK Rapid	10 (1.6)
		FASTANK Rapid 1500	47 (7.5)
	Open pool/collapsible tanks, rectangular Open pool	Fastank Raceway 1.7m	10 (1.6)
		Fastank Raceway 3m	19 (3)
		Fastank Raceway 6m	38 (6)
		Open Top	24 (3.8)
		Open Top	60 (9.5)
		TST 10	28 (4.5)
		TST 14	64 (10.2)
		TST 18	107 (17.0)
Open Water Protected/Calm Water	Open pool	TST-300	300 (47.7)
Open Water Protected/Calm Water	Open pool	TST-500	500 (79.5)
Open Water Protected/Calm Water	Open pool	TST-1000	1,000 (15.9)
Protected/Calm Water	Open, inflatable pool	KP-3	2.4 (0.4)
		KP-6	4.8 (0.8)
		KP-12	9.5 (1.5)
		KP-24	19 (3)
		KP-30	23.8 (3.8)
		KP-48	35.7 (5.7)
		FST-500	14 (2.3)
		FST 1000	28 (4.5)
		FST-1500	43 (6.9) 30 (4.8)
		FST 2500	72 (11.4)
		FST-4000	114 (18)
		FST-5000	143 (23) 142 (22.7)
		Texapool	4.3 (0.7)

TABLE B-9. Storage Data, 1993 and 1997 (*Continued*).

ENVIRONMENT	TYPE	MODEL	TOTAL VOLUME BBLS (M^3)
Protected/Calm Water	Open, inflatable pool	Texapool	26.8 (4.2)
		Texapool	89.3 (14.2)
		Sanator 2.5	16 (2.5)
		Sanator 6	38 (6.0)
		CF 500	12 (2)
		CF 4000	95 (15)
		GCB-A3	2.3 (0.4)
		GCB-B3	2.3 (0.4)
		GCB-A25	52.3 (8.3)
		GCB-B25	52.3 (8.3)
		B-SST-500	11.9 (1.9)
		B-SST-2500	59.5 (9.5)
		B-SST-5000	119 (18.9)
		E-PD-750	17.8 (2.8)
		E-PD-6100	145.2 (23.1)
		Floatank TXF-200	4.8 (0.8)
		Floatank TXF-8000	190 (30.3)
		VIKOTANK 2,000	12.5 (2.0)
		VIKOTANK 5,500	34.5 (5.5)
		VIKOTANK 13,000	81.5 (13)
		VIKOTANK 2.5	15.7 (2.5)
		VIKOTANK 6T	37.8 (6.0)
		VIKOTANK 13T	81.8 (13.0)
		BUND 4.5	28.3 (4.5)
	Open inflatable tank	Portapool	19 (3)
	Open inflatable tank	Portapool	32 (5)
	Open inflatable tank	Portapool	63 (10)
Protected/Calm Water	Open pool/collapsible tanks, square	Fastank Rapid E	10 (1.6)
Protected/Calm Water	Towable collapsible tank Towable pillow tank	TOB-500	12 (1.9)
	Towable collapsible tank Towable pillow tank	TOB-1000	24 (3.8)
	Towable collapsible tank Towable pillow tank	TOB-1200	29 (4.6)
	Towable collapsible tank Towable pillow tank	TOB-2500	60 (9.5)
	Towable pillow tank	TB 500	12 (1.9)
		TB 100	24 (3.8)
		TB 2500	60 (9.5)
		FL-1	6.3 (1)
		FL-10	63 (10)
		FB-25 Sea Slug	8.4 (1.3)
		TOB 500	12 (1.9)
		TOB 1000	24 (3.8)
		TOB 2500	60 (9.5)
Open Water	Towable Collapsible Tank Towable Pillow Tank	TOB-500	500 (79.5)
	Towable Collapsible Tank Towable Pillow Tank	TOB-10000	1,000 (159)
	Towable Collapsible Tank Towable Pillow Tank	TOB-2000	2,000 (318)
	Towable Collapsible Tank Towable Pillow Tank	RO-TANK-5	32 (5)
	Towable Collapsible Tank Towable Pillow Tank	RO-TANK-10	63 (10)
	Towable Collapsible Tank Towable Pillow Tank	RO-TANK-15	94 (15)
Protected/Calm Water	Towable flexible tank	Sea Tank 10	24 (3.8)
		A1 Dracone	28 (4.55)
		A2 Dracone	56 (9.1)
		D5 Dracone	143 (22.75)
		SeaContainer #SCTT600	14.3 (2.25)
		SeaContainer #SCTT1200	28.6 (4.5)
		SeaContainer #SCTT2500	60 (9.25)
		SeaContainer #SCTT5000	120 (18.5)
		5-Ton	31 (5)
		9-Ton	56 (9)

TABLE B-9. Storage Data, 1993 and 1997 (*Continued*).

ENVIRONMENT	TYPE	MODEL	TOTAL VOLUME BBLS (M^3)
Protected/Calm Water	Towable flexible tank (*Continued*)	12.5-Ton	77 (12.5)
		Trellcone	63 (10)
		Welltec Flexitank VA-5	148.4 (23.6)
		FT 5	31 (5)
		FT 9	56 (9)
		FT 12.5	77 (12.5)
		Unitor Oil Bag	62.9 (10)
			79 (12.5)
		Unitor Oil Bag	94.4 (15)
		Unitor Oil Bag	157.3 (25)
		OSRT 5	31.5 (5)
		OSRT 12.5	78.6 (12.5)
		OSRT 25	157.2 (25)
	Towable open tank Towable flexible tank	Floating 12.5	79 (12.5)
	Towable open tank Towable flexible tank	Floating 25	157 (25)
Protected/Calm Water	Towable open tank	FR50	31 (5)
		FR200	126 (20)
		NOFI Inflatable Oil Barge 25	175 (5)
		NOFI Inflatable Oil Barge 50	314 (50)
		BO5	32 (5)
		POLLUTANK-5	31.5 (5)
		POLLUTANK-10	63 (10)
		POLLUTANK-25	157.5 (25)
		HIB R28	65.0 (10.3)
		HIB R20	20 (3.2)
		HIB	65.0 (10.3)
	Pillow Tank	ALT Petro-Flex	6.0 (1.0)
		ALT Petro-Flex	11.9 (1.9)
		ALT Petro-Flex	47.6 (7.6)
		ALT Petro-Flex	71.4 (11.4)
		ALT Petro-Flex	95.2 (15.1)
		ALT Petro-Flex	119.0 (18.9)
		TSC 500	12 (1.9)
		TSC 1000	24 (3.8)
		TSC 2500	60 (9.5)
Protected/Calm Water	Collapsible tank Pillow Tank	Fabritank	71.4 (11.4)
	Collapsible tank Pillow Tank	Fabritank	119 (18.9)
	Collapsible tank Pillow tank		6.3 (1)
			63 (10)
			126 (20)
		C-FDA-75	1.7 (0.3)
		C-FDA-2400	57.1 (9.1)
		C-FDA-5000	119 (18.9)
	Collapsible tank Pillow Tank	EFC Utility Tank	0.7 (0.11)
	Collapsible tank Pillow Tank	EFC Utility Tank	9.9 (1.9)
	Collapsible tank Pillow Tank	EFC Utility Tank	109.5 (17.4)
	Collapsible tank Pillow Tank	EFC Pillow Tank	71.4 (11.4)
	Collapsible tank Pillow Tank	EFC Pillow Tank	95.2 (15.1)
	Collapsible tank Pillow Tank	EFC Pillow Tank	143 (22.7)
	Collapsible tank Pillow Tank	SeaContainer #SCPT5000	119 (18.9)
	Collapsible tank Pillow Tank	SeaContainer #SCPT100	2.4 (0.38)
	Collapsible tank Pillow Tank	SeaContainer #SCPT1500	36 (5.7)
	Collapsible tank Pillow Tank	SeaContainer #SCPT4000	95 (15.1)
	Collapsible tank Pillow Tank	Texablads	2.4 (0.4)
	Collapsible tank Pillow Tank	Texablads	47.6 (7.6)
	Collapsible tank Pillow Tank	Texablads	119 (18.9)
	Collapsible tank Pillow Tank		9.4 (1.5)
	Collapsible tank Pillow Tank		16 (2.5)
	Collapsible tank Pillow Tank		31 (5.0)
Protected/Calm Water	Collapsible tank Pillow Tank		63 (10.0)
	Pillow Tank	PILLOWTANK 10	63 (10)
	Collapsible Tank Pillow Tank	Pillowtank 1.5	9.4 (1.5)
	Collapsible Tank Pillow Tank	Pillowtank 2.5	16 (2.5)
	Collapsible Tank Pillow Tank	Pillowtank 5	31 (5)

TABLE B-9. Storage Data, 1993 and 1997 (*Continued*).

ENVIRONMENT	TYPE	MODEL	TOTAL VOLUME BBLS (M^3)
Protected/Calm Water	Open Tank	MT-10	63 (10)
		MT-21	134 (21)
	Open rigid tank		28.3 (4.5)
Open Water	Open Pool	OAT-24	214.2
		F-PD-10000	238.1 (37.9)
	Open Tank	MT-68	428 (68)
		ECONOTANK ET 1515	2,380 (378.4)
Open Water	Open Inflatable Pool	Decon Pool	334 (53)
		FST-12000	340 (54)
	Towable Flexible Tank Open Inflatable pool	FST-12,000	357 (57)
		CF 25000	595 (95)
		E-PD-10800	257.1 (40.9)
		GCB-A75	214.2 (34.1)
		GCB-B75	214.2 (34.1)
Open Water	Open pool, collapsible tanks, square		
Open Water	Open pool, collapsible tanks, rectangle		
	Collapsible Tank	Pillow tank	63 (10)
Open Water	Towable Flexible Tank	Sea Tank 100	238 (38)
		Sea Tank 250	595 (95)
		Welltec Flexitank VA-10	401 (63.8)
		D10 Dracone	286 (45.5)
		E Dracone	628 (100)
		F Dracone	1200 (191)
		J Dracone	2371 (385)
		L Dracone	3262 (519)
		O Dracone	5879 (1100)
		EFC Towable Storage Bladders	310 (49)
		EFC Towable Storage Bladders	595 (94.6)
		EFC Towable Storage Bladders	1786 (284)
		EFC Towable Storage Bladders	3571 (568)
		EFC Towable Storage Bladders	5952 (946)
		SeaContainer #SCTT10000	238 (37.5)
		SeaContainer #SCTT14000	330 (51)
		SeaContainer #SCTT25000	595 (94)
		25-Ton	155 (25)
		50-Ton	314 (50)
		100-Ton	620 (100)
		300-Ton	1860 (300)
		Trellcone	157 (25)
		Trellcone	315 (50)
		Unitor Oil Bag	157.3 (25)
		Unitor Oil Bag	315 (50)
		Unitor Oil Bag	629 (100)
		Unitor Oil Bag	1,258 (200)
		Unitor Oil Bag	1,887 (300)
		Unitor Oil Bag	3,145 (500)
		Unitor Oil Bag	6,290 (1000)
Open Water			157 (25)
		25 m^3	157 (25)
		50 m^3	314 (50)
		120 m^3	752 (120)
		FT 25	155 (25)
		FT 50	314 (50)
		FT 100	620 (100)
Open Water	Towable Open Tank	Pollutank	629 (110)
		POLLUTANK-50	315 (50)
		POLLUTANK-100	630 (100)
		Inflatable Barge BO5	32 (5)
		Inflatable Barge B25	157 (25)
		Inflatable Barge B100	629 (100)
		Inflatable Barge B25	157 (25)
		Inflatable Barge B100	629 (100)
		Inflatable Barge B50	314 (50)
		FR500	315 (50)
		FR1000	629 (100)

TABLE B-9. Storage Data, 1993 and 1997 (*Continued*).

ENVIRONMENT	TYPE	MODEL	TOTAL VOLUME BBLS (M^3)
Open Water	Towable Open Tank (*Continued*)	FR1500	943 (150)
		FR2000	1,258 (200)
Open Water	Collapsible Tank Pillow Tank	Fabritank	238 (37.8)
	Collapsible Tank Pillow Tank	Fabritank	476 (75.7)
Open Water	Collapsible Tank Pillow Tank	Fabritank	1190 (189.2)
	Collapsible Tank Pillow Tank	Fuel/oil	157 (25)
	Collapsible Tank Pillow Tank	Fuel/oil	630 (56.1)
	Collapsible Tank Pillow Tank	Fuel/oil	1570 (250)
	Collapsible Tank Pillow Tank	EFC Pillow Tank	179 (28.4)
	Collapsible Tank Pillow Tank	EFC Pillow Tank	952 (51.4)
	Collapsible Tank Pillow Tank	EFC Pillow Tank	4762 (757.2)
	Collapsible Tank Pillow Tank	SeaContainer #SCPT7500	180 (28.6)
	Collapsible Tank Pillow Tank	SeaContainer #SCPT10000	238 (37.8)
	Collapsible Tank Pillow Tank	SeaContainer #SCPT20000	476 (75.6)
	Towable Pillow Tank	FL-35	220 (35)
		FCB-125 Sea Slug	395 (62.8)
		FCB-250 Sea Slug	798 (126.9)
		TSB-0.6k	600 (95)
		TSB-1.2k	1,200 (191)
		TSB-2.5k	2,500 (398)
		TSB-5k	5,000 (795)
		TSB-10k	10,000 (1,590)
	Towable Collapsible Tank Towable pillow tank	RO-TANK-25	157 (25)

Note: 1997 catalog is represented by the sum of the pink and green data. Pink, data not listed in the fourth edition (1993) but listed in the sixth edition (1997). Green, data listed in the fourth (199) and sixth (1997) editions. Black, data listed in the fourth edition (1993) but not listed in the sixth edition (1997). 1993 data can be obtained by combining the green and black data.
Source: Schulze (1993, 1997).

TABLE B-10. Comparison of 1993 and 1997 Storage Availability Data.

ENVIRONMENT	TYPE	1993 [1]	1997 [2]	NEW [3]	PREEXISTING [4]	NO LONGER LISTED [5]
Protected/Calm Water	Open pool	26	46	18	28	5
	Open, inflatable pool	15	40	25	15	0
	Open pool/collapsible tanks, square	2	N/A	0	0	1
	Open pool/collapsible tanks, rectangular	3	N/A			
	Open pool/square	N/A	N/A			
	Open pool/round	N/A	N/A			
	Towable collapsible tank	7	N/A			
	Towable pillow tank	N/A	10	0	10	0
	Collapsible tank	25	N/A			
	Pillow Tank	N/A	38	13	25	0
	Towable flexible tank	13	25	10	15	0
	Towable open tank	3	11	10	1	0
	Open tank	N/A	2	2	0	0
	Open rigid tank	N/A	1	1	0	0
Open Water	Open pool	3	2	2	0	0
	Open inflatable pool	0	7	6	1	0
	Towable collapsible tank	4	N/A			
	Collapsible tank	13	N/A	0	0	1
	Towable pillow tank	N/A	9	8	1	0
	Towable flexible tank	30	37	8	29	0
	Pillow Tank	N/A	12	0	12	0
	Towable open tank	1	13	12	1	0
	Open tank	N/A	2	2	0	0
Total		**145**	**255**	**117**	**138**	**7**

Note: N/A indicates that this category *name* for model *types* was not listed in the catalog, but does not indicate that the *model* was not listed.

[1] Because of a change in the catalog's organization of storage *types*, 1993 *types* do not correlate with 1997 *types*, although the *models* still correlate. 1993 totals can be obtained by combining the preexisting and no longer listed columns.

[2] 1997 is represented by the sum of the new and preexisting columns.

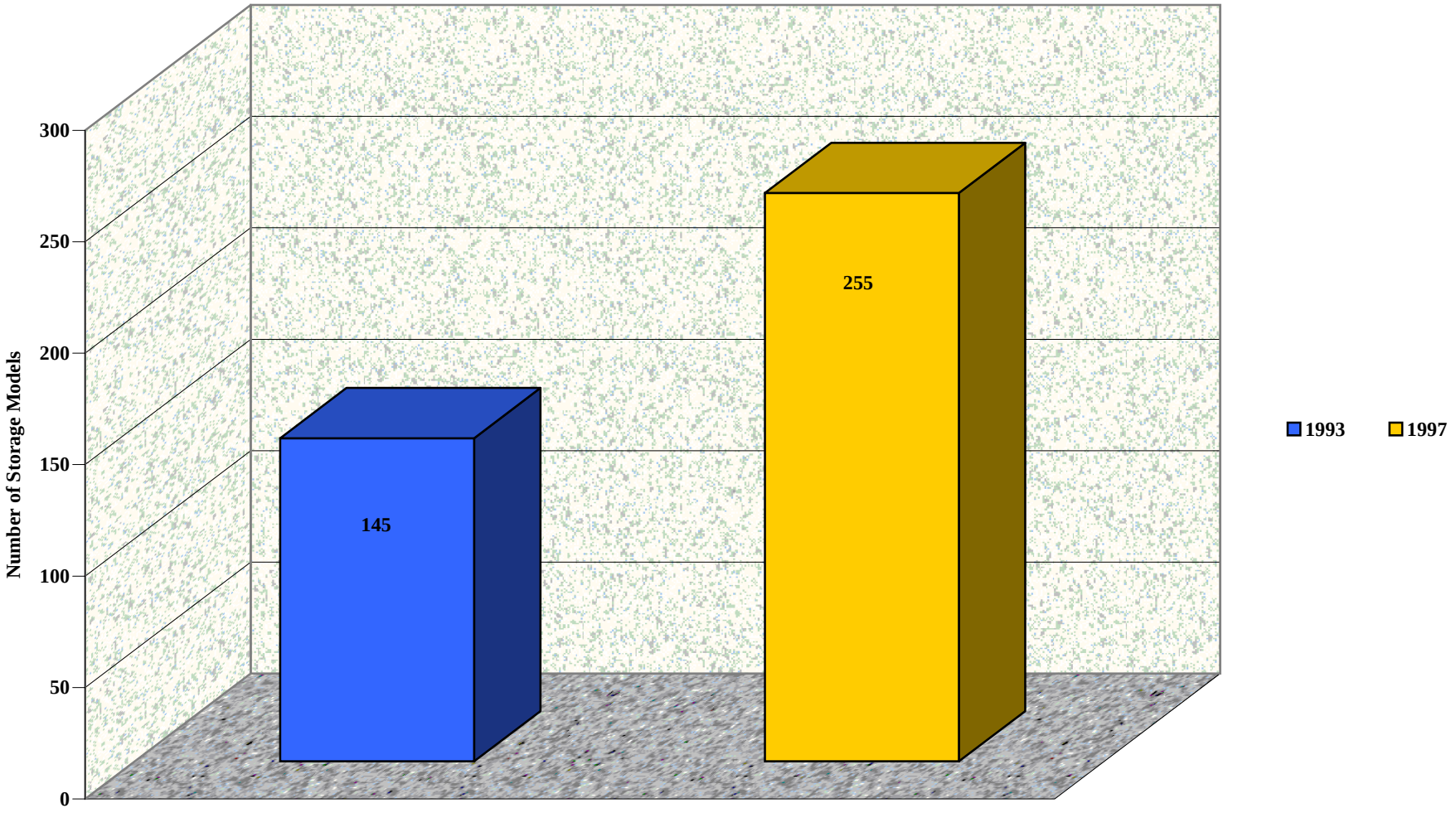
[3] New, not listed in the fourth edition (1993) but listed in the sixth edition (1997).

[4] Preexisting, listed in the fourth (1993) and sixth (1997) editions.

[5] No longer listed, listed in the fourth edition (1993) but not in the sixth edition (1997).

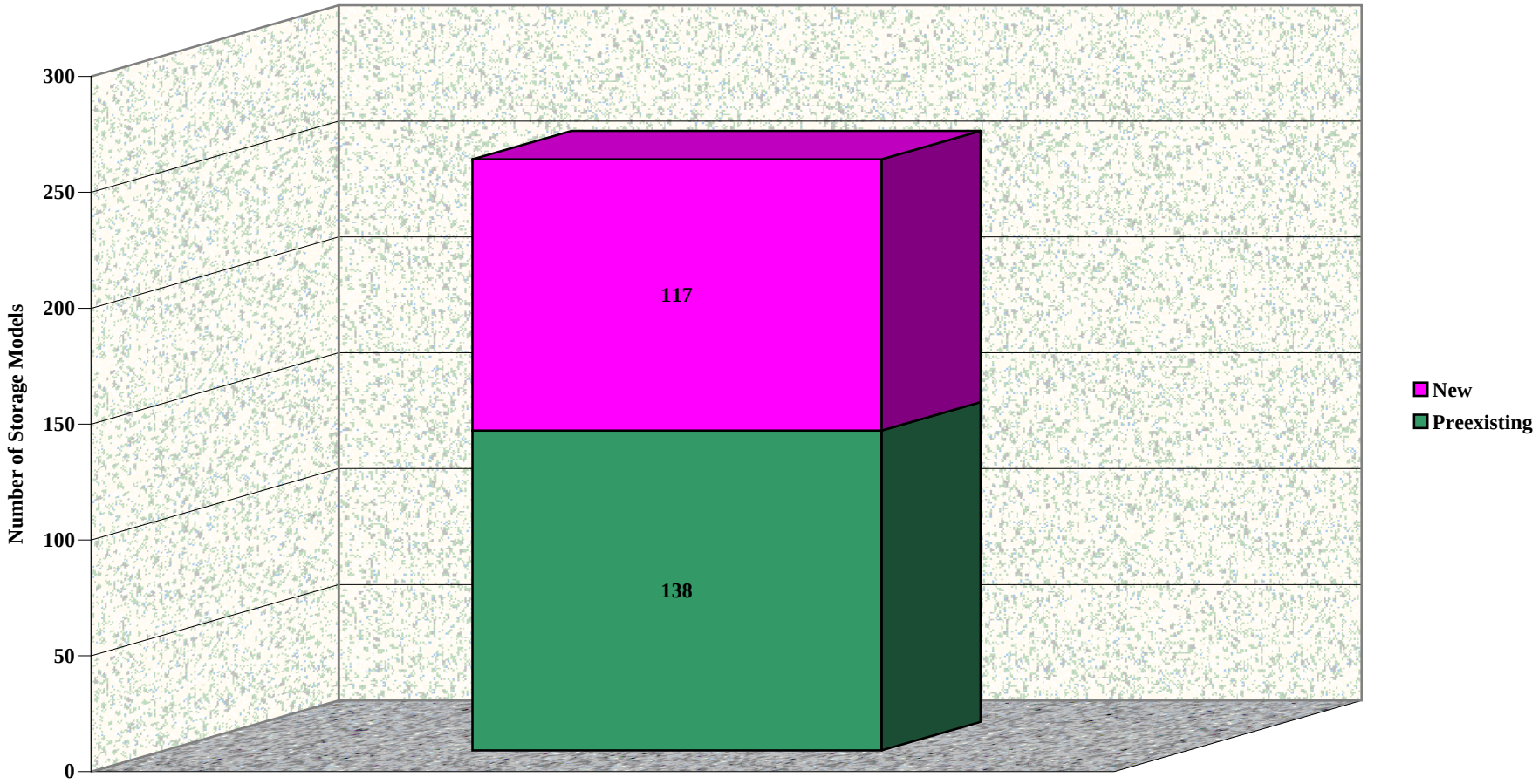
Source: Schulze (1993, 1997).

FIGURE B-9. Comparison of 1993 and 1997 Storage Availability Data[1].



[1] Compiled from totals in Table B-10.

FIGURE B-10. Composite of 1997 Available Storage[1].



[1] Compiled from totals in Table B-10.