

**ENCLOSED GROUND FLARE  
PARTIAL USERS LIST  
JOHN ZINK HAMWORTHY COMBUSTION**

YEAR	CAPACITY (TONS/HR)	COUNTRY	TYPE	USE	CAPACITY (OTHER)
2014	200	Thailand	EGF	R	100 t/h (2 units)
2014	180	Singapore	ZTOF	R	90 t/h (2 units)
2012	4	Germany	KEGF		
2012	500	Australia	KEGF	G	100 t/h (5 units)
2012	110	Argentina	KEGF	O	
2011	130	Russia	KEGF	R	
2011	124.5	Russia	ZTOF	R	
2010	226	Australia	KEGF	G	113 t/h (2 units)
2010	7.5	Germany	KEGF	O	
2007	100	Brasil	KEGF	O	
2006	44	USA	KEGF	G	
2005	80	Japan	KEGF	G	
2004	100	Italy	ZTOF	O	
2004	72	Malaysia	KEGF	O	
1999	78	Argentina	KEGF	O	
1999	12	Saudi Arabia	KEGF	G	
1998	90	Taiwan	KEGF	R / O	
1998	8	Holland	KEGF	G	
1997	200	S. Korea	ZTOF	O	100 t/h (2 units)
1997	67	England	KEGF	R	
1996	48	Germany	KEGF	G	
1996	20	Nigeria	KEGF	P	
1996	20	Australia	KEGF	G	
1996	18	USA	KEGF	PO	
1996	10	England	KEGF	G	
1996	9	Holland	KEGF	G	
1996	4	Portugal	KEGF	R	
1996	2.5	UAE	KEGF	G	
1996	2.5	UAE	KEGF	G	
1996	1	Hankensbuttel, Germany	KEGF	G	
1996	0.5	Brunei Tunku Gas Plant	KEGF	G	
1995	52	England	KEGF	G	
1994	40	England	ZTOF	G	
1994	5.7	Holland	ZTOF	G	
1994	5	USA	ZTOF		
1993	100	USA	ZTOF	O	
1993	70	Japan	ZTOF	R	
1993	40	Norway	KEGF	P	
1993	10	Germany	KEGF	G	
1993	10	England	KEGF	G	
1993	8	USA	ZTOF		
1993	5	Finland	KEGF	O	
1993	4	USA	KEGF	R	
1993	1	Howell, MI	ZTOF	ETO	
1993	1	Salisbury, NC	ZTOF	ETO	
1993		Oostende, Belgium	ZTOF		70 Nm <sup>3</sup> /Hr
1993		UAE	ZTOF	G	32 MMSCFD
1993		Haubourdin, France	ZTOF	LF	480 Nm <sup>3</sup> /Hr
1992	60	Germany	ZTOF		
1992	50	Saudi Arabia	ZTOF	O	
1992	50	Canada	ZTOF	R	
1992	40	England	ZTOF	G	

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1992	30	England	KEGF	G	
1992	29	Russia	KEGF	P	
1992	7	England	KEGF	G	
1992	7	USA	KEGF	P	
1992	3.6	Germany	ZTOF		
1992	3	USA	ZTOF	ETO	
1992	1	Asheville, NC	ZTOF	ETO	
1992		Salindres, France	ZTOF		75 Nm <sup>3</sup> /Hr
1991	70	Germany	ZTOF	O	
1991	70	Gelsenkirchen	ZTOF	O	
1991	30	USA	KEGF	PO	
1991	21	Holland	KEGF	P	
1991	13	Germany	KEGF	G	
1991	2	England	KEGF	P	
1990	45	Taiwan	ZTOF	O	
1990	10	USA	KEGF	PO	
1989	40	Congo	ZTOF	G	
1989	32	England	KEGF	P	
1989	32	England	KEGF	P	
1989	26	England	KEGF	P	
1989	3	USA	ZTOF	ETO	
1989	3	USA	ZTOF	ETO	
1989	1.5	GAAG Holland	ZTOF	G	
1988	88	USA	ZTOF	G	
1988	20	England	KEGF	R	
1988	5	England	KEGF	P	
1986	100	USA	ZTOF	R	
1986	40	Indonesia	ZTOF	G	
1986	14	Indonesia	ZTOF	G	
1986	10	England	KEGF	P	
1986	5	Norway	KEGF	G	
1986	2	Scotland	KEGF	R	
1986		Orange Co., CA	ZTOF		
1986		Toronto, Canada	ZTOF		
1985	30	Offshore Europe (FPSO)	KEGF	P	
1985	27	Offshore Europe (FPSO)	ZTOF	G	
1985		Hawaii, USA	ZTOF	T	
1984	50	Germany	ZTOF	O	
1984	10	England	KEGF	G	
1984		Iesselmonde-Holland	ZTOF	G	20.000 Nm <sup>3</sup> /h
1983	2	USA	ZTOF	ETO	
1983	1.5	USA	ZTOF	LF	
1983	0.5	San Bernadino, CA	ZTOF	T	
1983		Victoria, Australia	ZTOF		
1982	48	USA	ZTOF	G	
1982	17	Iraq	ZTOF	R	
1982	8	Germany	ZTOF	G	
1982	1	Essexville, MI	ZTOF		
1982		Antwerp-Belgium	ZTOF		1.500 Nm <sup>3</sup> /hr
1981	24	Japan	ZTOF	T	
1981	7.2	Holland	ZTOF	G	
1981		La Port, TX	ZTOF		

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1980	80	USA	ZTOF	G	
1980	10	USA	ZTOF		
1980	4	USA	ZTOF	T	
1980	4	USA	ZTOF	T	
1980	1.8	USA	ZTOF		
1980		Vlissingen-Hollarwd	ZTOF	G	2.500 Nm <sup>3</sup> /hr
1979	45	Germany	ZTOF	O	
1979	1.5	USA	ZTOF	T	
1979		Zeebrugge-Belgium	ZTOF		1.000 Nm <sup>3</sup> /hr
1978	30	USA	ZTOF	O	
1978	3	USA	ZTOF		
1978	2.5	Holland	ZTOF		
1978	2	Germany	ZTOF		
1978	0.5	Signal Hill,CA	ZTOF		
1978		Laurinburg,NC	ZTOF	ETO	
1978		New South Wales, Aust.	ZTOF	O	
1977	60	Germany	ZTOF	O	2 @ 30 t/h
1977	30	Germany	ZTOF	O	
1977	30	USA	ZTOF	O	
1977	30	Canada	ZTOF	R	
1977		Clyde, Australia	ZTOF	R	
1977		Paulsboro,NJ	ZTOF	T	
1976	5	Belgium	ZTOF		
1976		Paulsboro,NJ	ZTOF	R	
1975	35	Germany	ZTOF	O	
1975	35	Germany	ZTOF	O	
1975	30	Germany	ZTOF	O	
1975	25	England	ZTOF	R	
1975	13	Germany	ZTOF	O	
1975	8	USA	ZTOF	SYN	
1975	2.5	Geel,	ZTOF	R	
1975		Springhill,Lk	ZTOF		
1975		Mobile,AL	ZTOF		
1975		Ooita, Japan	ZTOF	O	
1975		Ferndale,WA	ZTOF	R	
1975		Anacortes,WA	ZTOF	R	
1975		Honolulu,HI	ZTOF	T	
1974	54	Germany	ZTOF		
1974	35	Germany	ZTOF	R	
1974	32	England	ZTOF	R	
1974	30	Germany	ZTOF	O	
1974	20	France	ZTOF	R	
1974	1	Baltimore,MD	ZTOF	SYN	
1974	0.5	Ottawa,IL	ZTOF	O	
1974		Seal Sands, U.K.	ZTOF	G	
1974		Chita, Japan	ZTOF	R	
1974		Prudhoe Bay,AK	ZTOF	T	
1974		Vancouver, BC, CN	ZTOF	T	
1973	24	Grand Bahamas	ZTOF	R	2 @ 12 t/h
1973	20	France	ZTOF	R	
1973		Blue Island,IL	ZTOF	R	
1973		Linden,NJ	ZTOF	SYN	

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1972	60	Germany	ZTOF	O	2 @ 30 t/h
1972	50	France	ZTOF	O	2 @ 50 t/h
1972	12.5	Italy	ZTOF	R	
1972		Harrison, NJ	ZTOF	SYN	
1971	60	Germany	ZTOF	O	2 @ 30 t/h
1971	60	Germany	ZTOF	O	2 @ 30 t/h
1971	50	France	ZTOF	O	2 @ 25t/h
1971	30	Germany	ZTOF		
1971	25	France	ZTOF	R	
1971	6	France	ZTOF	R	
1971	5	Germany	ZTOF	T	
1970	3	France	ZTOF	R	
1969	6	France	ZTOF	R	
1968	25	Germany	ZTOF	O	
1968	25	England	ZTOF	R	
1968	12.5	Germany	ZTOF	O	
1967	12.5	Germany	ZTOF	O	
1964		Penbroke, Great Britian	ZTOF	R	
	10	France	ZTOF	R	
		Alton, United Kingdom	ZTOF		
		Plymouth, New Zealand	ZTOF		
		Easington, U.K.	ZTOF	G	
		Barrow, U.K.	ZTOF	G	
		Grangemouth, Great Britian	ZTOF	R	

ETO= ETHYLENE OXIDE  
LF= LANDFILL/BIOGAS  
R= REFINERY  
P= OIL PRODUCTION FACILITY

G= GAS PLANT  
S= SYNGAS  
T= TANK/LOADING  
O= OLEFINS  
PO=POLYOLEFINS