ValiChex™
From Tank Level to Ticket:
Verified. Tracked. Trusted.

Challenges

- Lack of metering accuracy confidence
- Inconsistent or unreliable flow meter readings
- Discrepancies between ship and shore leading to commercial disputes or loss claims
- Delayed or incomplete reconciliation of product losses or unauthorized draws
- Inability to verify custody transfer integrity in real time, increasing operational and financial risk
- Lack of audit-ready documentation for regulatory or partner review
- Limited visibility during high-value transfers across truck, rail, or marine operations

880M+ Barrels of Crude Validated with ValiChex™

⊕ About Us

FloSeer is a Houston-based technology company focused on improving clarity and accuracy in fluid transfer operations across the energy industry. Our team brings decades of expertise in flow metering, automation, and project execution, delivering solutions that boost accountability, efficiency, and insight.

We are committed to innovation, operational excellence, and lasting client partnerships, helping solve complex challenges with confidence and precision.

⊕ Get in Touch

Have questions or want to see a demo? We are here to help you find the best solution for your needs.

Contact Information

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Scan for more information

What Is ValiChex™?

ValiChex™ is FloSeer's intelligent software solution for validating bulk liquid transfers with unmatched accuracy. Designed for terminals, refineries, and logistics operators, ValiChex™ monitors every loading event from tank level to ticket.

By analyzing both tank level data and flow meter readings in real time, ValiChex™ ensures accurate transferred volumes at the custody transfer point. It performs a continuous material balance between tank inventory changes and flow data, automatically identifying discrepancies such as leaks, mismeasurements, or unaccounted loss. Calculations are performed in compliance with API or ISO standards, as appropriate.

Features

Automated Ticketing - Generate accurate custody transfer compliant tickets based on tank level changes in real time at the point of oil movement.

Real-time Volume Reconciliation - Compare tank-based and flow meter readings to detect discrepancies.

Recalculation and Error Correction - Corrections with full audit and traceability for any event within the last 14 days.

Alerting and Reporting - Flag discrepancies, generate audits, and export reports instantly.

Vendor Neutral -Seamless connectivity with SCADA, DCS, LIMS, IMS & PLC Systems with industry standard communication protocols.

API and ISO compliant calculations.

A reduction in metering uncertainty of 0.1% provides a saving of 67K USD per 1 Million BBL (where $67 / US BBL)

Benefits

- **Validation** - Ensure accurate real-time validation of tank volumes and transfers even without a metering system by detecting drift, spreadsheet errors, and mismeasurements to maintain. compliance, and optimize throughput

- **Dispute Resolution** - Enables contracts to leverage ATG (Automatic Tank Gauging) as an independent check, reducing friction in custody disputes.

- **Expose and Reduce Uncertainty** - Reduce uncertainty by validating existing measurements, detecting consistent discrepancies, and enhancing confidence.

- **Leak Detection** - Detects leaks, passing valves, and potential theft by identifying discrepancies between flow and tank level data in real time.

- **Backup System** - ValiChex™ can act as the primary system in case of a failure of your Flow Metering System by utilizing tank levels for custody transfer.

Reports

A selection of sample reports highlights ValiChex's[TM] capabilities in detecting loss, verifying flow, and documenting transfer integrity.

Example Tank Material Balance Report

FLOSEER LLC COMPANY REPORT
OPERATIONS
MATERIAL BALANCE REPORT
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Start of Day 18/12/24 05:00:00
End of Day   19/12/24 05:00:00

Issued 19/12/24 10:25:38

Grade	Mat. Bal. GSV BBL	Mat. Bal. GSV *mm
SGC-NTF	-561	-9.6
SGC-STF	3,632	162.4
Tot SGC	3,071	152.8

Grade	Mat. Bal. GSV BBL	Mat. Bal. GSV *mm
LHS	-2,042	-137.6
WTI	109	5.1
AH	39	3.8

Grade	Mat. Bal. GSV BBL	Mat. Bal. GSV *mm
ASL	0	0.0
WTS	34	0.8

Tank	Grade	Start of Day Level mm	Actual TOV BBL	Actual GSV BBL	End of Day Level mm	Actual TOV BBL	Actual GSV BBL	Difference (By Stock) Level mm	Actual TOV BBL	Actual GSV BBL	Receipts GSV BBL	Rcpt Other GSV BBL	Discharges GSV BBL	Water Drain GSV BBL	Dish. Other GSV BBL	Misc. Correction GSV BBL #1	Diff (Ticket) Actual GSV BBL	Material Balance GSV BBL	Material Balance GSV *mm
NTF-36	SGC	3,049	45,876	45,769	3,048	45,880	45,790	-1	-16	21	0	0	0	0	0	0	0	-21	-1.3
NTF-37	SGC	14,465	236,471	223,910	2,624	39,396	38,955	-11,841	-187,075	-184,955	0	0	-184,896	0	0	-47	-184,945	10	0.6
NTF-38	SGC	2,284	33,561	33,557	2,282	33,529	33,542	-2	-32	-15	0	0	0	0	0	0	0	15	0.9
NTF-40	SGC	2,084	29,848	29,584	2,062	29,818	29,573	-2	-30	-11	0	0	0	0	0	0	0	11	0.7
NTF-41	SGC	2,528	36,318	36,139	2,524	36,259	36,089	-4	-59	-50	0	0	0	0	0	0	0	50	3.4
NTF-42	SGC	2,140	29,857	29,830	2,141	29,872	29,858	1	15	28	0	0	0	0	0	0	0	-28	-1.9
NTF-43	SGC	2,005	27,137	27,064	2,004	27,122	27,060	-1	-15	-4	0	0	0	0	0	0	0	4	0.3
NTF-52	SGC	2,333	68,197	67,726	2,328	68,040	67,672	-5	-157	-54	0	0	0	0	0	0	0	54	1.7
NTF-53	SGC	2,883	86,371	85,197	2,877	86,182	85,131	-6	-189	-66	0	0	0	0	0	0	0	66	2.1
NTF-54	SGC	2,451	74,467	74,543	2,449	74,404	74,496	-2	-63	-47	0	0	0	0	0	0	0	47	1.5
NTF-55	SGC	2,401	71,059	70,517	2,400	71,027	70,511	-1	-32	-6	0	0	0	0	0	0	0	6	0.2
NTF-56	SGC	3,843	134,696	113,359	6,821	269,153	265,592	4,978	154,457	152,233	152,279	0	0	0	0	0	152,279	46	1.5
NTF-57	SGC	2,544	74,162	74,083	2,543	74,131	74,089	-1	-31	6	0	0	0	0	0	0	0	-6	-0.2
NTF-58	SGC	2,191	66,246	62,921	2,188	66,153	62,890	-3	-93	-31	0	0	0	0	0	0	0	31	1.0
NTF-59	SGC	2,308	66,713	66,348	2,303	66,558	66,279	-5	-155	-69	0	0	0	0	0	0	0	69	2.2
NTF-70	SGC	1,976	73,723	72,383	1,971	73,516	72,297	-5	-207	-86	0	0	0	-119	0	0	-119	-33	-0.8
NTF-71	SGC	14,902	610,497	601,840	5,835	233,722	230,259	-9,067	-376,775	-371,581	0	0	-370,996	-303	0	-3	-371,302	279	6.8
NTF-72	SGC	12,996	530,674	523,350	2,056	76,439	75,347	-10,940	-454,235	-448,003	0	0	-448,089	0	0	14	-448,075	-72	-1.8
NTF-73	SGC	1,950	72,571	71,250	1,953	72,696	71,509	3	125	259	0	0	0	-201	0	0	-201	-460	-11.2
NTF-74	SGC	6,300	253,271	249,386	15,039	616,300	607,353	8,739	363,029	357,967	357,761	0	0	0	0	0	357,761	-206	-5.0
NTF-75	SGC	16,008	656,274	646,918	2,013	74,943	73,622	-13,995	-581,331	-573,296	0	0	-573,336	0	0	-68	-573,404	-108	-2.6
NTF-77	SGC	13,894	567,913	560,133	1,949	71,909	70,950	-11,945	-496,004	-489,183	0	0	-489,196	0	0	-38	-489,234	-51	-1.2
NTF-78	SGC	7,730	312,276	307,730	11,161	454,787	448,451	3,431	142,511	140,721	140,952	0	0	-546	0	0	140,406	-315	-7.7
NTF-79	SGC	2,035	75,219	74,211	13,906	568,281	558,960	11,871	493,062	485,769	485,757	0	0	0	0	0	485,757	-12	-0.3
NTF-80	SGC	16,532	676,922	667,516	9,442	382,189	376,868	-7,090	-294,733	-290,648	0	0	-289,601	-760	0	-17	-290,378	270	6.6
NTF-81	SGC	2,661	100,593	99,253	4,775	188,326	185,735	2,114	87,733	86,482	115,334	0	-28,676	-312	0	0	86,346	-136	-3.3
NTF-82	SGC	11,384	464,063	457,214	4,316	170,474	167,894	-7,068	-293,589	-289,320	0	0	-288,063	-1,265	0	-43	-289,391	-71	-1.7
STF-10	SGC	10,274	98,174	97,069	2,509	22,995	22,777	-7,765	-75,179	-74,292	0	0	-74,317	0	0	0	-74,317	-25	-2.6

Example Daily Summary Report

FLOSEER LLC COMPANY REPORT
OPERATIONS
DAILY METER MATERIAL BALANCE REPORT
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Start of Day 12/14/24 05:00:00
End of Day   12/15/24 05:00:00

Issued 12/19/24 10:29:47

Berth	BOL	Mtr 24H GSV BBL	ATG 24H GSV BBL	24H Diff GSV BBL	24H Diff %	Mtr OBQ GSV BBL	ATG OBQ GSV BBL	OBQ Diff GSV BBL	OBQ Diff %
B1 (1)									
B1 (2)									
B2 (1)									
B2 (2)									
B3 (1)	129788	331,216	331,302	86	0.03	2,015,283	2,014,625	-658	-0.03
B3 (2)									
B4 (1)	129799	1,150,392	1,149,529	-863	-0.08	2,164,197	2,163,510	-687	-0.03
B4 (2)									
B5 (1)									
B5 (2)									

Differences expressed as ATG-MTR and % Difference as (ATG-MTR)/MTR respectively. As such a negative indicates the Meter indicated more.

Refinery	Mtr Alloc	Mtr 24H GSV BBL	ATG 24H GSV BBL	24H Diff GSV BBL	24H Diff %	Mtr	UnAlloc GSV BBL	Mtr	UnAlloc GSV BBL
AFN	GL3	317,828	317,931	103	0.03	GL2		131-Z-165	
AFS	GL5,6	493,875	494,643	768	0.16	GL3		131-Z-166	
ENR-SGC	131-Z-165	0	265,198	265,198	100.00	GL4		131-Z-167	
ENR-WTS	131-Z-166	0	0	0	0.00	GL5		131-Z-168	
ENR-AH	131-Z-167	0	0	0	0.00	GL6			
ENR-WTI	131-Z-168	0	100,192	100,192	100.00	B1		B3	
AFN/AH	GL2	19,145	19,187	42	0.22	B2		B4	

No conflict in meter allocation detected