

# GAS COMPRESSOR OPTIMIZATION

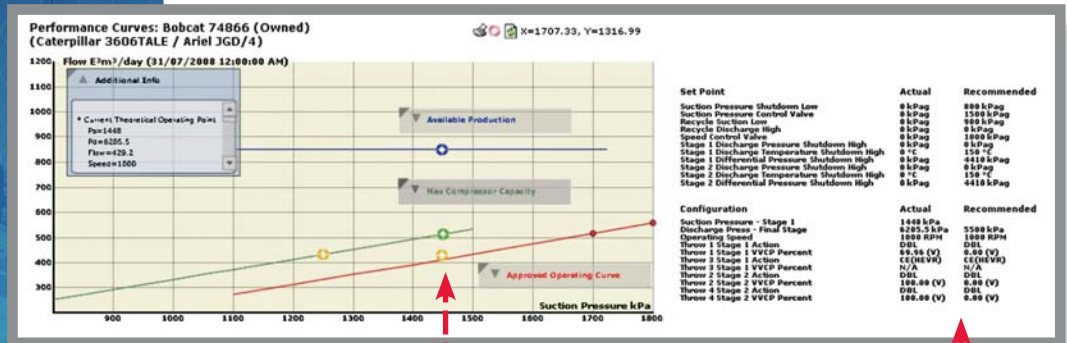
THE SOFTWARE SOLUTION  
FOR MANAGING YOUR  
COMPRESSOR FLEET

www.peprinc.com

Precision software that gives you **24/7 access**  
for **effective management**  
of your **revenue producing hardware**

- ▶ Increase production
- ▶ Reduce operating costs
- ▶ Auto-rank units
- ▶ Monitor unit performance
- ▶ Access unit information
- ▶ Review existing performance
- ▶ Run new performance

## INTERACTIVE CURVE OPTIMIZATION



Automated Performance  
Curve Comparison to identify  
performance improvements

Actual & Recommended  
Set Points for quick reference

## OPTIMIZATION CHECKLIST & DIAGNOSTIC CAPABILITIES

PEPR Production Equipment Performance Reporting (PEPR)

Company: Equipment Admin. Process: Opportunity User: View: Reports Support Log Out

Compressor Performance KPI Summary

Compressor	Date Last Read	Calc. Flow Etm³/day	Suct. % Open	Recy. % Open	Driver RPM	Unused Power kW	% Engine Power	% HE Load	% CE Load	% Rod Load	Max Cyl Temp °C	% Cyl Dev.	% Cyl IS Dev.
Chinook Plant 523247 (Owned)	30-3-08	106	893	499	56	20	0	27	109	18	0	14	10
Chinook Plant 525248 (Owned)	30-3-08	84	1150	500	56	20	0	27	109	18	0	14	10
Donkey Plant 524505 (Owned)	30-3-08	101	946	414	50	3	0	60	118	18	0	16	4
Cottage River Plant 524205 (Owned)	30-3-08	121	1202	410	59	38	0	49	141	16	4	6	4
Chinook Plant 255254 (Owned)	30-3-08	131	1150	492	60	28	0	69	112	12	2	2	2
Chinook Plant 526326 (Owned)	30-3-08	110	950	388	64	0	0	80	121	15	2	2	2
Deville Plant 705657 (Owned)	30-3-08	106	913	296	44	102	0	70	121	17	5	5	5
Deville Plant 705657 (Owned)	30-3-08	96	1175	252	67	9	0	56	152	10	31	31	31
Chinook Plant 255247 (Owned)	30-3-08	109	1140	278	60	31	0	61	119	20	5	5	5
Cottage River Plant 205264 (Owned)	30-3-08	204	960	337	75	75	0	69	140	16	16	16	16
Chinook Plant 526326 (Owned)	30-3-08	120	1150	212	35	40	0	66	117	17	6	6	6
Shelby Plant 525222 (Owned)	30-3-08	144	1189	220	76	36	0	69	136	5	5	5	5
Donkey Plant 523245 (Owned)	30-3-08	113	1027	183	70	42	0	65	111	15	12	12	12
Chinook Plant 526326 (Owned)	30-3-08	143	1269	199	79	31	0	68	136	13	13	13	13
Paradise Plant 525245 (Owned)	29-3-08	158	1250	203	79	31	0	62	131	14	12	12	12
Shelby Plant 526326 (Owned)	30-3-08	110	1126	151	80	60	100	62	135	9	2	2	2

Green Flags identify under-utilized compressors

▶ Intuitive data-driven user interface

▶ Green flagged opportunities

▶ Red flagged warnings

▶ Generates action list

▶ Provides overall fleet management capability

Downtime Tracking with customizable categories

Compressor Detailed - Downtime

Month(s) of: 06/01/2008 - 06/30/2008

Location: Paradise Plant2

Total Hours: 720.00

Equipment: Paradise2 525252 (Owned)

Manufacturer	Compressor Manufacturer	Downtime Summary
Caterpillar	Ariel	Reliability 100.00 %
G3516TALE; 1400 RPM W AFRC	JGD/4	Availability 99.70 %
Natural Gas Fuelled Spark Ignite	Recip. Compressor	Utilization 99.70 %
Rated Power 955.9874		Capacity

	Communication	Compressor	Engine	Gas Sales Problems	Instrumentation	Operating	Piggings	Weather	Total
6/1/2008	0.00	0.00	0.00	0.00	0.00	2.00	0.00	0.00	2.00
Total	0.00	0.00	0.00	0.00	0.00	2.00	0.00	0.00	2.00

THE ORIGIN OF



Production Equipment Performance Reporting

From a Producer's question... Would it be possible? PEPR INC. created a 24/7 accessible software solution that inventories entire reciprocating & screw gas compressor fleets to enable the inputting of the daily equipment readings that run a set of calculations identifying the units that need attention – PEPR "green flags" under utilized compressors & those nearing the end of their current configuration life or location where a booster is needed – PEPR "red flags" compressors entering potentially harmful operating ranges on temperatures, pressures, rod loads or other key variables.

The name given to the project was...PEPR

Production Equipment Performance Reporting

Four years of field-testing and a continuous development program.

Successful field trials drove the development process & created the first automated reporting feature called "The Bad Actor Report" enabling producers to select units for tracking, the frequency of reports & where they are sent. Another first is the fuel gas & economic calculations that determine gains or losses. PEPR even calculates when a compressor will reach the end of its operational life!

To make a long story short...

PEPR offers a full suite of features, benefits & modules designed to manage single units or entire fleets.

The PEPR Team...

Industry IT/IS Leading Developers, Engineering Expertise & Rotating Equipment Specialists offer a combined force that will support your success.

## CORNERSTONE DISPLAY: THE KPI SCREEN

Auto-Rank Function tailored to prioritize the best opportunities

Green Flags signal where to start the optimization process

## BAD ACTORS REPORT

Scans the database to find units where warning flags have been identified

Insightful Reporting provides a detailed page for each compressor & a list of recommended checks

► Ideal for directing operators to the trouble spots in the operation

## REPORT SELECTION AND E-MAIL DISTRIBUTION

- Reports on a pre-scheduled basis; distributed electronically through e-mail
- Delivers information any where, any time without requiring personnel to log in

## PEPR SUPPORT SERVICES

- IT/IS PEPR Support
- Engineering Technical Services
- Compressor Optimization
- Equipment Auditing Service
- Equipment Auditing Training Program
- Gas Compression Training

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Production Equipment Performance Reporting