

Valve market information needs for Suppliers in Western Europe

A presentation By Bob Mcilvaine on
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Valve World Expo Forum 2014

Integrating market information into most decision making

- Most regional decisions are best made by viewing Western Europe as 16 countries and 1 aggregation of small countries to provide 17 meaningful segments
- Market information needs to be analyzed and used as an integral part of sales and operations and not a separate effort to be occasionally undertaken
- Market information needs to be delivered along with other information in a manner to supply the 4A Knowledge Needs
 - Alerts: Unsought information which is important and needed as events occur
 - Answers: A quick and convenient route to obtain quick answers which are accurate
 - Analysis: Review answers and provide the needed action
 - Advancement: Not only periodic but training as part of the working day
- Detailed market information by country, valve type, and industry should be considered in every staffing, travel, product development, and promotion decision



Western European Countries segmented into 17 major purchasing entities

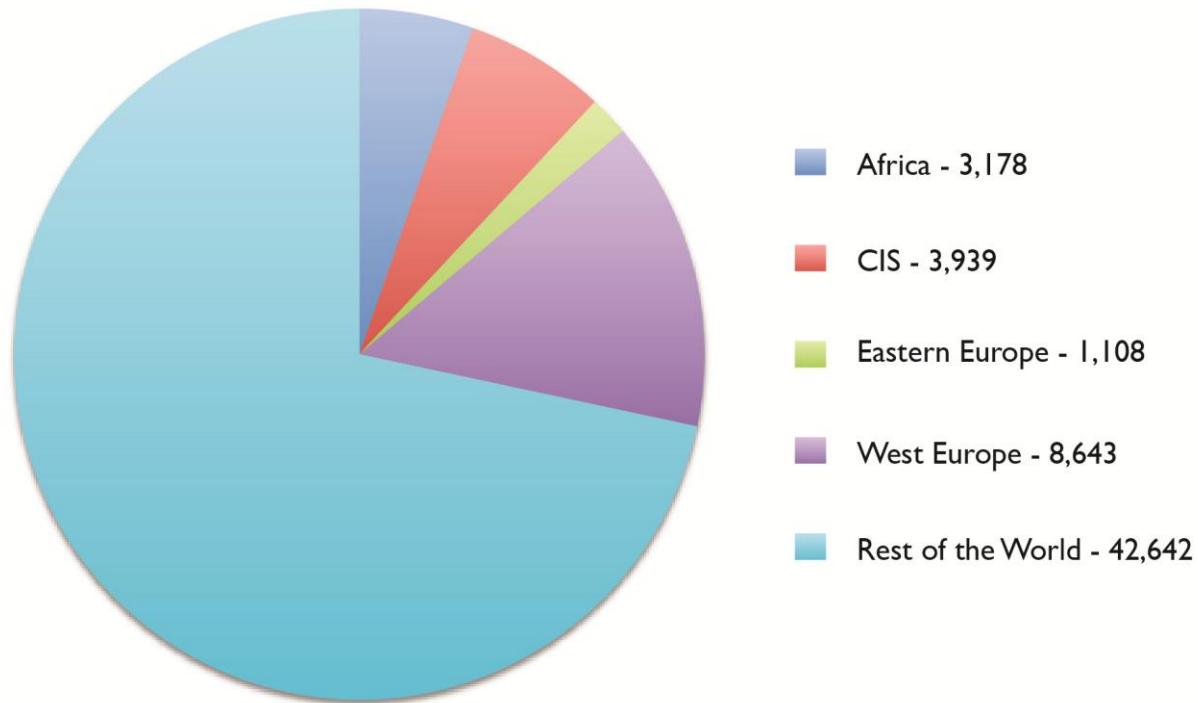


Austria, Belgium, Denmark, Finland, France,
Germany, Greece, Ireland, Italy, Netherlands,
Norway, Portugal, Spain, Sweden, Switzerland,
United Kingdom, Other Western Europe



Western Europe Valve Sales

2015 World Valve Sales (\$ millions)



Segmentation by Industry

- Chemical
- Electronics
- Food
- Iron & Steel
- Metals
- Mining
- Oil & Gas
- Other Electronics
- Other Industries
- Pharmaceutical
- Power
- Pulp & Paper
- Refining
- Wastewater
- Water
- In addition to the industrial sectors evaluated in the Western Europe Valves Markets and Forecasts, there are other markets including domestic, commercial, marine , fire protection
- Mobile including autos, trucks etc is a unique market
- Fluid power and hydraulics involves small valves in a unique market



Western Europe Valve purchases in 2019 \$ millions

Country	2019
Austria	183.45
Belgium	337.20
Denmark	149.32
Finland	219.95
France	1,075.57
Germany	2,043.75
Greece	95.22
Ireland	171.18

Country	2019
Italy	1,025.52
Netherlands	501.50
Norway	572.78
Other Western Europe	29.16
Portugal	115.33
Spain	702.09
Sweden	367.06
Switzerland	157.32
United Kingdom	1,328.24



Other Western Europe

Western Europe is segmented by country with the exception that the small countries have been aggregated into one segment. Even with the aggregation, this is a very small portion of the total market

- Andorra
- Faroe Islands
- Gilbralter
- Greenland
- Guernsey
- Iceland
- Isle of Man
- Jersey
- Lichtenstein
- Luxembourg
- Malta
- Monaco
- San Marino
- Vatican



Austria Ball Valve Forecast \$ millions (partial sample)

Industry	Classification	2012	2013	2014	2015	2016	2017	2018	2019
Chemical	Control	0.16	0.16	0.17	0.17	0.17	0.18	0.18	0.18
Chemical	OnOff	3.09	3.13	3.17	3.22	3.28	3.34	3.41	3.48
Electronics	Control	0.02	0.02	0.02	0.02	0.03	0.03	0.03	0.03
Electronics	OnOff	0.42	0.44	0.46	0.47	0.49	0.51	0.52	0.54
Food	Control	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10
Food	OnOff	1.81	1.83	1.84	1.86	1.88	1.91	1.93	1.97
Iron & Steel	Control	0.15	0.15	0.15	0.15	0.16	0.16	0.16	0.16

Other industries are not shown in this example



KOC Sales Strategy

Knowledge + Organization + Collaboration

- Knowledge of products, projects, processes and prospects is the foundation of the KOC Strategy
- Organization is the ability to deliver this knowledge to all the right people at the right time
- Collaboration is the sharing of this information throughout the organization in a manner that is most beneficial
- The key to success is voluntary participation. The sales representative will participate fully if he can determine how to collaborate
- The bottoms up voluntary strategy allows salesmen in different regions to contact each other and compare notes on a project which involves both.
- The top down strategy with division heads forcing collaboration is tough to implement. It is time consuming and difficult because divisions are inherently power seeking rather than power sharing.



Market information needs by function

Category	Background information	Information for specific decisions
General Management	Long term market forecasts Industry trends Valve industry trends	Growth rates in each of the 17 countries and aggregated sales region for coming decade.
Sales Management	Long term market forecasts Industry trends Valve industry trends	Growth rates by industry and valve type in each country in order to split work among sales staff and to set sales budget
Marketing	Long term market forecasts Industry trends Valve industry trends	Determine the opportunities and match advertising, exhibiting and digital promotion to match those opportunities
Regional sales manager	Competitive information Process information Valve features and comparisons	Sales potential in each country and each industry segment in order to guide sales people. Specific competitor information by valve type and industry
salesman	Competitive information Process information Valve features and comparisons	Quotas or goals segmented by valve type and industry within the territory, Process information, Project information, contacts, supplier successes, comparative value of supplier product to competition



The 4-A Knowledge Needs

Category	Alerts	answers	analysis	advancement
Regulatory developments	G, S, R, L	G,S, R,L	G,S,	G,S,R,L,D
Regional sales forecasts			G M,S,R	
Local Sales forecasts			M, R,S,L	
Technology developments	G,S,R,L, D	G,S,R,L,D	G,S,R,L, D	G,S,R,L,D
Project Informaton	R,L	R,L	S,M,R,L	
Process Knowledge		S,R,	S,R,L,D	S,R,L,D

G= general management , S= Sales management R= regional sales manger L= local salesman E= Engineering D= Research and Development , M = Marketing



Germany Flue Gas Desulfurization, Megawatts

Classification	2014	2015	2016	2017	2018	2019	2020
Existing FGD	91,316.00	94,316.00	94,316.00	95,816.00	97,316.00	98,816.00	100,316.00
FGD Retirements	0.00	0.00	0.00	0.00	0.00	0.00	0.00
New Construction - FGD	950.00	3,000.00	0.00	1,500.00	1,500.00	1,500.00	1,500.00
Retrofits - Known	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Retrofits - Unknown	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total New FGD	950.00	3,000.00	0.00	1,500.00	1,500.00	1,500.00	1,500.00



Western Europe pharmaceutical new valve sales vs replacement and repair in a year where Austria has little pharmaceutical activity.

Country	Greenfield New Valve Revenue %	Valve Replacement %	Repair Parts %
Austria	6.05	72.27	21.68
Belgium	35.73	49.44	14.83

Other countries are not included in this example. Those countries where new build activity is strong will show a higher percentage of new valve revenue. Most industries in Western Europe are not growing significantly so replacement is a bigger market than new builds.



Segment every industry by % potential in each process

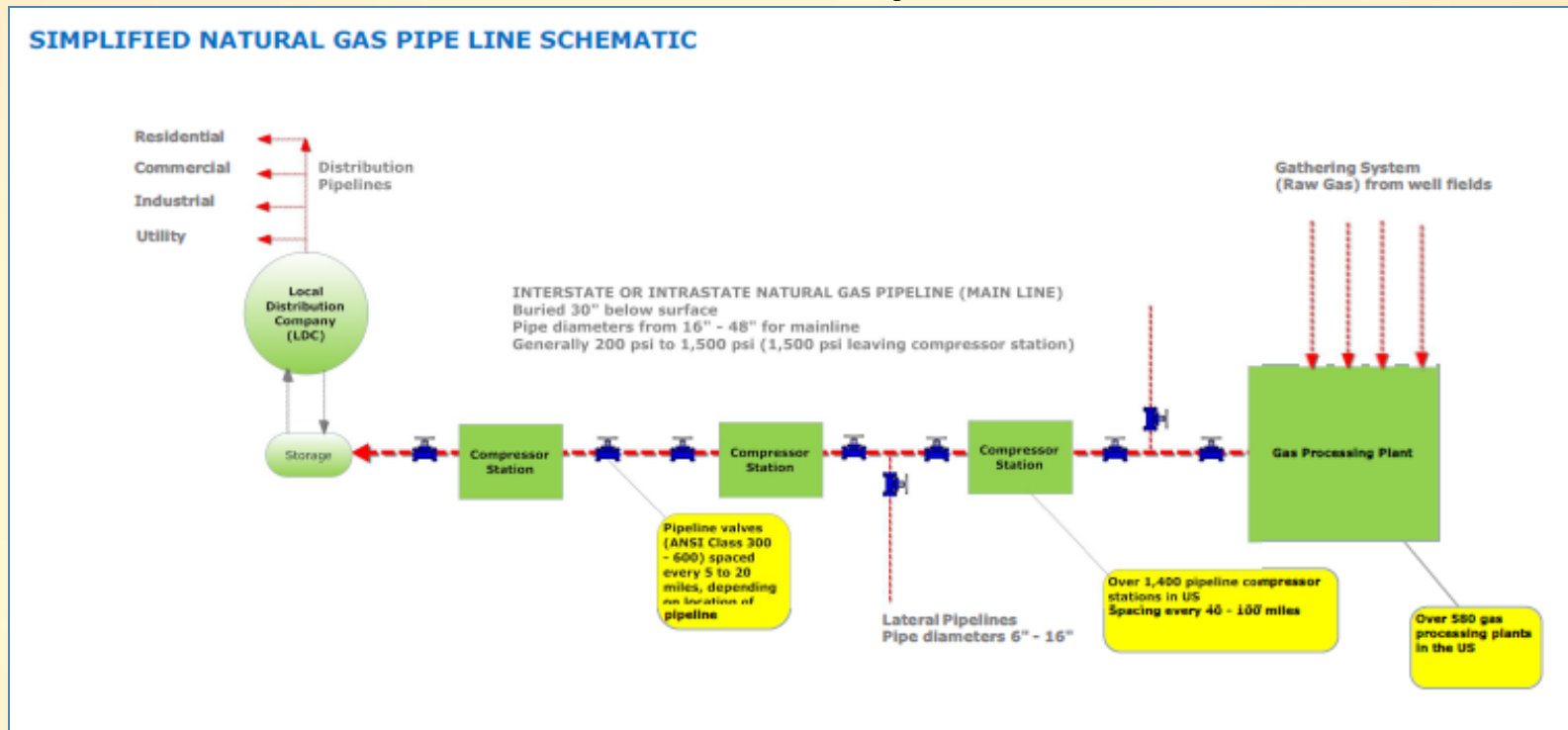
Industry	Water treatment	Production	Cooling	Wastewater
Chemical	10	60	5	25
Electronics	10	75	5	10
Food	10	60	5	25

Other industries are not listed in this example

Some industries such as power have very large cooling percentages. Some such as chemicals and pharmaceuticals have a very high percentage of production. Water treatment is 100% for municipal drinking water plants. Valves for a river intake will be the same whether the water goes to a municipality or a power plant.

Know the processes-Application

Natural Gas Pipeline



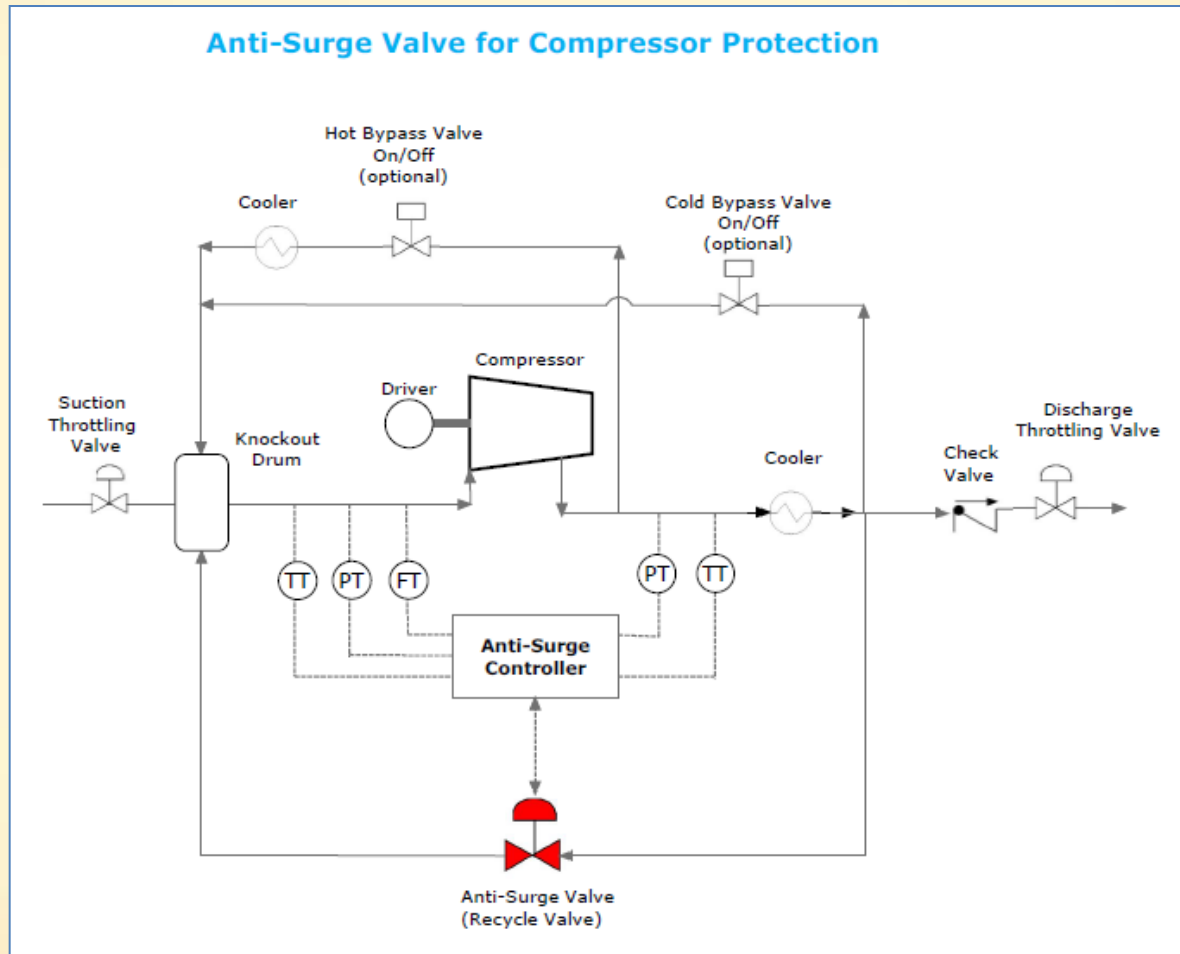
Natural gas main pipeline valves are generally sized 16" to 48", ANSI Class 300 to 600 (1,440 psi working pressure, max), provide leak-tight closure, and conform to API 6D.

Note: Butterfly valves are not often installed in this application because they are inherently not "piggable", and are not within the scope of API 6D.

Understand valve needs for processes. CTG/CTL is big new market with major projects in the Ukraine and OEM activity in Western Europe. Siemens is a major gasifier supplier

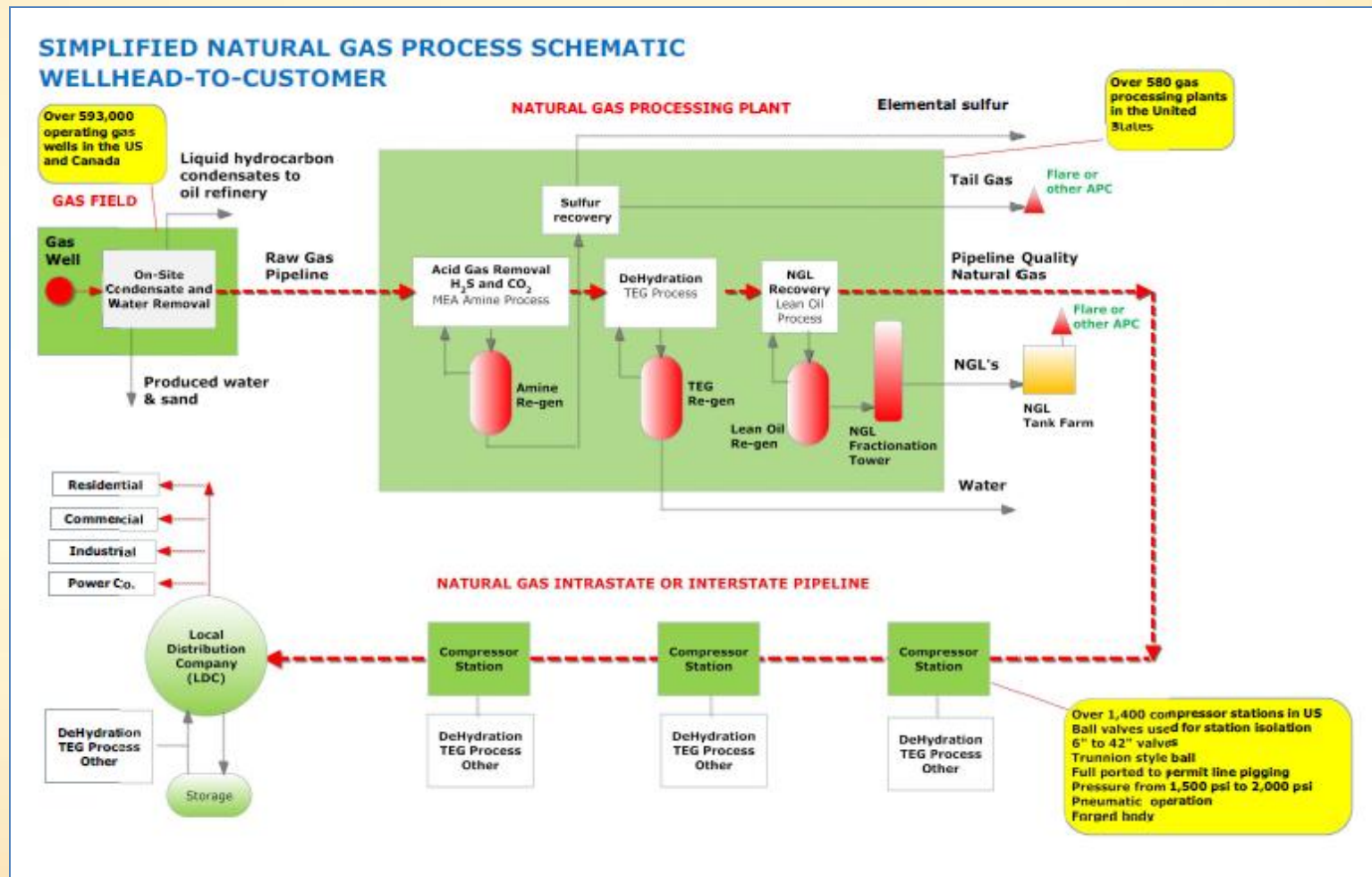


Valves for Compressor stations 2



Application Overview

Natural Gas Process Diagram

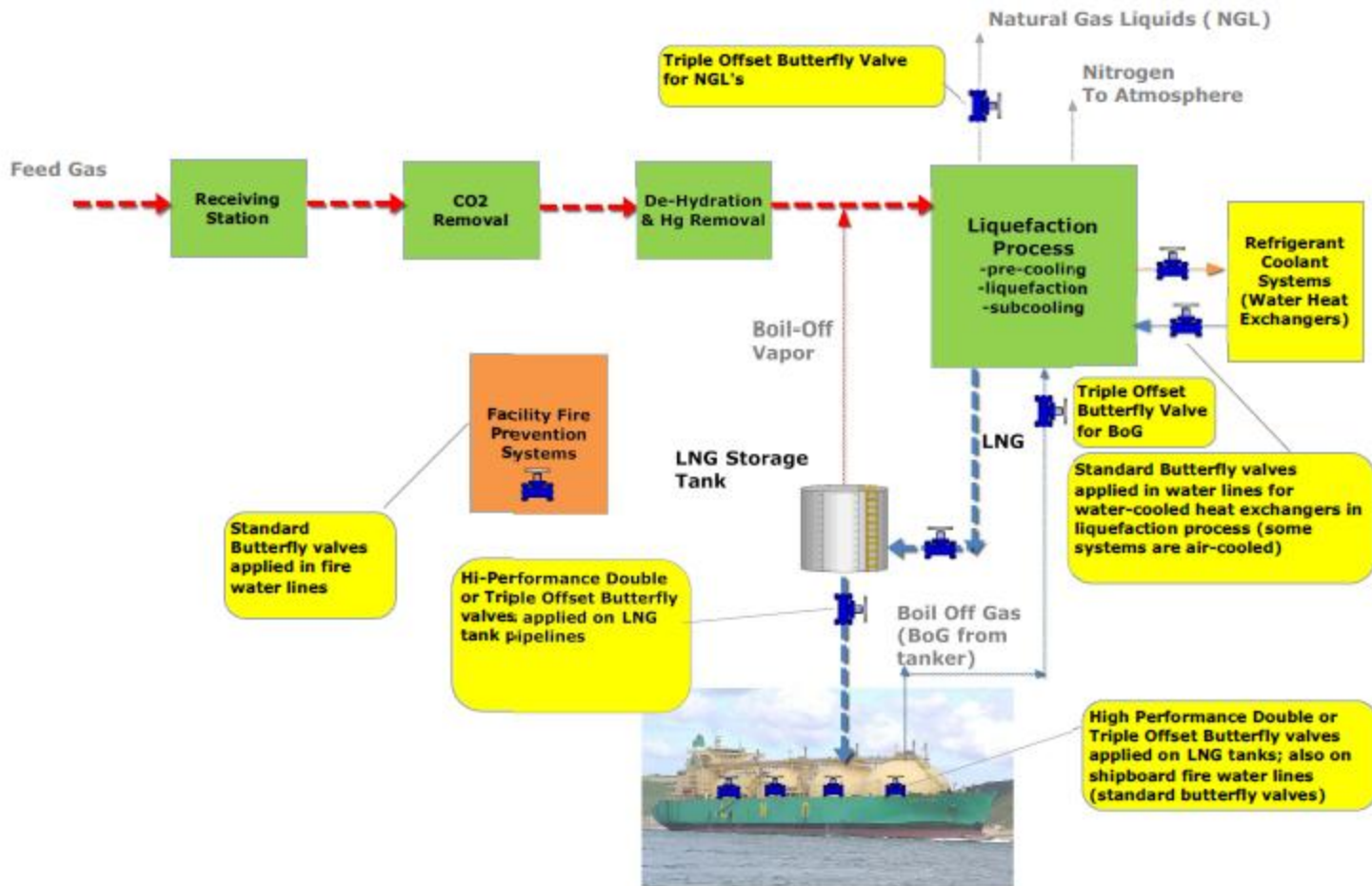


Application

LNG Liquefaction

(pipeline, fire service, cooling)

SIMPLIFIED LNG LIQUEFACTION PROCESS FLOW DIAGRAM

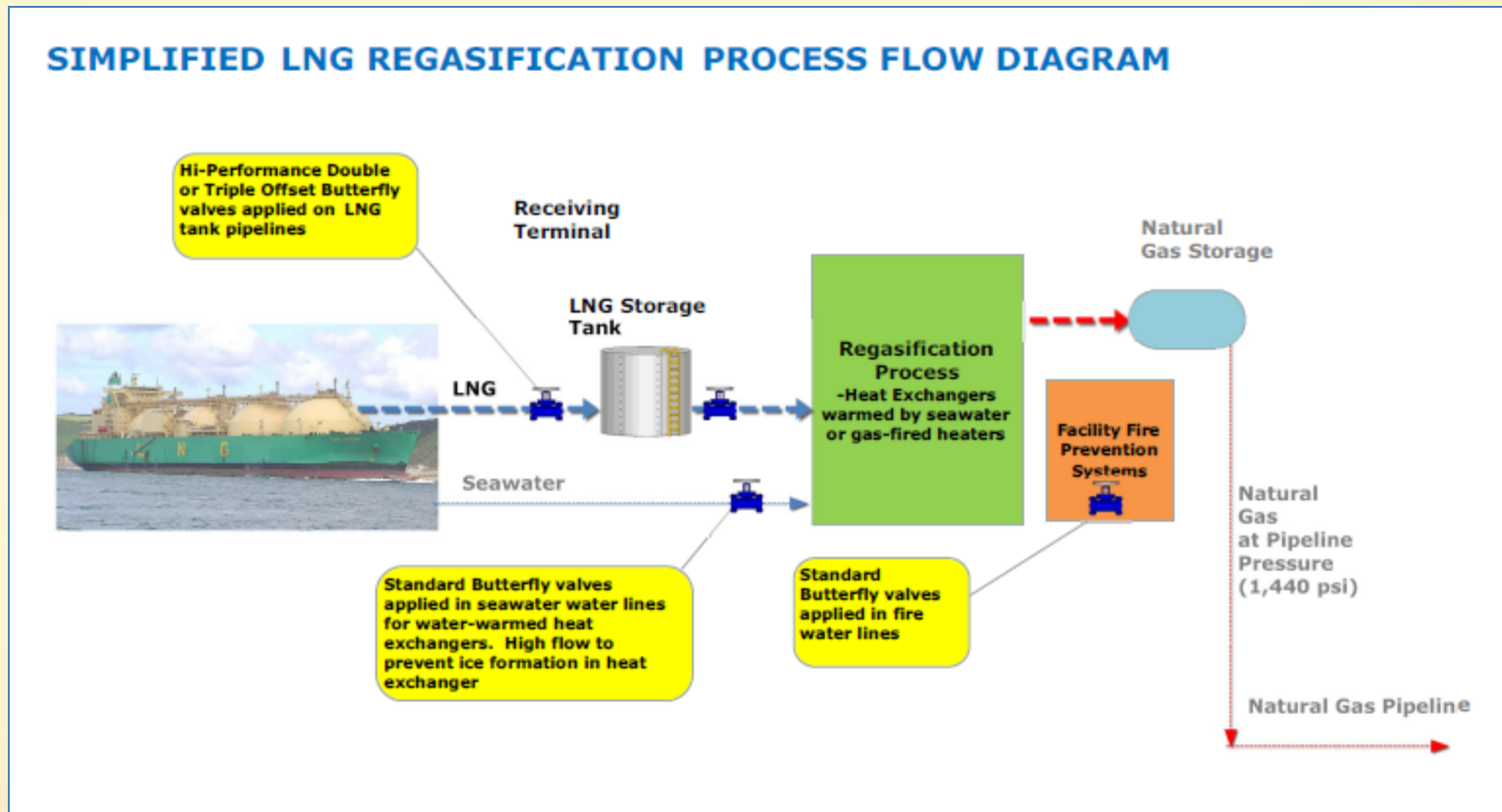


Application

LNG Re-gasification

(pipeline, tank isolation, fire service, LNG warming)

SIMPLIFIED LNG REGASIFICATION PROCESS FLOW DIAGRAM



Should we set up a sales office in Germany to sell our new pharmaceutical on-off globe valve?

Question	Answer
What is the valve growth projection for Germany?	Valve growth over the next 5 years will be \$ 140 million from present \$1.9 billion
The biggest potential for the new valve is pharmaceutical, how big is this market?	Will grow by \$ 4 million to \$ 61 million/yr by 2019
The product is a globe valve , so how big is this segment	German pharmaceutical globe market will grow by \$ 1 million/yr to \$ 15 million in 2019
It will primarily be used for on-off and not control , so how big is this segment	On-Off market will grow from to \$ 13 million by 2019
Then new valve is used mostly in processing and not water, so how big is this segment?	Processing segment is 60% for a 2019 market of \$ 7.8 million
What will be the sales for new plants?	Only 30% or \$ 2.3 billion
The new product should capture 15% share	Target is \$ 345.000/yr by 2019
Should capture 5% of the replacement market which is 70%	Target is 70% of 7.8 million x 5%=\$ \$ 273,000 For total annual sales of \$ 618,000



Should we exhibit at The Industrial Valve Summit in Bergamo Italy May 27, 28, 2015

But there is interest from the entire oil and gas industry , so how big is the oil and gas market in Western Europe	\$ 671 million
There could also be Middle East visitors. How big is the Middle East Oil and Gas Market?	\$ 2.8 billion
If we do exhibit should we highlight our refining valves? How big is this market in Italy?	\$ 135 million
Compare this to other 2015 exhibitions such as Achema June 9-15, Frankfurt. This reaches the chemical industry. What will be 2015 chemical valve sales in all of Europe?	\$ 1.9 billion
The Valve Summit reaches chemical as well as other industries and is focused on valves, so it will appeal to potential attendees with the geographical and product interest	
There will be key valve decision makers at the Summit. So the ultimate decision should be made not on the number of attendees but the those who are important.	
The schedule should include a mix of user oriented and product oriented conferences. Valve Summit should be viewed in the context of both the market size covered by a conference and the opportunity to reach that market	



Gas turbine plants in Germany- In operation

Replacement valve opportunities in both peaking and combined cycle plants.

- Fuel delivery and storage
- Air intake
- Combustion
- Generation
- HRSG
- Cooling tower or ACC
- Water treatment
- Wastewater treatment

- [Germany - Atel Holding](#) [Germany - DREWAG – Stadtwerke Dresden GmbH](#) [Germany - DREWAG Stadtwerke Dresden](#) [Germany - E.ON Kraftwerke GmbH](#) [Germany - E.ON Thuringer Energie](#) [Germany - EnBW Rhinehafen](#) [Germany - Gemeinschaftskraftwerke Irsching GmbH](#) [Germany - GEW RheinEnergie AG](#) [Germany - Infraser GmbH & Co. Höchst KG](#) [Germany - Knapsack Power GmbH & Co KG](#) [Germany - Kraftwerk Mainz-Wiesbaden AG](#) [Germany - Kraftwerke Gera GmbH](#) [Germany - Mainova AG](#) [Germany - Mark E Energie](#) [Germany - Mark-E AG](#) [Germany - MVV Energie](#) [Germany - NUON Energie und Service GmbH](#) [Germany - Papierfabrik Palm GmbH & Co KG](#) [Germany - RheinEnergie AG](#) [Germany - RWE AG](#) [Germany - RWE Generation](#) [Germany - RWE Generation SE](#) [Germany - RWE Power](#) [Germany - RWE Rheinbraun](#) [Germany - Siemens/E. ON Kraftwerke GmbH](#) [Germany - Solvay Chemicals](#)



Keep up with valve problems and solutions such as stellite delamination. The rapid cycling of GTCC has generated challenges. This is an example in an intelligence system just on gas turbines

- **Internal Data Search by Product**
- **Product Name:**
- **NV Energy Coping with Stellite Delamination**
- CCJ editors participated in a round table with NV Energy personnel to discuss the first gas-turbine major inspection at its Walter M Higgins Generating Station. Higgins is a 2x1 combined cycle powered by 501FD2 gas turbines from Siemens Energy Inc. The air-cooled plant began commercial operation in 1Q/2004 as Bighorn Generating Station, then owned by Reliant Energy Inc. Higgins has compiled some enviable statistics over the years, most recently 100 percent starting reliability in 2012: 131 starts in as many attempts. The roundtable covered a number of issues including large steam valves. It focused on satellite liberation form high-pressure (HP) and hot reheat (HRH) valves serving in F-class combined cycles. Tight shutoff of parallel-slide gate and non-return globe valves has been compromised in some cases. This is an industry-wide problem and something NV Energy is dealing with at Higgins and other plants. The company's experience was factored into the industry roundup published earlier.
- **Revision Date:** 3/1/2014
- **Tags:** Siemens, NV Energy, Gate Valve, Ball Valve, Gas Turbine, Stellite, Delamination



New Gas turbine plants in Germany

Location Comment	Project Title	Startup Date
Baden Wurttemberg	<u>Karlsruhe CHP CCGT - Trianel/MiRO Refinery</u>	2020
Berlin	<u>Klingenberg CHP CCGT - Vattenfall</u>	2016
North Rhine Westphalia	<u>Krefeld Uedingen CHP CCGT - Trianel</u>	2019
North Rhine Westphalia	<u>Lausward CCGT - Stadtwerke Dusseldorf</u>	2018
North Rhine Westphalia	<u>Leverkusen Chempark CCGT - Repower AG</u>	2018
Berlin	<u>Lichterfelde CHP CCGT - Vattenfall</u>	2016
Hesse state	<u>Ludwigsau CCGT - Dong Energy</u>	On hold
North Rhine Westphalia	<u>Niehl 3 CHP CCGT - RheinEnergie</u>	2016
Brandenburg	<u>Premnitz CCGT - Alpiq</u>	On hold
Bavaria	<u>UPM Schongau CHP CCGT - UPM</u>	2015
Brandenburg state	<u>Wustermark CCGT - Advanced Power AG</u>	Cancelled



Norway-oil and gas projects

- Contract:
- [Aker Solutions Signs Marathon Oil Norge Contract for Delivery of Subsea Trees to Alvheim Field - 1/7/2013](#)Contract:
- [Aker Solutions to Deliver Drilling Equipment Package for New Rig in Azerbaijan - 7/25/2013](#)Contract:
- [Aker Solutions Wins Statoil Gullfaks South Contract - 1/4/2013](#)Contract:
- [BP Awards UK Companies over £1Bln in Contracts for Key West of Shetland Project - 10/16/2013](#)Contract:
- [CB&I Gets Topsides Contract for Statoil's Mariner Heavy Oil Field Development - 1/31/2013](#)Contract:
- [DOF Subsea Wins \\$45M Contracts for Asia Pacific Jobs - 9/5/2013](#)Contract:
- [Dolphin Wins Several 3D Seismic Contracts - 12/20/2013](#)Contract:
- [DSME Awarded Contract for Dagny Topsides - 3/12/2013](#)Contract:
- [EMAS AMC Wins \\$165 Mln Offshore Pipelay Contract for Aasen Field - 4/11/2013](#)Contract:



Prospects- power plant in UK

- **Company:** E.ON Technologies (Ratcliffe) Limited
- **Parent Utility:** _ (to view all plants of this Parent Utility)
- **Address:** Ratcliffe-on-Soar
- **City:** Nottinghamshire NG11 0EE
- **Zipcode:**
- **Country:** UNITED KINGDOM
- **Name:** David XXXX Engineer
Source: Gen.Entry 11/2013-5/2014
Email: david.xxxxx@eon-uk.com **Telephone:** 44-2476-1927-24 **Fax:**
- **Areas of Interest:** Flue Gas
Desulfurization Monitoring/Sampling
- **Name:** David xxxxx Technical Consultant
Source: Gen.Entry 5/2014-11/2014
Email: david.xxxxxxx@eon.com **Telephone:** 44 2476 192725/c-44 792
1491164 **Fax:** 44 115 9024007

