



## **Compressed Air Best Practices Magazine interviews Rick Stasyshan, Technical Consultant, of the Compressed Air & Gas Institute**

Compressed air is viewed as industry's fourth utility. Compressed air is frequently the only means of effectively, consistently, efficiently and safely powering certain machinery and processes. It enables users to perform critical work to manufacture, build and process the products we use every day. The world cannot function without compressed air. BPM recently caught up with Rick Stasyshan, the Compressed Air and Gas Institute's recently appointed Technical Consultant, to shed some light on CAGI's activities and industry involvement.

**BPM:** Good morning! Congratulations on assuming this newly created position at CAGI. Could you please describe your role?

**Rick Stasyshan:** The Compressed Air & Gas Institute Board of Directors created this position to assist them in fulfilling their mission by providing technical and marketing leadership to the CAGI Membership. Since my entire career was dedicated and focused on applying compressed air products and my involvement with CAGI in various positions, they asked me to accept this exciting position.

**BPM:** Perhaps you can review for our readers, exactly who CAGI is and what their mission is?

**RWS:** The Compressed Air and Gas Institute (CAGI) is a trade association with a long history of service to the manufacturers and users of compressed air. One of the nation's oldest trade associations – CAGI was formed in 1915. As it approaches its 100<sup>th</sup> anniversary, the members of CAGI are working diligently and aggressively to meet the ever-changing requirements of its served customer base.

As you would expect of any centenarian, CAGI has experienced many changes over its lifetime, but the institute and its members have never lost their focus on serving the industry and the users of compressed air. As a result of this focus, CAGI's efforts have assured that the organization remains the united voice of the compressed air industry, serving as the unbiased authority on technical, educational, promotional, and other matters that affect the compressed air and gas markets. Basically, with the combined expertise of our members, we are simplifying Compressed Air Decisions for our audience.

**BPM:** How does CAGI attack and fulfill that mission?

**RWS:** Let me start with a brief overview of CAGI and how its current activities provide the foundation for understanding the institute's exciting forward-looking strategic direction.

CAGI fulfills its mission through the following key objectives

- To promote cooperation among its members for the improved production, proper use and increased distribution of air and gas compressors and related equipment.
- To develop and publish standards and engineering data for air and gas compressors and related equipment.
- To increase the use of compressed air, to promote its safe use, and to improve the quality and efficiency of compressed air systems.
- To collect and distribute information of value to CAGI members and to the general public.
- To engage in cooperative educational and research activities.
- To cooperate with governmental departments and agencies and other bodies in matters affecting the industry.

**BPM:** How is CAGI structured and organized to function and work?

**RWS:** Many of the Compressed Air and Gas Institute's activities are carried out in several sections, which are categorized by product scope. Individual member companies may affiliate with one or more of these sections, depending upon their product lines.

Current active sections are Air Drying and Filtration, Blower, Centrifugal Compressor, Pneumatic Tool, Rotary Positive Compressor, Reciprocating Compressor, and System Assessment.

In addition, CAGI uses standing committees to carry out important work of the Institute. These committees, including the Educational and Promotional/Marketing Committee and the Standards Committee, carry out much of the important work of the Institute by addressing topics of broad concern to the industry.

**BPM:** Now you have whetted our appetites! With our reader's focus on improving the energy efficiency of their compressed air systems, can you elaborate a little more on the System Assessment Section? And could you give us an understanding as how you might interface with the Compressed Air Challenge?

**RWS:** Of course, it seems every interview and discussion in this industry quickly reveals that energy consumption and energy efficiency of compressed air systems will be the motivating driving force of any future strategy and committee work at CAGI. The beauty of CAGI is that its member companies understand and embrace the efficient and safe use of compressed air; therefore, the System Assessment Section is working across all the CAGI sections and standing committees to make sure of our involvement.

The System Assessment Section works to enhance the energy efficiency and performance of compressed air systems. CAGI is a founding sponsor of the Compressed Air Challenge (CAC) and a Department of Energy Allied Partner. The CAC, as your readers are aware, is a public/private initiative fostered by the Department of Energy to serve as a resource to help industry achieve energy savings and to increase the effectiveness of compressed air systems.

The System Assessment Section oversees CAGI's efforts to improve compressed air system effectiveness and efficiency and guides the institute's cooperative activities with DOE and CAC. These activities include development and organization of compressed air system training programs, production and distribution of educational materials, etc. to benefit compressed air system users.

**BPM:** It would seem that Education is key to assist the stakeholders in compressed air, whether it be the end users, distributors, system assessors or the manufacturers, in understanding how to safely and efficiently use their compressed air systems. How does CAGI help your audiences in this area?

**RWS:** The Educational and Promotional/Marketing Committee coordinates with the individual product sections the preparation of literature and videos that provide the industry and public with information about the compressed air and gas industry. These materials help to stimulate the new and existing markets for member companies' products by communicating the capabilities and benefits of air and gas compressors, blowers, dryers and pneumatic tools. Among the responsibilities of the committee is the frequent review and updating of the Institute library of technical literature, including the industry's reference manual, the *Compressed Air and Gas Handbook*. This committee keeps the website up to date ([www.cagi.org](http://www.cagi.org)) and coordinates the update to CAGI's eLearning modules – the CAGI SmartSite.

**BPM:** Can you elaborate a little more on the CAGI SmartSite?

**RWS:** Of course, the CAGI SmartSite was a collaborative effort of our member companies that contributed to provide an on-line compressed air training tool. The SmartSite is targeted to multiple audiences that includes but is not limited to compressed air users, distributor support teams and the member company employees. The SmartSite is an introduction to the compressed air markets, applications and understanding how the basic elements of a compressed air system work together. It is a great starting tool to understand compressed air, industry's 4th utility.

The Introduction to Compressed Air Systems offers 8 modules that provide information on the various aspects of compressed air systems:

- Compressed Air Basics
- Types of Compressors
- Capacity Controls
- Distribution Systems
- Controlling Wastes
- Air Treatment

- Compressor Installation & Air System Maintenance
- Integrally Geared Centrifugal Compressors

**BPM:** What benefits does this training provide?

**RWS:** The benefits are numerous. First and foremost, it provides a foundation for users to better understand how to maximize their air system efficiency. They will quickly learn about the dos and don'ts of compressed air systems. Highlighted is the importance of maintenance tips to maximize the economic returns and reliability of the system. I should also highlight that it also allows the participant to review and progress through the various modules at a pace that accommodates today's busy individual schedules. The on-line training is available 24/7 and participants can choose to attend sessions at home or at the office and at your own pace. Finally registration allows for a full year access to use as a refresher or resource.

**BPM:** As BPM visits our reader's facilities; frequently we hear references to the various standards and regulatory organizations impacting the manufacture and use of compressed air systems. How is CAGI involved and influencing these activities?

**RWS:** Standards assure users of receiving equipment and components that are safe, efficient, and uniform throughout the world. The Standards Committee's objective is to coordinate the development of standards in each section and to participate in the review and publishing process. This process ensures that as products in CAGI's purview enter the market they are tested and perform to established uniform minimum levels for user satisfaction and protection. CAGI maintains close liaison with other bodies concerned with standards, including ISO, PNEUROP in Europe and ANSI, ASME and other industry groups in the United States.

**BPM:** BPM magazine has learned that CAGI has been applauded for your work in developing CAGI Performance Data Sheets and then embarked on a third party verification of these documents. Can you provide our readers with some more details?

**RWS:** This recognition excites us at CAGI, because it shows how the Product Sections, their engineering committees, Standards Committee and the System Assessment worked together to provide a total program to assist our user base and demonstrates fulfillment of our mission.

As a result of our market activities, including the Compressed Air Challenge involvement, CAGI's Air Drying and Filtration Section and the Rotary Positive Compressor Section focused on providing a fair and equitable comparison of the specific power package performance of these products – the ability to quickly compare “an apple-to-apple”.

For displacement type compressors, including rotary screw compressors, ISO 1217 is the recognized performance standard, but it is too complex for performance testing in volume production. CAGI and PNEUROP developed Simplified Test Codes, which have been incorporated as appendices to ISO 1217. CAGI members agreed that published performance of their products would be based upon the Simplified Test Codes and data

sheets were developed to provide a standardized method of presenting the performance data. The compressor data sheets allow a common basis for comparison of some relevant items.

The members then took an additional and unprecedented major strategic step forward and initiated a Third Party Verification Program to verify product performance.

**BPM:** Third Party verification? This seems like a bold step, how exactly does this program work and what if a manufacturer is not a member of CAGI?

**RWS:** Great points. Let me start by explaining the program.

Several times a year, the program administrator will randomly select and test samples of equipment to verify that they meet the manufacturers' published performance ratings.

The program verifies the information that participating manufacturers publish on the standard CAGI Data Sheets, which are also published on the participants' websites and in their product literature. The data sheets define operational and performance information used during the specification and application decision-making process.

Participation is voluntary and is open to all manufacturers, whether they are a CAGI member or not. The current program covers rotary compressors from 5-200 HP, and stand-alone refrigerated compressed air dryers from 200-1000 SCFM.

Participating manufacturers and the results of the verification tests are posted on the CAGI website. Participating manufacturers that pass the verification program test procedures are allowed to utilize the CAGI Program Verification label on the models' specification sheets and product literature. This is the Participant's public representation that their stated airflow capacities and efficiencies have been verified by an independent laboratory.

CAGI members are providing users with a neutral means of comparison to select the most efficient equipment to meet their production needs.

**BPM:** Thanks for this insight and overview. I am sure that we can expect future inputs from CAGI as the Institute continues its strategic activities forward. For more detailed information about CAGI, its members, compressed air applications or answers to any of your compressed air questions, please contact the Compressed Air and Gas Institute. CAGI educational resources include e-learning coursework on the *SmartSite*, selection guides, videos and the *Compressed Air & Gas Handbook*. For more information, contact the Compressed Air & Gas Institute, tel: 216-241-7333, email: [cagi@cagi.org](mailto:cagi@cagi.org), [www.cagi.org](http://www.cagi.org)