

THE GLOBAL JOURNAL OF ENERGY EQUIPMENT

TURBOMACHINERY INTERNATIONAL

TURBOMACHINERYMAG.COM

2022 MEDIA PLANNER



#1 GLOBAL RESOURCE FOR PRINT, DIGITAL AND CONTENT
MARKETING SOLUTIONS IN ENERGY EQUIPMENT

UNMATCHED IN GLOBAL ENERGY TECHNOLOGY

Over 60 years

Turbomachinery International® is published seven times a year and covers the latest industry news in the energy and industrial markets, including engineering breakthroughs in gas and steam turbines, compressors, expanders, pumps, combined cycles, instrumentation and control and all associated equipment and services in land, air and marine-based applications. Available in PRINT and ONLINE.

Turbomachinery Supplement

Turbomachinery International® editorial team regularly covers a variety of topics in supplements such as hydrogen turbomachinery, pumps and LNG, as well as custom supplements as requested.

The **Turbomachinery Handbook** is the most complete PRINT and DIGITAL reference catalog serving the turbomachinery markets. In addition to in-depth forecasts of turbomachinery markets, it provides a comprehensive list of manufacturer machine specifications and a searchable directory of over 800 product and service vendors. Based on a recent survey of 1,000 subscribers, 78 percent find the Turbomachinery Handbook a valuable source of suppliers and equipment specifications. Some 57 percent refer to the Turbomachinery Handbook 8 to 15 times annually when researching new suppliers.

To get listed in the online and printed Turbomachinery Handbook, go to TurboHandbook.com

The **Turbomachinery Newsletter**, published twice weekly, is the definitive aggregated source of breaking news that often scoops the general media. It features technical articles, industry commentary, product announcements and value-added expert opinion in the energy and turbomachinery markets worldwide.

Turbomachinery International®'s **online resources** host a knowledgeable staff of industry experts, as well as a searchable archive of past newsletters, past issues, sponsored links, new projects and engineering breakthroughs.

OUR EDITORIAL TEAM



Drew Robb

Drew Robb has been editor-in-chief of *Turbomachinery International*® for a decade. A 25 year veteran of the energy, oil and gas and engineering sector, he is responsible for the print edition and overall content.

ARobb@mmhgroup.com | 941-807-7659



Tim Lukac

Tim Lukac is assistant editor/online editor of *Turbomachinery International*®. His duties include social media, online content, industry news, new products and editing.

tlukac@mjlifesciences.com

THE GLOBAL RESOURCE OF ENERGY EQUIPMENT

"I read the issue from cover to cover. You are doing a great job with these articles."

—Herb Sirois, Foster Cove Engineering

I really enjoyed the articles on hydrogen in a recent issue. It was interesting to see how the gas turbine and compressor people were dealing with the problems associated with H2.

—John McIlvoy, PE

"Keep up the good work."

—Dr. Dara Childs, Retired Director, Turbomachinery Lab, Texas A&M

"Congratulations on your Myth Buster columns. I keep them in a special folder."

—Ron Natole, Natole Turbine Enterprises (retired gas turbine expert)

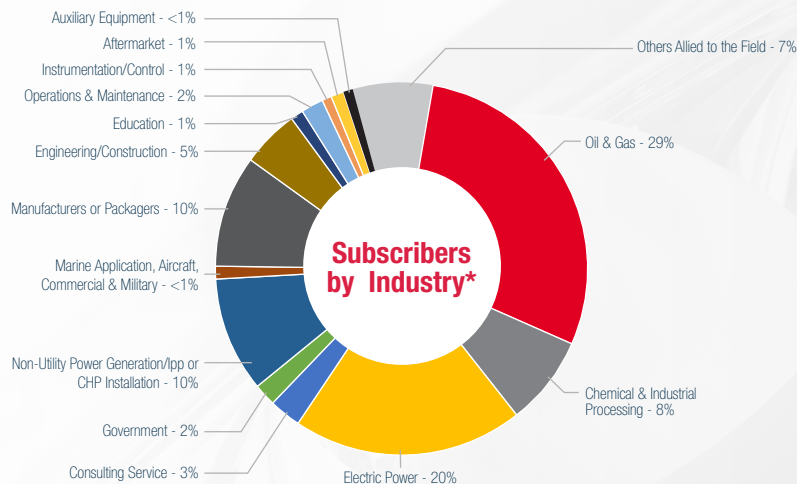
TURBOMACHINERY

INTERNATIONAL
TURBOMACHINERYMAG.COM

Industry's Technology
and Business Beacon for
Readers Worldwide

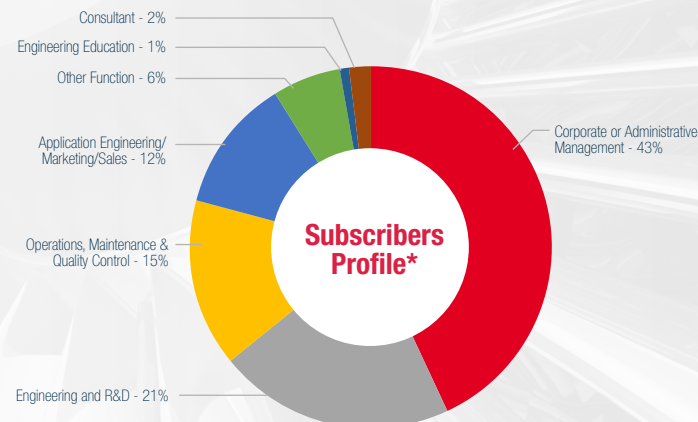
**#1 in
Readership**

Decision-makers rely on us to keep them informed of the latest engineering feats, technology breakthroughs and new products and services.



13,415
Print &
Digital
Subscribers

19,273
Newsletter
Subscribers
Delivered Weekly†



Placing your ad in *Turbomachinery International*® guarantees your message will be seen by industry professionals who read *Turbomachinery International*® regularly in print or online.

*Source: AAM Audit, December 2020, as filed with Alliance for Audited Media, subject to audit
†Publisher's own data

Website*

turbomachinerymag.com

Average Monthly Page Views

42,743

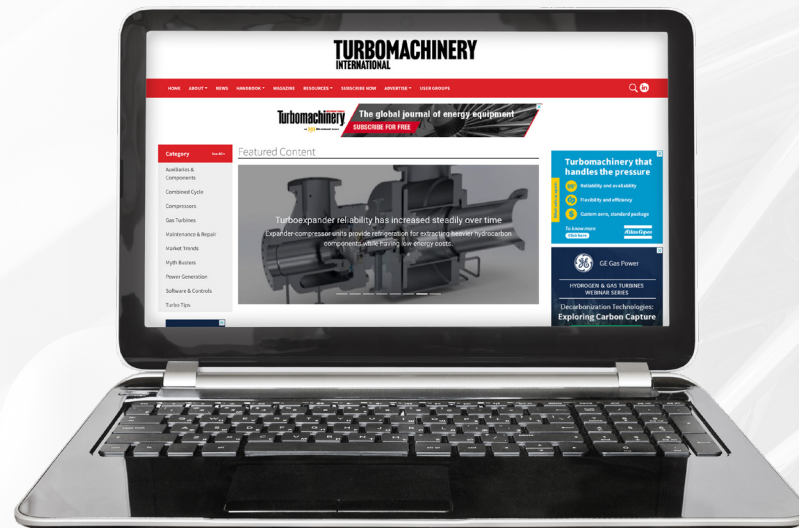
Average Monthly Unique Visitors

23,850

E-newsletters*

Average Distribution

19,273



Available Opportunities

Turbomachinerymag.com is designed to serve the information needs of engineers and technical decision-makers worldwide. It offers excellent opportunities to attract potential customers to your site and an online audience of more than 23,000 readers.

It includes:

- *Turbomachinery International*® magazine and Handbook, searchable editorial archives of past issues, as well as company news, user groups, white papers and industry links.
- Banner Ads that increase your recognition and link potential customers to your site.

Website Advertising & Sponsorships

Partner with the industry's authoritative voice among turbomachinery users and suppliers worldwide. Banner advertising includes standard formats and positions, including leaderboard and skyscraper. We support Shockwave, Flash, Complex animation and user-initiated media and sound. Sponsorships are available for the daily e-newsletter and blog, as well as sponsored microsites.

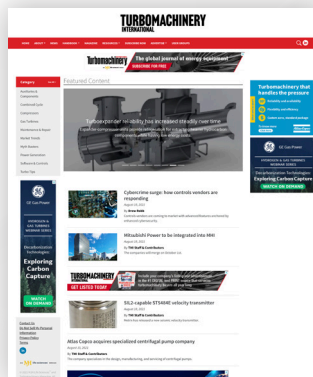


Source: AAM Audit, December 2020, as filed with Alliance for Audited Media, subject to audit

Turbomachinerymag.com

Display your ad in front of decision-makers in the field by placing your display ad on turbomachinerymag.com

- Banner Ads
- Expandable Video Banner Ads
- Rich Media
- Geotargeting
- Native Advertising

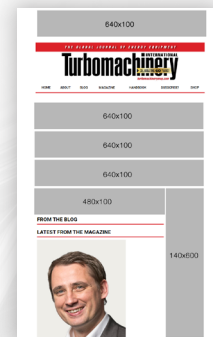


E-newsletters

Newsletters are blasted twice weekly to global professionals who specify, maintain and purchase equipment and services.

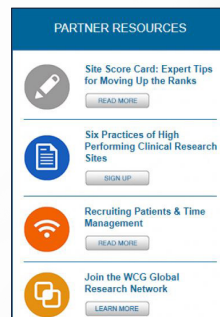
Whitepaper E-newsletters

Participating companies receive instant notification from subscribers who download their whitepaper—registrant's name, company and contact information. Whitepapers will be posted on the *Turbomachinery International*® website for one year following each blast.



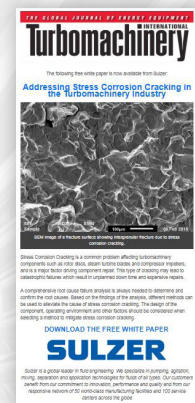
Sponsored Content Block

Exclusive sole-sponsored resource section on *Turbomachinery International*®'s website where your company can disseminate collateral, videos, whitepapers and research, to drive website traffic, generate leads, and more. Link up to four assets plus your company's logo and website link. For gated assets, all registration information will be provided.



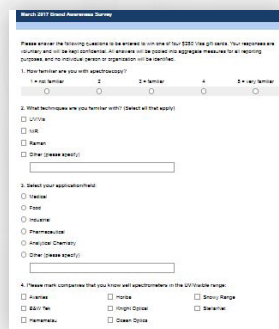
Custom Targeted Email

Emails from our database that contains unduplicated decision-makers from global companies involved in industry science industries served by our leading publications.



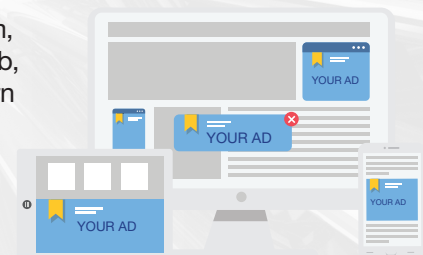
Sponsored Survey Package

Turbomachinery International®'s sponsored web-based surveys can be used to better understand your client's business issues. These survey projects include a written report of findings and can provide individual data on each survey respondent's habits and preferences.



Ad Retargeting

Once a visitor leaves turbomachinerymag.com, your display ad will follow them across the web, driving targeted groups to your website to learn more about your products or services.



As an alternative to tradeshow, conferences and face-to-face events, you can deliver your message through our virtual communication platforms that include dedicated traffic drivers, lead generation and content engagement. Through our experience, expertise and state-of-the-art in-house studios, the transition from in-person to online is seamless and timely.

Virtual Conferences and Symposia

Virtual Conferences offer an at-home alternative to in-person events, bringing critical information directly to the screens of industry professionals without cutting corners on attendee experience. The virtual learning environment features many of the same amenities of a live tradeshow or meeting, including a lobby, auditorium, exhibit hall, networking lounge and resource center.



Virtual Presentation Showcase

Is your company missing out on delivering a presentation at an industry event? Reach the same audience by delivering the presentation virtually through our webcast tool. Our Presentation Showcase program is comprised of a series of short, topic-driven videos that combine our editor's interview with your speaker and outtakes from their presentation. Each package is promoted to your target audience, extending reach, expanding access and prolonging engagement well after the event has ended.



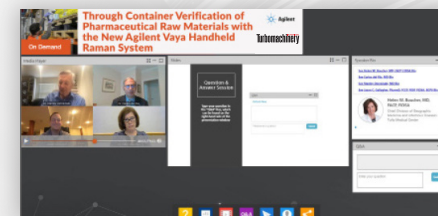
Virtual Thought Leadership Interviews/Roundtable

Using advanced video conference technology, our internal studios team will coordinate a remote interview conducted by our editors and your key opinion leaders that provides insight and digs into the key issues affecting our industry. Each video includes questions of your choice and promotion to our audience.



Virtual Press Conference

Turbomachinery International®'s will give your company the opportunity to deliver the press conferences your company planned for this year's industry events to a targeted audience. Feature topics such as your company's new product launches, M&A activity, restructuring or market trends. Each program includes promotion to our audience.



Video Programs

Extend your ROI at industry events with video content that can strengthen your brand reach postshow with editorialized videos by *Turbomachinery International*® and audience engagement with the *Turbomachinery International*® community.

Presentation Showcase

Our Presentation Showcase program is comprised of a series of short, topic-driven videos that combine our editor's interview with your speaker and outtakes from their presentation. Each package is promoted to your target audience, extending reach, expanding access and prolonging engagement well after the event has ended.

Thought Leadership Interview

Our internal studios team will coordinate an interview conducted by our editors and your key opinion leaders that provides insight and digs into the key issues affecting our industry. Each video includes questions of your choice and promotion to our audience.

Exhibit Booth Interview

Extend your ROI at industry tradeshows with custom video content that can strengthen your brand reach post-show. We'll conduct an interview at your booth and edit it into a three to five minute video with promotions to the *Turbomachinery International*® community.



Live Events

Partner with *Turbomachinery International*® to create your custom live events. Our editorial and events teams work with you to develop and execute best-in-class programs that meet your business and educational goals. What makes *Turbomachinery International*® your partner of choice?

Content Development:

The *Turbomachinery International*®'s team works with your team to produce a program based on your needs.

Key Opinion Leader Recruitment:

We find the speakers that will attract your target attendees at the event and postevent.

Attendee Recruitment:

Using our extensive databases and relationships with our audiences, *Turbomachinery International*® will find and attract the people you want to attend your live event.

Postevent Content:

Our team will create video, audio and written content based on the program. Not only do we create the content, we also provide marketing programs to get the content out to both attendees and nonattendees.

Turnkey Logistics:

Besides the expertise of *Turbomachinery International*®, you also get the meeting planning services of MJH Live Events to create a turnkey solution for your event.



Custom Content Creation

Demonstrate thought leadership

Our dedicated content editor will develop and write thought-provoking, insightful content about your products and services such as, but not limited to:

- Whitepapers
- Webcast summaries
- Conference presentation overviews
- Case studies
- Technical articles
- Roundtable discussions
- Infographics
- Thought leadership interviews
- Digital primers
- Product profiles
- Market research reports
- Company profiles

Sponsored E-books

We will integrate your articles, case studies, whitepapers, videos, website links, webcasts and other digital resources. We then deliver them digitally to 21,044 subscribers.



Lead Nurturing

Topic-driven programs that capture prospects and nurtures them by deploying high-quality content via strategically-timed communications. These programs are designed to deliver sales-ready leads.



Dedicated Dialogue

Turbomachinery International® will conduct an interview with an expert from your company (scientist, corporate manager, etc). This interview will be marketed through a multimedia program that includes a podcast and a two page article in an issue of *Turbomachinery International*®.

Position your company as a thought leader with interactive web technology.

Turbomachinery International® educational webcasts are led by credible moderators and offer exclusive sponsorship to a qualified audience while embracing digital engagement.

Experience — More than 500 educational webcasts produced by our group each year

Credibility — *Turbomachinery International®* has been in the industry for over 60 years

Talent — Respected speakers, producers and moderators from our editorial team

Audience/Reach — Select from qualified industry professionals

Marketing & Promotion — Targeted audience development: print, digital and social media

Analytics — Comprehensive lead capture and data reporting for every event

Turnkey — Full-service management, marketing, training, production and hosting



Enhanced Webcasts

Cross-platform solutions that can convert a stand-alone educational webcast into an integrated content program

Extend the reach of your webcast. We transcribe the webcast and write a comprehensive technical brief that we promote through our online channels. We also provide you with a PDF of the paper.

Standardized Compressor Solutions for Reliable, Cost-Efficient Power Generation

An Executive Summary

Boosting fuel gas to feed gas turbines in power plants can be accomplished by various technologies, which all have their pros and cons. The most common are reciprocating, screw, and centrifugal compressors. The best solution from a technical standpoint depends upon various factors. The economically best solution is determined by the resulting cost. Particularly the standardization of the packaging options offered a significant reduction in the CAPEX of centrifugal compressors.

Overview

Choosing the best compressor for a gas power plant is fundamentally a project cost. These capital initial investments (CAPEX), the operating cost (OPEX), and reliability (upset and repair) cost during down time. These different compressor types are usually selected based on the gas composition, the gas inlet pressure, and the gas inlet temperature. The gas inlet pressure is a critical factor, which is then reduced in volume. The compressor then gas and releases it at a higher pressure. Centrifugal compressors are working on a kinetic principle. The gas is continuously accelerated by impellers. The kinetic energy is then converted into pressure when the gas is decelerated. Whereas positive displacement compressors have a fixed volume flow and pressure ratio for a given driving speed, the flow and the outlet pressure are interrelated at centrifugal compressors.

Considerations when Choosing a Compressor

The results of the various forms of compressor can be broken down into several categories. However, the bottom line is the total cost of ownership. Some aspects of which are listed below. The statements are general guidelines for power plants starting at 500 MW. They are meant to be re-evaluated during each project.

ability is crucial in modern power plants and with OPEX and opportunity costs. **Figure 1** (left) comparing the types of compressors. A fuel gas boosting centrifugal compressors have services and loading service, depending of the gas. Screw compressors for fuel gas usually get loaded.

As between the compressor types becomes (even looking at the opposite of "availability"), a lifetime. Centrifugal compressors have the life cycle. They are down less than 0.2% and as, while other solutions are not operating at all. Further time spent between failure and the time maintenance, repair, and overhaul are much more for reciprocating compressors and their OPEX.

reciprocating increases the pressure of the gas pipeline. To this end, energy is needed, affects the operating costs. The efficiency level depends upon the expected range of the duration with which the compressors will be displacement compressors are usually available speed drives and have a wide range their peak efficiency. Screw compressor can efficiencies at higher inlet pressures. They are 2% or more flow bypass under normal operation. Centrifugal compressors only recycle gas when the required flow falls below a certain percentage of the nominal flow.

When comparing the efficiency of compressor solutions, it is important not only to focus on the peak efficiency, but also to compare the power needed at various load cases and how long the compressors are expected to operate at these load cases.

Controllability and stability. Controllability and stability also are important rules for centrifugal compressors. Without control, these compressors can run into surge, which is an unstable operating mode and will damage the machine when coming continuously under the condition.

Control and only pneumatic centrifugal compressors from starting, but they also optimize the operation of a centrifugal compressor such that minimum energy is needed for operation. The control strategy is influenced by the output of the compressor in the entire plant. For example, one compressor can feed one or two gas turbines, other control strategies are needed when gas turbines are fed by three compressors where one compressor is redundantly in standby.

To optimize the total cost of ownership in all its aspects, various setup and control strategies and operation modes are required.

Reliability. The issues associated with reliability are well-controlled. However, handling them adds an additional design and maintenance burden to downstream piping because care must be taken. Pulsation dampers are available, but add to the expense of the plant and increase start-up and shutdown times. Reciprocating compressors produce a pulsating output by their nature, and require a dampener. Screw compressors also produce pulsations, although to a much lesser degree. Centrifugal compressors are largely pulsation free.

When planning a plant, it is important not only to focus on the compressors, but also on the auxiliary equipment.

Temperature. Compressing gas necessarily increases its heat, which is a useful phenomenon for gas boosters. However, in screw compressors, the lubricating oil receives a large portion of the heat generated by the compression. Additional heating of the gas prior to the turbine may be necessary for this type of compressors. This is not necessarily the case for reciprocating and centrifugal compressors, in which the discharge temperature is a result of the inlet conditions, the pressure ratio and efficiency, and can be easily controlled.

Noise. Noise levels are subject to regulatory requirements. For much of the industry, the acceptable long-term noise exposure is 85 dBA. The noise levels of reciprocating compressors are difficult to mitigate because the piston discharge pulses create high sound levels across a wide range of the acoustic spectrum, which leads to both noise and structural vibrations. Dampening and isolation need special focus because of the broad frequency range and the contribution of structural strain and noise. Many facilities report to placing the compressor in a dedicated building.

Editor Series - Multi-Sponsored Webcasts

Ask you sales representative for details

Podcast series regularly recorded by our editorial team that provides insights on news, new products, applications, and important trends in the industry. Our staff works with you on episodic programming to attract the most relevant listener base and to demonstrate your connection or expertise with the topic.

- Segmented by category
- Highlights important editorial topics
- New topics monthly
- Special coverage of industry events

These editorial podcasts are delivered to professionals via our brand's website and online audio channel.



Your opportunity to share a point of view

Industry Insights is a native marketing program that gives you the platform to introduce thought leadership and insights within the context of our trusted editorial. This is content marketing at its best with articles by your subject experts, integrated alongside valued content in *Turbomachinery International*®.

A native, branded content opportunity

- Articles, press releases, videos, etc. are included within the digital content feed and and/or the print edition of *Turbomachinery International*®
- An expandable offering from one article to a complete content center with your branding
- Featured on the turbomachinerymag.com home page as well as in appropriate topic areas
- An integrated promotional program provides significant exposure to our audience

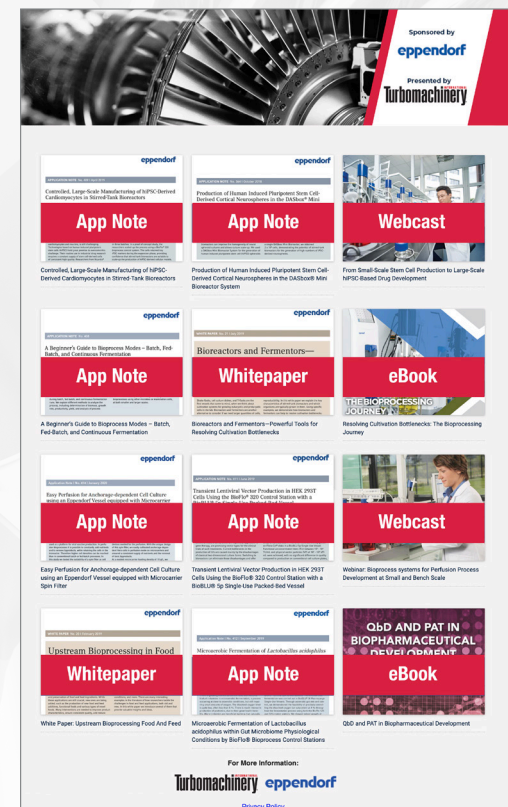


Content Engagement Hub

Showcase a key topic and promote your brand

Package your valuable content marketing assets into a user-friendly digital hub where users can self-educate themselves. The Content Engagement Hub is driven by a multi-touch marketing campaign and single-sign-on access to generate quality leads. The always-on nurturing lets prospects choose the time and place that they engage, leading users to spend more time consuming your content.

- End-to-end project management including setup of a branded environment, creative design of all materials, turnkey promotion, and reporting
- Six to twelve related assets, including white papers, app notes, videos, webcasts, research and web links
- Hosted and promoted for three months
- Your assets are promoted to a relevant audience through a turnkey solution for content syndication and lead nurturing



Need help developing content?

Our expert content marketing team can work with you to develop engaging content that resonates with your target audience.

REACH TURBOMACHINERY BUYERS ALL YEAR LONG

The *Turbomachinery International*® Handbook is the number one digital and print source that provides over 100,000 buyers of turbomachinery technology, products, and services worldwide with a searchable source of suppliers.

What's in the Handbook?

A detailed company directory, complete with:

- Contact information
- Text description of each company
- Categories providing a cross-index of market segments and related equipment and services
- Machinery specifications for all the major OEMs
- Market analyses by experts in the field

Benefits of being listed:

- Your company's contact information and description will be in front of industry decision-makers
- Distributed at EVERY major turbomachinery industry tradeshow, conference, exhibition and group meeting we attend
- 12 months of exposure: the Handbook is used as a reference for industry professionals throughout the year
- Immediate online Handbook exposure for the next two years and the ability to update your listing at anytime

To get listed in the online and printed Handbook, go to TurboHandbook.com or contact Bob Maraczi at RMaraczi@MJHLifeSciences.com or (203) 810-5277.



Each issue of the the magazine includes the following topics as well as special features, show reports, news, products and columns, with categories covering a wide range of topics:

Turbines: Gas turbines, steam turbines, power generation, combined cycle plants, aeroderivatives, simple cycle plants, turbomachinery controls, combined heat and power (CHP), packaging, blades and vanes, IGCC, microturbines, uprates and retrofits, hydrogen, supercritical CO₂

Compressors: Centrifugal compressors, centrifugal fans, oil & gas, LNG, enhanced oil recovery, offshore technology, expanders, mechanical drive

Maintenance and Repair: Parts and service, turbomachinery maintenance, plant maintenance, inspection, borescope, lubrication, water washing

Auxiliaries and Components: Magnetic bearings, seals, bearings, actuators, turbine inlet cooling, filtration, silencers, heat recovery steam generators (HRSGs), sensors, valves, gears, VSDs, materials and coatings, pumps, vibration

Software and Controls: turbomachinery controls, big data, digitalization, analytics, seals, motors, computer-aided engineering, CAD/CAM, digital twin, FEA, instrumentation, industrial internet

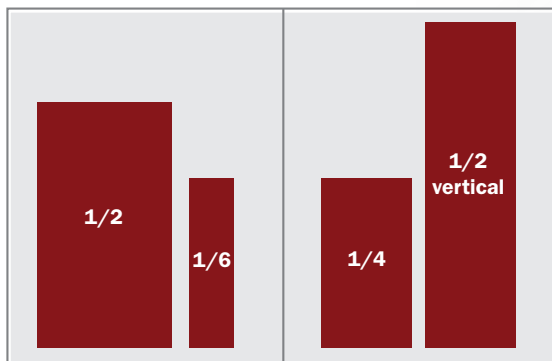
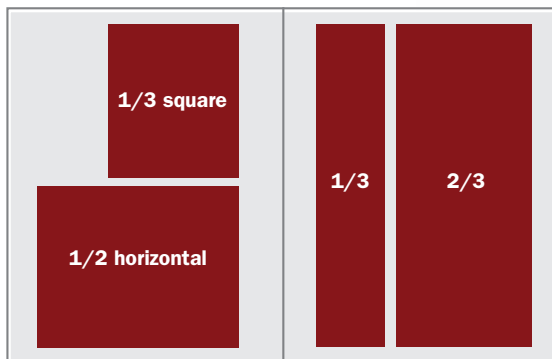
JANUARY FEBRUARY	MARCH APRIL	MAY JUNE	JULY AUGUST	SEPTEMBER OCTOBER	HANDBOOK 2023	NOVEMBER DECEMBER
Ad Close January 21	Ad Close March 3	Ad Close April 14	Ad Close June 8	Ad Close July 29	Ad Close September 21	Ad Close October 21
Gas Turbines	Oil & Gas	Steam Turbines	Centrifugal Compressors & Fans	HRSGs	Specifications Gas & Steam Turbines	LNG
Hydrogen	Compressors	Power Generation	Gas Turbines	Maintenance	Compressors	Offshore Technology
Maintenance and Repair	LNG	Combined Cycle	CHP	Lubrication	Expanders	Centrifugal Compressors & Expanders
CHP	Auxiliaries and Components	Aeroderivative Gas Turbines	Blades & Vanes	Seals, Valves, Bearings & Actuators	Combined Cycle Mechanical Drive	Power Generation
Software and controls	Outages and shutdowns	Parts & Service	Simple Cycle Maintenance	Big Data Analytics	Marine	Microturbines
Free half-page corporate profile with every full-page ad	Combined cycle	Inspection & Borescope	Materials & Coatings	Controls	Market Analyses Gas Turbines U.S. Power Industry Compressors	Uprates and Retrofits, Parts & Service
	Digital twin	Water Washing & Inlet Cooling	Vibration	Combined Cycle	Directories Manufacturers Supplier & Service Providers	Magnetic Bearings
	Remote monitoring	Filtration	Instrumentation	Oil & Gas	Product Categories	HRSGs
	Augmented reality	Controls	LNG	Gears & VSDs		Pumps
		Lubrication	Carbon Capture	CAD/CAM		Digital Twin
		Digitalization		Industrial Internet		Instrumentation
				Hydrogen Supplement		
POST SHOW REPORTS						
Turbomachinery & Pump Symposia	Baker Hughes AM, Power Gen International	Western Turbine Users, Inc.	Turbo Expo	HRSG Forum	ASME/IGTI Turbo Expo	
VALUE ADDED						
Free Whitepaper or Button Ad in Turbo e-newsletter	Free Whitepaper or Button Ad in Turbo e-newsletter	Free Whitepaper or Button Ad in Turbo e-newsletter	Free Whitepaper or Button Ad in Turbo e-newsletter	Free Whitepaper or Button Ad in Turbo e-newsletter	Free Whitepaper or Button Ad in Turbo e-newsletter	Free Whitepaper or Button Ad in Turbo e-newsletter
IN EVERY ISSUE:						
Executive Q&A Industry News Turbo Tips Myth Busters New Products & Services Vendor's Spotlight						
BONUS DISTRIBUTION						
Western Turbine Users Inc.	Asia Turbomachinery & Pump Symposia	Turbomachinery Expo	HRSG Forum	Turbomachinery & Pump Symposia	Every major turbomachinery trade show, conference & exhibition and user group meeting we attend in 2022	PowerGen International
PowerGen International						

*Subject to change

MAGAZINE AND HANDBOOK

MECHANICAL REQUIREMENTS

AD UNIT	Width		Depth	
Space	(inches)	(mm)	(inches)	(mm)
Full Page	7.0	178	9.75	248
Two-page spread	16.0	406	10.75	273
2/3 vertical	4.75	121	9.875	251
1/2 island	4.75	121	7.5	190
1/2 horizontal	7.25	184	4.75	121
1/2 vertical	3.5	89	9.875	251
1/3 square	4.75	121	4.75	121
1/3 vertical	2.25	57	9.875	251
1/4 page	3.5	89	4.75	121
1/6 page	2.25	57	4.75	120



BLEED (Actual magazine size)

2-page spread bleed:

(U.S.) 16.5" width x 11" length trims to 16" x 10.75"

(Metric) 420 mm width by 280mm length trims to 407mm by 273mm

1-page bleed:

(U.S.) 8.25" x 11" trims to 8" x 10.75"

(U.S.) Leave 0.25" safety all around the live matter

(Metric) 210 mm width by 280mm length trims to 203mm by 273mm

PRODUCTION & PRINTING INFO

Format:

Hi-Res, printer-ready, **PDFx1a:2001** files ONLY.

One ad ONLY per PDFx1a:2001 file accepted.

(Spreads must be separated as two separate PDF files and marked for left and right with bleed on all four sides, a combined file must also be sent.)

Naming Requirements:

When naming your ad file for your company, for example, name it with the magazine name and issue date, ie, Company Name_Turbomachinery International®_January 2018.pdf. Ensure that your file name does NOT contain any spaces or special characters.

Hi-Res PDFx1a:2001 files must have:

1. All fonts embedded (NO True Type fonts accepted)
2. The correct mode (ie, CMYK or Grayscale) Never RGB or LAB or embedded color profiles.
3. All spot colors MUST be converted to CMYK. NO file with PMS colors accepted.
4. OPI must NEVER be included in the file. (see advanced tab in distiller)
5. Resolution: 300 DPI for all submitted images and files.
6. All ads must have position marks for non-bleed ads and trim and bleed marks for bleed ads.

THE CORRECT SIZE PROOF MUST ALWAYS BE GENERATED DIRECTLY FROM THE DISK/FILE YOU SUBMIT.

ONLY ACCEPTED PROOFS for 4-color ads:

1. Kodak APPROVAL Proof
2. Matchprint DIGITAL H/T Proof
3. Fuji FINALPROOF

Proofs MUST be created with SWOP web offset gains.

Publication not responsible for variance between digital file and any proof not listed above. Proof must be screened at 133 line screen on publication base, color calibration SWOP standards, density max 260% to 280%. All ads supplied without a color proof will have one made (time permitting) at advertiser or ad agency's expense. Since client will not be able to sign off on the proof made, the publication is not responsible for color of proof.

Publication is not responsible for files that do not conform to the specifications listed. Please confirm due dates with the production department. If you have questions, and/or problems with supplying a digital format, please contact the Production Dept. Please note: Charges will be made to advertiser or agency at commercial rates for digital files that require operator intervention. A color/content proof must be supplied.

email advertising materials to:

Monica Flick, Sales and Marketing Coordinator

732-346-3009

MFlick@MJHLifeSciences.com

Insert Rates On request

List Rentals

Email your message to a targeted, prespecified list of qualified professionals worldwide. It's a fast, easy and inexpensive way to broaden your exposure and recognition.



Creative Unit Name	Initial Dimensions (WxH in pixels)	Maximum Expanded Dimensions (WxH in pixels)	Max Initial File Load Size	Host-initiated Subload	Animation/Video Guidelines	Unit-Specific Notes (See General Ad Requirements)
Leaderboard - Desktop	728 x 90	728x270	200 KB	300 KB	15 sec max animation / 30 sec max video. Scrolling ISI animation must be less than 60 sec.	Expansion must be user-initiated by click
Leaderboard - Mobile	320 x 50 or 300 x 50	320x460 (full-screen)	50 KB	100 KB	15 sec max animation / 30 sec max video. Scrolling ISI animation must be less than 60 sec.	Expansion must be user-initiated by tap
Medium Banner	300 x 250	600 x 250	150 KB	300 KB	15 sec max animation / 30 sec max video. Scrolling ISI animation must be less than 60 sec.	Expansion must be user-initiated by click
Small Banner	300 x 100	Expansion not allowed for these units	100 KB	Not allowed for this ad unit	15 sec max animation length/Video not allowed for this unit. (If using animation, expansion is not allowed.)	
Half Page	300 x 600 (desktop only)	600 x 600	200 KB	300 KB	15 sec max animation / 30 sec max video. Scrolling ISI animation must be less than 60 sec.	Expansion must be user-initiated by click
Welcome Ad	640 x 480 or 300 x 250 (desktop only)	Expansion not allowed for these units	200 KB	300 KB	15 sec max animation length/Video not allowed for this unit. (If using animation, expansion is not allowed.)	
Super Leaderboard	970 x 90	970x300	200 KB	400 KB	15 sec max animation / 30 sec max video. Scrolling ISI animation must be less than 60 sec.	Expansion must be user-initiated by click
Floating Footer	1025 x 100, 970 x 90 or 728 x 90	970x300	150 KB	300 KB	15 sec max animation length/Video not allowed for this unit. (If using animation, expansion is not allowed.)	Expansion must be user-initiated
In-Article Display Ad	300x100	Expansion not allowed for these units	100 KB	Not allowed for this ad unit	15 sec max animation length/Video not allowed for this unit. (If using animation, expansion is not allowed.)	
Wallpaper/Gutter Ads	150x1050, 160x600, 120x600	Expansion not allowed for these units	200 KB	300 KB	Animation or video is not allowed for this unit.	Must be built by third party vendor, Spotable at an additional cost
In-Banner Video	300x250, 728x90, 300x600	300x250 > 600x250 728x90 > 728x270 300x600 > 600x250	200 KB	2.2MB Total load with video	Minimum 24 fps for video / 15 sec max length / 1.1 MB additional file size allowed for host-initiated video / Unlimited file size for user-initiated video	Audio and video must be user initiated.
Video Pre-Roll Ad	16:9 preferred 4:3 accepted	N/A	10 MB	N/A	Length: 15 seconds for non-skip ad, 15-60 seconds for skippable ads	n/a

Email Newsletter Creative Units

Creative Unit Name	Initial Dimensions (WxH in pixels)	Maximum Expanded Dimensions (WxH in pixels)	File Format	Max Initial File Load Size	Host-initiated Subload	Animation/Video Guidelines	Unit-Specific Notes
Top Leaderboard	640x100	Expansion not allowed for this unit	Jpg, gif, png	50 KB	Not allowed for this unit	Gif animation : 15 second max	3rd party 1x1 impression tracking pixel and click URL accepted
Skyscraper	140x600	Expansion not allowed for this unit	Jpg, gif, png	50 KB	Not allowed for this unit	Gif animation : 15 second max	3rd party 1x1 impression tracking pixel and click URL accepted
Leaderboard	480x100	Expansion not allowed for this unit	Jpg, gif, png	50 KB	Not allowed for this unit	Gif animation : 15 second max	3rd party 1x1 impression tracking pixel and click URL accepted
Big Box	300x250	Expansion not allowed for this unit	Jpg, gif, png	50 KB	Not allowed for this unit	Gif animation : 15 second max	3rd party 1x1 impression tracking pixel and click URL accepted
Text Ad	65 Word Max 1 Click Thru URL						3rd party 1x1 impression tracking pixel and click URL accepted

Preroll Ad

Video Setting	Specifications		
File Format	H.264 (mp4)		
Audio Format	MP3 or ACC (Preferred)		
Aspect Ratio	H.264		
Frame Rate	24 or 30		
Length	6 - 15 seconds for non-skippable 15 - 30 seconds for skippable		
Max File Size 10MB	Low Resolution	Medium Resolution	High Resolution
16:9 Aspect Ratio	360p or less	360p - 576p	576p - 1080p
4:3 Aspect Ratio	480p or less	480p - 576	n/a
Video Target Birate	500 kbps - 700 kbps	700 kbps - 1500 kbps	1500 kbps - 2500 kbps for 720p 2500 kbps - 3500 kbps for 1080p
Site Served	<ul style="list-style-type: none"> » Must be uploaded to YouTube (send video URL, shortened URL not allowed) » Must allow embedding » Must be public or unlisted » True streaming in not allowed 		
Third-party Served	<ul style="list-style-type: none"> » Must be SSL-compliant » VAST 2.0, Vast 3.0 or VPAID (VAST 2.0 will not be accepted for skippable ads) 		

Sponsored E-blast Guidelines

Requirements	<ul style="list-style-type: none"> » HTML creative from client » Text back up from client (optional) » Subject line and preheader » Test and final seed list"
Additional Needs for UNBRANDED e-blasts	<ul style="list-style-type: none"> » Opt Out link on clients creative » Suppression file from within the last 10 business days from the client » From line
Please send the following 5 business days prior to the send date	<ul style="list-style-type: none"> » The HTML (saved as an attachment, with images hosted to your server) » Text only file (saved in Notepad- with full URLs listed for all links. The text should mirror the words in the HTML and not include coding) » Your suppression file: in excel (only if sending from your company name) » Subject line: (limit to under 50 characters/including spacing) » Test seed list: email address of those to receive the test to review » Final seed list: any additional email addresses that are not on the test list but need to receive the final deployment (up to 10)
Timeline	<ul style="list-style-type: none"> » MJH Life Sciences™ will follow up with a proof of the e-blast at least one business day prior to the scheduled deployment to the test seed list » Please review the proof and reply back to the email with approval or changes marked in a PDF. If another proof is required, a revised test will be sent » MJH Life Sciences™ will confirm that the e-blast is scheduled to deploy on the specified date » By the 15th of the following month, MJH Life Sciences™ will provide delivery metrics for all that deployed within the month

GENERAL NOTES

File weight calculation: All files for the ad (.html, .js, .css, images, etc.) must be included as part of the maximum file weight calculation for all file load limits. Shared libraries are also included as part of the file weight calculation unless otherwise exempted. File weights are calculated after files have been compressed into gzip format. You can use this site to check if your creative is within our specs guidelines <http://html5.iabtechlab.com/needauth?redir>.

Initial file load: Includes all assets and files necessary for completing first visual display of the ad.

Host-initiated subload: Where allowed, additional files may load one second after the browser domContentLoadedEventEnd event. The ad should be able to “listen” for the browser domContentLoadedEventEnd event before subsequent files beyond the initial max file size may be loaded.

User-initiated file size: Ads that allow additional file size for host-initiated subload also allows for unlimited file load after user-initiated interaction. User initiation is the willful act of a user to engage with an ad. Users may interact by clicking or tapping the ad.

VIDEO REQUIREMENTS:

- File Format: H.264 (mp4)
- Audio Format: MP3 or ACC (Preferred).
- Aspect Ratio: 16:9 preferred, 4:3 accepted
- Frame Rate: 24 or 30
- Max File Size: 10MB
- Tags Accepted: VAST 2.0, VAST 3.0, or VPAID (VAST 2.0 will not be accepted for skippable ads). Must be SSL-Compliant.
- Video length: 15/30 sec

HTML5 NOTES:

HTML5 provides/introduces new options for developing ads. The IAB has developed “HTML5 for Digital Advertising” (<http://www.iab.com/html5>) to help ad designers provide ads in HTML5 unit that will perform more successfully across the display advertising ecosystem. Please review this document and adopt its recommendations to help improve HTML5 ad performance in the industry.

HTML5 DESIGN INDUSTRY STANDARDS INFO:

<http://www.iab.com/html5>

HTML5 REQUIREMENTS FOR GOOGLE AD MANAGER:

<https://support.google.com/admanager/answer/7046799>

GENERAL AD REQUIREMENTS (APPLY TO ALL DISPLAY ADS):

File Format - JPG, GIF, PNG, HTML5 (must be 3rd-party hosted)

Audio - Must be user-initiated. To allow for audio initiation in videos without player controls, a control may be included for user to initiate audio.

Expansion - Must be user-initiated by click and served through a 3rd Party tag.

Hotspot - Not to exceed 1/4 size of ad. Initiated when cursor rests on hotspot for at least 1 sec. Must NOT initiate audio

Defining ad space - Ad unit content must be clearly distinguishable from normal webpage content (ad unit must have clearly defined borders and not be confused with normal page content).

Max CPU - Ad not to exceed 30% CPU usage during host-initiated execution

Submission Lead Time - Minimum lead time for ad file submission is 5-7 business days before campaign start.

Max number of host-initiated file requests - Ad not to exceed 15 file requests during initial file load and host-initiated subload. Unlimited file requests allowed after user-interaction



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