TECHNICAL TOOLBOXES

API Inspectors Toolbox Success Stories

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Who Should Read This?

Your organization owns and/or operates pipework, pressure vessels, or aboveground storage for liquids or gases, or you manage as a service provider. Alternatively, you conduct an API-inspections service as a third-party contractor. Or, your goal is to maintain oversight for API 570, 510, and 653 reporting for the work you contract to others.

As a team or department responsible for inspection and reporting, a significant portion of your costs comes from the time spent compiling reports. API inspectors and Engineers use the API Inspectors Toolbox (APITB) from Technical Toolboxes to maximize their productivity while maintaining or improving output quality. It shows you how the discipline of dedicated software helps to minimize the risk of legal liability.

We interviewed the Engineering Mechanical Integrity Manager at a major North American oil and gas operator and two practicing inspectors working for inspection services providers. We asked all three about their experiences with APITB and how they leverage it to achieve consistent results and save time in the reporting process.

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Meeting Inspection Challenges with APITB

As an inspector, you spend time in the field and the office. You inspect equipment onsite, research the Codes, perform calculations, analyze data, and format the reports, all of which are time-consuming tasks.

Pipework, pressure vessels, and aboveground storage tanks in plants and storage facilities have tremendous potential for harm and liability if they fail. In service, these assets are conduits of the productivity and revenue, the lifeblood of the companies that employ them. So, as the certifying inspector, the pressure is on you to deliver accurate reports, with the 'i's dotted and the 't's crossed.

You need this solution to deliver consistent quality and reduce the risk of liability caused by inaccurate analysis and reporting. As such, the goals are compliance and disruption-free operations. APITB is a digital system that fosters increased productivity in all of these activities.

A highly experienced Inspector designed the APITB for all API 510, 570, and 653 inspectors and engineers to use. It's a cloud-based solution with persistent data storage. While the latest version stands independent of Microsoft tools, it interfaces with them seamlessly. So you can output fully-formatted reports for customers confidently and rapidly.

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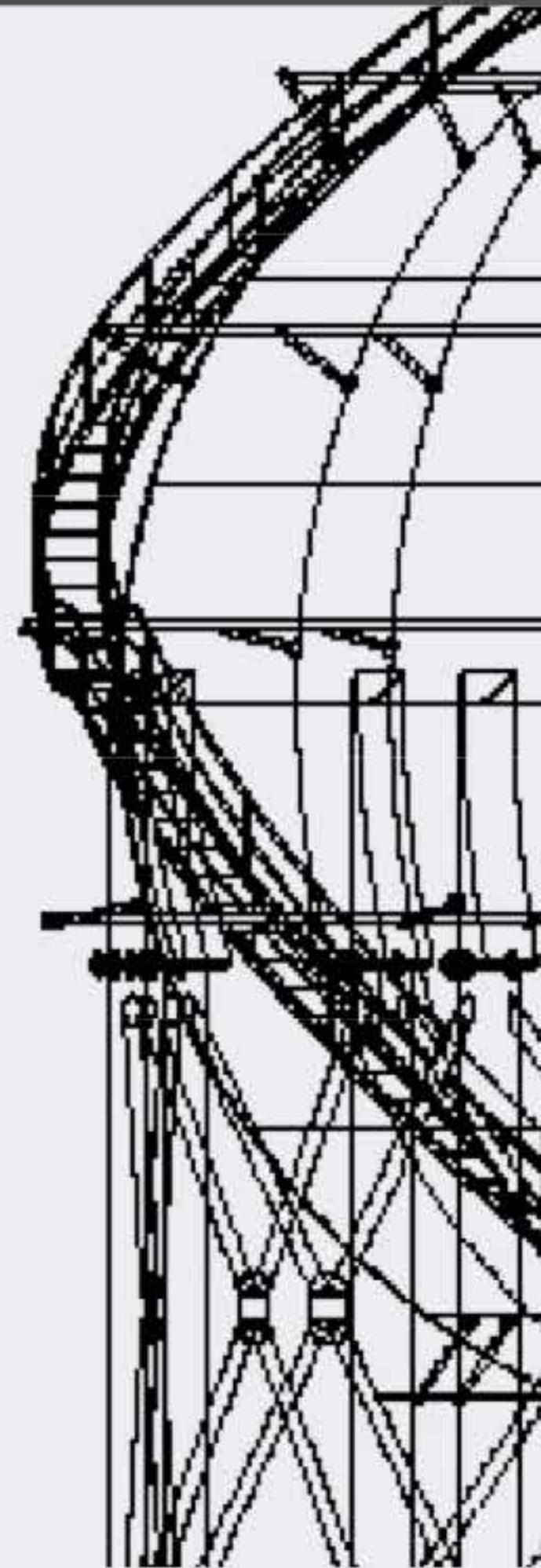
The API Codes in Practice

Inspectors inspect individual equipment pieces and report on the condition. Inspectors and engineers then determine remaining life and integrity. Time spent on preparing reports is a critical factor in the work-life of an API inspector and engineer. As an inspector, you may be an independent contractor or employee. APIs 510, 570, and 653 define the standards of your certifications.

API 510 – The goal of the Pressure Vessel Inspector Certification is to improve management control of process unit operation, repair, and maintenance, reduce the potential for inspection delays resulting from regulatory requirements and provide a continued high level of safety through the use of inspectors specialized in process equipment.

API 570 – The Piping Inspector Certification provides a continued high level of safety through inspectors specializing in process piping, to improve management control of process unit inspection, repair, alteration, rerating, and reduce the potential for inspection delays resulting from regulatory requirements.

API 653 – The Aboveground Storage Tank Inspector Certification promotes safe storage and material handling of petroleum products in a manner that protects employees, the public, and the environment. It includes Supplement 1 to API 653, Tank Inspection, Repair, Alteration, and Reconstruction.
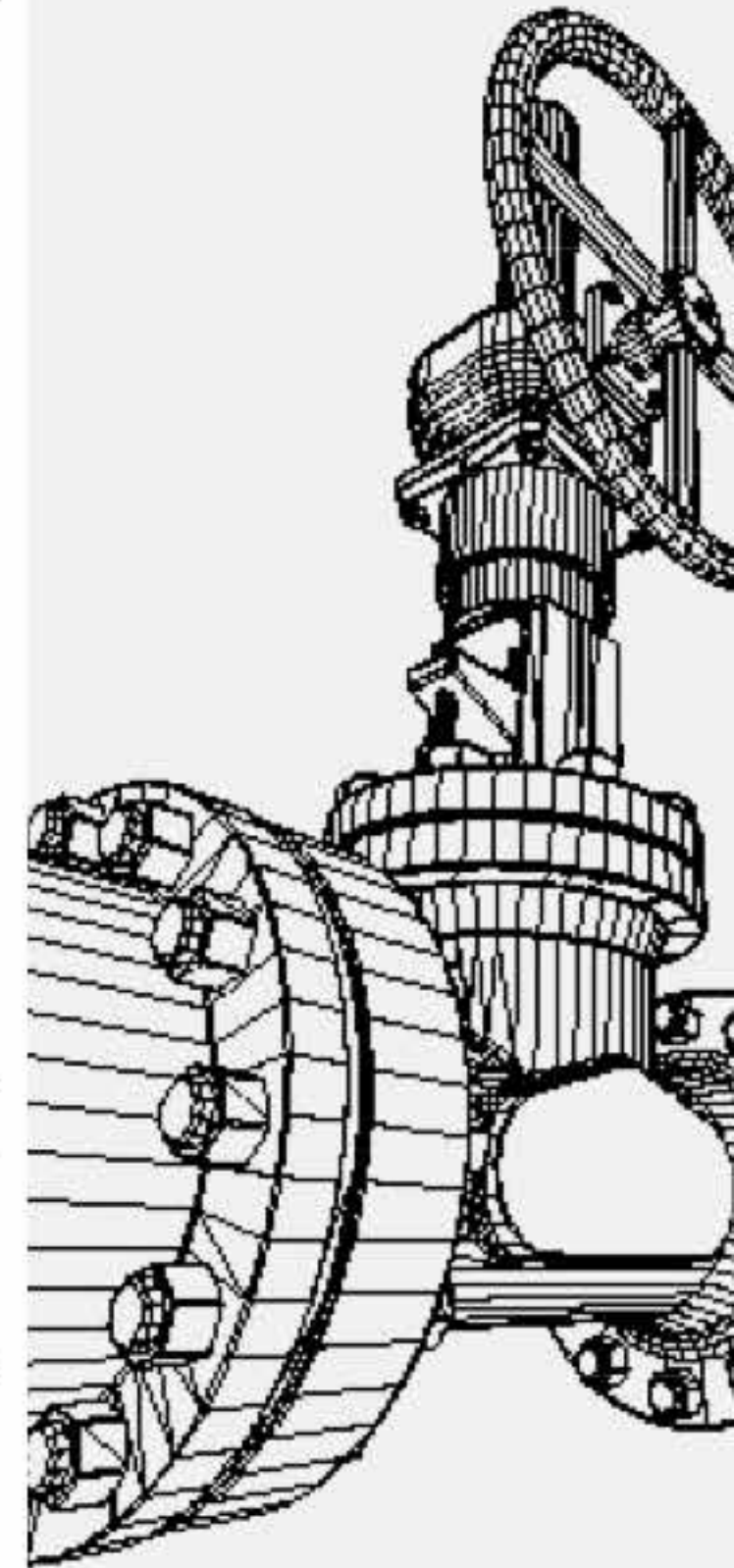
How One Operator Uses The APITB

The Engineering Mechanical Integrity Manager from one North American oil and gas operator kindly shared his experiences working with the API Inspectors Toolbox. He wrote at length about how the company uses APITB, and this is what he told us:

"We have used several software platforms and internal methods in the past for our Company, but the API Inspectors Toolbox is by far the most reliable, efficient, trustworthy, time-saving, and accurate program out there."

"There are other inspection related programs out there, but the API Inspectors Toolbox brings it to the next level. Specifically, our team gets a lot of use out of the API 653 Aboveground Storage applications, which is the best program I have seen on the market for above ground tank inspection."

"The program is very intuitive, easy to learn, and from a managerial perspective, it gives me the ability/capability to see the progress of all Reports and completion status for each report my inspectors and engineers are performing. I can also QC and check reports very easily before they go out to the regulator, auditor, or our Executive Management."
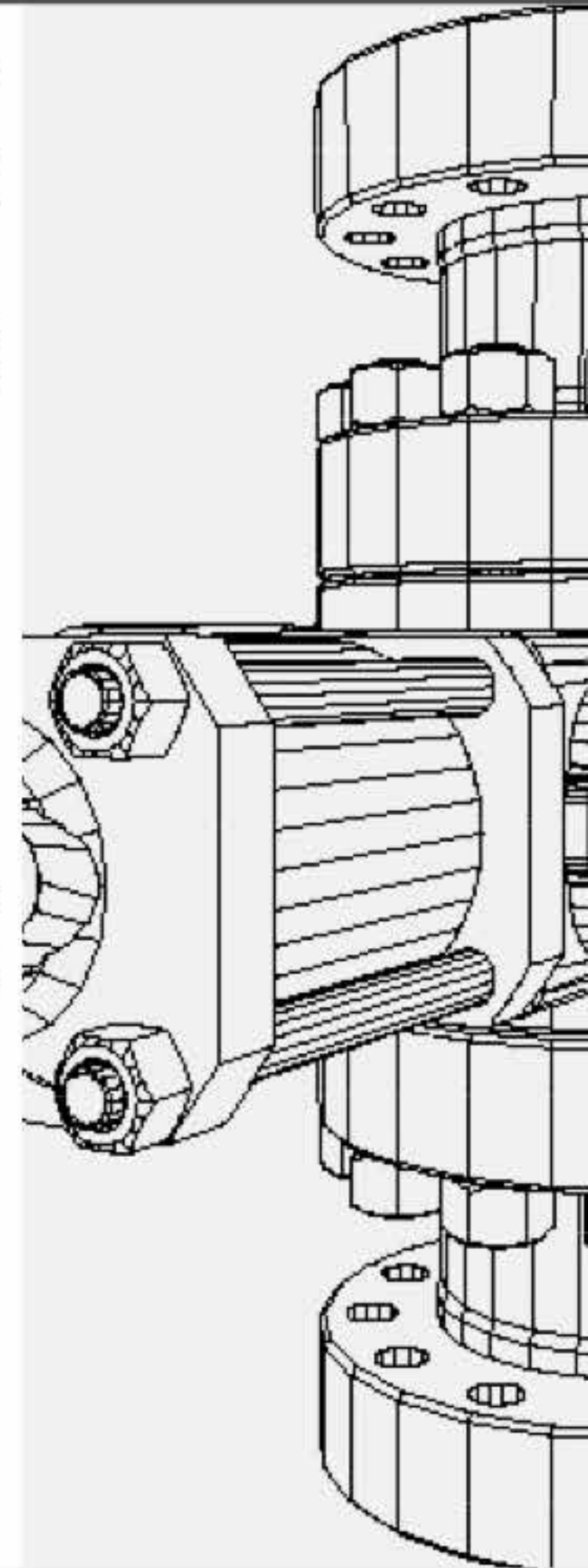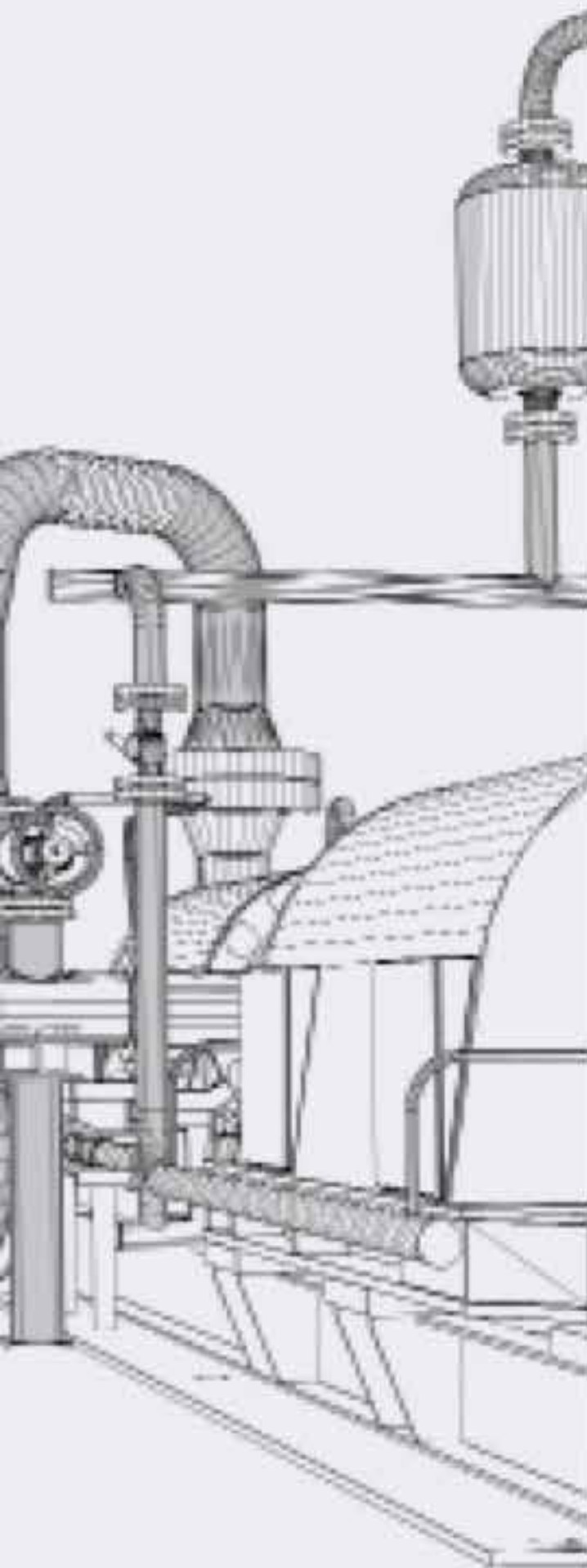
"Furthermore, with the collaborative features on the software, it assures me that all prior jobs and data stay with my team and company. How this helps our group is that when people come and go, the knowledge and previous work that has been completed, does not 'leave' with them. This allows for better training for my inspectors and greater knowledge retention of the inspection process, calculations performed, and report building process."

"The collaborative feature also provides an easy way for my reliability engineers or facilities engineers to assist with the code referencing and calculations simultaneously while the inspectors are out in the field or in a remote location."

"Another outstanding feature is it provides virtually every technical industry reference and assorted tool that an API Inspector or Engineer would need without breaking open a code-book. In my opinion, this alone reduces about three to six hours per job to complete your calculations and/or reporting process. You multiply that out over a given year, this probably allows my inspectors to get to 25-35% more jobs, just on this feature alone."

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"Another great aspect of the program is the reduction of kickbacks or rejections of reports by auditors or executive management. Previously, [in the] internal process I would assume about 1 out of 3 reports are kicked back to us for revisions. With the APITB report builder, I would say it is down to 1 out of every 20 reports are kicked back. That is almost a 650% gain in efficiency for our group, this amounts to huge time savings for our team. The API Inspectors Toolbox is so efficient and reliable to us, it basically equates to the 'work-output' of 2 full-time inspectors with the work of one. This is two times the gain of efficiency for our engineers and inspectors, which is double the cost savings for our overhead."

"Lastly, Technical Toolboxes customer service is second to none. They are a pleasure to work with and have experts on staff to not only help with functionality questions but technical questions as well."

"I personally believe any Operator that owns regulated above ground storage tanks and piping should be using this software as a standard operating procedure for their reporting process and I can't recommend this software application enough."
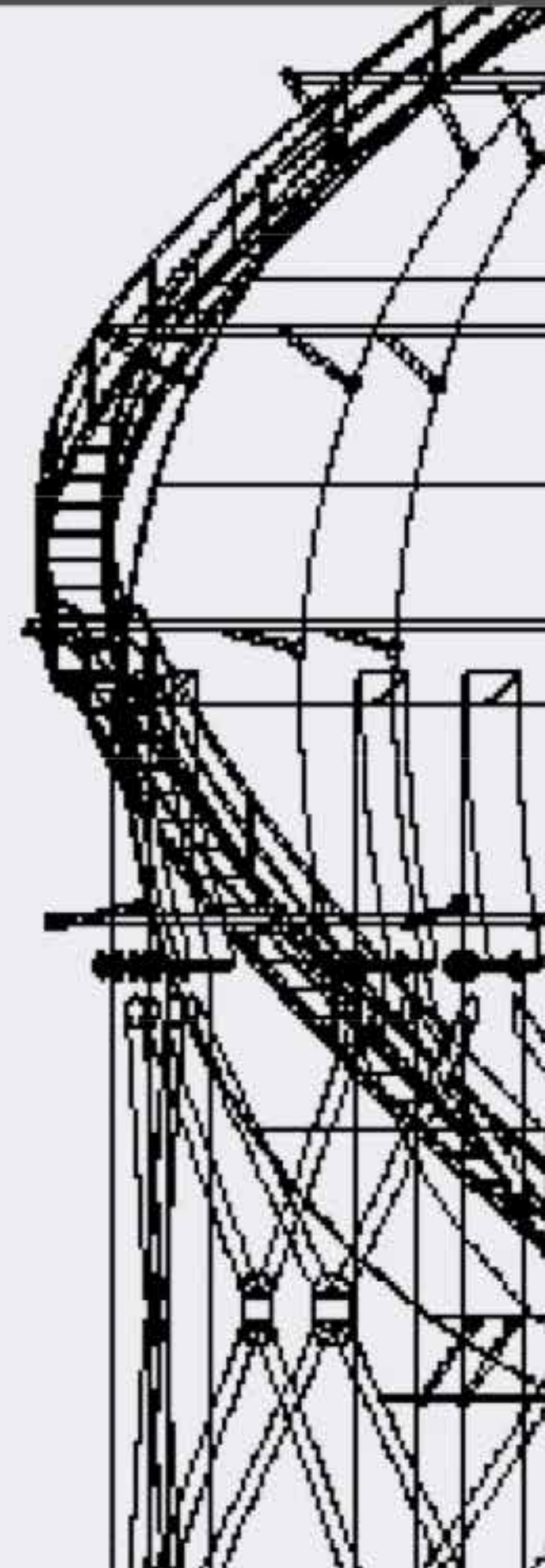
Knowledge Management

Given the centralized repository, captured data, and collaborative environment, top solutions also institutionalize knowledge. This allows organizations to own generations of actionable insight and experience for better strategic decision-making. Furthermore, this type of knowledge management reduces the risks associated with key employees leaving the organization with critical knowledge and know-how and taking said intangible assets with them.

Litigation and Audit Defense

Since DOT, FEMSA, and IRS audits are always a threat, top solutions address the need to prove due diligence and track records with a simple and quick click of a button. Organizations that track all aspects of their business process, including time and billing, can provide transparency and oversight, thus reducing the risk of issues arising from legal actions.

Billing Insight

Successful organizations need tools that aid in billing management, customer information, and employee time. These should be able to deliver transparency and invoicing details needed for any customer inquiry, providing traceable verification of completed work. Tools need to provide this type of drill-down reporting in a quick, easy, and efficient manner. Furthermore, given the multi-organizational approach to pipeline operation, technology

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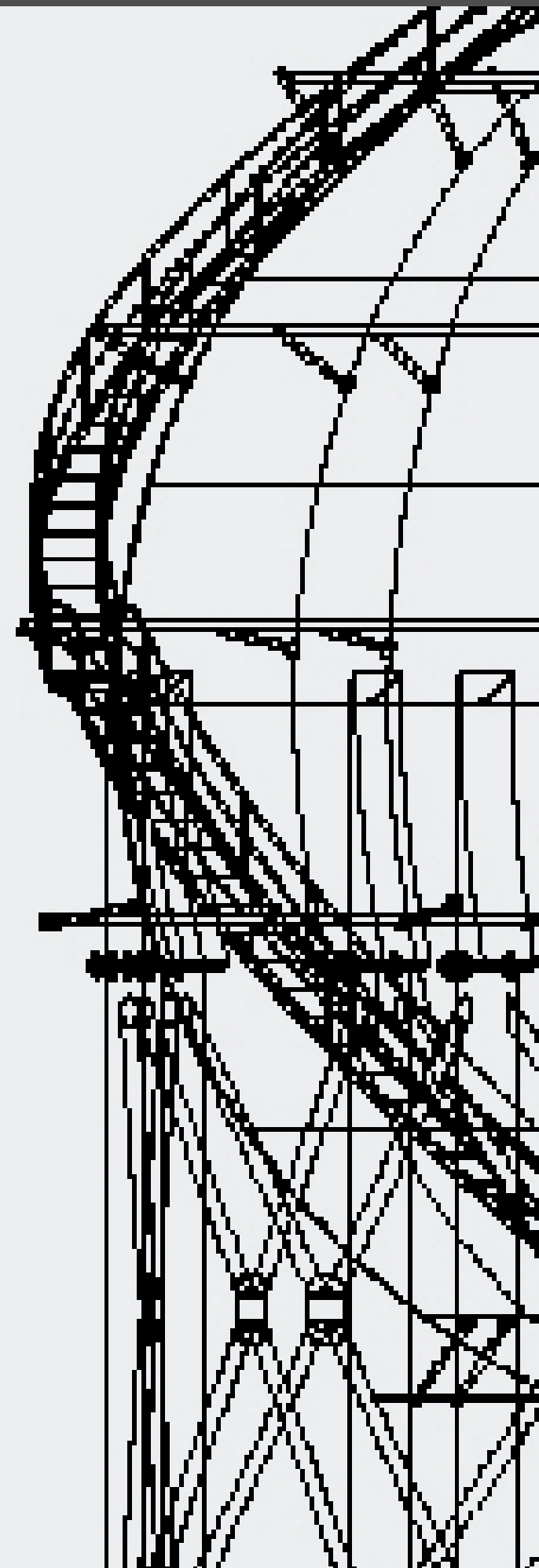
The Inspectors' Perspectives

To understand the work of people who perform inspections and write reports, we invited API-certified inspectors to share their perspectives and listened to what they had to say. In this section, we quote the responses of two experienced inspectors. What Inspectors Ames and Lanphear told us exemplifies how many in the profession have told us they use the APITB.

Corey Ames is a Certified API Inspector. Much of his work revolves around calculations for finding the remaining life of industrial assets or petroleum, chemical water, and food processing. The driving factors for his company's clients are always compliance and service continuation. As a third-party entity contracted to provide inspection and reporting, Ames depends on API Toolbox to deliver results efficiently. When asked if he would recommend the APITB, Ames responded, "Yes, and I have. I often recommend it to other inspectors, engineers, and clients."
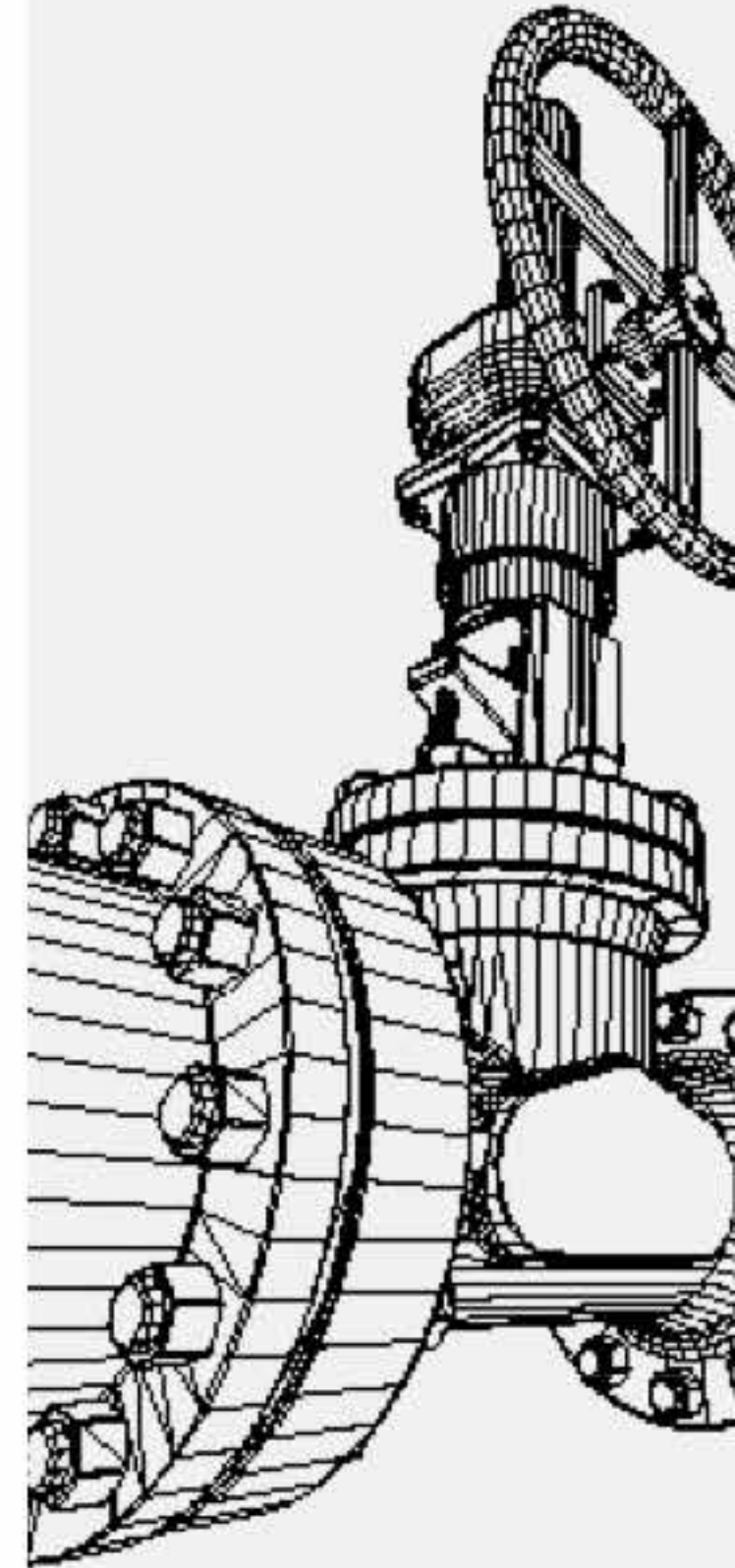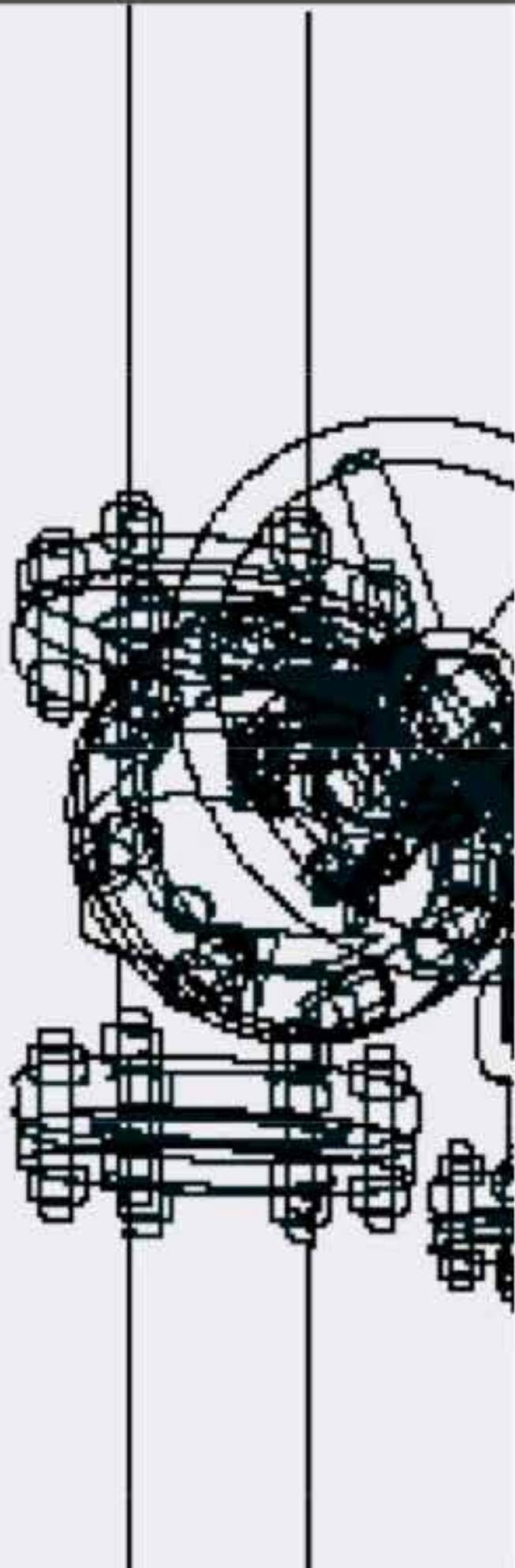
Corey Lanphear has been in the industry for more than twenty years. He started work for his grandfather and learned to perform the calculations and write reports manually. Once he discovered APITB, he had the experience to appreciate the help. "It was a big help, allowing me to know what I was looking at."

After the family sold the business, he eventually had an opportunity to join the largest non-destructive testing (NDT) company in North America. The company provides asset protection solutions for critical integrity and safety inspection services. Their NDT service clients span a broad range of heavy industry, including pipeline engineering for oil and gas.

Lanphear says that the company has an internal solution for API inspection and reporting. However, when they recruited him, one point about which he insisted was that he could continue using Technical Toolboxes for calculations, references, and reporting. He said, "They have their own program, but I put my foot down, and they accepted that."

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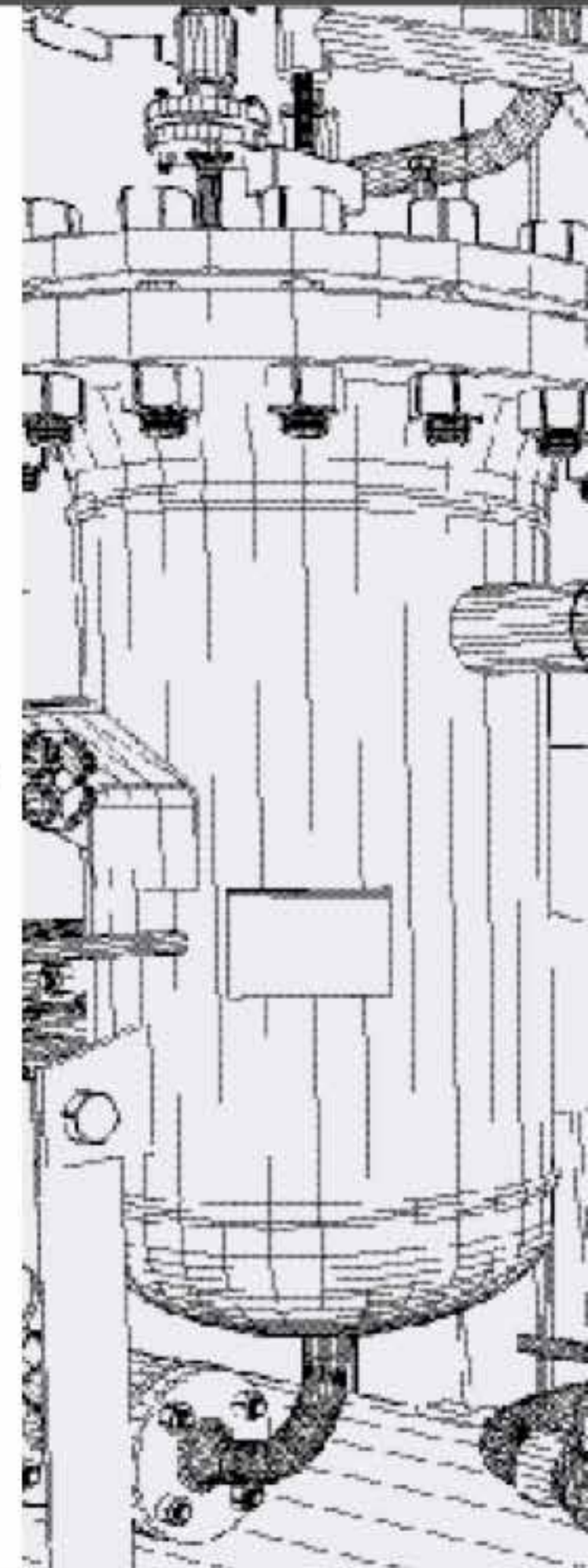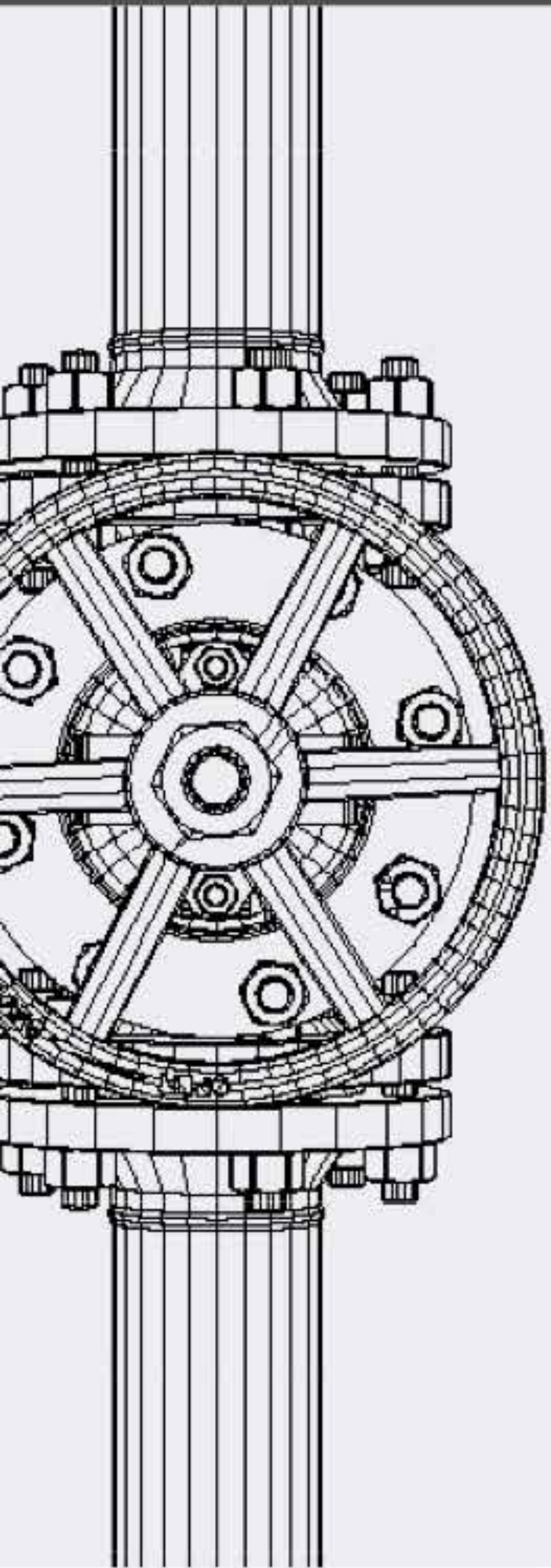
Perspectives

Inspection practices are still shifting from the manual, analog-driven, world of pen and paper to the digital realm of databases and automated calculations. Going digital provides efficiencies by reducing work duplication, facilitating data storage and accessibility, and breaking the constraints of manual practices.

You maximize your return on investment when inspectors spend the most time on billable work and not on other activities. APITB eliminates time spent hunting for data, formatting documents, and chasing down errors, which means more time contributing to billable revenue and a higher return on investment.

Ames and Lanphear each deliver approximately one-hundred reports a year, which, as they both acknowledged, is around double the number they could produce by alternative methods. At that rate, the APITB license works out to about $40 per inspector per report.

Another significant factor that matters to company leaders is that calculations and case histories are consistent and that human error doesn't undermine analytical accuracy. The reporting format in APITB is precise, with standardized calculations and all of the elements that the Codes and clients demand from third-party inspectors. It delivers productivity, quality, and protection from liability.

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Lanphear said there is one more thing about Technical Toolboxes that he appreciates. "Another feature that keeps me using API Toolbox is the great customer service. It makes all the difference as one of the things that matter most."

Given the revenue for each additional report made possible, the return on investment amounts to hundreds of thousands of dollars per year for each inspector. Whether you measure ROI against the price of the solution, increased billable hours, or risk reduction, APITB is the solution that delivers results.

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## Click here to learn more about Technical Toolboxes or to request a demo

Next Steps

Technical Toolboxes offers products designed by pipeline engineers for pipeline engineers, integrity engineers, inspectors and operations managers. Our pipeline engineering solutions help you manage your key asset data while maintaining quality and productivity while meeting industry standards and company SOPs in daily operations.

A solution from Technical Toolboxes gives users the ability to build workflows and implement standard formulas to achieve high-quality results consistently. At the same time, you will have the peace of mind to know that, should the unexpected occur, you will have the right tools at hand to respond promptly and effectively.

Technical Toolboxes allows you to stand back to see the big picture. You will also have ample capacity to collaboratively examine the details of engineering problems and make smarter decisions. Most of all, you will be able to deploy your engineering teams in ways that make the best use of their skills and knowledge. They will spend more time taking care of business and finding new opportunities for you.

If you are seeking the best upstream, midstream, or downstream software solution for your pipeline engineers, contact Technical Toolboxes today. We will answer your questions, arrange a no-obligation software demonstration, or set up a free trial.

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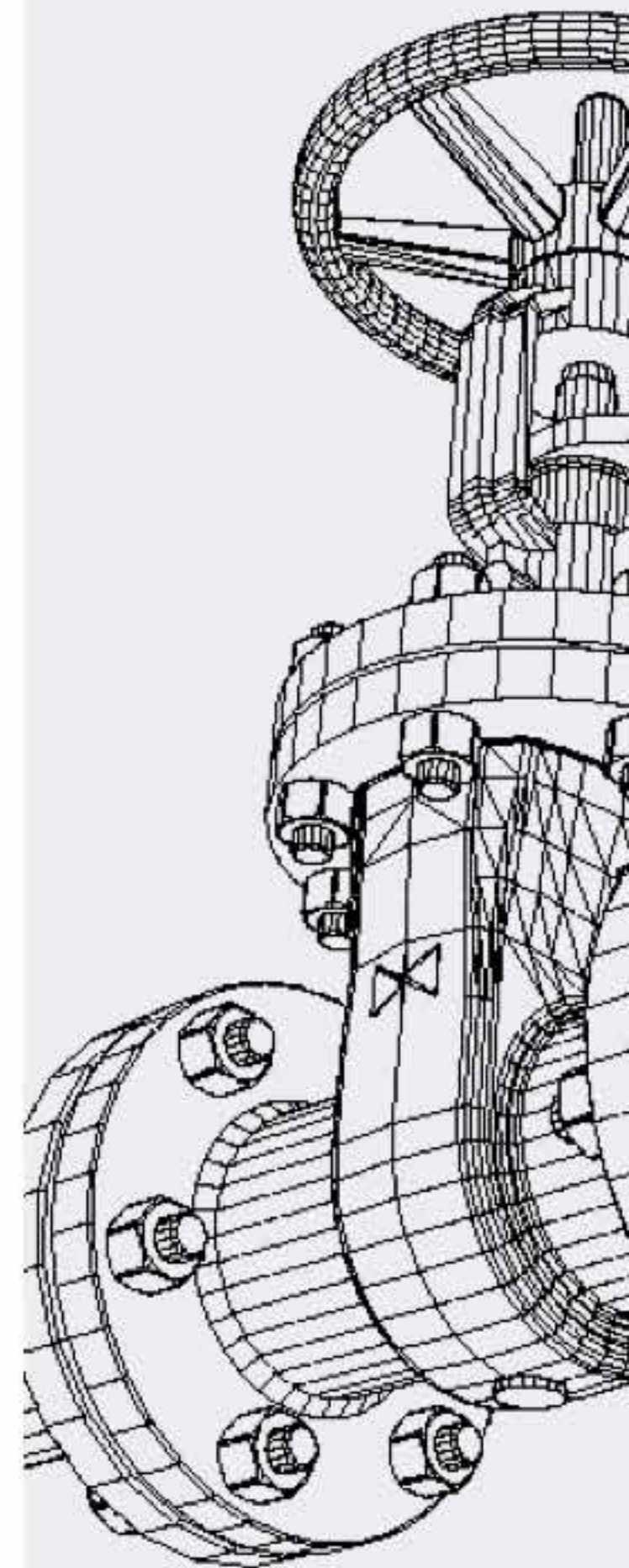
Technical Toolboxes
10370 Richmond Ave, Suite 1150
Houston, TX 77042, USA

Toll Free: (866) 866-6766
Phone: (713) 630-0505
Fax: (713) 630-0560

info@technicaltoolboxes.com
www.technicaltoolboxes.com

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Pipeline Toolbox
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About Technical Toolboxes

Technical Toolboxes is a leading provider of integrated desktop and cloud-based pipeline software, online resources, and specialized training for pipeline engineering professionals worldwide. We deliver oil and gas industry training courses covering a breadth of topics with industry-recognized instructors. Compare the performance that Technical Toolboxes technology and training can make in pipeline engineering performance and you'll see a measurable difference. Our fit-for-purpose pipeline engineering software platform will help you reduce risk, lower the total cost of operations, and accelerate project schedules. Hundreds of companies rely on our certified, industry-standard technology to enhance their pipeline engineering performance.