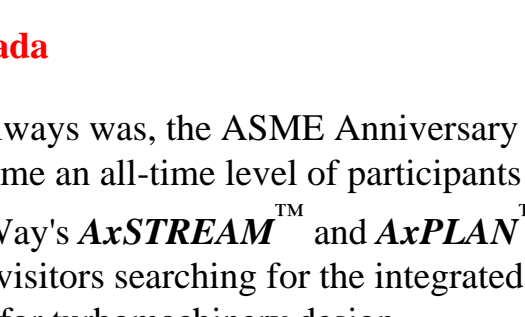


• OVER 8,000 SUBSCRIBERS - ACROSS THE USA •

[Send to a Friend](#) | [Advertise](#) | [Suggestions?](#)

SoftInWay Through the Prizm of Events

SoftInWay on the ASME Anniversary Global Gas Turbine Event.



**June 6-9, 2005
Reno-Tahoe, Nevada**

Grand show as it always was, the ASME Anniversary Turbo Expo 2005 had gathered this time an all-time level of participants and attendees. A booth with SoftInWay's **AxSTREAM™** and **AxPLAN™** software had attracted a bulk of visitors searching for the integrated, robust and cost-effective solutions for turbomachinery design.

Among them current and future users of all categories beginning from students and teachers through designers and consultants to manufacturers and retrofiters.

[Click here](#) to view some snapshots from SoftInWay's show gallery

Mirror of SoftInWay's Innovations

**AxSTREAM™ Extends Blade Design Opportunities:
Leaned Airfoil Design is Available Now**

SoftInWay proceeds moving on the way of **AxSTREAM™** further development and refinement.

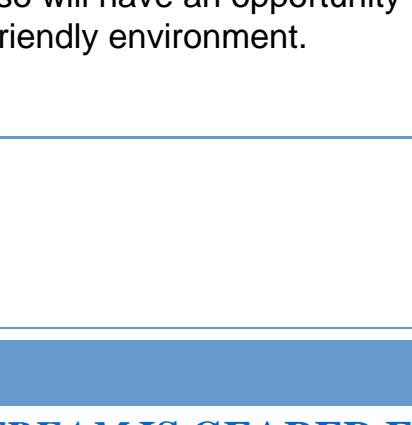
From now on, leaned airfoil design is available with AxSTREAM.

New feature allows to analyze, calculate, and visualize the blades and nozzles with constant or arbitrary lean, preserving export options to 3D CFD solvers.

[More>>](#)

AxSTREAM for Students and Teachers

**Unique option for students and teachers effective until 09/01/05.
Help yourself in self-education!**



Downloadable Turbine Design and Performance Course with AxSTREAM 3-months Education license for **\$149**. Hurry up!!! Both offer and summer will expire soon!!! [More>>](#)

Openings in SoftInWay

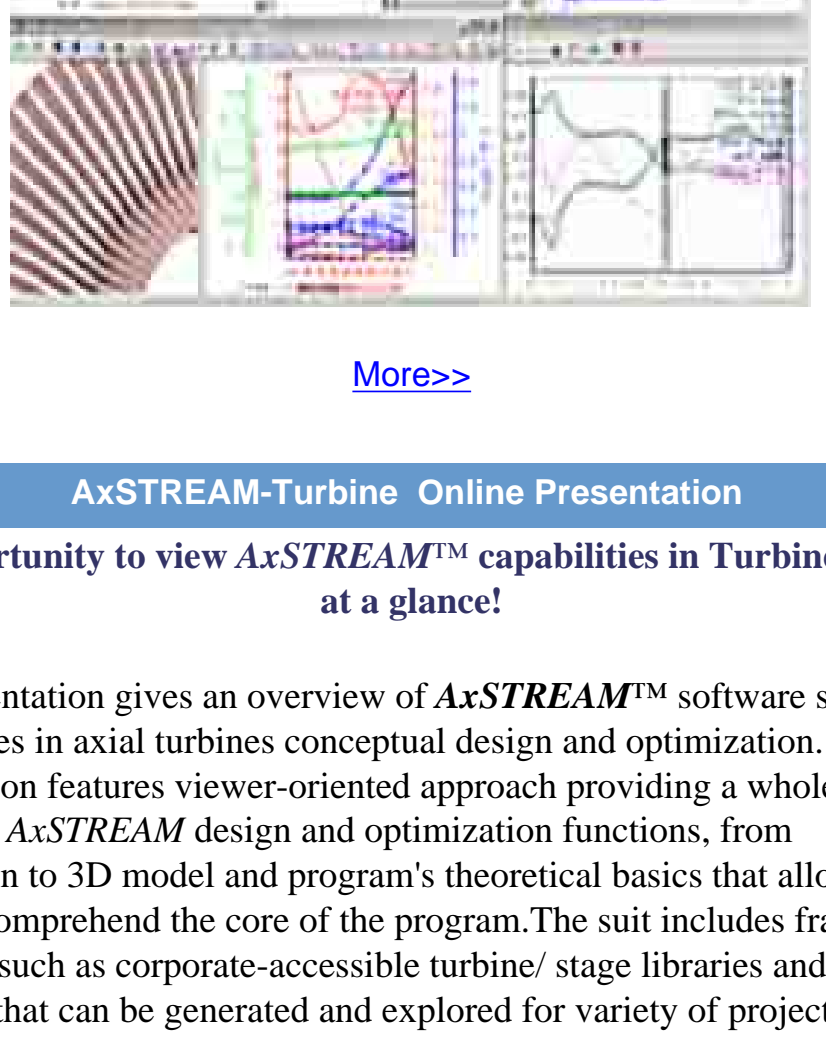
We currently invite you to explore the vacancies that the links below are leading to:

[CAE Software Developer](#)
[Project Manager, Engineering Consulting](#)
[Sales Engineer/Project Manager](#)

You will join a strategically focused and highly motivated team involved in Scientific, Mechanical Engineering, Design Consulting and Software Development. You also will have an opportunity to work on multiple projects in a flexible, friendly environment.

AxSTREAM in University Programs

Continuing SoftInWay's education line by inclusion of its flagship product AxSTREAM – a powerful software suite for turbomachinery design, analysis, and optimization – in various education courses, the company announces the integration of this suite in Louisiana State University Mechanical Engineering Department Turbomachinery course.



[More>>](#)

AxSTREAM-Turbine Online Presentation

An opportunity to view AxSTREAM™ capabilities in Turbine Design at a glance!

The presentation gives an overview of **AxSTREAM™** software suite capabilities in axial turbines conceptual design and optimization. This presentation features viewer-oriented approach providing a whole specter of unique **AxSTREAM™** design and optimization functions, from conception to 3D model and program's theoretical basics that allow to quicker comprehend the core of the program. The suit includes framework elements such as corporate-accessible turbine/ stage libraries and profile database that can be generated and explored for variety of projects.

[View >>](#)

AxSTREAM-Compressor Online Presentation

An opportunity to view AxSTREAM™ capabilities in Compressor Design at a glance!

Compressor solver makes it possible in a fast manner to perform conceptual design of the compressor, performance parameters optimization, meanline analysis, cascades profiling, export of 3D blade models to CFX, ANSYS, and other commercial solvers as well as import blade 3D geometry in IGES format.

Everybody can evaluate at full extent smart and completely user- and object-oriented GUI, following the entire process streamlined from entering initial data to final results presented as a set of aerodynamic characteristics and blades geometry ready for export.

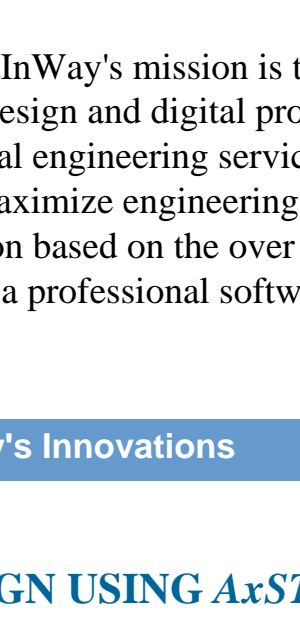
To view AxSTREAM-Compressor online presentation

[Click here >>](#)

Welcome to our Science Club!

New Mechanical Engineering Papers!

We will be glad to publish your papers in mechanical engineering in our Science Club. Please submit your articles to lm@softinway.com



Here you will find an array of articles authored by our scientists and colleagues from academia and dedicated to various aspects of turbomachinery research, design, simulation and modernization, heat transfer, mechanical engineering etc.

[More articles >>](#)

AxSTREAM in University Programs

AxSTREAM IS GEARED FOR LOUISIANA UNIVERSITY TURBOMACHINERY EDUCATION

FOR IMMEDIATE RELEASE

BURLINGTON, Massachusetts, June 22, 2005

SoftInWay, Inc., the developer of **AxSTREAM™** – a powerful software suite that encompasses the complete engineering process of axial turbomachinery flow path conceptual design and optimization continues its education line in the way of inclusion of this flagship product in various education courses.

"We have developed educational programs for all who want to learn, improve or expand their knowledge in turbomachinery design. Our programs benefit undergraduates, graduates, teachers, professional designers and retrofiters, all of who, using our rapid and reliable design tools" - says Leonid Moroz, President and CEO of SoftInWay. - "Recently, the Mechanical Engineering Department of Louisiana State University (LSU) has chosen to include **AxSTREAM** in their Turbomachinery Program. We are pleased with their decision to incorporate our software into their curriculum because LSU places high emphasis on turbomachinery academic, research and educational activities, making a real contribution to the industry science and practice."

Dr. Shengmin Guo, LSU Mechanical Engineering Faculty Assistant Professor and instructor of the ME 4853 course Turbomachinery, said: "The educational version of **AxSTREAM** offered to us by SoftInWay covers all basic lines in turbine design and optimization. We were able to effortlessly integrate the **AxSTREAM** tool into the learning process as an efficiency assistant for students. Dr. Guo also added: "I am very pleased to report that most of students learned to use **AxSTREAM**, which helped enhance the theoretical matters encrusted by the course. Naturally, it took them some time to figure out how to set the important performance parameters and how to evaluate the effect of varying those parameters on the overall performance of the turbine. **AxSTREAM** enabled the students to examine the relationships between path parameters and blade shapes, making it a very useful supporting educational tool. Spanning the concepts-to-details process of axial turbine design and retrofitting, the tool enriched the students with application-oriented guidelines for new and existing turbine flow path designs along with real design techniques for the entire flow path and its optimization. In some of my students' opinion, this software has been one of the best they have worked with in their Mechanical Engineering curriculum."

Being a company deeply committed to future engineers' solid knowledge of turbomachinery design, SoftInWay offers **AxSTREAM** for use in the turbomachinery courses of educational entities worldwide.

The **AxSTREAM™** software suite can be downloaded for evaluation. Please request by writing to tech_support@softinway.com.

About SoftInWay. A USA corporation, headquartered in Burlington, MA, SoftInWay's mission is to serve the high technology community by providing software products and engineering services in the area of research, design and digital prototyping of power generation equipment. The company develops products for rapid turbomachinery design, provides technical engineering services, and uses in-house and industry standard CFD, FEA and CAD tools to address design issues at the earliest possible stage to maximize engineering productivity and increase the efficiency and reliability of equipment. The core product, **AxSTREAM**, is an integrated solution based on the over 400 years of collective turbomachinery experience of the SoftInWay engineering team, with the clear goal of bringing to industry a powerful software tool for rapid, optimized turbomachinery flow path design. www.SoftInWay.com

Mirror of SoftInWay's Innovations

LEANED AIRFOILS DESIGN USING AxSTREAM

AxSTREAM turbine design suite gives an opportunity to design swept and leaned airfoils. Both lean and sweep can be as constant as arbitrary along the blade height, in the last case defined by cross-section offsets.

Airfoil surfaces designed with **AxSTREAM** can be exported in IGES format. Export of the airfoil geometry can be performed as the cross-section contours to build 3D CFD models (CFX, Fluent).

AxSTREAM turbine design software provides sufficient precision to calculate a leaned airfoil performance using axisymmetric stage analysis. **AxSTREAM** finds optimization solutions for leaned airfoils with the lean both constant along blade height and arbitrary with station offsets.

This paper presents:

1. Samples of leaned and swept airfoils designed with **AxSTREAM**;
2. Comparison of leaned airfoil calculation results for two solver types: 2D (**AxSTREAM** axisymmetric solver) and 3D CFD (CFX).

1. Samples of Leaned and Swept Airfoils Designed with AxSTREAM

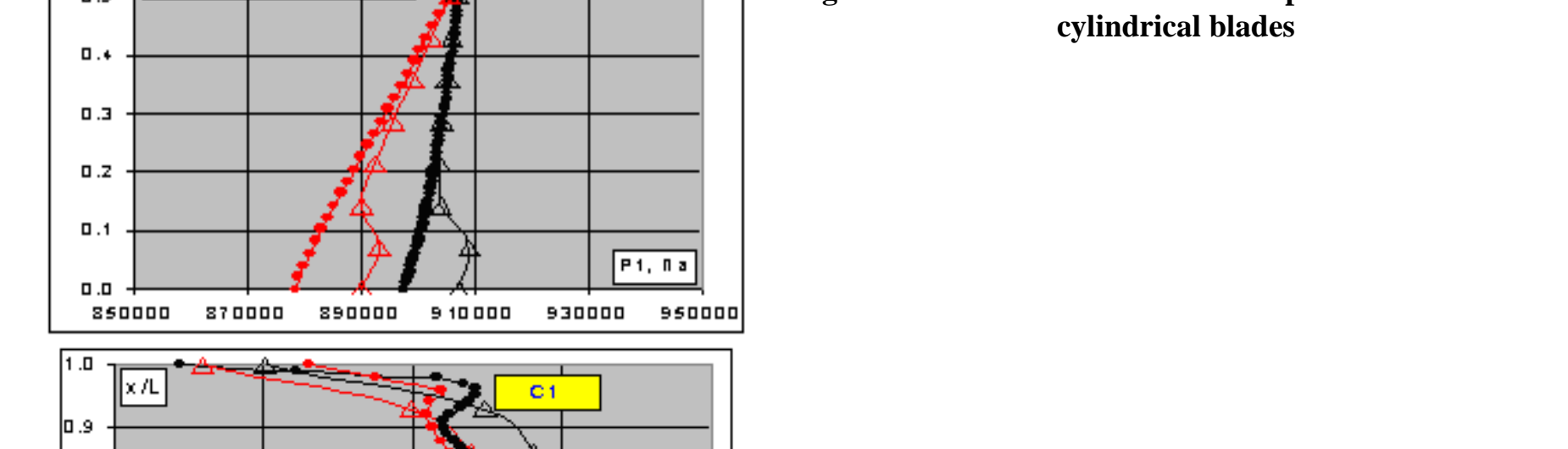


Fig 1.1 Original model - cylindrical nozzle

Fig 1.2 Nozzle with constant sweep + 10 degrees

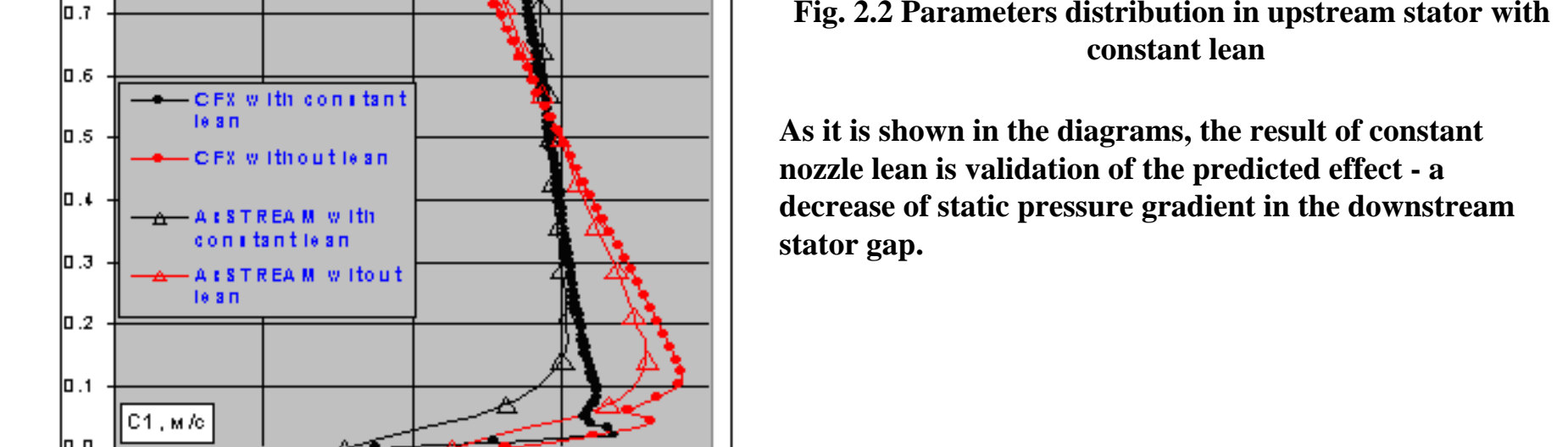


Fig 1.3 Nozzle with varied sweep of "N" type

Fig 1.4 Nozzle with varied sweep of "S" type

The pictures above show how **AxSTREAM** calculates stage parameters with regard to lean.

2. Data Comparison

2.1 Comparison of AxSTREAM and 3D CFD

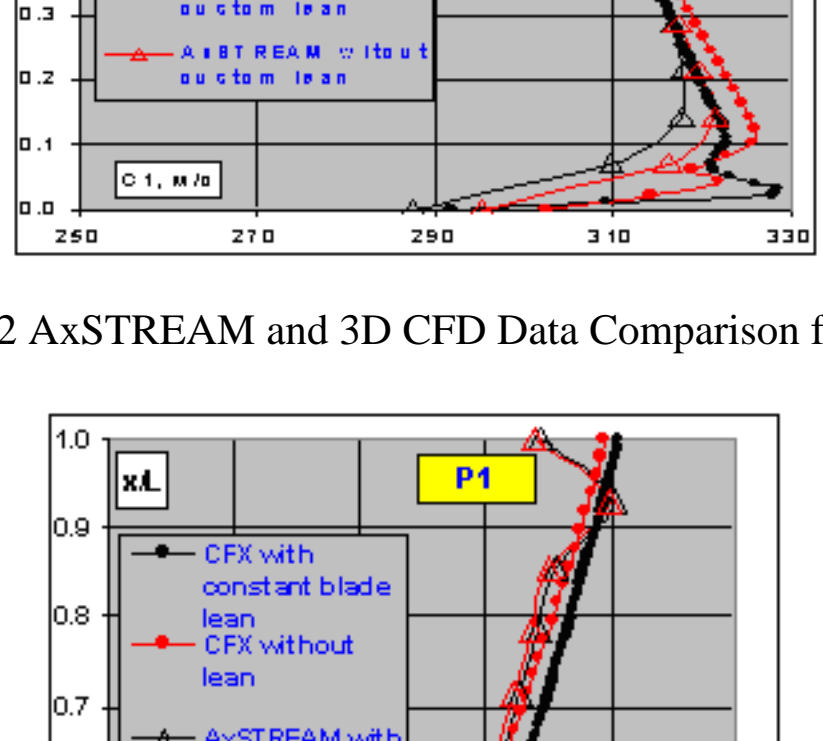


Fig. 2.1 Parameters distribution in upstream stator with cylindrical blades

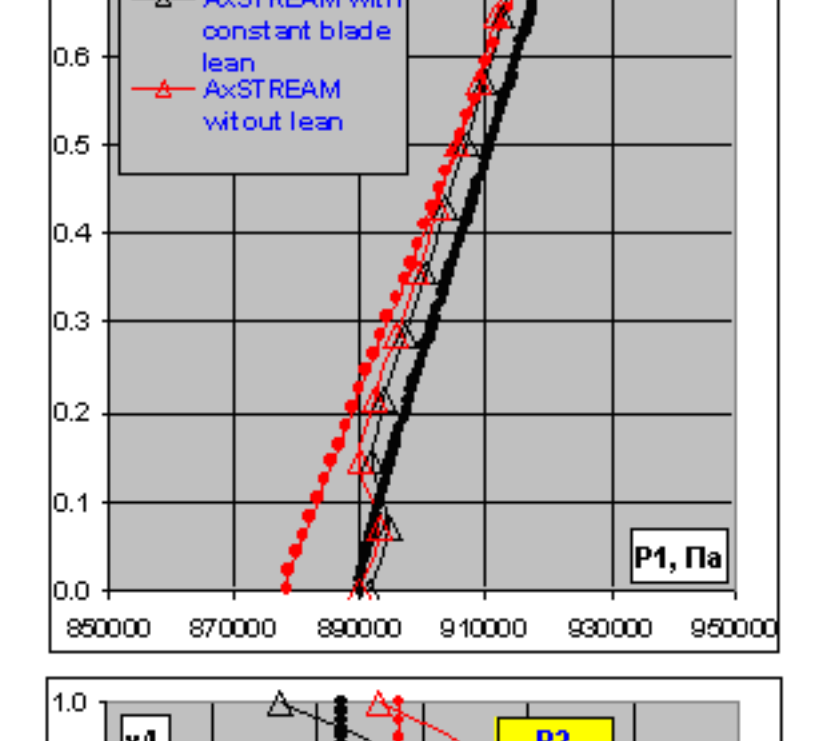


Fig. 2.2 Parameters distribution in upstream stator with constant lean

As it is shown in the diagrams, the result of constant nozzle lean is validation of the predicted effect - a decrease rate of static pressure gradient in the downstream stator gap.

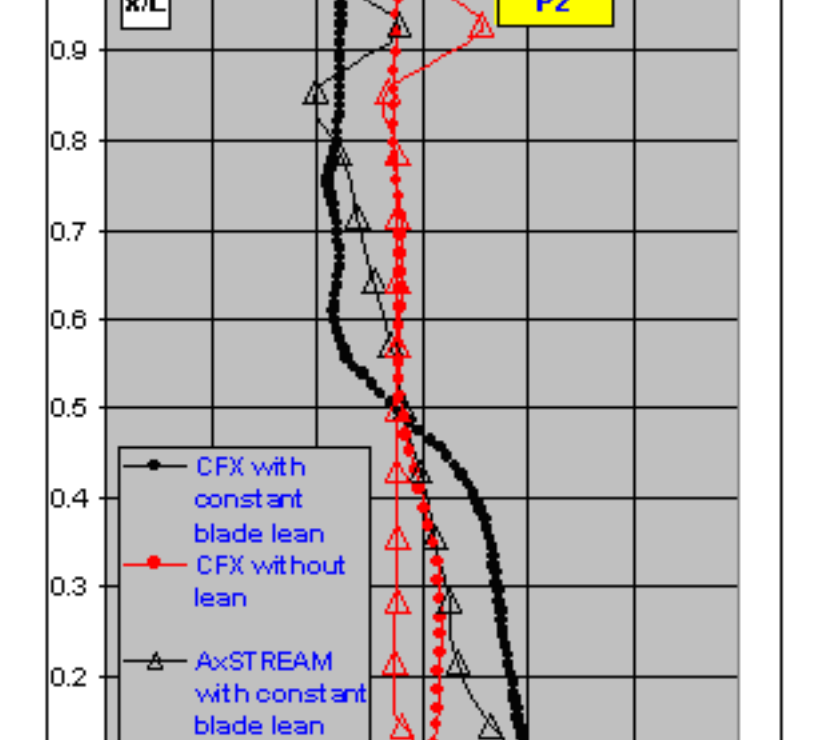


Fig. 2.3 Parameters distribution in upstream stator with varied lean of "S" type.

S-formed nozzle was created arbitrary with the only aim to illustrate the lean effect and to carry out this calculation. As it is shown in the charts, the applied cross-section offsets near the root and at the periphery of the blade does not influence the flow structure substantially. Parameters near the mean-line remained unchanged, and the gradient slightly decreases in the direction of edge surfaces.

2.2 AxSTREAM and 3D CFD Data Comparison for the Airfoil with Constant Lean

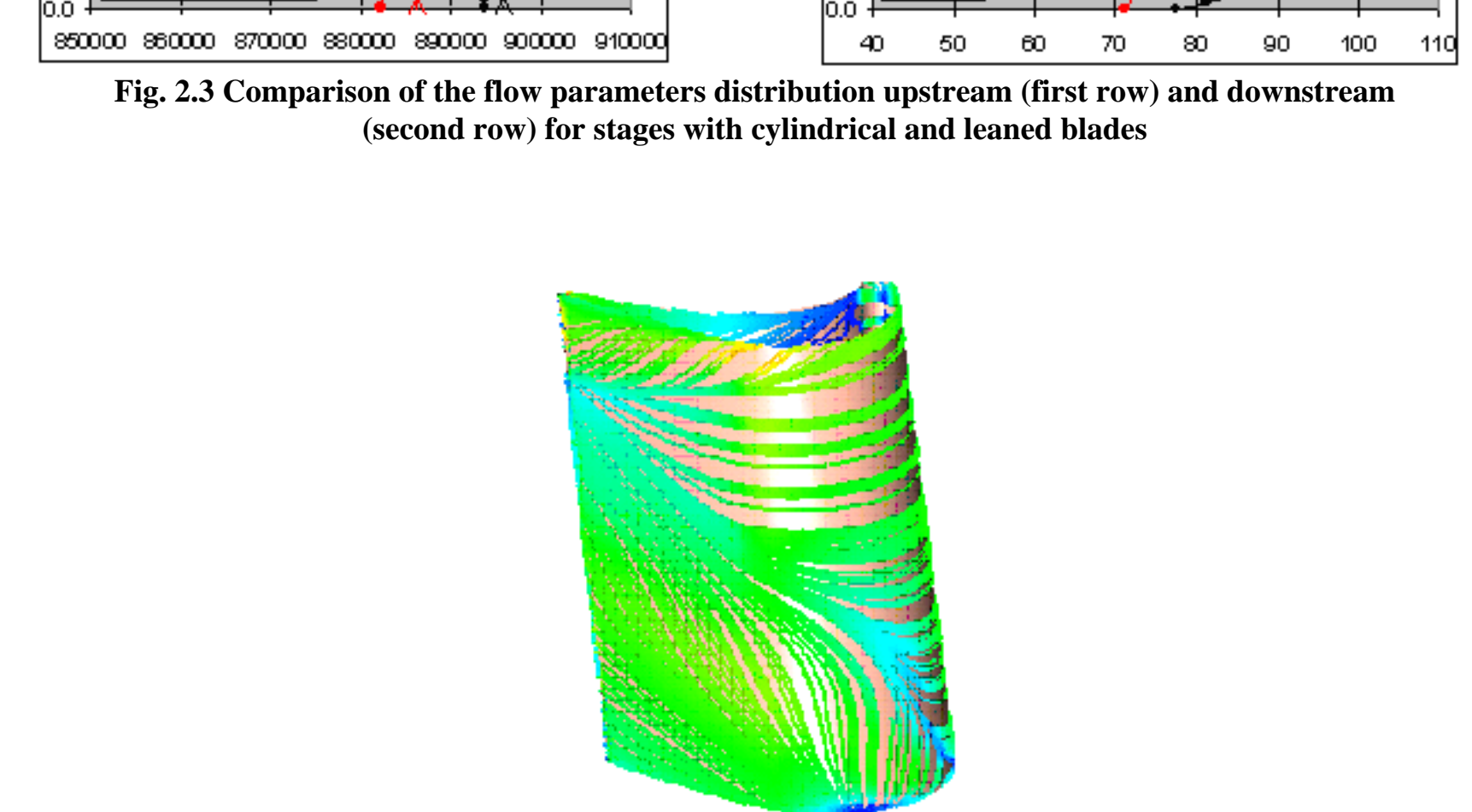


Fig. 2.3 Comparison of the flow parameters distribution upstream (first row) and downstream (second row) for stages with cylindrical and leaned blades

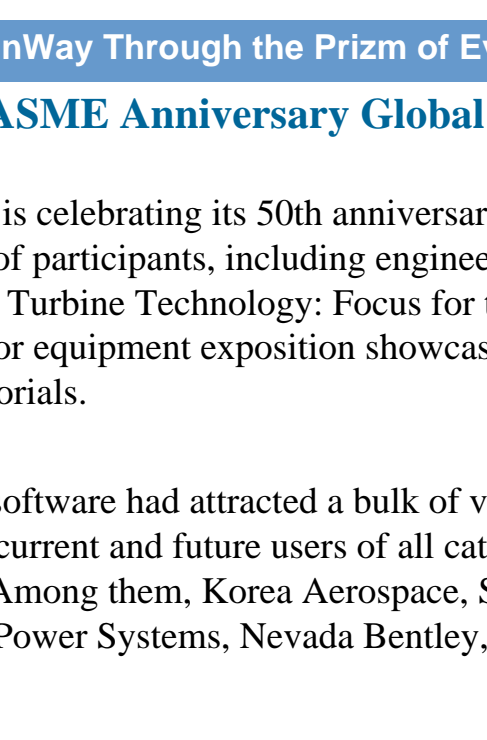


Fig. 2.4 Streamline contours on the leaned blade suction side (CFX)

For more information, please address tech_support@softinway.com

SoftInWay Through the Prizm of Events

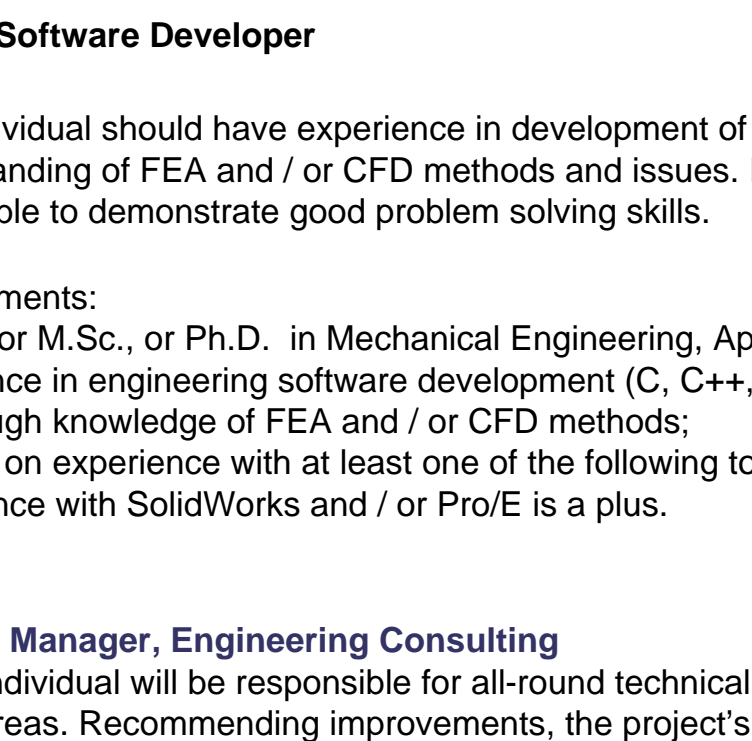
SoftInWay on the ASME Anniversary Global Gas Turbine Event

ASME TURBO EXPO 2005- Power for Land, Sea and Air is celebrating its 50th anniversary in 2005. Grand show as it always was, this ASME ANNIVERSARY TURBO EXPO had gathered over 2000 of participants, including engineers, research scientists, and other professionals from across the world. The event included a keynote session titled "Gas Turbine Technology: Focus for the Future," featuring a panel of leading executives from the power generation industry. The event also hosted a major equipment exposition showcasing new and advanced products and systems, plus a Technical Congress featuring more than 600 papers and tutorials.

A booth with SoftInWay's **AxSTREAM™** and **AxPLAN™** software had attracted a bulk of visitors searching for the integrated, robust and cost-effective solutions for turbomachinery design. A list spans current and future users of all categories beginning from students and teachers through designers and consultants to manufacturers and retrofiters. Among them, Korea Aerospace, Siemens Westinghouse Power, China Electric Power University, Alstom, Samsung Techwin, GE Power, Cheng Power Systems, Nevada Bentley, Korea Institute of Machinery and Materials, etc. Two of them are presented below.



Gennadiy Afanasiev, Senior Engineer Siemens Westinghouse Power Corporation, Lead Turbine Integration Next Generation Combustion Turbines, and Dr. Leonid Moroz, SoftInWay's President and CEO discussing **AxSTREAM** capabilities.



Professor Kang Chun, North China Electric Power University Department of Power Engineering, and Dr. Leonid Moroz, SoftInWay's President and CEO after **AxSTREAM** software presentation. Prof. Kang Chun showed considerable interest in **AxSTREAM**'s Educational version for including it in NCEPU Department of Power Engineering curriculum.

Openings in SoftInWay

Welcome to join SoftInWay Incorporate! We invite you to explore the vacancies presented below:

CAE Software Developer

This individual should have experience in development of complex engineering software projects and a strong background in CAE tools. Excellent understanding of FEA and / or CFD methods and issues. It is essential that the individual has a strong desire to learn and explore new technologies and is able to demonstrate good problem solving skills.

- Requirements:
- B.Sc., or M.Sc., or Ph.D. in Mechanical Engineering, Applied Math or Physics with respectively 5+, or 3+, or 0-1 years of experience in engineering software development (C, C++, FORTRAN);
 - Hands on knowledge of FEA and / or CFD methods;
 - Through knowledge of FEA and / or CFD methods;
 - Must be strongly focused and extremely organized.
 - Proven experience in writing specifications, quality assurance, project complexity, labor effort estimation, and risk analysis skills.
 - Excellent oral and written communications skills are essential.
 - PMI certification is a plus.

Project Manager, Engineering Consulting

This individual will be responsible for all-round technical preparation and evaluation of project proposals in FEA-based CFD, Heat Transfer, Stress-Strain areas. Recommending improvements, the project's technical issues coordination including problems' review, sophisticated model description, precise boundary conditions evaluation, and gathering and analysis of other data required for providing further non-stop development process.

Also responsible for building and maintaining development schedules, and following project deliverables on time, for inclusion to detailed pre-go. Beyond that, the candidate needs to have very sharp analytical skills, which s/he will use through the project life cycle, including detailed self-identification, project feasibility estimation, and user requirements analysis.

Requirements:

- Masters Degree or Bachelors in Mechanical Engineering with significant related experience at Power Generation Machinery oriented companies like GE, Pratt & Whitney, Rolls-Royce, Alstom, Computed Science Degree is desirable.
- 5+ years of complex Mechanical Engineering project management, engineering application development, design, and implementation experience.
- Experience in FEA-contained packages' implementation like ANSYS and/or similar toolkits is required.
- Principle knowledge in CFD, Heat Transfer, Stress-Strain, Machine Design is extremely appreciated.
- Must be strongly focused and extremely organized.
- Proven experience in writing specifications, quality assurance, project complexity, labor effort estimation, and risk analysis skills.
- Excellent oral and written communications skills are essential.
- PMI certification is a plus.

Sales Engineer/Project Manager

The essential job function of this person is business development and sales of engineering/software development consulting services including: - forecast development to achieve national sales goals; - developing and implementing a strategic sales plan to achieve national sales goals; - identify, close and maintain key accounts; - provide information to marketing to improve products and profitability; - monitor and assess major competitors' activities and products. The person will perform sales work inside and outside in support of SoftInWay's engineering services for diverse industries including Aerospace, Power Generation, Automotive, Energy, Petrochemical, Utilities, Gas, etc. He/She will prepare proposals or service contracts for SoftInWay's engineering services with deep understanding of customer requirements and the company's team Design and Engineering abilities in FEA-based CFD, Heat Transfer, and Structural applications development. Coordinate and schedule marketing activity. Serve as Project Manager for various projects, both temporary and ongoing.

Requirements:

- Minimum 4 year Degree in Mechanical Engineering or related areas with significant related experience at Power Generation Machinery oriented companies like GE, Pratt & Whitney, Rolls-Royce, Alstom.
- 5 - 8 years experience of surpassing sales quotas in selling consulting services to C-level executives in engineering and scientific.
- Principle knowledge in CFD, Heat Transfer, Stress-Strain, Machine Design, CAD/CAE, and Visualization is appreciated. Knowledge of MS Office and MS Project is a plus.
- Excellent prospecting and presentation skills.
- Must be strongly focused and extremely organized.
- Exceptional oral and written communications skills are essential.

About SoftInWay Corporation

SoftInWay, Inc. is an engineering company headquartered in Burlington, Massachusetts, USA. Company has a sales office in Scottsdale, Arizona, USA. Company's mission is to serve international high technology community by providing high quality engineering services and software products in the area of design and modeling of turbo-, thermo- and rotating machinery; and thermal-, structural- and fluidic analyses. Company uses its proprietary technologies, and industry standard CFD and FEA tools to address design issues at the earliest possible stage, maximize engineering productivity and increase efficiency of new and retrofitted equipment. Company collaboration with academia, industry, and customers around the world has led to a reputation for constant innovation in the complete design-to-manufacture process.

For more information, visit <http://www.softinway.com/> or call 781-685-4942.

Opt-out info

This mail has been sent to: [E-MAIL]

If you wish to no longer receive the email version of our newsletter or if you consider it as unsolicited commercial e-mail, reply with the Subject line "Discontinue" and include your original email address/addresses in the subject heading. Please include your complete list of email addresses where our mail was received and reply along with the From: and To: addresses left intact. We will immediately update our list accordingly.

We apologize for the inconvenience if any caused.

Under Bill s.1618 Title III passed by the 105th U.S. Congress this mail cannot be considered Spam as long as we include contact information and a remove link for removal from our mailing list.