

BEM in Nuclear

BEM Applied in American Nuclear Power

Special points of interest:

- BEM Spool Scanning
- BEM Condensate Scanning
- BEM Pipe Scanning



After the last publication on BEM joint testing, we were asked about some applications that we had used it on the American Nuclear Industry.

At Elite, we have hand scanning kits as well as pigging capability. The best thing about hand scanning kits is that we are not limited on what we can assess when it comes to asset investigation, whether it be Internal or External Scanning on Spools, Piping, Condensate Tubes, Tanks, or boilers. There are multiple benefits of BEM, which we highlighted in the last publication. One of the most beneficial aspects of BEM is the ability to scan through non ferrous offsets of up to 1". That includes concrete, tar, paint and existing CIPP liners.



Dual Internal BEM Scanning of large diameter piping at Oyster Creek, Nuclear Power Plant.

Inside this issue:

BEM Application	2
BEM Spool Scanning	2
BEM Condensate Tube Scanning	2
Update contaminated Pipe	3
Terry Bell	4

Update: 1200ft Rehabilitation on 4" Contaminated Pipe for a Fuel Basement.

ter. We are not going to hide

the fact that, in the last two

Currently, we have cleaned about 800ft of 4" contaminated pipe. This is a running update, and the final product will be shown with our next Publication on a internal spray on coating system for small diameter pipe. Currently, EPS is the only company in the US that has the capability to spray on coating at this size diame-

cbeitner@elitepipeline.com

Carl Beitner

years, rehabilitating small diameter pipe in hard to reach places has made us extremely busy. We have had to increase our workforce due to this demand. These publications are not meant to be advertising. The information is directed to the Engineers, Pro-

ject Managers, Plant Personnel to give an in-depth insight to our processes and techniques. With this information we hope you can better plan your projects and find solutions on remediation that, in the past, you had no solution for.

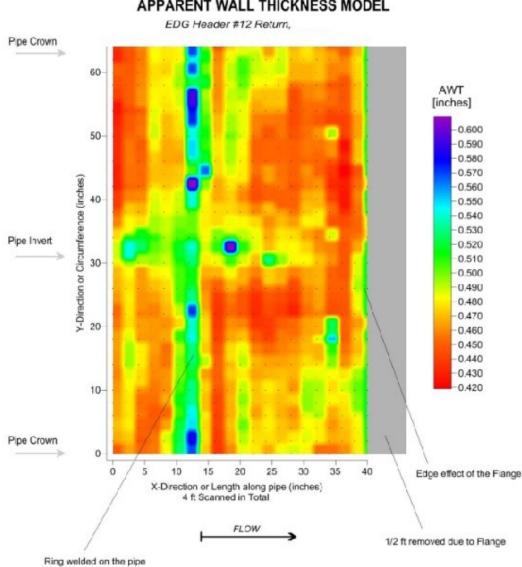
BEM Spool Scanning

BEM spool scanning is one of the most popular form of applications we get commissioned for. For us as a company, the process is unique. Once a through wall spool is accessed, we have the ability to scan, provide 24hr results, apply epoxy coating ,then sleeve if needed.

Here are some results:

Through Wall Spool Scanning through an **Enecon Coating Product**

APPARENT WALL THICKNESS MODEL



"Following scanning and pending results, we would coat the spool and install a WEKO Sleeve."



2. Coat



3. Sleeve



1.Scan

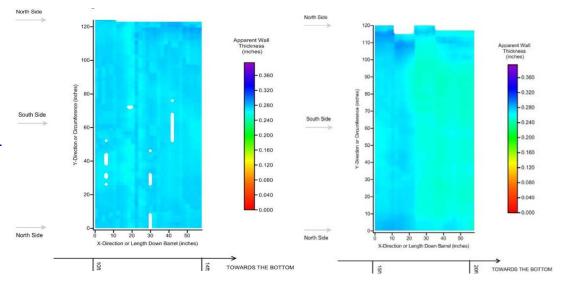
Page 2

BEM Condensate Tube Scanning

BEM condensate tube scanning is another form of scanning. Prior to this scanning, we knew the apparent wall thickness. However the client did not know the thickness of the end cap.

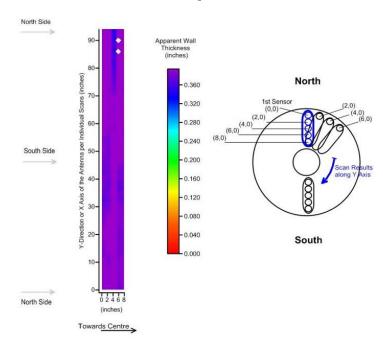


Vertical Scanning of a Condensate Tube



"Following scanning of the condensate and the cap, there appears to be some thinning at the end of the condensate tube; the cap is thicker than originally thought."

BEM Condensate Cap Tube Results

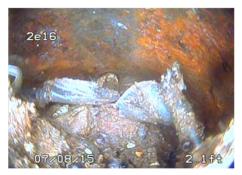


Update: Cleaning 1200ft of 4" Contaminated Lines

We are currently about 60% completed on cleaning 1200ft of 4" fuel building contaminated piping . Below are some as found pictures.







20 Weeks in PAPH Hoods & Respirators



"We are raising the bar for decontamination proficiency in extreme conditions. Under our Tyvek suits we have ice vests, radio communications and have temp cool rooms for EPS employees in the fuel building basement. Considering we are always in high risk situations we have always maintained control and behind that is first class plant support.

Carl Beitner

Prepping for Internal Spray on Coating



Vacuuming Contaminated debris after mechanical dry cleaning. No water required.





BEM: nschoepf@elitepipeline.com

Contaminated Relining:

cbeitner@elitepipeline.com

Internal Seals: tbell@elitepipeline.com

Phone: 616-726-8286



Welcome Terry Bell - General Manager

We are excited to announce and welcome Terry Bell, General Manager, to the EPS team! Terry comes to us with a solid reputation, unwavering commitment for delivering results, and proven leadership. With over 24 years of experience in the municipal, industrial and nuclear markets, his addition will prove invaluable. With exceptional expertise in trenchless rehabilitation and internal sealing, look for Terry to strengthen EPS's services and solidify our commitment to be the best in the business! He remains active in the industry through trade journal publications, speaking engagements, and EPRI participation. He earned his BS in Mechanical Engineering from Purdue University. Please join us in welcoming Terry to the EPS family!



"I find it extremely rewarding to be part of a team that is committed to safety, customer satisfaction, quality, and their employees. The growth EPS is realizing is phenomenal! I'm truly excited about our future and grateful for the opportunity to make a difference."

Terry Bell GM - tbell@elitepipeline.com