

A close-up, profile view of Harald Baldursson, a middle-aged man with short, spiky grey hair and a full, grey beard. He is looking off-camera to the right with a serious, contemplative expression. He is wearing a dark blue polo shirt under a grey zip-up jacket. The background is blurred, showing what appears to be a workshop or industrial setting with shelves and equipment.

Interview with Harald Baldursson

# From pipelines to hydropower – reliable industrial X-ray inspections

Industrial inspections in Iceland's rugged terrain present unique challenges like remote locations, extreme weather, and demanding infrastructure. For Haraldur Baldursson, founder of HB Technology Services ehf., ensuring reliability and efficiency in X-ray inspections isn't just about precision - it's about survival.

For years, heavy X-ray systems made field inspections exhausting. Today, lightweight and robust X-ray technology has significantly improved non-destructive testing. From hot water pipelines to hydropower projects, Haraldur has seen first-hand how these innovations enhance his work.

#### **A Shift to More Efficient X-ray Systems**

Haraldur recalls: "My old Andrex system was exhausting to work with. The X-ray tube alone weighed 40 kilograms, plus another 40 kilograms for the transformer box. It was backbreaking. I had to constantly repair one tube while using the other, cycling them back and forth from Denmark."

By 2017, a major project with German company Linde forced him to upgrade. "That was the turning point. I realized I needed something more reliable. After researching my options, I chose the EVO 225D/1200.

At just 28 kilograms, it was a huge relief compared to my old system, and it's been a key asset ever since."

#### **Choosing Equipment for Demanding Conditions**

Durability is a top priority. Haraldur explains: "The new system is like the Rolls Royce of X-ray tubes - robust, reliable, and built for the toughest jobs."

**"The EVO  
225D/1200 is like  
the Rolls Royce of  
X-ray tubes - it's  
robust, reliable,  
and built for the  
toughest jobs."**

Haraldur Baldursson,  
founder of HB Technology services



Glass inserts in some X-ray systems posed too high a risk for Iceland's environment. "I needed something that could handle demanding applications. The system fits the bill perfectly. It's built to last and performs flawlessly under pressure."

Strict security regulations make isotope-based systems unfeasible in Iceland, further solidifying the need for a reliable X-ray system. Comet X-ray provided a powerful and durable alternative.

#### **Field applications in harsh environments**

Haraldur highlights a key project: "One of our most memorable jobs was at a hydropower plant in Budafell. We worked on a massive pipe coming down the mountain into one of the turbines. That pipe was nearly three and a half meters in diameter, with a wall thickness of 16 to 20 millimeters. The EVO 225D/1200 handled it perfectly; it was built for jobs like that."

For hot water pipelines, which can be as large as DN 1000 and beyond, high precision is essential. "For smaller pipes, we must work with ellipses, a major part of our daily operations. Accuracy makes a huge difference."

Beyond pipelines, HB Technology Services inspects hot water tanks, oil tanks, and other industrial structures requiring plate-based X-ray inspections.

#### **Selecting the right tool for each job**

Haraldur's team selects the right system for each job. "If a job can be done with a lighter system, I'll use it, it's easier on the staff and reduces strain on the generator. But when you reach the limits of what it can handle, the high-powered system is waiting in the workshop, ready for the toughest jobs."

Haraldur Baldursson, founder of HB Technology Services ehf., in his Reykjavík office.





Central heating pipes used in Reykjavík, located in Akranes.

For smaller inspections, the ECO 200D improves mobility and speed. "The lighter system is a game-changer. It's light, easy to handle, and makes RT much more efficient. The difference in mobility and speed allows us to do more inspections in less time—without compromising quality."

#### **A new standard in Iceland**

For Haraldur Baldursson, having the right equipment means tackling Iceland's toughest inspection challenges with greater efficiency. "Having the right equipment means I can work faster, safer, and with greater precision."

Comet X-ray continues to support industry experts like Haraldur in maintaining the highest inspection standards, no matter how demanding the job.

**"When I turn  
on my equipment,  
it has to light up  
and do its job.  
And that's  
exactly what  
Comet delivers"**

Haraldur Baldursson,  
founder of HB Technology services

#### **COMET Technologies Denmark A/S**

Helgeshøj Alle 38, 2630 Taastrup, Denmark

T +45 72 40 77 00

VAT DK 18 21 52 33

Web: [xray.comet.tech](http://xray.comet.tech)

Mail: [mail.xray.dk@comet.tech](mailto:mail.xray.dk@comet.tech)