

Millions to be invested in new manufacturing plant for Loanhead

A new manufacturing plant in Loanhead will create new jobs and allow Scotland to become a world leader in a low carbon technology which will reduce emissions from off-road vehicles. The plant will grow an expected £100 million annual export business within ten years and there will be 30 new jobs initially with up to 200 jobs expected.

Danfoss has now taken a majority stake in Scottish hydraulic specialists Artemis Intelligent Power, a company based in Loanhead. Today work begins on the new facility for Artemis which will be built alongside their existing base.

The new plant will be used for the manufacturing of high tech digital hydraulic pumps and motors for vehicles used off road like excavators or wheel loaders. All of these will use what Artemis have developed over the last decade or so. It is called the Digital Displacement® technology. Even the excavator which will break ground today at the new site will use it.

Eric Bretey Director Digital Displacement at Danfoss heads up the business in Scotland. He said : "Our first goal is for Artemis technology to be a key component in the \$3.5 billion off-highway vehicle hydraulic machinery market.

“Vehicle manufacturers are asking for reliable, cost-effective solutions to reduce environmental impact and increase productivity, and Digital Displacement technology will provide just that.

“We estimate the emissions reduction of each Digital Displacement excavator will be the equivalent to taking 18 diesel family cars off the road. It is a technology which increases efficiency, reduces cost and pays for itself very quickly.”



An illustration visualising an aerial view of the planned Danfoss low-carbon Digital Displacement® manufacturing facility, Loanhead, Scotland.

Earlier this year, a consortium comprising Danfoss and Artemis secured £11 million from the Advanced Propulsion Centre UK to help develop Digital Displacement technology, alongside Scottish firm Robbie Fluid Engineering.

Bretey explained : “The support of the Advanced Propulsion

Centre has been an important catalyst in our collaboration in the off-highway sector and underscores our decision to make this major investment in the UK. In the years ahead, these pumps will become a core component in any off-highway machine which utilises hydraulic power, and there is enormous potential in other sectors too.”

Digital Displacement® hydraulics is a fundamental innovation which offers a radical increase in efficiency for a wide range of applications. The core technology – a highly flexible, digitally-controlled hydraulic pump – has applications from offshore wind to road transport, rail and off-highway machinery. It can be delivered as a ‘straight swap’ for conventional hydraulic pumps, or can be integrated in new ways, including hydraulic transmission systems for buses, or energy recovery and recycling for trains.

Niall Caldwell Managing Director Artemis said : “It’s not enough to invent new technologies in the UK – we also need to manufacture here and export around the world, and this is what this Danfoss investment will enable. We are also very grateful to the Advanced Propulsion Centre for their support and to Scottish Enterprise for their backing over many years.

“Our technology was first developed in the University of Edinburgh and we have successfully piloted Digital Displacement in trains, trucks, wind turbines and industry, and in each sector it offers massive potential to increase efficiency and reduce cost.

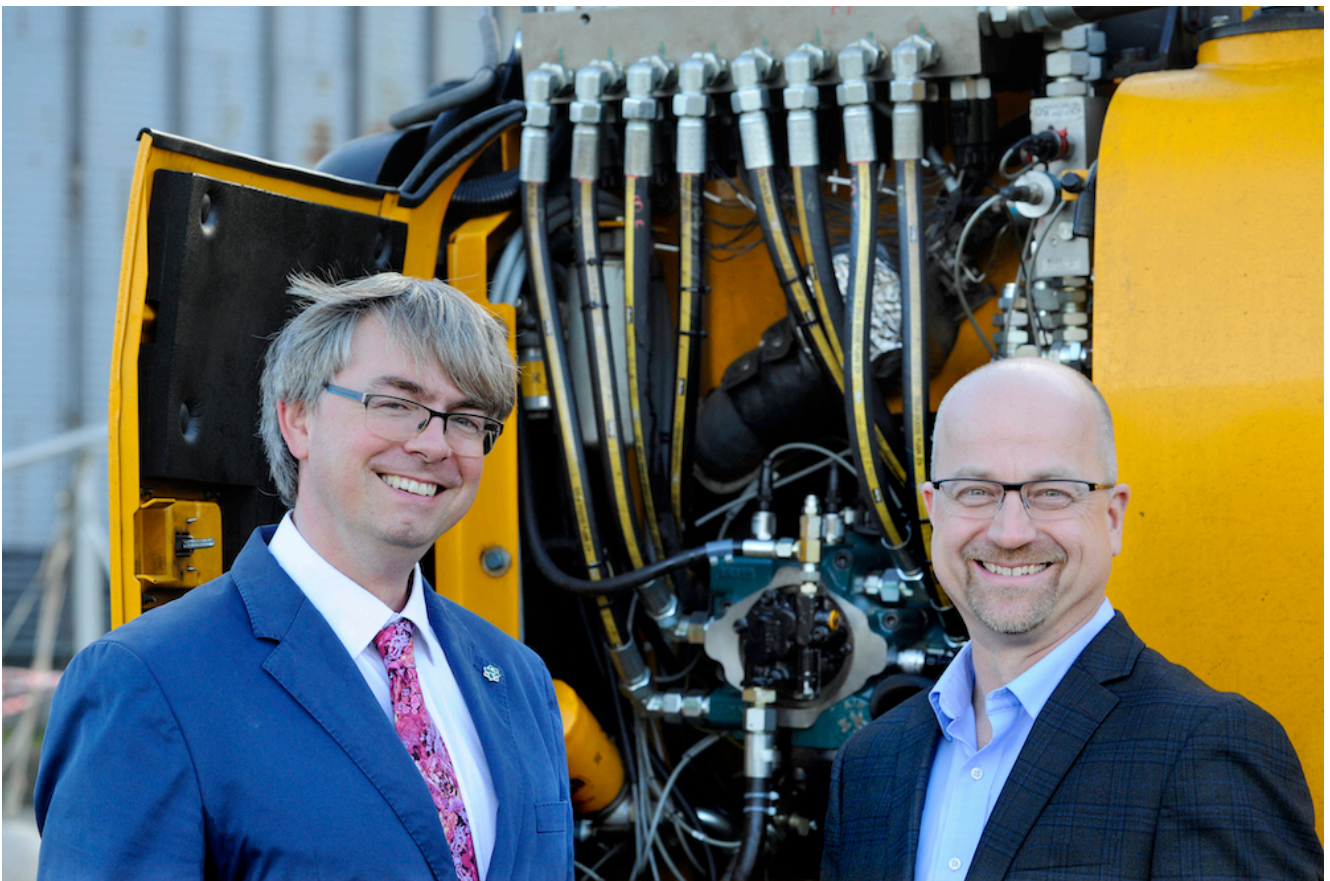
“In the coming months and years we will help Danfoss develop commercial products for each of these sectors, but today the focus is on the off-highwaymarket.

“Ultimately, the Digital Displacement off-highway vehicles of the future will have smaller engines, be cheaper to run and use less than half the energy – whether that energy comes from fossil fuel, hydrogen, biogas or batteries. It is a technology

that pays for itself, requires no sales subsidy and will make a very positive impact on the environment.”

Paul Lewis, Managing Director of International Operations, Scottish Enterprise, said: “As a long-standing supporter of the research carried out by Artemis Intelligent Power, we welcome Danfoss’s investment in the company and are thrilled to see work begin on its new Loanhead facility. Establishing high-value manufacturing bases for technologies geared towards reducing emissions can help cement Scotland’s position as a leading player in the global transition to a low-carbon economy, attract significant further investment and aid the creation of a highly-skilled modern workforce.

“It’s gratifying to think that Artemis’ technology can be utilised the world over to mitigate the threat of climate change. The company is poised to break into a multi-billion-pound market that could have a transformational impact on its business, the economy of Scotland, and the global environment.”



Niall Caldwell (Artemis Intelligent Power managing director)
with Eric Bretey (correct, Danfoss Power Solutions director).
Photo : Colin Hattersley Photography