

PRESS RELEASE

Leading corporations support hyperloop development

Hardt Hyperloop works with Tata Steel, Royal IHC and BAM to develop hyperloop standard

Delft, 30 May 2018 – Steel group Tata Steel, maritime equipment supplier Royal IHC and construction group Koninklijke BAM are supporting Delft-based Hardt Hyperloop’s European hyperloop initiative. The aim is to accelerate the development, pool knowledge and expertise and ultimately work towards developing an international standard. The organisations have today signed a declaration of intent for this purpose.

Tata Steel, Royal IHC and BAM are important industrial partners that possess knowledge and experience that dovetails perfectly with the development of the hyperloop. Tim Houter, CEO of Hardt Hyperloop: ‘Together we will create a hyperloop that addresses the infrastructural challenges. It is a sign of confidence that the business community wishes to be so closely involved with this development. These companies recognise the commercial opportunities provided by the hyperloop.’

Construction group BAM has been involved in the development of the hyperloop from the outset. BAM and Hardt previously realised the first European testing facility together. This collaboration will be further intensified through the signing of the declaration of intent. Maarten van Raaij, Director of BAM Infra Rail: ‘This is genuinely a new and innovative way to travel. It solves the problem of our increasingly busier cities. That’s why we consider this so important at BAM Infra. We hope to see its development be fast-tracked as a result of this collaboration.’

In addition to investing knowledge, Tata Steel and Royal IHC will make a financial contribution to the development of the hyperloop. Hans van den Berg, Director of Tata Steel in IJmuiden: ‘Tata Steel invests in the development of types of steel that help make society more sustainable. Our high-strength types of steel enable our clients to efficiently produce low-energy products. The development of a hyperloop fits in seamlessly with this. An extremely large part of the hyperloop infrastructure is made of steel. One of the greatest challenges entails building the hyperloop tube and rails as efficiently as possible. We have now developed technology for this and expect both the weight and costs to be cut in half thanks to a smarter construction and more efficient production methods. We also believe it will be possible to apply these developments on a broader basis extending beyond the hyperloop.’

Joti Hakkert, Director IHC Mission Equipment Nederland: ‘This initiative is a revolutionary technological innovation in the field of transport systems. IHC is consequently pleased to enter into this collaboration to help make this possible. Our knowledge and expertise in the field of handling and tunneling systems will enable us to construct the required infrastructure for the hyperloop in an extremely efficient manner that will cause as little nuisance for the surroundings as possible.’

Open invitation

The development of the hyperloop is entering a new phase with the commencement of the collaboration among the four companies. Houter: ‘The realisation of the hyperloop calls for broadly based support for the ultimate end product. We are consequently going to expand this

movement further and invite organisations that can contribute to the technological development and implementation to take part in the further realisation of the hyperloop.’

Growing support

A diverse range of investors and partners have already expressed their confidence in Hardt Hyperloop. BAM, de Nederlandse Spoorwegen (NS, Dutch Rail) and regional investment fund UNIIQ have been involved from day one. A collaboration has also been entered into with Busch Vacuümpompen en Systemen and Goudsmit Magnetics Group. It was announced in February of this year that a group of investors, including Paul van Keep, co-founder of Exact, Gregory van der Wiel, professional footballer and co-founder of investment fund Block Party, and sustainable energy fund Enfuro Ventures are investing 1.25 million euros in the hyperloop.

About Hardt

A world in which physical barriers between people no longer exist. That is Hardt’s mission. To make that possible, the start-up is the only European company that is developing the hyperloop. This is a high-speed transportation system using reduced-pressure tubes in which capsules carrying passengers or cargo can travel. The air resistance is so low that speeds of more than 1,000 km/per hour are attainable. Hardt is led by four founders: Tim Houter, Marinus van der Meijs, Mars Geuze and Sascha Lamme. Under their leadership, the team from TU Delft won Elon Musk’s hyperloop competition in 2017, after which Hardt was founded. Hardt has now grown into a professional company that enjoys the support of the Lower House of the Dutch parliament, the Dutch Railways, BAM and UNIIQ. More than EUR 1.5 million was raised in several investment rounds. Read more on:

<http://www.hardtglobalmobility.com/>

About Tata Steel’s European operations

Tata Steel is one of Europe's leading steel producers, with steelmaking in the UK and Netherlands, and manufacturing plants across Europe. The company supplies high-quality steel products to the most demanding markets, including construction and infrastructure, automotive, packaging and engineering. Tata Steel works with customers to develop new steel products that give them a competitive edge. The combined Tata Steel group is one of the top global steel companies, with an annual steel capacity of 27.5 million tonnes and almost 74,000 employees across five continents. The group’s revenue in the year ending March 2017 was \$18.1 billion.

<https://tatasteel.nl/>

About Royal IHC

Royal IHC enables its customers to execute complex projects from sea level to ocean floor in the most challenging of maritime environments. We are a reliable supplier of innovative and efficient equipment, vessels and services for the offshore, dredging and wet mining markets.

With a history steeped in Dutch shipbuilding since the mid-17th Century, we have in-depth knowledge and expertise of engineering and manufacturing high-performance integrated vessels and equipment, and providing sustainable services. With our commitment to technological innovation we strive to continuously meet the specific needs of each customer in a rapidly evolving world.

Royal IHC. The technology innovator.

www.royalihc.com

About BAM Infra

BAM Infra is the partner for infrastructural connections in the Netherlands. We connect for the future. In our own way. Slightly different, slightly smarter. Always safe en sustainable. That's what we stand for. That's our mission.

With broad expertise and innovative methods, we add value for our clients. We are known for the quality and reliability of our products and services and above all, the efforts en experience of our employees.

Building the present, creating the future.

www.baminfra.nl

Note, not for publication:

Photographic materials

Photographs of the signing and renders of the hyperloop are provided. You can download them in the attachment and use them, referencing Hardt Hyperloop.

Contact at Hardt Hyperloop:

Raymond Bresching
raymond@countercontent.nl
0650485700

Contact at Tata Steel:

Robert Moens
Spokesperson Tata Steel
T. 0251-491837
M. 06-10880476
robert.moens@tatasteel.com

Contact at Royal IHC:

Ms Eveline Bos
Manager Communications
T + 31 88 015 4585
M + 31 6 20 25 13 23
e.bos@royalihc.com

Contact at BAM Infra:

Bert Ooms
Specialist External Communications/ Spokesperson
M. + 31 6 – 11260223
bert.ooms@bam.com