

NEW, INNOVATION-ORIENTED PLANS FOR THE DESERTED SHIPYARD OF THE ROTTERDAM DRY DOCK COMPANY (RDM). IN 2007, THE OFFICIAL PAPERS FOR THIS PROJECT WERE SIGNED BY THE PORT OF ROTTERDAM AUTHORITY, ROTTERDAM UNIVERSITY AND ALBEDA COLLEGE. THE RESULT OF THESE ENDEAVOURS IS RDM CAMPUS – OF WHICH WE ARE INCREDIBLY PROUD. THE CAMPUS ENVIRONMENT IS SURE TO ATTRACT NEW PIONEERS WHO WILL FURTHER DEVELOP THIS CONCEPT. THIS COFFEE TABLE BOOK ILLUSTRATES HOW A DESERTED SHIPYARD HAS BEEN TRANSFORMED INTO A CAMPUS. LET YOURSELF BE INSPIRED AND HELP US TO CREATE AN INNOVATIVE FUTURE FOR THE CITY AS WELL AS THE PORT OF ROTTERDAM.

HANS SMITS, CEO of the Port of Rotterdam Authority

JASPER TUYTEL, Chairman of the Board of the Rotterdam University of Applied Sciences

PIET BOEKHOUD, Chairman of the Board of the Albeda College

INTRODUCTION

ACTUALLY THIS COFFEE TABLE BOOK NEEDS NO INTRODUCTION. JUST TURN THE PAGES AND SEE FOR YOURSELF HOW A DESERTED INDUSTRIAL MONUMENT EVOLVES INTO AN INSPIRING AND INNOVATIVE LEARNING AND WORKING ENVIRONMENT: RDM CAMPUS.

Firstly, what the photos don't explain is the rich history of the visionaries, these progressive pioneers working in the port, the city and the educational system of Rotterdam. Thanks to them, RDM shipyard's unusual industrial monument has taken on a new and valuable function. Within two years the former machinery hall was transformed into Innovation Dock: a hotspot for practical and theoretical technical education including a floor for innovative companies. At the same time, the offices of the board of directors were renovated and the outside area cleaned up. Further, access to this area was improved thanks to the City of Rotterdam investing in the fast ferry Aqualiner.

It all began in 2004 when Albeda College, Rotterdam University (Hogeschool Rotterdam) and CityPorts Rotterdam Development Company (Ontwikkelingsmaatschappij Stadshavens) met at the RDM shipyard. The shipyard's vocational school in the machinery hall, which Albeda College had taken over from the bankrupt RDM in 2002, was in urgent need of renovation. At the time, Rotterdam University was short of space and Stadshavens had just started redeveloping the wharf. Together with representatives from Heijplaat and the housing corporation Woonbron, they were looking for opportunities to improve the economical environment of the city and port by creating high-value living and working spaces. The parties involved did not need much time to reach an agreement on what they wanted. They were all fascinated by the history of the shipyard and the buildings as well as the fact that this century-old manufacturing industry was incredibly innovative for its day. After all, renowned ships had been built at this location and the underlying vision was future-oriented. This was the spot – this was the moment. The idea of creating a *Research, Design & Manufacturing* campus originated here.

PIONEER Frank Rieck, lecturer of Product Innovation at Rotterdam University and Chairman of the acquisition team

Five years ago this area looked like an industrial Pompeii, as if a volcano had erupted and everyone had fled the area. The machines were still in place, there was dust everywhere and even the hammers had been left, but there was no one to be seen. So the question arose - what to do with this area? A question that posed an educational challenge for all involved. In fact, the Innovation Dock was born out of necessity – since 23,000 m² is far too large – even for two ambitious institutions. However, innovating faster under the same educational roof is a compelling, unique idea. The companies with whom we are testing this concept, are thankful that working here is relatively inexpensive and that they have access to our facilities and knowledge. And we are thankful for their participation since they give technical education stature. This results in incredible synergy and symbiosis.

According to Stadshavens, establishing these schools here would act as an important stimulus for further development of the area. But how this would happen didn't become clear until the conference 'Creativity meets business' in 2005. Then both institutions and Stadshavens started to see how cooperation between education and business should be approached. Four months later an initial agreement was signed. In 2006, progress in executing

this innovative plan was delayed due to discussions on the responsibility involved in dealing with this area and the necessary investments. At the end of this year it seemed as if all initial enthusiasm had simply evaporated. After a meeting with the Economic Development Board of Rotterdam (EDBR), the situation changed, largely due to former Dutch politician Ruud Lubbers who rekindled interest for the project. Shortly thereafter the role of Stadshavens in the project changed and responsibilities were shared between the Port of Rotterdam Authority and the City of Rotterdam. The Port of Rotterdam Authority was not only the owner of the buildings at the RDM site but also responsible for development of the site. Time for action!

PIONEER Cor van Asch, Project Developer at the Port of Rotterdam Authority

If we want to remain competitive internationally, we need to continually have a lot of educated technical personnel. This is why RDM Campus is very important for the Port of Rotterdam. It enables students to meet people from harbour companies, which increases their interest in the port as a possible employer. One crucial part of this plan is finding a sufficient number of innovative companies involved in design and engineering that are willing to participate. I sincerely hope that this will succeed. Up until now, the response has been enthusiastic and has resulted in a number of contacts, so I do have faith that it will all work out great.

In addition to the efforts made by directors of the involved parties, a developmental team was involved in the RDM Campus plan. As well as investments made by the three founding fathers themselves, subsidies were acquired for renovation purposes and for the development of a new educational plan aimed at long-term cooperation between business and educational partners.

PIONEER Bert van Pelt, Project Manager of RDM Campus on behalf of Albeda College

Now that the Innovation Dock is here means that we have reached a strategic goal for a new economy and new careers. The situation is a dynamic one, but we're not there yet. This is an enormous investment for the region, involving new economies as well as people. Companies interested in development and people who really want to learn something, know that they should be here. The result: dynamic careers in a new economy. And, of course, the innovations produced should help the existing economy to move forward. Once Rotterdam becomes a city of expertise and knowledge, a manufacturing city and a city with continual sustainable results, our objective will have been reached.

INNOVATION DOCK has a surface area of approximately 23,000 m². The minimum height of this hall is 12 meters. Due to its large size, investments in sustainable energy for the hall are necessary. The hall has the largest underfloor heating system in Europe and the plans to add 3,000 m² solar energy panels to the roof are underway. The institutions involved use about half of the hall's space and have sufficient room in which to work and carry out experiments. In short, there is enough breathing space for all. Practical education takes place in greenhouses, so that even when students are working on a theoretical project, the practical side of this project remains visible. There are no walls to separate higher (Rotterdam University) from intermediate (Albeda College) vocational education.

The business hall resembles a trading floor and offers leaders in innovation space to further develop and test their products. There is room for more than 20 companies in the three market sectors *Building, Moving & Powering*. What these three market sectors have in common is sustainability. The idea is that companies will take advantage of the opportunities available at the Innovation Dock for a period of three to five years. They not only sign a tenancy contract for an open and flexible space (maximum of 2,000 m²) with lots of options, but also an expertise and knowledge agreement which outlines how education can enrich business initiatives. These companies are carefully selected with an objective to mix small companies with departments from larger companies.

Students from various fields of training and disciplines are collaborating to create the future headquarters of the Dutch Delta Design – a floating pavilion for the Rotterdam Rijn harbour. The entire pavilion is being built at the campus. The students are building trainees working with the innovation team on the prototype. In short, they are working on realizing an innovative and sustainable future-oriented project.

PIONEER Bert Hooijer, Director of the Institute for Built Environment and Business Administration at Rotterdam University

With these facilities we will be able to offer education which meets the demands of the 21st century. For our students following the educational program of Water Management, studying in the Rotterdam harbour offers enormous advantages. From the beginning, they are involved with authentic and realistic projects and they work with companies that are specialized in building projects on water. For our students there are numerous challenges in the future. For instance, we want to create a floating garden village, a kind of experimental location which acts as a free zone holding garden projects on water: a smart district which uses decentralized generated energy.

It is now October 2009 and renovations have been completed. Training and research have begun and the first companies have moved to the hall. The fast ferry crosses the river back and forth and hundreds of visitors have participated in tours and seminars held on campus. The realization of RDM Campus was possible thanks to the initiatives, the confidence and enthusiasm of many people. Unfortunately, it is not possible to thank everyone personally. This book is a tribute to those who have supported and worked together with us in creating RDM Campus. We hope to be able to count on you in future so that we can join forces in achieving a sustainable success.

INNOVATION DOCK

INNOVATION DOCK IS THE FORMER MACHINERY HALL OF THE ROTTERDAM DRY DOCK COMPANY (ROTTERDAMSCHE DROOGDOK MAATSCHAPPIJ). ON THIS SITE OF 23,000 M², COMPREHENSIVE INSTRUCTION IN VOCATIONAL EDUCATION IS GIVEN AND LEADERS IN CREATIVE MANUFACTURING WORK TOGETHER WITH STUDENTS ON SUSTAINABLE PRODUCTS FOR THE FUTURE.

Architect education hall: Van Heerden & Partners Architecten

Architect business hall: PLUS architecten

DROOGDOK

DRY DOCK (DROOGDOK), THE FORMER HEADQUARTERS OF THE ROTTERDAM DRY DOCK COMPANY (ROTTERDAMSCHE DROOGDOK MAATSCHAPPIJ), IS BOTH UNIQUE AND CHALLENGING. HERE PEOPLE AND IDEAS COME TOGETHER, HERE CONFERENCES ARE ORGANISED AND KNOWLEDGE IS EXCHANGED. RDM DRY DOCK HOUSES THE ROTTERDAM ACADEMY OF ARCHITECTURE AND URBAN DESIGN (ROTTERDAMSE ACADEMIE VAN BOUWKUNST), KNOWLEDGE CENTRES OF ROTTERDAM UNIVERSITY (HOGESCHOOL ROTTERDAM), THE CONFERENCE CENTRE, PROJECT OFFICE CITYPORTS ROTTERDAM (PROJECTBUREAU STADSHAVENS) AND THE PROJECT OFFICE RDM CAMPUS.

Architect: PLUS architecten