PREHORQUISA
SUS DISEÑOS EN HORMIGÓN ARQUITECTÓNICO

Project Title:	**Developing an optimal design code of spillway formed by wedge shaped blocks**
Acronim:	**DIABLO**
Reference:	**RTC-2014-2081-5**
Length:	**03/02/2014-31/08/2017**
Financial Entity:	**Spanish Ministry of Economy and Competitiveness (MINECO)**
Call:	**RETOS-COLABORACIÓN 2014 (National R&D&I 2013-2016 Plan)**
Coordinator:	**PREHORQUI, S.A.**
Partners:	**U.P.M., CIMNE, DACARTEC.**
Project Funding:	**930.729,25€**

Following the research ACUÑA project, ended in June 2014, and using the product obtained in this project, this research proposal arises with the intention of answering to the calculation demand and spillways dimensioning with this protection solution in an integral way; including a same tool design and calculation advanced numerical methods, all the complementary elements to the stepped channel formed by wedge shaped blocks such as the mouth of entrance to the spillway, the structures of power dissipation in the output of the channel, etc.

Furthermore, in order to the final customer possesses a greater range of choices, we are studying the variation of the material to be used in the manufacture of the blocks, evaluating the use of non conventional concrete, such as concretes with fiber.

For the marketing of ACUÑA's block, the software availability of design and calculation of the whole structure, and how it works in the cloud or via web, and the possibility to manufacture alternative materials, facilitates its sale to potential customers to offer a full service with the complete design of the spillway structure to execute precast blocks.

Detail of precast concrete blocks placed in the drainage channel.

This project is founded by the Spanish Ministry of Economy and Competitiveness (RETOS-COLABORACIÓN programme, National R&D&I 2013-2016 Plan).

GOBIERNO DE ESPAÑA · MINISTERIO DE ECONOMÍA Y COMPETITIVIDAD · SECRETARÍA DE ESTADO DE INVESTIGACIÓN, DESARROLLO E INNOVACIÓN

Testing facilities of spillway physical model with wedge-shaped blocks in operation.