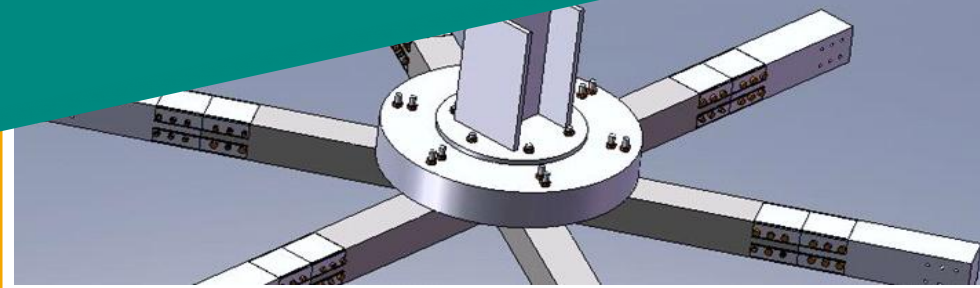




INDUSTRIALIZED SHALLOW FOUNDATION

TECHNOLOGY OFFER



COMPETITIVE ADVANTAGES

- ✓ It is a **stable system, adaptable** to various technical requirements (i.e. loads and soil resistance) and also **modulable** depending on the construction.
- ✓ It consists of a finite number of prefabricated and industrialized elements, **interchangeable** and **easy to handle**, allowing **great speed and ease of assembly** and its application to a wide variety of geometries of structural systems. It may even be **changed** over the building useful life.
- ✓ It **improves the construction process**, as well as its **management and quality**, as the system allows constructions based exclusively on said finite number of elements.

INNOVATIVE ASPECTS

- ✓ It allows to increase the volume of influence of the terrain thanks to a reticular set of pressure bulb pseudo-cylinders.
- ✓ Depending on the type of terrain and the actions applied on the columns and supports, it allows the provision of a greater or lesser number of modulated elements assembled together, thus allowing the load transmission to the ground to be increased or decreased.
- ✓ The system can be used as a single footing or as a foundation set system, constituting an authentic foundation grid.
- ✓ In one of its embodiments, a modular system is provided based on standardized measurement modules based on "M" (M = 100 mm) according to the UNE 41604: 1997 or ISO 2848: 1989. Systems are proposed in dimensional blocks 12M, 15M, 18M, 21M, 24M, 27M, 30M, 33M, 36M, 39M, 42M, 45M and 48M.

ABSTRACT

The foundation consists of a series of modules, which have a great versatility to adapt to different positions and loads from the structural support columns, as well as to the various characteristics of the land on which it rests. Specifically, those modules, which may or may not be connected to each other, are responsible for receiving the loads from the columns of the structure and transmit them to the ground. This load transmission is done through a load-distribution central base plate, to which a series of radial arms is assembled. These arms will receive the loads of such central base and transmit them to the ground, so the loads are distributed through a branched surface.

Its general use is intended for lightweight construction, preferably with medium and low loads. This foundation system is applicable to medium soils and also compact and hard terrain.

PATENTS

- ES patent applied.
- In time to apply for international patent protection.

TYPE OF COLLABORATION

- Licence agreement.

Principal Researcher

Ángel Martín Rodríguez

Department

Construction and
Manufacturing Engineering

E.mail

otri@uniovi.es

Phone

(+34) 985 10 27 62
(+34) 985 18 23 29