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Manufacturer of equipment for pharmaceutical, chemical and food industries

Equipment in conformity with PED and ATEX European Directives



The KATES company has long-standing experience in designing and fabricating pressure equipment in conformity with the Directive 97/23/EC (PED). Pressure devices such as vessels, reactors and mixers have broad application in pharmaceutical, food and chemical industries, as process equipment.

Pressure equipment may be produced in a wide range of fittings and structures, with heating and cooling jackets and isolation mantles.

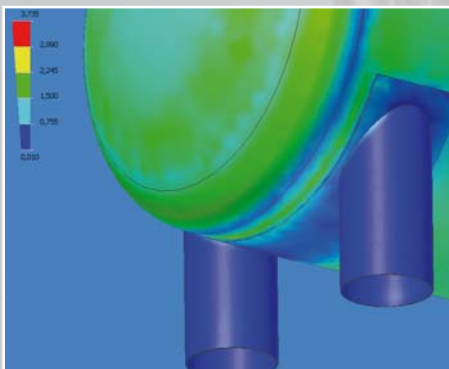
In the design process, our technical department works according to the PED Directive requirements and, for structures without applicable analytical computational model, using the finite element method (FEM). The Company's products are put through a complete certification process and obtain the CE marking.



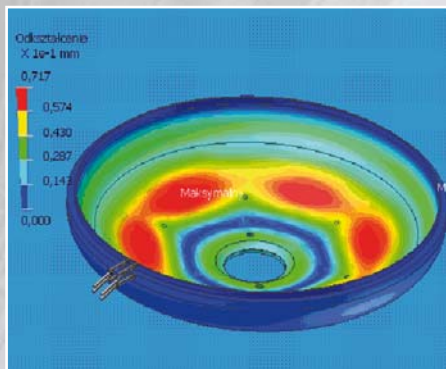
A conical mixer closed with a clamping ring



A pressure vessel head with stub pipes



A strain pattern in a horizontal vessel (FEM analysis)



A stress pattern in the structure of a technologically reinforced pressure-formed bottom (FEM analysis)



A works transport pressure vessel

KATES designs, manufactures and obtains certification for equipment intended for use in potentially explosive atmospheres, in conformity with Directive 9/94/EC (ATEX 100).

The scope of our action covers atmospheres containing dusts and gases, equipment group II, category 1, 2, 3, temperature class T1-T6.

The equipment we produce includes vacuum-pressure reactors, homogenizing mixers, compact mixers, process devices and many others.

The certification of a device is carried out with the participation of a Notified Body, for equipment of category 1, 2. During the certification process, a device documentation is examined as regards its conformity with the ATEX Directive general requirements, and the device itself is examined as regards its conformity with the documentation and the Directive requirements. During the examination, a full scope of tests are conducted on a device operating at its maximum parameters, in order to rule out any possibility of creation of an ignition source.

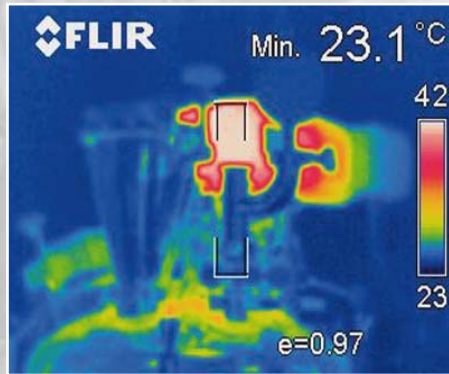
Our offer also includes installation of control and power supply systems of equipment operating in potentially explosive atmospheres.



A reactor adapted to operate in a potentially explosive atmosphere



An electrical terminals assembly in the zone



A temperature pattern of the power unit of a device (a thermographic camera image)



A data plate of a device of category 2



A mobile non-pressure mixer



A mobile homogenizing mixer



A mechanical seal auxiliary system