



**Sectoral Operational Program „Increasing the economic competitiveness”
-co-financed by European Fund of Regional Development
„Investments in your future”**

PRORITARY AXIS 2: – COMPETITIVENESS THROUGH RDI

Operation 2.1.1: „RD Projects in partnership between universities/research institutes and enterprises”

Project title: Increasing MAT Craiova competitiveness by manufacturing a multifunctional aggregate for working the soil in agricultural farms

PROJECT ID: 438 CODE SMIS: 11789

Number of financing contract: 219/ 28.07.2010

Period of project running: 28.07.2010-27.06.2012

Project responsible: Ph.D. Eng.CONSTANTIN Nicolae

Total value:	140.420
Eligible non-reimbursable value out of <i>FEDR</i>	44.612.50
Eligible non-reimbursable value out of national budget	9.137.50
Beneficiary eligible co-financing (53.26 %)	61.250
Project non-eligible value	25.420

Partners involved in project achieving:

Economic agent (Beneficiary): **SC MAT SA CRAIOVA**

Researching Organization: **INMA Bucharest**

The economic agent S.C. MAT S.A. Craiova has requested to the research organization INMA Bucharest to test the behaviour of multifunctional aggregate designed at soil working and which ensures at a single passing more than one operation: the profound soil loosening in order to facilitate the plants roots penetration into the soil at a great depth in search of water and nutritive elements; preparing the germinating bed with specific working parts; soil breakage and additional levelling by means of rollers with bars. Manufacturing and selling a numerous *multifunctional aggregates for working the soil* shall create the premises for enhancing the economy of South-West Oltenia 4 Region.

Up to present moment the first activity of the project **A1.1 In-house trials** has been finished; it comprised the product verification and then preparing it for the relevant tests, preparing the measuring and control apparatus and equipment used at tests and the in-house trials. This activity is aimed at checking the aggregate constructive parameters and public road safety. The activity 2 of the project **-A1.2 Tests in field-laboratory conditions-** designed at determining the multifunctional aggregate qualitative and energetic working indexes is in course of running.



The multifunctional aggregate for working the soil - **MATINA** performs during spring or autumn at a single passing on stubble, the following agricultural operations:

- ✓ Deeply loosening the soil at 0.20÷0.25 m working depths, with loosening parts of chisel type, in order to allow to plants roots to penetrate more easily at great depth for finding the nutritive elements and water necessary;
- ✓ Preparing the germinating bed at 10÷14 cm working depths with working parts of notched disks with elastic arm- type in view of sowing;
- ✓ Soil breakage and additional levelling by means of rollers with bars;
- ✓ The aggregate works with big power tractors (180-240H.P.) on all types of soils on plane soils or slope soils up to max. 6°.