

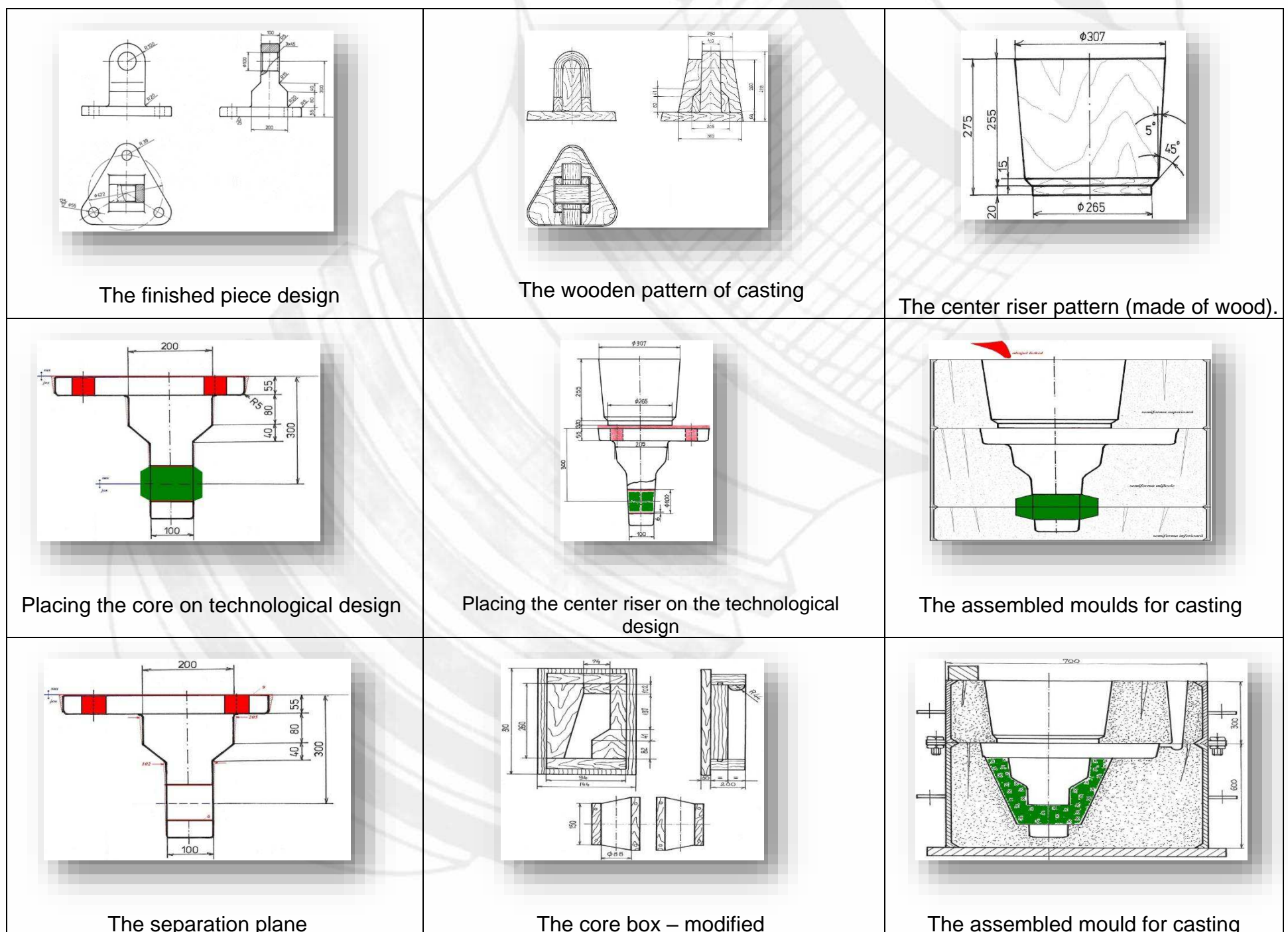
## Research on the influence of moulding-casting technology on the quality of castings

*research project*

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The quality of castings has a particularly role in the Romanian foundries. In this context, quality assurance is the overall objective of the foundries. The critical analysis performed on moulding-casting technology of the type *Lifting mechanism* is presented. This casting is a subset of the lifting and rotating mechanism of the furnace vault. The casting analysed is a medium size, with weight of 114 kg. The current moulding-casting technology involves moulding into three mould-parts leading to the occurrence of defects (decentering of the core, displacement of the lower mould and the middle mould and occurrence of burrs in area separated. Thus, to reduce the percentage of defects registered in industrial practice is necessary to change the moulding-casting technology. Thus, to reduce the percentage of defects registered in industrial practice is necessary to change the moulding-casting technology.

This requires the use of two mould-parts, re-dimensioning of the core and the core box and dimensioning of the runner network. The adoption of these changes in industrial practice has direct implications on the cost of casting and foundry costs default.



Application in industrial practice of all the technological method applied lead to the decrease the percentage of rejects registered from 13% to about 4%. This aspect has a positive influence in castings costs respectively in the company costs.

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