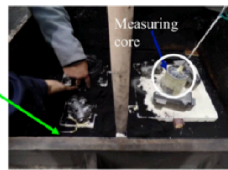


Experimental methodology

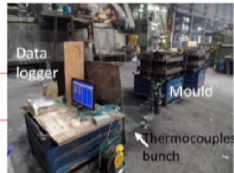
Covering the polystyrene models by zircon alcohol coating



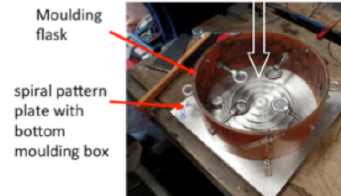
Thermocouple in casting
Mould instrumentation



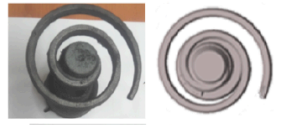
Experimental test in F RODA



Spiral reverse pattern plate



(GJL 250, $T_{\text{pouring}} = 1348^{\circ}\text{C}$
green sand humidity = 3,3%)



Green sand parametrs determined in 3 plate test. Confirmed influence of over moisture zone in green sand

GJL 250, $T_{\text{pouring}} = 1348^{\circ}\text{C}$
green sand humidity = 6,6%)



GJL 250:
 $CLF_{\text{up}} = 90\%$
 $CLF_{\text{down}} = 60\%$

GJS-400-15, $T_{\text{pouring}} = 1367^{\circ}\text{C}$
green sand humidity = 3,3%)



Green sand parametrs determined in 3 plate test.
GJS 400-15:
 $CLF_{\text{up}} = 90\%$
 $CLF_{\text{down}} = 10\%$

Real rods casting



Simulation result

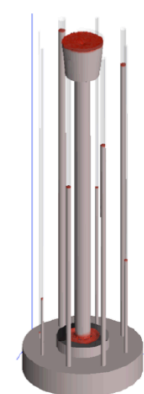


Figure n° 14.- Experimental and numerical results of simple geometrical pieces tests.