

**Request for Information
Iron Founding (Compacted Graphite Iron)**



Company Name:
Contact Person (Surname, name, patronymic, and job position):

Tel./Fax: _____ **E-mail:** _____

Country: _____ **City:** _____

1) Tasks to be tackled (please describe):

- to prevent formation of cementite in the structure of irons
- to reduce the likelihood of appearance of gas- and shrinkage-related porosity defects
- to improve cast iron mechanical properties
- to make the structure of irons more uniform in castings having uneven wall thicknesses
- to prevent formation of chill areas at the edges of light-section castings (edge hardness)
- to produce compacted graphite cast iron of grade _____
- to consistently obtain the desired compacted graphite iron microstructure of castings
- other:

2) Grade of irons being manufactured (choose one or several grades):

- EN-GJV-300 EN-GJV-350 EN-GJV-400 EN-GJV-450
- Alloy cast irons (grades to be indicated) _____ t

3) Smelting vessel:

- Induction furnace Electric arc furnace Cupola furnace Other (to be indicated):
- Capacity: Capacity: Capacity: Capacity:

4) Casting/molding method:

- green sand casting no-bake casting
- die casting pressure casting
- centrifugal casting shell mold casting
- investment casting lost foam casting
- continuous casting other technologies (to be indicated)

5) Molding equipment (describe its components indicating their make and model, clear dimensions of the mold boxes, production rate; if there are several sets of equipment available, information to be provided for each separately):

make and model: _____ **capacity:** _____ **mold box dimensions:** _____
make and model: _____ **capacity:** _____ **mold box dimensions:** _____

6.1) Capacities and types of available ladles:

- teapot ladle tilting ladle stopper ladle two-stopper ladle ladle with sliding gate valve
- Capacities:**
_____ t _____ t _____ t _____ t _____ t

- cylindrical ladle
_____ t

6.2) Capacity and type of ladle to be used for inoculation (to be indicated): _____ t, _____ type

7) Wire feeder:

- Single strand wire feeder Twin strand wire feeder None

8) Casting(s) requiring modification (process parameters for making irons):

- Base iron chemical composition:

Element Content, %									
C	Si	Mn	S	P	Cr	Al	Cu		

- iron grade to be manufactured _____;

- cast iron being manufactured is:

- ordinary synthetic

- temperature of base iron being tapped (to be indicated): _____ °C;

- temperature of iron being poured into moulds (to be indicated): _____ °C;

- weight of casting(s) _____ kg;

- number of castings in one mould _____ pcs.;

- minimum wall thickness of casting(s) produced _____;

- maximum wall thickness of casting(s) produced _____;

- casting/molding method _____;

9.1) Inoculation practice (if any):

9.2) Inoculant being used (manufacturer's name, grade, size fraction):

9.3) Duration of pouring of the molten iron following its inoculation:

- 10 min. and less between 10 and 15 min. 15 min. and more

10) Residual Mg content in molten iron at the time its pouring into molds is completed:

- 0.02% and less between 0.02 and 0.04% between 0.04 and 0.07%
 other (to be indicated)

11) QA/QC:

- Laboratory for testing molding materials Metallography laboratory
 Mechanical laboratory NDE laboratory
 Chemical laboratory

Please send the completed data sheet to 151@nppgroup.ru