

**Request for Information
Iron Founding (Gray Iron)
Company Name:**



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

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

Country: _____ **City:** _____

1) Iron(s) requiring inoculation (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 _____;

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

- EN-GJL-150 EN-GJL-200 EN-GJL-250 EN-GJL-300 EN-GJL-350
- Alloy cast irons (grades to be indicated) Other (to be indicated)

3) 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)
- other:

4) Smelting vessel:

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

Capacity: Capacity: Capacity: Capacity:

5) Casting/molding method:

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

6) 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:** _____

7.1) 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

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

8) Wire feeder:

- Single strand wire feeder
- Twin strand wire feeder
- None

9.1) Inoculation practice (if any):

9.2) Inoculant being used (manufacturer's name, grade, size fraction, consumption to be indicated):

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) 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