



Fundiciones Urbina, S.A.

ENVIRONMENTAL STATEMENT 2002

Fundiciones Urbina, S.A.



ENVIRONMENTAL REPORT

JUNE 2003



EMAS

INFORMACION
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1. ACTIVITY

1.1. LOCATION

Fundiciones Urbina S.A., is located in the in Goian Industrial area, at Padurea street nº 16 and San Blas, nº 2. Both installations are surrounded by other companies, apart from Padurea Street which is surrounded by plots of land. Access to the industrial area is through N-240.

Since its foundation in 1985, FUNDICIONES URBINA, S.A. is specialized in the production of iron castings, basically with nodular graphite and laminar graphite in all of its qualities. ADI quality is also cast which is got undergoing the pieces to a heat treatment. This treatment is subcontracted to certified suppliers. Pieces weight ranges from 1000grs to 2 Tons.



Because of the high quality of all the range of products Fundiciones Urbina is able to supply to any industrial segment.

Its main clients and segments are the valves, industrial-vehicle, agriculture machinery, tool-machinery with the naval and rail industry, iron and steel industry and the automobile industry.

Contact Data:

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Legutiano (Alava)
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Contact: José Antonio Uribe and Rakel García



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1.2. INSTALLATIONS

Place: 16 Padurea Street

Melting

- Pouring Installation: 3Tons capacity automatic ladle..
- 2 induction electric furnaces of 8 and 10 Tons respectively
- 2 oxy-rotary furnaces of 8 Tons both of them.



Green Moulding



The green automatic moulding line is able to produce 120 moulds per hour. Box dimensions are 900x700x230x230 mms., improving the production of complex pieces as much in their interior as in their exterior. The moulding system works by the means of an aeration-Sand filling system and an hydraulic system to squeeze, system capable to produce a uniform density and a high strength, as well as of its fine mould stripping property which enables to get a proper dimensional precision.

The 5 cooling lines of 39 moulds each one enables to get the proper structural homogeneity.

For sand preparation we are provided with 2 mixers EIRICH of 60 ton/h capacity each one and Space automatic sand control.



Chemical Moulding

Characteristics of the chemical moulding installation:

- Maximum capacity 1700x1200x400x400 mm. box-less
- Mixer capacity of 50 ton/h.
- Manufactured by I.M.F. in the year 2000
- Moulding possibility on the ground
- High flexibility regarding to the number of pieces, the quantity ranges from 1 to a high amount.



Finishing and Shipping

Finishing is provided with:

- 2 shot-blasters ALJU y MEBUSA,
- 1 drum shot-blaster PAMBORG

UBICATION: 2 San Blass street

In this building is the Shipment Department, here the shot-blasting of small pieces (till 45 kg.) is made and pieces are prepared and packaged to send to the client.

This is made by the means of a drum shot blasting ALJU TROM 54.

1.3. OTHER SERVICES (Finishing and Heat Treatment)

To be able to offer a complete service of finished pieces, the group which FUNDICIONES URBINA, S.A. belongs to is provided with a mechanical shop with numeric control machines and CAD-CAM for the machining of serial pieces as the production requires. The superficial coatings like painting, galvanizing or zincing are carried out by certified suppliers.

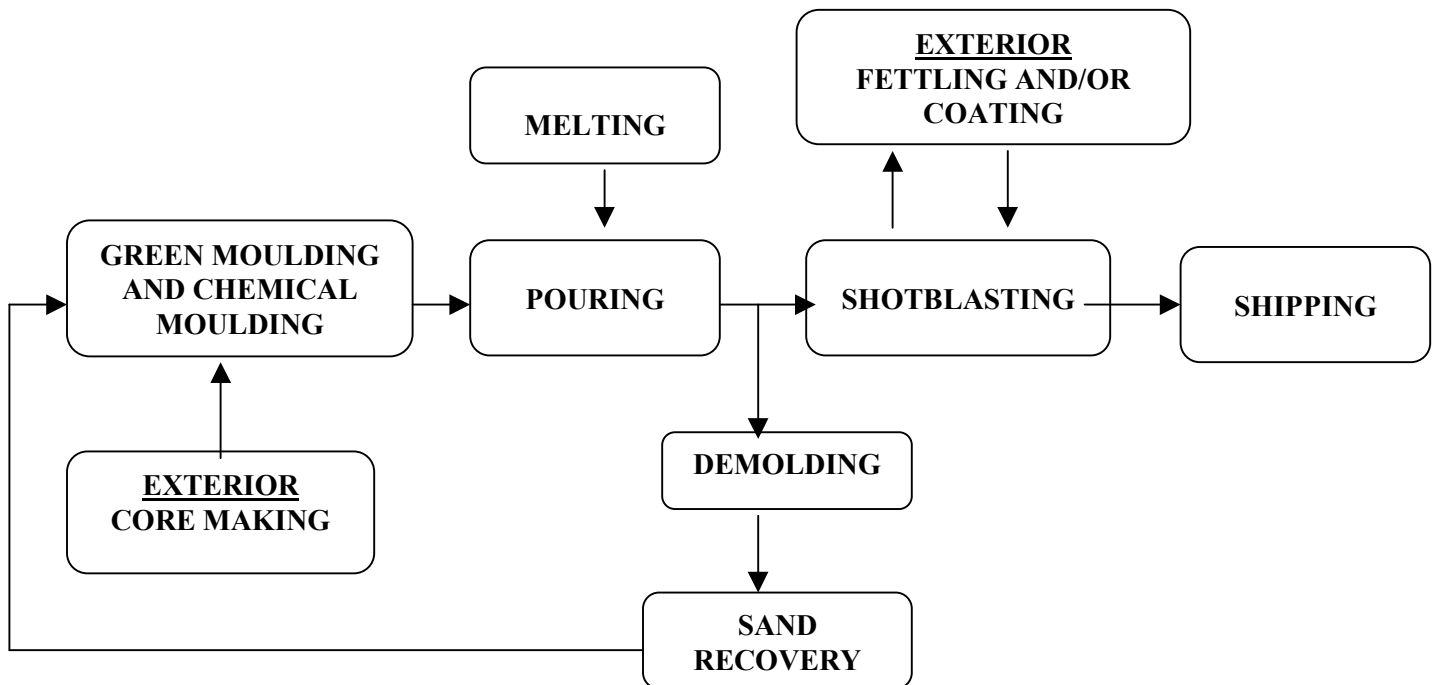
1.4. Fairs and Expositions

FUNDICIONES URBINA, S.A. takes part in the following trade fairs as expositor:

- Subcontracting biannual Fair of Bilbao.
- Annually Fair of Hanover in the Hannovermesse.



1.5 Productive Process Flowchart



GREEN AND CHEMICAL MOULDING: preparation of the sand moulds for the subsequent pouring. As a function of the size of the piece the chemical or green moulding is selected (core making is external)

MELTING/POURING: furnaces are load with raw material, iron melting, refining with ferro alloys and pouring into prepared moulds.

DEMOLDING: stripping of the moulds, sand and piece; mechanical recovery of the sand by the means of conveyor belts in different levels.

SHOT BLASTING: shot blasting of the piece and fettling and coating if it's necessary and a second shot blasting in its case.

SHIPPING: shipment preparation and packaging to pick up by external freight.



2. GENERAL ISSUES

2.1. Regulation nº 761/2001

This is a regulation – not a guideline -, that's why its application in the member countries is automatic, and it's not necessary to suit it to the national legislation.

We must say, to begin with, this Regulation known as well as EMAS (Environmental Management Audit Scheme) is free. The organizations decide to join EMAS voluntarily.

EMAS target is to promote continuous improvements in environmental behaviour of the organizations by:

- ⇒ Establishment and use of environmental management systems in the organizations
- ⇒ Systematic assessment, objective and periodic of such as systems running.
- ⇒ Information spreading about the environmental behaviour and opening dialogue with public and other interested parts.
- ⇒ Active involvement of the organization people, so as a suitable training which enables the active involvement in the works involved in environmental management system.

2.2. Environmental Statement

This is the main part of the system, since it means the society disposal of the remarkable environmental data of the company:

- Emissions, raw material, water and energy consumption, etc.
- Environmental policy, which must include two key issues, assure the performance of the regulation and the continuous improvement commitment based on measurable aims.
- Validation - made by an environmental inspector - so as the system audit as it complies with the regulation.

This means offering the society a dialogue about our company activity, providing them with all the necessary information.



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2.3 FUNDICIONES URBINA, S.A. Reasons to unite to the system

Since the system is free, FUNDICIONES URBINA, S.A. has decided its joining because in its opinion it's the best system to show its commitment with the society to carry out an industrial activity with the less impact as possible to the environment, so as making the best to decrease such impact.



On the other hand, this system provides us a better knowledge of our activity which enables to decide about what issues we must focus our efforts and to decrease our raw material, water and energy consumption, emissions and waste materials, as much in quantity as in harmfulness.



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3. – ENVIRONMENTAL POLICY

Herewith it's the **Environmental Policy** of Fundiciones Urbina, S.A.

Fundiciones Urbina S.A., is aware of the effects that its industrial activity causes in the environment. Therefore, it takes the necessary measures in order to reconcile its industrial activity development with the protection of the environment, taking criteria of continuous improvement, suitable regulation and prevention of the pollution of the environment where Fundiciones Urbina S.A. is located.

Fundiciones Urbina S.A. has settled down, maintained, revised and changed, the environmental aims and targets in order to improve continuously our environmental performance. To be more precise, one of the main aims is to reduce the management of the inert waste materials and increase its revaluation.

To comply with it, Fundiciones Urbina S.A. has developed an environmental management system suitable for the environment nature and impacts of its activities, products and services in order to guarantee the fulfilment of this policy and secure the preventive activity.

This is because the environment impacts involved in the current activities, products or/and process are regularly reviewed. The future ones are also reviewed as essential elements for the preventive environment.

Being aware of the importance of the information about the environment protection measures by the company could have for other ones, the company commits to offer to the interested parts its environment policy and takes into account the point of view of the interested parts, employees and public institutions in strategic decisions involved in the local surroundings.

Signed

Jose Antonio Uribe
General Manager of Fundiciones Urbina S.A.

Legutiano, 24th of September of 2002



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4. - EFFECTS, PROGRAM AND PRESENTATION OF THE ENVIRONMENT MANAGEMENT SYSTEM

FUNDICIONES URBINA, S.A., started the works for the definition, development and installation of an environmental management system based on the regulation ISO 14.001 in the year 2000. We took part of the group of foundries that with the collaboration of IHOBE and the Association of foundries of the Basque Country and Navarre, they worked with TALDE_ISO 14.001. In June of 2001 it's certified according with the regulation ISO 14.001 with the certificating name TÜV.

It's realized an Initial Environmental Revision which includes:

- Identification of legislative requirements for the appliance to the functions, processes and activities of the foundry.
- An inspection of the environment management practices.
- An identification, assessment and registration of the remarkable environment effects.

The information provides a base for the establishment of the first aims, its development in programs and the determination of the number and shape of the first procedures and instruction of the environmental management system.

IHOBE's offer was received in the year 2002 promoting the certification by EMAS regulation for those companies which have the certification ISO 14.001.



The adaptation between one regulation and another is realized by meetings in groups of the participant companies, where the consultant examines the document which exists in the company and detects the modifications to carry out to adapt to the Regulation EMAS.

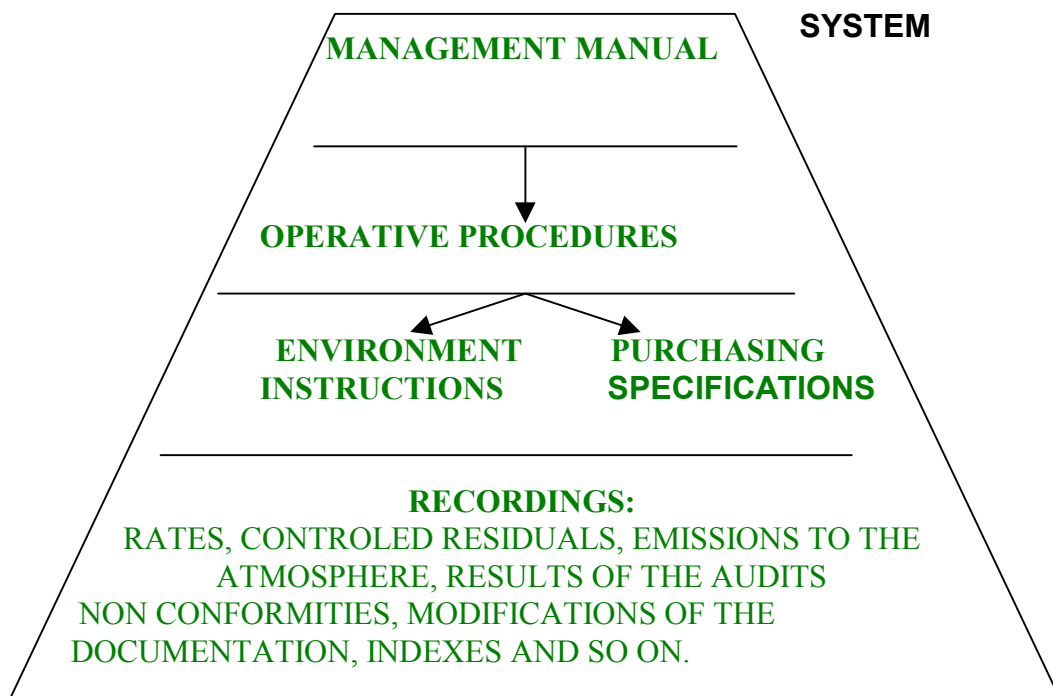


4.1. Environment Management System

The environment management system is developed according to the requirements of the Regulation 761/2001 and it's composed of the following elements:

- Environment Policy of the foundry
- Documentation of the environment management system, which consists of:
 - Environment Management Manual. It describes the responsibilities of the Management and the organization, so as the control of the activities and all the parts which cause or are likely to cause environment effects.
 - Environment program, the necessary activities to meet the annually environment aims are collected in it.
 - Operative procedures. It is described the development of the activities of the environmental Management Manual (residuals, purchasing control, emissions to the atmosphere, management of the non conformities, etc).
 - Operative environment instructions: they show in detail the performance in case to handle dangerous products, spills, etc.
 - Purchasing specifications: they describe the environment demands to specific products (chemical products, gas-oil, recycled pallet, materials which demand regulation by road, etc).
- Internal/external environment audit. (It's one of the operative procedures of the system) as a tooling to assess the development and the effectiveness of the Environment Management System.

DIAGRAM OF THE STRUCTURE OF THE ENVIRONMENT MANAGEMENT SYSTEM





Direct responsible for the development of the Environmental Management System is the Environment Management Director who is at the same time the General Manager of Fundiciones Urbina, S.A.

The revision of the System is carried out annually by the Management Department to assess the development, its effectiveness and to set out new targets and aims for the improvement of the environmental protection. The continuous and periodic follow-up of the system is carried out by the Management Department, with the responsible for the different departments, in the ordinary meetings of the environmental committee and in the outstanding meetings due to a remarkable fact in the environmental management system.

Safety and Environment Department is the responsible for the revision and maintenance of the environmental management system.

There is not any remarkable modification in the documental evolution of the environment management system. The only remarkable modification has been the procedure of "Identification and Assessment of the Environmental Issues". The approaches have been modified and the indirect issues have been included, not considered previously (see page 20 of this DMA).

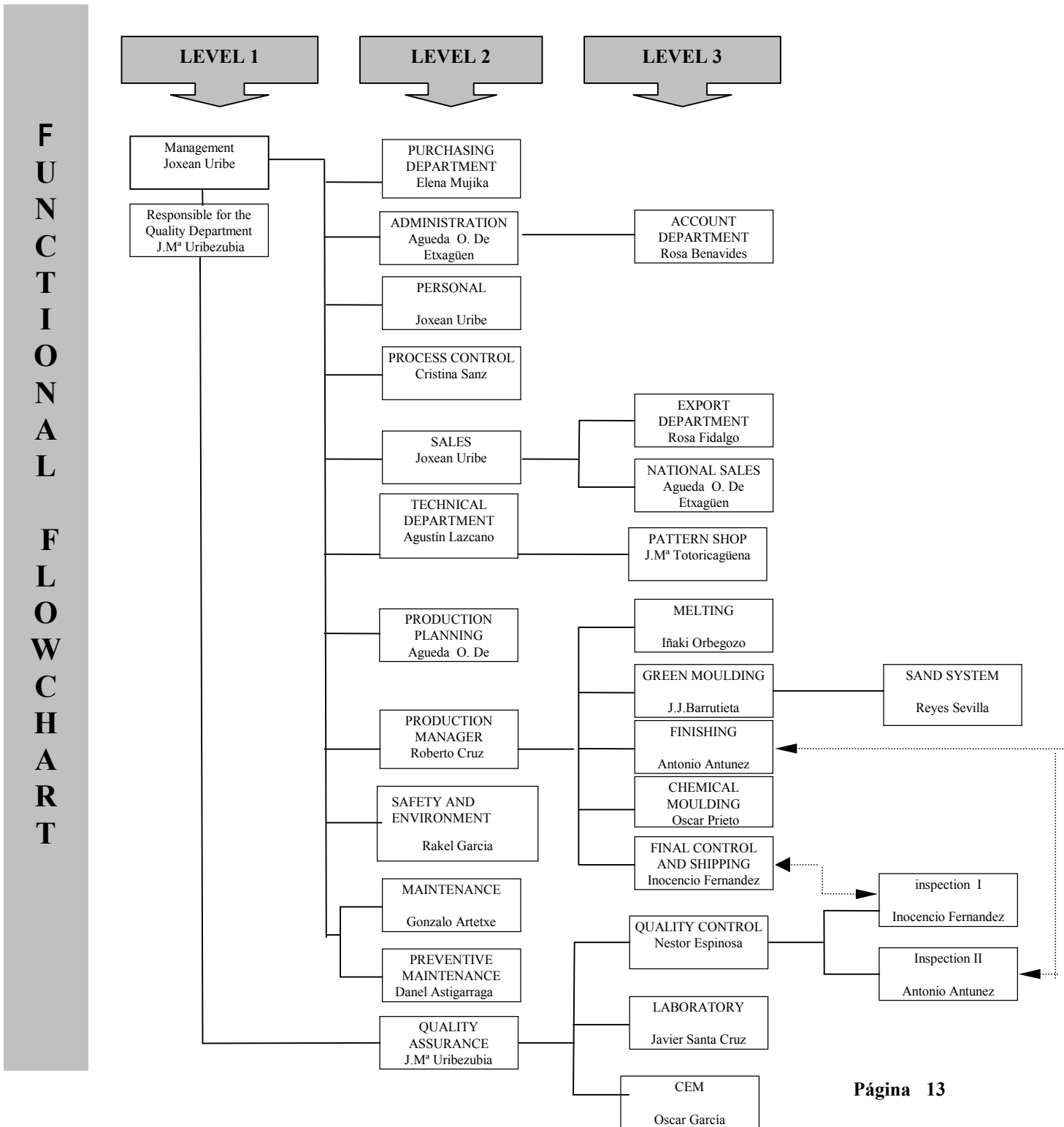
The legal environmental requirement is identified by the environment management system, in order to suit it to the strict execution of the legislation.

A mechanism of proactive communication is developed: so internal, for our employees and clients, as external, including our suppliers and contractors, the Administration (the Town Council and The Basque Government mainly) and other involved parts.



4.2. Functional Flowchart

Functional description of the organization and lines of authority in Fundiciones Urbina are exposed in the following flowchart.





5. - REMARKABLE ENVIRONMENT ISSUES

An environmental impact is any modification in the environmental, adverse or beneficial comes from the activities, products or services of the organization.

Environmental aspects:

It's any element of the activities, products or services of a company capable of act on the environment. Remarkable aspects generate an important effect in the environment. The issues which the organization has a total control are direct and issues which the company hasn't total management control are indirect.

For the assessment of the direct environmental issues the responsible for the environmental management identifies the aspects generated by the activity developed at the foundry.

The responsible for the direct environmental issues assesses each aspect. The assessment of the direct environmental issues is recorded.

Herewith a general list of issues and its impacts:



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SPILLS

Discharging of effluent to a cleaner	<p>The treatment of this effluent normally includes the reduction of the organic material. The organic material normally disappears by oxidation and aerobic kierung. A second product of the mud is produced and it is eliminated or recycled as a fertilizer.</p> <p>The impact changes depending on the receipting water like the composition of the effluent. An impact of the modifications of the natural ecosystem is produced.</p>
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EMISSIONS TO AIR

Emissions of gas, heat, liquid and solid particles	<p>It affects to the labour environment, it contributes to the pollution of the air of low level and the global heating. Contribution to the glasshouse effect and the acid rain; the activity could change the local environment.</p> <p>It contributes to the air pollution directly or indirectly as synergistic or payee of other pollutants.</p> <p>The impact changes as a function of the emission and the surrounding area.</p>
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INDUSTRIAL WASTE

Deliver of the industrial waste for its ignition	Emission of COV, NO _x , SO _x , CO ₂ , and particles to air and, therefore it contributes to the reduction of the ozone, the air pollution, glasshouse effect gas production and a global heating.
Storage, handling and delivering of urban inert waste	<p>Contribution to acid filtrations in drains with a high grade of biological Oxygen Demand (DOB), ammonia, organic nitrogen, volatile fatty acids and other toxins. The gas of the sinks contributes to the glasshouse effect and the global heating. It affects to the local environment and it smells badly.</p> <p>Risk of impact due to elution, spills, filtrations, and so on. The impact depends on the composition waste.</p> <p>Use and degradation of the site</p>
Delivering of residue for recovering, recycling and valuation	Recycling, recovery and valuation reduce the residue impact, but it can be remarkable the impact in the process and its following use and they must be taken into account.
Storage, handling and delivering of dangerous residue	Risk of spills or filtrations which could act with other materials and could have an effect in human health and impact in environment. High impact as dangerous residue which can be flammable and/or having toxic effects and/or cancerous and/or other ones of different nature.
Use interceptors on the collection system	Reduction of the natural sources. Contribution to the production of solid residue.



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STORAGE AND CONSUMPTION

Storage and handling of chemical products (acids, oils, lubricants, solvents, etc)	<p>Risk of spills or accidental filtrations, deliberate or not, detected dangerous products which could act with other storage products and have an effect on the human health and have an impact in the local and global site.</p> <p>For the specific danger, risk for the health, composition and environmental impact, see the security data form of the product supplier.</p>
Consumption of raw/auxiliary material, non dangerous	<p>Reduction of natural sources.</p> <p>Contribution to the production of dangerous residue, solid residue which are not recycled.</p>
Consumption of water of municipal resources, water sites of surroundings	<p>The impact can have an effect in the local site and the hydro graphic ecology. Reduction of the limited hydrologic resources. Water is one of the main resources of life. Only the 3% of the world water is without salt and only the 0,003% of the world water is suitable for drinking, irrigate or for the industry.</p>
Consumption of rock gas for the energy and fuel for transport	<p>Reduction of resources of fuel non renewable. Combustion produces emissions of COV, NO_x, SO_x y CO₂ and therefore, air pollution , acidizing, gas for the glasshouse effect and global overheating. Global gas resources are rated for 80 years:</p> <p>Transport is the origin of 50% on average of the air pollution, CO_x (14%) and CFC (28%).</p>
Consumption of hydroelectric energy	<p>Hydroelectric energy is one of the cleanest energy sources in the world. It's renewable and without CO₂ other emissions to air during the process. Biggest hydraulic reservoirs can have a serious impact in local ecology and nearest areas due to the deforestation, loss of biodiversity and social impact.</p>

OTHER ONES

Vibrations	The impact changes according to the affected areas.
Noise	Noise pollution is the risk more common and can affect all the local ecology and the natural site. One excessive ore long exposure to noise (over 8 hours above 85-90 decibels leads to a hearing loss).
Visual impact	The impact changes according to the environment and local community. Such as impact can be considerable and it's often underestimated by who is responsible for producing it.
Other ones	Product or service suppliers' inappropriate behaviours contracted or subcontracted. Impact changes according to the inappropriate environmental behaviour (e.g. impact changes according to the reduction of the residue).



FUNDICIONES URBINA, S.A. carries out once a year the identification and assessment of the environmental aspects with the target of knowing the real and potential aspects produced by the activities and services developed in FUNDICIONES URBINA, S.A. including:

- Emissions to air at existing places
- Generation of residue: dangerous, inert and urban ones
- Storage and handling of dangerous products
- Generation of external noise
- Consumption of water supply, raw material and auxiliary material
- Fuel and energy consumption

YEAR 2002

Direct environmental issues are assessed and the 6 most significant for FUNDICIONES URBINA, S.A. have been the following ones:

1. Emission to atmosphere of solid particles from the oxy-rotary furnaces: they are produced during the raw material melting process in the oxy-combustion rotary furnaces.
2. Storage, handling and delivery to authorized body inert residue: meeting slag, broken cores, non-renewable sand and other residue are taken to official dumping site.
3. Storage and handling of dangerous products in the chemical moulding: resin and catalytic products.
4. Consumption of auxiliary dangerous materials in chemical moulding, meeting and maintenance mainly.
5. Consumption of electricity for the electric furnaces running and general lighting (plants and offices).
6. Storage and delivery to authorized agent the dangerous residue produces during the maintenance, chemical moulding and casting production in general.



ASSESSMENT CRITERIA

Questions to ask about each identified aspect:

- a) Does any parameter (emission, training, etc.) exceed over 85% the limit value established by legislation?. Or, Does the identified issue involve the use of any dangerous product or creation of any dangerous residue?.
- b) Are the third interested ones worried about the issue? To say in more detail: employees, clients, neighbourhood, local community, share-holders, bankers, insurance companies or lawyers.
- c) Is the identified issue or impact associated to any more serious global issue? That is: Global heating and glasshouse effect, reduction of the ozone layer, acid rain and acidifying, deforestation, loss of biodiversity, use of non renewable resources.
- d) Is significant the used, storage, dumped, emitted or thrown away amount?
- e) Is significant current frequency to use, storage, dump, emit or throw away?

It's considered significant the environmental issue for which the answer to any question of the questionnaire of significance is Yes (or what is the same: when the significance factor is 1 or more).

Despite having identified a lot of important issues regarding to its environmental impact, valuation has turned out to be low since they don't involve large consumptions or residue creation (auxiliary dangerous materials, dangerous residue, etc.) the dangerous residue types table and its per cent of creation against the residue total is shown in page 32.



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YEAR 2003; advance of data dated June-2003

With the implementation and adherence to the EMAS regulation, the procedure of environmental aspects identification and valuation has been modified. Since the year 2003 the valuation is carried out according to toxicity and identified aspects quantity criteria. (see page 21).

Identification of key issues is carried out so for direct issues (created by foundry activities and services) as for the indirect issues (created by the suppliers and contractors, transport, product issues, etc. Over which organization hasn't got total management control).

Following direct significant issues have been identified in the procedure implementation:

- Emission of solid/dust particles to atmosphere in new installations (since there is no emission data, the most restrictive value is taken)
- Management of inert residue to authorized agent (slag, fines, sand, etc.). Inert residue is the 99% of the generated residue.
- Gas consumption for oxy-combustion in rotary furnaces.
- Packaging or containers used in the expedition of pieces to client can become residue.



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Regarding to indirect issues, three of them have been identified and their control is described following:

1. Environmental behaviour and contractors and subcontractors' practices

Subcontractors who develop their activities, so as inside as outside of FUNDICIONES URBINA, S.A. installations have received a letter and acknowledgement of receipt in order to:

Control the dangerous residue (DR), inert residue (IR) and urban residue (UR) generation and management by using the suitable containers.

If any new service is subcontracted, Environment Responsible assesses environmental issues associated with this service, reporting the result to subcontractors and involved Department.

Additionally, subcontractors who give services associated to Environment Management such as transport companies, dangerous residue agents and other ones, are allowed by competent organizations.

2. Purchasing Management

All purchases in FUNDICIONES URBINA, S.A. are carried out trying to minimise environmental impact of these products or services, looking for recycled or re-used products, bulk or recyclable containers, sprays without CFC's, low energy consumption machines, etc.

3. Product freight to international client: dangerous combustion which pollutes atmosphere is generated.

Fundiciones Urbina S.A. control is low for this issue. Fright companies take over the routes in order to achieve a return on it.

Environmental awareness is promoted and tooling for managing is offered.



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6 – ASSESSMENT CRITERIA OF ENVIRONMENTAL ISSUES (2003)

Assessment of direct environmental issue significance on standard conditions is carried out according to:

DIRECT ISSUES: are evaluated according to the magnitude and toxicity (T*M).

<u>Toxicity (T):</u>	MATERIAL OR USE	PRODUCT WASTE	NOISE
LOW: 1 point	Use of recycled components/ Non toxic components or described as irritant or harmful.	It's recycled or appreciated	There is no complain in neighbourhood
MEDIUM: 5 p	Use of recycled components/ Easily flammable, corrosive or toxic	It's burned	There are oral complains in neighbourhood
HIGH: 10 p	Use of non recycled components / Explosive, Highly flammable, very toxic, cancerous, mutagenic or teratogenic components	It's taken to dumping site	There are complains in writing in neighbourhood

<u>Toxicity (T):</u>	EMISSIONS	SUBSTANCE
LOW: 1 point	Emitted amount is below 25% legal top	Substances described as irritant or harmful according to security forms and the rest of cases.
MEDIUM: 5 p	Emitted amount range is the 25-50% of the legal top.	Substances described as easily flammables, corrosive or toxic according to security forms.
HIGH: 10 p	Emitted amount is over 50% of legal top	Substances described as explosive, highly flammable, very toxic, cancerous, mutagenic or teratogenic according to security forms.

<u>Magnitude</u>	AMOUNTS	EMISSIONS
LOW: 1 point	Generated/used/emitted amount is bellow 25% of the used total	Focus emits 8 hs 220 days/year (aprox. Working days by collective agreement)
MEDIUM: 5 p	Consumed/emitted/generated amount as residue is between 25 and 50 of the whole/ established legal limit/ generated residue	Focus emits 12 hs 220 days/year (aprox. Working days by collective agreement)
HIGH: 10 p	Consumed/emitted/generated amount as residue is over 50 % of the whole/ established legal limit/ generated residue	Focus emits 16 hs 220 days/year (aprox. Working days by collective agreement)



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For INDIRECT ISSUES:

Product issues: Once the issues are identified, the evaluation is carried out according to the magnitude and toxicity (T*M).

Toxicity (T)	MATERIAL O USO	TRANSPORTE
LOW: 1 p	Use of recycled components	Ship/railway
MEDIUM: 5 p	Use of non recycled, non toxic components	Truck
HIGH: 10 p	Use of non recycled toxic components	By air

Magnitude: (M):	MATERIAL OR WASTE	USE	FREIGHT
LOW: 1 p	Materials with a weight <5% of product weight	Product emits air or water vapour	> 1000 km
MEDIUM: 5 p	Material with a weight >5% and <15% of product weight.	Product main pollutant Appendix III RD 833/1975	Between 1000 and 3000 km
HIGH: 10 p	Materials with a weight >15% of product weight.	Product emits special pollutants Appendix III RD 833/1975	> 3000 km

Contractors and subcontractors' practices and suppliers' suppliers and external services: Once the issues are identified, the evaluation is carried out according to magnitude and environmental management (M*GA).

Magnitude (M):	CONTRACTORS/SUBCONT. - INCIDENTS	SUPPLIERS / EXTERNAL SERVICES
LOW: 1 p	There is no non conformities (incidents...) at work	Supplier / group of suppliers is up to 25% of total cost
MEDIUM: 5 p	Slight incidents (they aren't a danger for environmental policy)	Supplier / group of suppliers is up to 25-50% of total cost
HIGH: 10 p	Serious incidents (policy appliance is in danger)	Supplier / group of suppliers is over 50% of total cost

Note: when a supplier is over 25% of total cost, then it's considered individually. Groups of suppliers can be: raw materials, auxiliary materials, external treatments for pieces, etc.

Environmental Management (GA):

LOW	1 point	Company has a certified SGMA
MEDIUM	5 points	Company has a legal audit. SGMA implemented without certification
HIGH	10	Without environmental performance



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For **ACCIDENTS OR INCIDENTS** – (Evaluation criteria haven't been modified with the implementation of EMAS Regulation)

For each incident or accident likely to happen (abnormal situations), is determined likelihood of happening and magnitude of its consequences, according to the following ranking:

GRADE OF RISK (GR)		MAGNITUDE OF CONSEQUENCES		
		LOW (1 p)	MEDIUM (5 p)	HIGH (10 p)
LIKELIHOOD OF HAPPENING	REMOTE (1 p) Less than 1v/year	Trivial (1 p)	Slight (5 p)	Serious (10 p)
	POSSIBLE (5 p) 1v/m - 1v/year	Slight (5 p)	Serious (25 p)	Very serious (50 p)
	LIKELY (10 p) 1vez/mes	Serious (10 p)	Very serious (50 p)	Very serious Imminent (100 p)



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7. - OBJECTIVES, EXPENDITURE AND INVESTMENT IN YEAR AÑO 2002

OBJETIVE	AIM	ASSOCIATED ISSUE/REASON	(*) RESPONS. EXECUTION	% PERFORMANCE
CARRY OUT AN ENVIRONMENTAL EKOSKAN	LOCATE ENVIRONMENTAL ISSUES TO IMPROVE	Continuous improvement, see improvement possibilities	RE	100
REDUCE INERT RESIDUE MANAGEMENT	REDUCE 2.5 % INERT R. MANAGEMENT TO DUMPING SITE	Direct issue associated to residue: its generation, treatment and management	MA / RE	100
VALUATE TRANSFER BELTS AND TYRES	VALUATE 100% BELTS AND TYRES	Direct issue associated to residue: its generation, handling and management	MA / RE	100
REMODELATION OF THE POURING NETWORK	REGULATE WATER WASTE	Continuous improvement, connect directly to an interceptor	CM / RE	100
INCREASE RECYCLED AND ECOLOGIC PAPER CONSUMPTION	CONSUME 100 % USED RECYCLED PAPER	Issue associated to resources consumption and residue generation	CM / RE	100
MANAGE PLASTIC	PLASTIC CONTAINER AND MANAGEMENT OF THIS RESIDUE	Direct issue associated to residue: its generation, handling and management	RE	60
REDUCE PACKAGING AND CONTAINERS AMOUNT	REDUCTION TO A LEVEL OF 2% THE PACKAGING AMOUNT	Direct issue associated to residue: its generation, handling and management	CM / RE	100
IMPROVE THE LOCAL IMAGE OF FUNDICIONES URBINA S.A.	IMPROVEMENT AT UP TO 5 % FUNDICIONES URBINA S.A. IMAGE	Continuous improvement regarding to external local image	RE	100
ENVIRONMENTAL AWARENESS	ENVIRONMENTAL AWARENESS IN ALL LEVELS OF ORGANIZATION	Continuous improvement and workers' taking part	RE	100
IMPROVE STORAGE AND HANDLING OF RESINS AND CATALYTIC PRODUCTS IN CHEMICAL MOULDING	STORAGE AND HANDLING OF DANGEROUS SUBSTANCES	Issue associated to dangerous material storage, resins and catalytic products	CM / RE	100
COLLECTION THE OFF-GASS CLOSE TO ROTARY FURNACES	EMISSIONS TO ATMOSPHERE	Issue associated to air pollution	CM / RE	80

(*) CM: COMPANY MANAGEMENT; RE: RESPONSIBLE FOR ENVIRONMENT; MA: MAINTENANCE; CM: CHEMICAL MOULDING



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In relation to the year 2001, targets are kept (**but** with a modified aim since they are considered generic of an environmental management system and based in the continuous improvement idea):

- Reduction of inert residue management
- Reduction of packaging and containers quantity (residue)
- Plastic management and transfer belts valuation
- Increase ecological and recycled paper consumption

Expenditure and Investment in 2002

General expenditure and investment for environmental issues in the year 2002 has reached to a total of 454.682,25 euros corresponding to:

- Inert and dangerous residue management: authorizations, transports and pouring fees.
- Chemical composition of residue
- Enabling of water waste canalization
- Contraction of building manufacturer for enabling the structure to dedust the exhaust gas for rotary furnaces and cored wire installation.
- Installation of exhausting equipment and filters for rotary furnaces and cored wire installation.
- Installation and connection of nitrogen installation.

To count expenditure and investment, neither involved personal cost nor internal management used material of established targets haven't been taken into account.

Neither cost due to corrective measures implementation.



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Targets non achieved at 100 %

Plastic management:

Aim was achieving a container where people throw away this type of residue for its suitable management. It was required to Legutiano official al administration and they refused it. Budget was required to a specialized company and this budget was refused because it was considered too high in relation to the generated residue quantity. Residue was picked up in bags and taken to existing containers of near villages.

Setting of plastic container has been ordered again to Legutiano official administration in the year 2003. In June of 2003 the administration has put a container in the surroundings for delivery of tins, cans, plastic, etc.

Installation of aspiration and purification in rotary furnaces:

Aim is installing equipment for aspiration and depuration of produced emissions by the rotary furnaces and carries out the measures to record and legalise the emitting sources to atmosphere. In December 2002, the installation was fitted and at total yield Program was closed without measures having chosen OCA and budget agreement. In June 2003, the measures have been already carried out (see results in page 38) and such project has been presented to Basque Government.





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7.1- TARGETS for year 2003

TARGET	AIM	ASSOCIATED ISSUE/REASON	(*) RESPON. EJECUCION	(**) % CUM PLIMIENTO
IMPLEMENTATION AND CERTIFICATION ACCORDING TO EMAS REGULATION	CERTIFICATED BY INDEPENDENT BODY	Continuous improvement of the environmental management system	ER/ ED	80
REDUCTION OF AIR EMISSIONS	EMISSION BELLOW 50 P.P.M.	Direct issue associated to air pollution	ED / MA	100
REDUCTION OF INERT RESIDUE TO DUMPING SITE	REDUCTION UP TO 2.7% MANAGED SAND QUANTITY MANAGED IN DUMPING SITE	Direct issue associated to residue, its generation, handling and management	MA / ER	40
IMPLEMENTATE THE REGULATION ISO 14.031	ESTABLISH A SPECIFIC PROCEDURE TO DELIVER OF INDICATORS	Improvement in data system and treatment of environmental management indicators.	ER	40
INVOLVEMENT OF HEAT TREATERS SUPPLIERS WITH ENVIRONMENTAL MANAGEMENT	50 % OF HEAT TREATERS SUPPLIERS WITH LEVEL 1 DE E+5 (ADVICE AT THE PLANT OF IHOBE)	Indirect issue associated to environmental involvement: residue management, emissions, noise pollution, dumping, consumptions, etc.	ER	40
AWARENESS WITH ELIMINATION OF PRODUCT BY CLIENT	INTERVIWERS ABOUT ELIMINATION AND LETTERS ABOUT AWARENESS	Indirect issue associated to generated residue and its management at the end of useful life of bought	ER	40
INCREASE THE RE-USE CONTAINERS	REDUCTION OF WOOD RESIDUE QUANTITY UP TO 2%	Direct issue associated to residue: its generation, treatment and management	CM / ER	40
WORKERS TAKE AWARENESS IN SPEARING TIME BEHAVIOUR	REPORT OF THE RESIDUAL ELIMINATION GUIDE AND ONE ARTICLE MONTHLY	Continuous improvement and workers' participation	ER/ ED	20

(*)CM: COMPANY MANAGEMENT; ER: ENVIRONMENTAL RESPONSIBLE; MA: MANTEINANCE; ED: ESPECIFIC DEPARTMENT

(**) % execution in June 2003



8. - VALUATION OF SIGNIFICANT ENVIRONMENTAL EFFECTS REGARDING TO ACTIVITIES

Issues capable of producing environmental effects are described below including tables of data and graphs. Comments are added with tables of data for its interpretation:

Data which are offered can't be compared at sector level since as far as now we haven't got sectors indicators. Fundiciones Urbina, S.A., Works with IHOBE (Public Body of Environmental management) in the source indicators. This project has as target to get indicators of different companies and make sector indicators in order to have reference data and evaluate internal environmental behaviour.

FUNDICIONES URBINA, S.A. performances have as target to minimise in origin, recovery, recycling and re-use.

On the other hand foundry separates residue in origin and on individual way, in order to value the residual products.

FUNDICIONES URBINA, S.A., produces in its activity:

- Inert, dangerous and urban residue
- Atmospheric emissions and dumping
- Material and energy consumptions
- Other ones

Let see data about them:



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8.1. Dangerous residue

Internal residue nomination	Process of generation
USED OIL	Compressor – Maintenance of installations
FLUORESCENT	General - Lighting
PILES	General – little things, lantern, camera, etc.
BATTERIES	Automotive barrows
RESINS AND RESIN CONTAINERS	Patterns – pattern repairing for casting
OIL/DISOLVENT SOAKED CLOTHS	Maintenance labours
OIL FILTERS	Maintenance of installations and barrows
VACUUM SPRAYS	Maintenance of furnaces , general maintenance
EMPTY PLASTIC CONTAINERS	General (which had dangerous substances)
EMPTY METAL CONTAINERS	Chemical moulding and maintenance (which had dangerous substances)
FEPIOLITE FOR SPILLS	Chemical moulding (resins and catalytic products), expeditions (fuel) and maintenance (installations repairs)
OFF-DATED PAINTS AND THEIR PACKS	Maintenance – paint for pieces, guardrails, etc.

Residue or products which are re-used or recycled are:

- Empty containers of resins and catalysts
- Barrows' Batteries
- Empty aerosols

All of them are carefully sent according to their nature delivering to authorized bodies for treating.



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8.2. Inert Residue

Residue internal nomination	Type of residue according to Ordinance. 423/97
MOULDING SAND	Moulding sand
BROKEN CORES	Cores sand
SHOT BLASTING FINES	Metal particles
SAND OF INDUSTRIAL CLEANER	Other inert residue
SLAG	Slag
MOULDING FINES	Sand of filters
HEAT RESISTANTS	Heat resistant material
TRANSFERS BELTS AND TYRES	Caoutchouc and elastomers and tyres

Products or residue which are re-used or recycled are:

- Excess sand from sand recovering process (cement plant)
- Moving belts and tyres (cement plant)
- Toner cartridges for printers
- Pallets and broken wooden boxes

8.3. Urban solid residue:

- Paper and cardboard.
- Plastic
- Organic rests from canteen

Paper cardboard and plastic is picked up for recycling by authorized company and urban residue is picked up in container to take to dumping site.



Fundiciones Urbina, S.A.

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8.4. Residue Data

YEAR	PRODUCTION	TOTAL Residue	INERT Residue	DANGEROUS Residue	Wood Residue
2001	19.193	6833,239	6322,580	0,309	510,35
2002	19.906	6615,749	6044,115	0,289	571,32

In Tons

Urban residue is not counted.

YEAR	% INERT RESIDUE	% DANGEROUS R.	% WOOD R.
2001	92,53 %	0,0045 %	7,47 %
2002	91,36 %	0,0047 %	8,63 %

8.5. Residue Indicators

INDICATOR	UNIT	2001	2002
Q residue container / bought pieces	Tn/Tn * 10 ³	28	31
Q generated residue / rough production	Tn/Tn * 10 ²	35,6	33,2
Revalue sand / generated sand	Tent %	16,55 %	28,68 %
Revalued sand / production	Tn/Tn %	2,35 %	4,51 %
Generated sand / production	Tn/Tn %	14,20 %	15,72 %

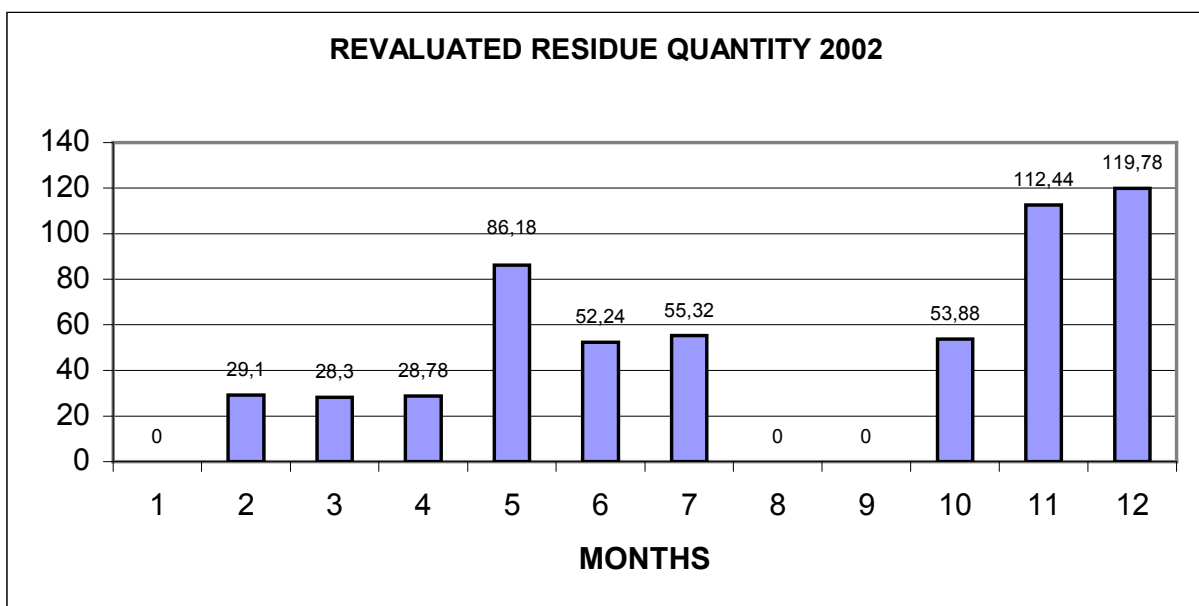


8.6. Mechanical recovery process of sand

Process has the following steps:

1. Box is separated from sand and pieces
2. Sand and piece go to demolding drum where they are cooled
3. To separate sand from piece is used a shaking apparatus with grate which jigs sand.
4. And it is fallen to a moving belt which goes through some belts and
5. Reach to a bolting-reel where valid sand is separated from not valid one
6. It's stored in a tank until process requires this sand to make moulds
7. Sand is prepared with bentonite and coal
8. It goes through belts to green sand moulding installation
9. Mould is made in box, is poured and goes to first step

Data about generated sand residue and the revaluated %





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Data about sand	2000	2001	2002
Core sand	1446,43	1432,31	1643,61
New sand	50,8	444,84	422,08
Coil	242,68	333,42	323,32
Bentonite	509,44	515,66	741,20
Total included in circuit	2409,92	2.726,23	3130,21
Revaluated sand in cement plant	106,2	131,48	566,02
Revaluated sand in rotary furnaces	248,15	319,88	331,76
Revaluated total	354,35	451,36	897,78

Expressed in Tons

Indicator

Exceeds of used sand of sand recovery process is a sub product for cement plants, so less residue is generated and less raw material is used. On the other hand per 9 tons of raw material for meeting are introduced 150kg of used sand to increase life time of heat resistant.

Revaluated sand: used sand sent to cement plant and revaluated in rotary furnaces.

Generated sand residue: introduced sand in circuit by bought cores, sand, coal and bentonite.

Index	Unit	2000	2001	2002
Revaluated sand / Generated sand	tn/tn %	14,72 %	16,55 %	28,68 %
Revaluated sand / Production	tn/tn %	2,37	2,35	4,51
Generated sand / production	tn/tn %	16,16	14,20	15,72



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8.7. Raw material consumption:

Year	Production	Raw Material (RM)	Auxiliary material (AM)	Index MP/Total (*10 ²)	Index MA/Total (*10 ²)
2000	14.911	11.027	2.407	91.17	16.14
2001	19.193	11.403	2.948	59.41	15.36
2002	19.906	13.086	3.343	65.73	16.79

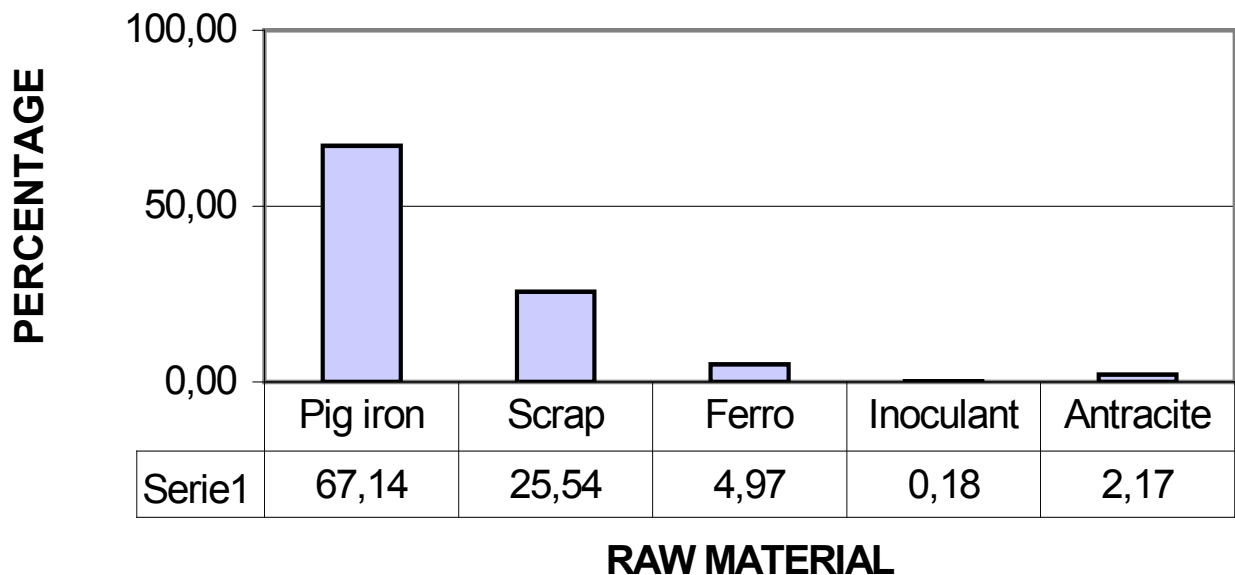
Raw material: pig iron, scrap, ferro alloys and anthracite

Auxiliary material: cores, resins y catalysts, oils and cleaners, sand, bentonite and coal and granulated metal.

In Tons:

Following data graphs are of the year 2002

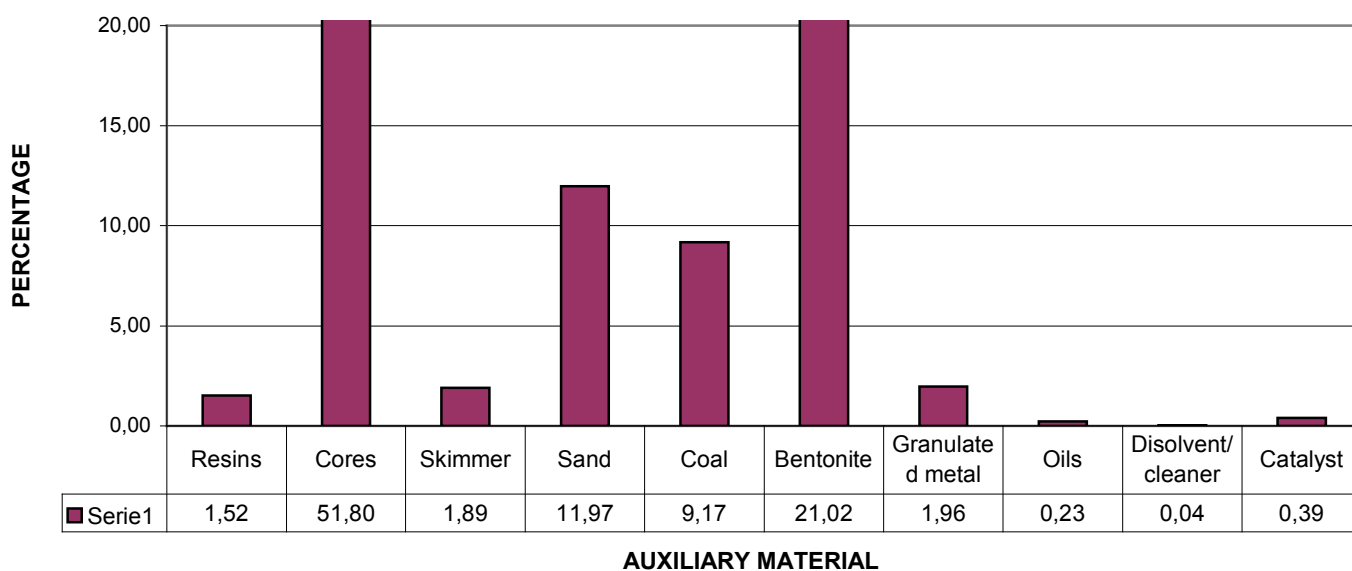
PERCENTAGE OF RAW MATERIAL CONSUMPTION





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PERCENTAGE OF AUXILIARY RAW MATERIAL



8.8. Fuel and energy consumption

Year	Production (Pr)	GAS		ELECTRICITY		FUEL GAS	
		kw/h	Kw/Pr (/10 ¹)	kw/h	Kw/Pr (/10 ¹)	kw/h	Kw/Pr
2001	19.194 tn	10.249.716	53,40	7.746.886	40,36	400.313	20,85
2002	19.906 tn	11.208.304	56,31	7.917.677	39,77	452.962	22,75



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8.9. Emissions to atmosphere:

At FUNDICIONES URBINA, S.A. there are the following emitting sources to atmosphere:

Activity which causes emission	Installation where emission is produced
Metal melting	Rotary furnace 1 and 2
Core wire treatment	Melting
Demolding 1 y 2	Green sand moulding shake-out
Sand return	Recovery of sand/fines
Chemical moulding	Dryer of gas
Chemical demolding	Chemical demolding shake-out

Implementing legislation is indicated in Decree-law 833/1975 on the 6th of February.

These are the most restrictive results of the measures in **year 2000**:

Emission Source	Solid Particles (mg/m ³)	CO (ppm)	NO _x (ppm)	SO ₂ (mg/m ³)
Rotary furnace 1	126	<10	321	< 30
Rotary furnace 2 (**)	1785	17	108	< 30
Desmolding 1	25	< 10	< 10	< 30
Desmolding 2	13	< 10	< 10	< 30
Recovery of fines	38	-	-	-
LEGAL LIMIT	150 [120 (*)]	500	300	4300

(*) Activity license reduces the limit to 120 mg/m³

(**) significant issue- associated to targets

Name of OCA: Foundation LEIA C.D.T.

Nº report: 05309



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Measures of year 2003 (most restrictive results):

Results of year 2003 measures are given below with the reason of introduction of new machines and installation of sucking equipment and cleaners in rotary furnaces points.

Emission Source	Solid particles (mg/m³)	CO (ppm)	NO_x (ppm)	SO₂ (mg/m³)
Rotary furnace 1y 2 (**)	<5	12	<10	<30
Nodularisation	<5	<10	108	<30
Gas dryer	59	26	26	<30
Shake-out	<5	/	/	/
LEGAL LIMIT	150 [120 (*)]	500	300	4300

(*) Activity license reduces the limit to a level of 120 mg/m³

(**) Previously rotary furnaces had smoke pipe with individual exit. Current installation has only one exit for both rotary furnaces.

Name of OCA: SEMATEC

Report n°: 62EM046

Results of measures taken so in the rotary furnace emission source as in new installations are given in the table. All results indicate that emission values are below legislation limits.

Rotary furnaces emission source which emitted previously over legislation limits previously has been reduced below limits thanks to exhausting and cleaning installation.



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8.10. Water consumption and waste water

Consumption	Source	Unit	2001	2002	06-2003
Water from network	Furnaces, mixers and baths	Meters ³ / production tn (*10 ²)	63,12	69,36	54,51

Water consumption from network is for cooling circuits for electric furnaces, mixers, kitchen and bath rooms.

The circuits are internal so there isn't producing circuits which dump to cleaner collector in the industrial sit in Goiain.

A consumption of 110 litres/worker (2/3 of 165 litres) is estimated per day. According to data of Statistical National Institute consumption of water per inhabitant is of 165 litres/day.

Calculating according to number of workers and working days in the year 2002, water consumption to domestic use and bath rooms is 2158,2 m³ and this is the 15.63 % of the total consumption.



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8.11. Legal execution

For legal requirements identification and other available ones to Fundiciones Urbina, S.A., the company has as external advisor the Basque Country and Navarra Foundries Association, and this association sends regularly the new executing legislation and modifications for the current one.

Environmental management system has a checking list for verifying one by one all the executing requirements and an indicator of legal execution is established.

Index	Unit	2000	2001	2002	06-2003
Legal execution %	Executed requirements / legal requirements	78.26 %	84.38 %	92.59 %	100 %

Nonfulfillments in year 2002:

Emissions to air:

Rotary furnace source emits over emission limit, and there are two new installations with emission sources to atmosphere. Agreement in the budget for carrying out measures and legalization Project of sources jointly.

With date June-2003 the legal nonfulfillment is corrected.



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8.12 Valuation of foundry environmental behaviour

Evolution of environmental behaviour is positive. Environmental management system is assisted by several process control procedures with continuous improvement aim.

As the legal executing indicator shows, with the installation of the gas and particles exhaust and clean equipment in rotary furnaces, the percentage has changed from 92,59 % to 100%.

On the other hand, sand valuation increasing is produced with the cement plant, so inert residue percentage to dumping site is reduced. This indicator is very important since corresponds to one of the most significant identified issues in environmental issues assessment.

Raw and auxiliary material, energy consumption speaking, the indicators don't show significant changes.

Summary of indicators:

Index	Unit	2001	2002	06-2003
Legal execution %	Executed requirements / legal requirements	84.38 %	92.59 %	100 %
Revaluated sand / Generated sand	Tn/Tn %	16,55 %	28,68 %	44,88
Q generated residue / rough production	Tn/Tn * 10 ²	35,6	33,2	30,63
Revaluated sand / Production	Tn/Tn %	2,35	4,51	8,81



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9. - DEADLINE FOR THE FOLLOWING STATEMENT

This Statement has been made in order to inform to collaborators, neighbours, clients, official institutions and suppliers about our policy and environmental performance and to propose a constructive dialogue.

Current Environmental Statement has been verified in the audit TÜV CERT dated 2nd and 3rd of July of 2003.

Annually the Environmental Statement is up-dated.

Nº Verifier: [E-V-0010](#)

Name: **TÜV INTERNACIONAL GRUPO TÜV RHEINLAND, S.L.**

Date: 02-03/07/2003