# (E)

Lost Wax







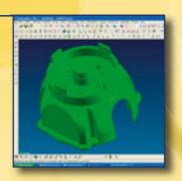
**PRECIMETAL** 

CIRE PERDUE-PRECISIEGIETWERK INVESTMENT CASTING - FEINGUSS

# The process knowledge

### Technical department

- Experienced engineers
- Modern CAD equipment
- Casting and solidification simulations
- Design assistance





### Die tools and pattern injections

- Aluminium and soft metal moulds...
- Rapid prototyping
- Automatic or manual injection
- All types of cores

### Assembly of patterns on trees

- By welding or glueing
- From 1 to 1500 parts per assembly
- Online quality control



### Ceramic shells

- Automatic lines for dipping/ coating of heat resistant products
- Adaptative manufacturing
- Wax drain-off through autoclave

# Moulds firing and metal pouring

- Fusion capacity: 8 tons/day
- Two production lines
- Alloys following customer requirements
- Spectrometric control



# Machining and surface treatments

- Finished parts ready for assembly
- Qualified and certified partners
- Integrated Logistics





### Finishing and heat treatment

- Shell removal
- Parts cut-off by sawing
- Finishing as per specifications
- · All kind of heat treatments



### Certification and controls

- Dimensional
- Non destructive
- All technical resources in-house or by specialised laboratories



# Advantages which make the difference



# **Unique Process allowing**

- HIGH PRECISION
- COMPLEX METALLIC PARTS
- ALTERNATIVE TO MACHINING AND WELDING

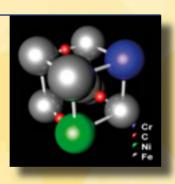


### Broad design freedom

- Complex geometries
- Interior cavities
- Thin walls
- Marking, grooves and toothing

### Multiple alloy choices

- Low and high alloyed carbon steels:
- Structural steels
- Case hardening steels
- Nitriding steels
- Tool steels
- ...
- Stainless steels:
- Martensitic
- Austenitic
- Duplex
- Heat resisting
- ..
- Nickel and Cobalt base alloys:
- Hastelloy
- Stellite
- 510
- · Copper alloys:
- Copper- aluminium
- Copper-beryllium
- Brass
- \_ \_





# Reduced machining, welding and assembling

- Subassemblies casted into one part
- Structure and material homogeneity
- Less fracture tendancy



# Dimensional accuracy and surface condition

- Very close to the machining tolerances
- Reduced polishing
- Easy fitting of surface coatings



### Weight reduction

- Hollow-outs
- Thin walls
- Enforced rigidity by stiffeners



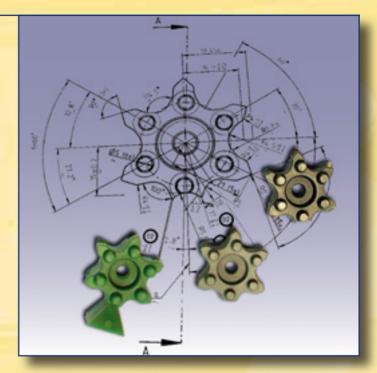
# We focus on giving you the best quality

### Excellence in customer's service

### Reliability / flexibility

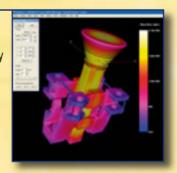
- Just in time and Kanban
- Simple and complex components adapted to your needs
- Small and large series
- International reputation
- Reference from important customers
- Solid finances





### Research and Development

- Continous improvement policy
- Process knowledge
- · Regular staff training
- Continous investment
- Integrated IT





### Long term partnership

- Technical assistance from day one
- Metallurgical advices
- Rapid Prototyping
- Machining and surface treatments
- Individual management of emergencies and helping out
- Local logistic facilities

### Quality system

- Certification ISO9001 (2000) and EN 9100 (aeronautical)
- Modern control equipment and techniques





### **Professional ethics**

- Respect of commitments
- Guarantee of patent rights
- Protection of social and ethical values
- Environment saveguarding

# Lost wax : our speciality



# For the Industry...

- 400 partner customers
- 150 experienced operators
- Modern factory
- In the heart of Europe
- Certified quality system
- Permanent progress
- International reputation
- 50 years of experience
- Parts from 1 g to 50 kg
- All ferrous alloys
- Nickel, cobalt and copper alloys
- 8000 different parts as reference

# ...for your industrial sector



# CIVIL AND MILITARY AERONAUTICS

- Structural parts
- Parts for fluid transport



### **MECHANIC**

- Textile, printing, packaging, agriculture machines, ...
- Security equipment
- Tooling



### FOOD PROCESSING EQUIPMENT

- Pasty, solid or liquid food processors
- Cutting, crushing
- · Packaging, storage



### **TRANSPORT**

- Light or heavy road, railway or marine vehicles
- Civil Engineering or agricultural machinery



### **FLUIDS**

- Fixed or mobile components for pumps, turbines, valves, flanges
- Pneumatic and hydraulic applications in corrosive environment or under high pressure



### **BUILDING**

- Facade components
- Special or security hardware
- Lock components
- Creation and Design



### **MEDICAL**

- Implants
- Instrumentation
- Equipment, furniture



### **DEFENCE**

- From light to heavy weapons
- Armoured vehicles, heavy guns, missiles
- Embedded electronic and optics



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## **PRECIMETAL®**

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