CV PRO GROUP

Engineering



SUMMARY

- 1.-Presentation letter.
- 2.-Phases of a new project development: Ways to collaborate with CVPRO.
- 3.-Project management with CVPRO.
- 4.-Strategies for new products development.
- 5.-Training services and CAD auditings.
- 6.-Advantages in projects development with CVPRO.
- 7.-Past projects by CVPRO.



1.-PRESENTATION LETTER

January 2013

CVPRO INDUSTRIAL DESIGN, S.L was born out of a private initiative among senior experienced professionals in the field of industrial computer aided design.

Nowadays, our team is formed of dynamic professionals possessing a strong experience in the field. Having our own resources and being accustomed to work as a team, gives us a level of involvement, stability and responsibility unreachable with a freelance specialist hired by the hour. The technical expertise, training and range of experience of each of our engineer enables us to stay flexible, together with our size not subject to the burden of a mother company vertically structured with its typically overhead costs (financial or business wise).

At present, we are in a growing phase as a direct result of the demand of the market but with no intention of becoming a business whose size would deprive us of the personal relations that define us, within our company and beyond.

Our team primary focus is to cover any of our customers needs. Our range of consultancy starts with small businesses – without considering their assignments less interesting because of their sizes – to the major players in our sectors including large international companies.

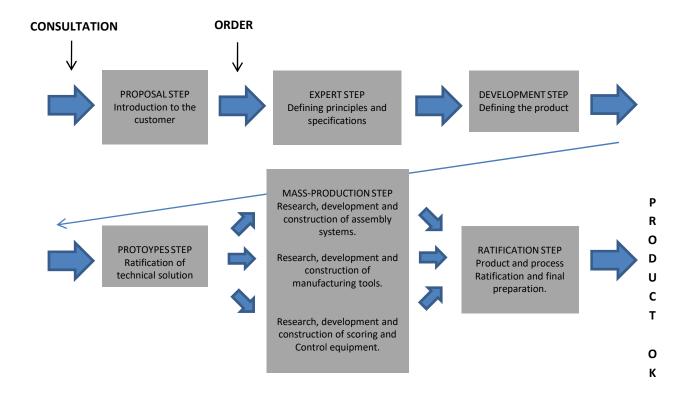
Until today, we have not encountered any competitor, given that any other company large or small in our sector is considered and treated as a colleague or client, never as a direct competitor. We are conscious of the fact that our product is translated into hours charged to the client, which can be delicate and inconvenient. However, our commitment and direct daily contact with the client enables us to maintain a constant disposition for improvement, both individually and collectively.

Yours faithfully

José Carlos CASTELLAR MASEGOSA Administrator.

2.-PHASES OF A NEW PROJECT DEVELOPMENT: WAYS TO COLLABORATE WITH CVPRO

In the next graphic you can see the different steps of a project development:



From this point, we can talk about the different points of collaboration between CVPRO and its customers.

PROPOSAL STEP

In this point, CV.PRO can prepare the Proposal Dossier and all the complementary and necessary documents such as drawings, scale models... Phase done with a close interaction with the customer.



EXPERT STEP

The principles which define the different technical solutions to use and the specifications which the product should have must be done by CVPRO together with the customer.

DEVELOPMENT STEP

The process of the product development will be done 100% by CV.PRO, in its installations. The customer will be informed periodically about the evolution of the project, using the specific and necessary Project Testing tools.

PROTOTYPES STEP

This step can be managed totally or partially by CV.PRO, depending on the customer's needs and the kind of prototypes which must be manufactured. CV.PRO will be able to participate in the testing and evaluation of these prototypes and will be the one in charge of correcting the product and also adding improvements if necessary.

MASS-PRODUCTION STEP

Here, CV.PRO has the ability to manage the 100% of the Research, Development and introduction of Assembly Systems, also to manage the Development and construction of scoring and control equipment associated with the Assembly Systems. CV.PRO can also be responsible of following the construction and developing of the manufacturing devices (moulds and matrixes).

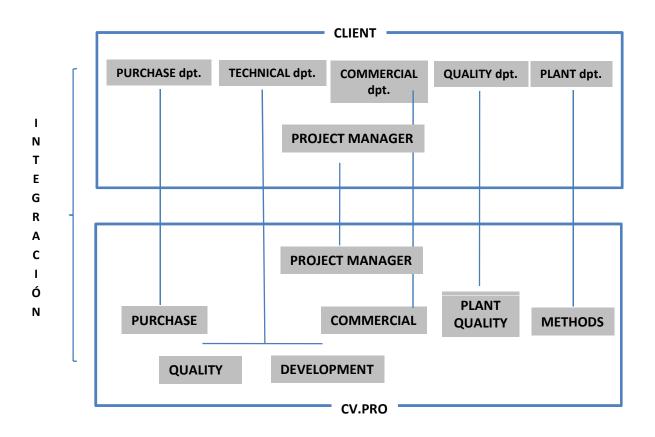
RATIFICATION STEP

Here, CV.PRO is able to analyze, together with the customer the points of nonconformity with the product and process specification in order to find the most appropriate solutions. On the other hand, CV.PRO can deal with the creation of the technical documentation necessary for the different costumer departments in order to make the manufacturing of a Product with the correct Quality and Characteristics.

CONCLUSION

CV.PRO has the necessary resources to be in charge of PROJECTS GLOBAL MANAGEMENT, leading and participating actively in everyone of its steps.

3.-PROJECTS MANAGEMENT WITH CVPRO



The final objective is to get a correct coordination of everyone involved in the Project by the integration between CV.PRO and the customer. We try to break down the walls that usually exist between client and supplier.



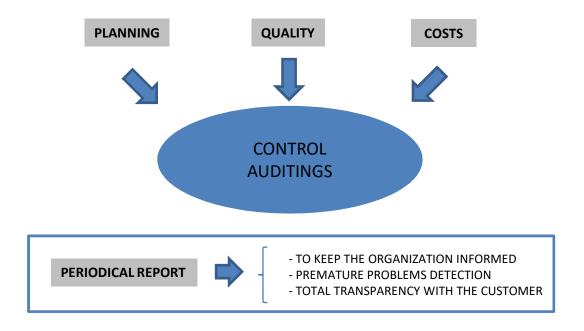
The conduct of the Projects is based in controlling these three parameters:

- Planning.
- Quality Plan.
- Costs (Unitary costs, investments and depreciations).

To take control of them, CVPRO will organize several auditings to share its findings. Then, CVPRO will redact a report with the following objectives:

- •The customer must know at all the time how is the project progressing.
- •To recognize as early as possible any problem that may appear during the project and to elaborate a strategy to solve them before they happen.
- •CV.PRO and the customer must have a clear and honest communication.

All of this is summarized in the next pictorial:

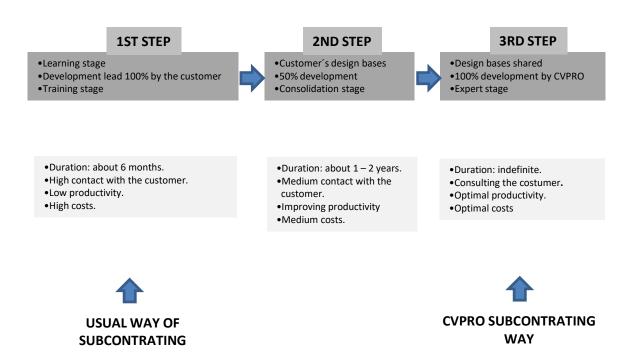




4.-STRATEGIES FOR NEW PRODUCTS DEVELOPMENT

To better organize the relationship with its new customer and the Product, CVPRO must go through different training steps to gain the necessary knowledge about the product, the process and about the working methods of the new costumer. Those , and besides fitting CVPRO knowledge, resources and working methods to this new situation.

To reach this optimal situation, CVPRO takes into account the next steps:



Our internal structure, CV.PRO personal stability and its strong involvement with the projects allow us to reach this optimal highly productive stage, consequent of the continuity of the necessary knowledge and working methods.



5.-TRAINING SERVICES AND CAD AUDITINGS

Training:

Because of our experience in this sector, we try to give to our customers training as well. To achieve that, we arrange courses (mostly practical courses in advanced topics); but also with casual consultations during the project development or during a visit. We know that C.A.D systems are really effective when the C.A.D. operator knows about hundred of small tweaks which are not taught in classes. We find it essential and productive, to be able to directly consult other professionals; we never deny a consultation or a suggestion, we look forward to optimize our customers C.A.D. knowledge.

Auditings:

We are willing to audit your professional and IT team in CAD, in order to get a comparative brief to detect mistakes and to try to find solutions and profitable improvements.





6.-ADVANTAGES IN PROJECTS DEVELOPMENT WITH CVPRO

Developing a project with CV.PRO has some advantages which we are going to describe:

LOWER DEVELOPING COSTS

All the steps in the Developing stage are perfectly defined and planned from the start, which let us optimize the developing costs.

•LOWER DEVELOPING TIME

The adequate planning of the project makes it possible to use only the necessary resources at each moment in order to make the Developing time as short as possible.

•LOWER RESPONSE TIME BEFORE INCIDENTALS

CVPRO personnel liability makes easier to response before the incidentals during the Project development.

•BETTER RESOURCES CONTROL

The meticulous planning of the project enables us to know a priori the necessary resources of the project in each one of the Development steps.

•HIGH LEVEL OF INVOLVEMENT IN THE PROJECTS

Our work is Projects Management, we are specialists in it, so we don't understand Project management without a HIGH LEVEL OF INVOLVEMENT in our customer's project, which we consider ours as well.



All we've been talking about is faced to the final objective, which is finding the **HIGHEST QUALITY IN OUR DUTY**

SATISFIED COSTUMER



CVPRO: AN ORGANIZATION THAT PRIORITIZES THE CUSTOMER DUTY



7.- Past projects by CVPRO

AUTOMOTIVE



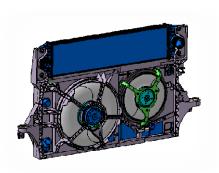
Concept

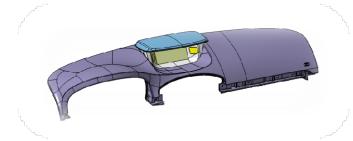
- design
- viability study
- benchmarking

Development

- Product engineering
- Process engineering
- C.A.D.
- C.A.E.
- prototypes

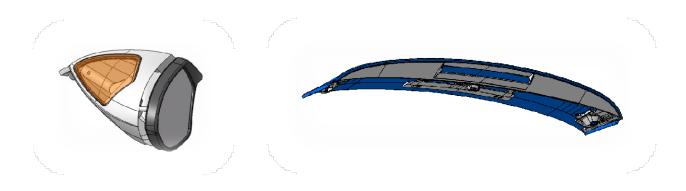
-HVAC: Design and development air ducts. Projects for Mercedes Benz, Suzuki, Volkswagen, Peugeot and Citroen.



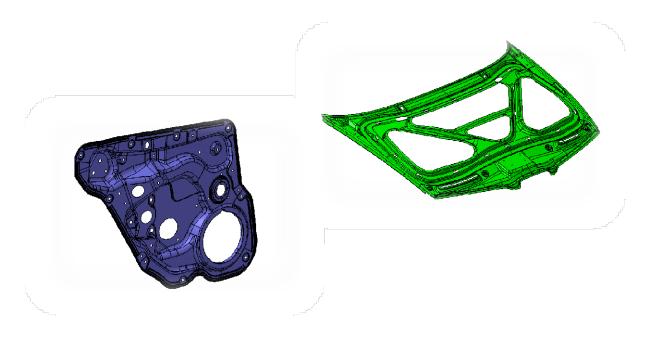


-Interior trim: Research and development projects cockpit for Mercedes Benz, Saab, Ford and FAW; door panels for Mercedes Benz, Seat, Ford, and rear quarters for Bentley.

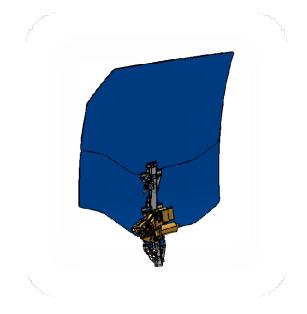
-Exterior trim: Design and development mirror projects for Renault, PSA, and Ducati. Spoilers, bumpers and moldings for Seat , PSA and Daimler.



-Body in white & movable parts: Viability studies and projects development of platform , hat and movable parts (side panels, pillars, roof, water channel, hinges stiffeners, floors, doors bonnets, tailgates , ...) for Faw, Ford, Renault , Seat, Audi.

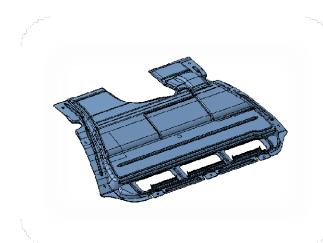


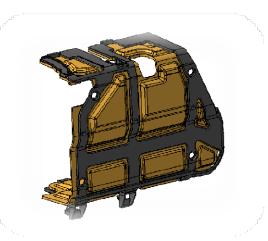
-Mechanisms: Gear boxes development, interface mechanisms, wiring gearbox, and covers for Audi and Mercedes Benz. Braking systems development of Brembo for Ducati, Aprilia, BMW, KTM and Bombardier.



- Insulation & Headshields

Complete insulation panels development for acoustic requests. Expert design heat shields in aluminium and steel. Projects to Renault, PSA, Daimler and VW.

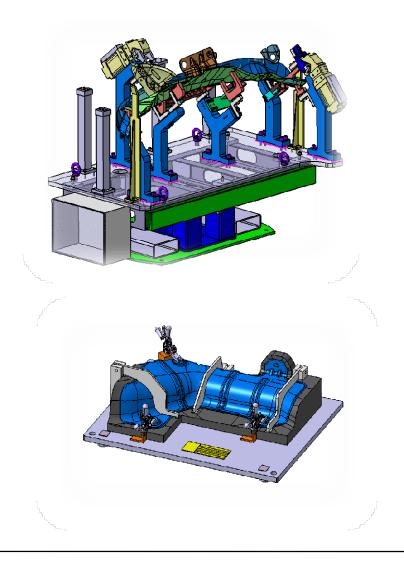






Tooling:

- -Tools development for assembly lines.
- -Control toolings to MATRA Automotive.
- -Welding tools to Daimler and PSA.





RAILWAY

Concept

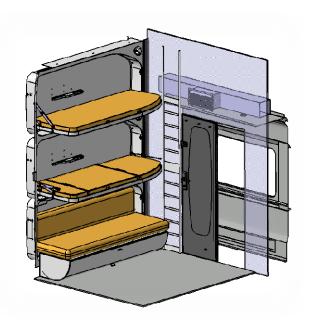
- style surfaces
- viability study
- benchmarking

Development

- interiors
- W.C modules
- mechanisms
- C.A.D.
- C.A.E.
- models

Inner Trim

- -Layouts and functionality studies
- -Design and development parts
- -Assembly analysis
- -Mechanical drive systems



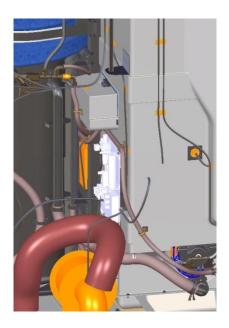


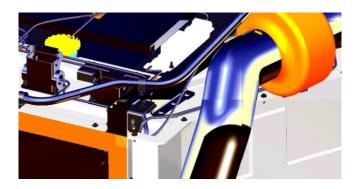




-Projects development of electrical installations:

- -Assembly tools Electrical installations-Roof piping
- -Equipment Installation.
- -Grounding
- -Electrical supports and brackets
- -Electrical panels mounting







WC modules, design and development:

- -Style and preliminary studies.
- -Fibers and fittings.
- -Interface.
- -Interior panels.
- -Outer panels.
- -Installations-Tanks.

Last references:

- -Auckland Tranport CAF
- -Civity Deutschland CAF
- -Tranvia Sao Paolo CAF
- -Amtrak Talgo
- -InterCityExpress (ICE) Siemens
- -Pkp ALSTOM SAVIGLIANO
- -Pp ALSTOM REICHSHOFFEN
- -Ph BOMBARDIER
- -Emu Trenitalia ALSTOM
- -Acc ALSTOM-CAF
- -DB; CAF
- -RFV; Bombardier
- -VIRM; Nedtrain





AERONAUTICS & AEROSPATIAL



Aeronautics

- -Design and development of curing coatings toolings, Airbus A-380 program.
- -Design and development of bending toolings to the rear rudder, A-380 program.
- -Development of positioners tolings, Airbus A-400M program.
- -Development of curing toolings, Boeing programs.
- -Development tools turntable and groups guided program Comac C919





AERONAUTICA / AEROSPACIAL

Aerospatial

- -Design and development of mechanical elements for the MARES (ESA) project under final customer specifications.
- -Manufacturing management to BIOLAB MARES (ESA) projects.
- -Development and production of structure / motor support MARES (EDA)project.
- -Design and manufacture CPU. box-chassis
- -Design and manufacture mounting tools MARES (ESA).

