
DVMENGINEERING

Industrial Innovation Development



Davide Violante

Founder **DIRECTA INNOVATION** - Network
Tecnologico Internazionale

INNOVATION ENGINEERING

Company Profile

DVM[©]Innovation Turnkey Supply Package

Development of Industrial Products and Processes.
Application Innovations and Industrial Research.
Product Prototypes, machinery and special equipment.
Innovative Productions and Industrial Partnership.

We guarantee Solutions, not just Projects...

A stimulating affirmation if it arises from the awareness that Manufacturing Companies need a Partner, to support the internal Technical Structure, able to respond in an integrated way to the needs of Industrial Innovation.

We work with a vocation for great challenges: we are a partner that combines experience and innovation, knowledge and experimentation and above all, creativity and technology.

We have a strong ability to understand the needs of the Industrial Company, creating Custom Solutions that manage to combine technical, managerial and economic needs together, assuming responsibility in terms of achieving the agreed results and objectives.

Overview	3	Proprietary Innovations and Industrial Research	13
Know-How, Technological Knowledge and References	5	Innovative Productions and Industrial Partnerships	18
Integration & Synergy	10	Integrated Development (specialization and multidisciplinary)	20
Engineering for Production	11	International Technology Network	23
Product and Process Prototypes	12		

Davide Violante, Founder and Managing Principal - in the last 10 years, we have observed about 200 Companies belonging to different Industrial Sectors, which have significantly improved their competitiveness. In more than 40 years of work, we have been able to understand that, while the developments in technology and the market require more and more specialised competences, on the other hand we call the need for a “multidisciplinary” approach in the solution of Problems regarding Product development and Manufacturing optimization.

He has a key role as "Technological Applications Developer" in the setting of production strategies and improvement of the product quality. As a Promoter and coordinator of Research and innovation projects, he has established international partnerships in the framework of European programmes.

The passion and the determination to pursue the objectives, the consolidated professional Know-How, the recognized experiences and the reliability, also following some entrepreneurial failures, have allowed him to occupy assignments since the years '70, as President of Companies operating in industrial automation and technological innovation. He was the forerunner of new production methodologies and new manufacturing systems.

DVMENGINEERING - Industrial Engineering Company within the **International Technology Network DIRECTA INNOVATION**, with the availability of "technical/technological Know-how and proprietary innovations that are used in the context of all our activities of Development in favor of the company/customer.

DIRECTA INNOVATION includes "specialists" in different areas such as: Mechanics and Kinic Structures - Automation of Production Systems - Calculation, Mathematics, Operational Research - Organisational Systems - Industrial Design - Manufacturing and Production Technologies - Industrial and Logistics Plants - Manufacturing Economics - Industrial and Pre-competitive Research - Materials Technologies - Product Specialists. This set of skills make up the "Multi-disciplinary Development Team".

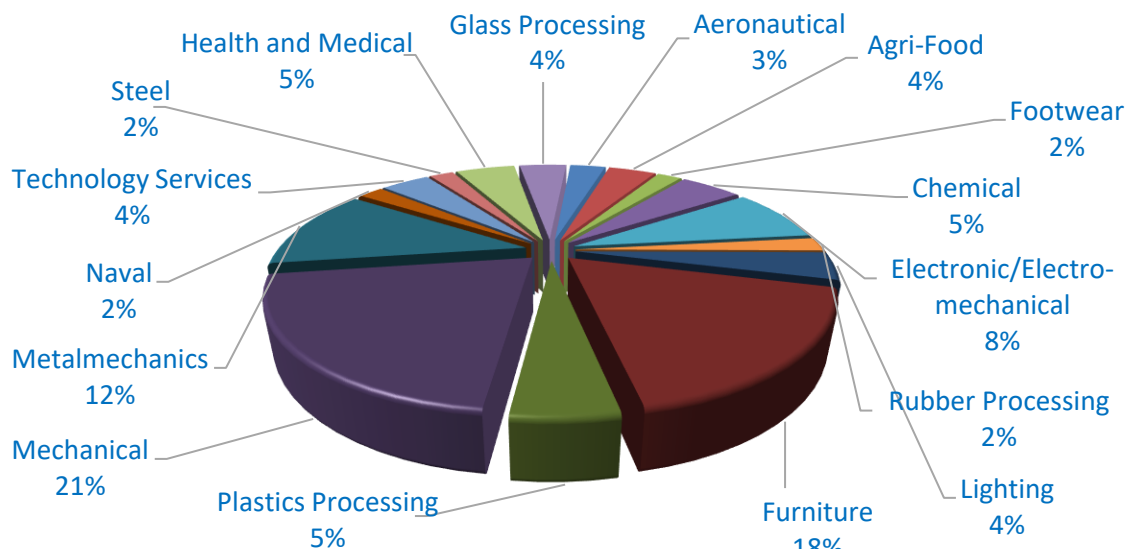
We operate in "integrated and synergetic way" by providing specialized/multi-disciplinary Competences of Professionals present on an international scenario, accustomed to answering the tasks entrusted to them, as regards:

- **Product development, complete with Prototypes;**
- **Production Resources organization (technologies, employees, materials, means);**
- **Innovation of the Production Systems.**



KNOW-HOW, TECHNOLOGICAL KNOWLEDGE AND REFERENCES

The capabilities of Analysis and Knowledge of the technical and management problems of Industrial Production, are the basis of the successes achieved for Small and Medium Industries, as well as for Large Companies: many of them have achieved remarkable results.



The experiences, the increased reliability, the KnowHow developed since the years '80, have allowed to provide projects, plants and systems in restaurant Pizzeria I reorganization technology.

The working methodologies, supported by integration and synergies, allow DVMENGINEERING to promote an **Integrated Offer** in the main technological reorganization of which the most KnowHow gallery has accumulated.

Le maggiori Competenze sono state applicate per lo sviluppo dei seguenti Prodotti:

- Abrasive;
- Accessory Windows;
- Agricultural self-propelled;
- Agri-Food Greenhouses;
- Agri-Food in Serra;
- Aids "Disability ";
- Aircraft Maintenance;
- Aluminium Rolling;
- Aluminum Drawing;
- Ambulances and Rescue Systems;
- Automotive Glazing;
- Automotive Paints;
- Automotive Tires;
- Automotive;
- Axle Assemblies;
- Baked Food;
- Ball Bearings;
- Building Paints;
- Canned Food;
- Carpentry Assembly;
- Components Industrial Vehicles;
- Composite Avio Components;
- Composite Structural Components;
- Cooker Hoods;
- Cutting Systems;
- Demolition Hammer;
- Differentiated municipal Solid Waste treatment;
- Dishwasher Bar;
- Disposable Containers;
- Distribution Machines;
- Domestic Aids;
- Doors and Shutters;
- Doors and Windows;

- Earth Moving Machines;
- Electro-Mechanical;
- Electronic Cards;
- Food Machines;
- Forklifts;
- Furniture wood, glass, metal;
- Glass slabs Processing;
- Glasses;
- Hardware Components;
- Heat Pumps;
- Home Automation;
- Hospital Equipment;
- Industrial Chemistry;
- Industrial Closures;
- Industrial Electric Box;
- Industrial Padding;
- Industrial Shelving;
- Infra-Air;
- Interactive Systems;
- Isothermal Containers;
- Industrial Vehicles and Fittings;
- Kitchen Equipments;
- Kitchen Furniture;
- Large Composite Components;
- Lead Mergers;
- Leather Shoes;
- Lift and Freight Elevator;
- Lighting;
- Logistics Systems;
- Mechanical and Electrical Strating Machines;
- Mechanical Avio;
- Mechanical Components;
- Mechanical Equipment;
- Naval Maintenance;
- Office Furniture and Walls;
- Packing Plants;
- Painting Plants;
- Pasta Food;
- Plastic Molding;
- Pultrusion Panels;
- Rotationally Moulded;
- Road Barriers and Pipelines;
- Rubber Seals;
- Safety Shoes;
- Scooter;
- Seating Office;
- Security Doors;
- Self-purge and Cisterns;
- Sliding Doors and Frames;
- Sofas and Beds;
- Sound absorbing Panels;
- Sports Shoes;
- Starter Motors;
- Surgical and Medical aids;
- Track Assembly;
- Upholstered Furniture;
- USW Boxes;
- USW Compactors;
- USW Treatment Plants;
- Vision Systems;
- Wood Panels;
- others.

In particular, we have worked on important companies, including:

Mechanics, Metalworking

AGOSTINI MECCANICA (Self-Propelled Components).
ALCAR (Self-propelled components).
ALENIA (Aircraft Components).
ALFATEX (Mechanisms).
ALTECNA (Injectors / Pumps).
AMA (Urban Waste).
ATR (Waste Treatment).
AVS (Equipment).
BENDIX (Braking Devices).
BOSCH (Electromechanical).

CALABRESE (Industrial Vehicles).
CENTRO ACCIAI (Barriers and Conduits).
COPARM (Waste Plants).
CORSARO (Building Closures).
DANIELLO (Mechanisms).
ERMETIKA (Building Closure).
FIAT AUTO (Automotive).
FIATALLIS (Earth Movement).
FINCANTIERI (Diesel Engines).
GIERRE (Extinguishers).
HITACHI (Earth Movement).

IDROMECCANICA ITALIANA (Demolition Equipment).

IMESA (Barriers and Conduits).

ITALIAN HYDRO-MECHANICS (Hydraulic Cylinders).

ITALTRACTOR (Earth Movement).

ITIPACK (Strapping Machines).

LUCIANO (Industrial Doors).

MINERVA (Industrial Vehicles).

OCEVI (Self-Propelled Components).

OM/PIMESPO (Lift Trucks).

OMD (Mechanical Components).

OTIS SpA (Elevators and Hoists).

SKF (Ball Bearings).

VIBERTI (Industrial Vehicles).

WEBER (Injectors).

Advanced Materials

MANULI STRETCH (Composite Materials).

ALENIA (Avionic Composite Components).

SALVER (Composite Materials).

VULCANAIR (Aircraft).

Plastic Processing

CROMPTON MOULDINGS (Plastic Containers).

DOMAR (Plastic Components).

GIANOPLAST (Disposable).

JEICOPLASTIC (Plastic Containers).

TELCOM (Plastic Products).

TRIFIBRE (Plastic Products).

Electronics, Electromechanics

COLUMBIA (Electric Strapping Machines) - Product Industrialization.

EUROMEDICAL (Medical Devices) - Value Analysis.

MAGNETI MARELLI (Electromechanical).

MATSUSHITA (Electronics).

MESSINA (Electric Box).

OLIVETTI (Photocopiers).

STANADYNE (Electromechanical).

STIGLEROTIS (Elevators).

Furniture & Furnishings

ADILE SALOTTI (Upholstered).

ARTEMIS (Lighting, Design Oriented).

B&B ITALIA (Upholstered Furniture, Design oriented).

CALIA SALOTTI (Upholstered Furniture).

COMFORTABLE (Transformable Mechanisms).

COMODO (Mechanisms).

DAYINOFFICE (Office Furniture).

DOIMO (Upholstered Furniture).

POLTRONA FRAU (Upholstered Furniture, Design oriented).

FUTURELINE (Upholstered Furniture).

GIORGETTI (Wood Furniture).

ICAM (Office Furniture).

IDEA RELAX (Upholstered).

INTERLINE (Upholstered Furniture).

ITALCOMFORT (Upholstered Furniture).

ITALSOFA (Upholstered).

MAB INTERNATIONAL (Upholstered Furniture).

METEORA (Upholstered Furniture).

METHIS (Office Furniture and Systems).

MOROSO (Upholstered Furniture, Design Oriented).

NATUZZI (Upholstered Furniture and Accessories).

NEWLINE (Upholstered Furniture).

PELETTIERI (Office Armchairs).

POLTRONA FRAU (Upholstered).

SICLA SALOTTI (Upholstered).

SOFTALY (Upholstered Furniture).

Lighting Technology

AMA (External Lighting Bodies).

FLOS (Lighting Bodies, Design Oriented).

FONTANA (Lighting Bodies, Design Oriented).

INSIDE (Lighting Bodies).

LUCEPLAN (Lighting).

O-LUCE (Lighting Bodies, Design Oriented).

OSRAM (Outdoor Lighting Bodies).

TRECI (Lighting Bodies).

TRECI (Lighting).

R&D Services

**EUROPEAN ASSOCIATION
TECHNOLOGICAL INNOVATION.**

CNR (R&D Center).

ELASIS (Research Center).

ENEA (Research Center).

ENI (National Hydrocarbon Center).

EUROPEAN UNION (DG XIII/R&D)

TECNOPOLIS (Innovation Center).

ZENIT GmbH (Innovation Center).

Rubber Processing

BRIDGESTONE (Tires).

DEPO (Seals).

Glass Processing

CURVET (Glass).

FDV (Glass Products).

MOVE GLASSES (Glass Processing).

PILKINGTON (Automotive Glasses)

STARGLAS (Glass Slabs).

Steel Industry

ACCIAIERIE DI COGNE (Drawing).

ECOBAT (Lead Merger).

ILVA (Steel Products).

LAMINAZIONE (Coil Aluminum).

STEEL CENTER (Barriers and Pipelines).

Chemistry

CP ITALIA (Paints).

SAM ABRASIVI (Abrasives).

TECHNIVER (Paints).

Agro-Food

ALCO/PALMERA (Tuna).

CASCARANO SEAFOOD (Fish products).

DIVELLA (Pasta Factory).

FIORE DI PUGLIA (Food).

LAPIETRA (Greenhouse Vegetables).

MARELLA (Pasta).

PUGLIA FLOWER (Food).

TECNOBLEND (Food Mixes).

Footwear

COFRA (Sports Shoes).

JANNOT (Footwear).

Large Company

Medium Company

Small Company



INTEGRATION & SYNERGY

DVMENGINEERING is able to provide multidisciplinary services of Product and Process Engineering and Innovation, covering from the definition of performance up to the start of production and commissioning.

Engineering	Manufacturing	R&D
PRODUCTION ENGINEERING SERVICES Development of industrial products, production processes and manufacturing systems.	PRODUCT AND PROCESS PROTOTYPES Prototyping of industrial products and process prototypes (machines and special plants).	LABORATORY OF INDUSTRIAL SEARCH Industrial research development for the innovation of products and industrial processes.

The **Pluses of our Services** include:

Innovation Level ensured by the availability of "Technological Know-how" and "Innovative Products and Processes" by the entire Technology Network, included in the "Innovation Bank DIRECTA INNOVATION".

High-profile Technological Creativity, with the availability of solutions developed applying different professional competences on an international scenario, belonging to our partners.

Integrated Development System that includes a particular development methodology to produce products and industrial processes, including the construction and experimentation of prototypes and the organization of production, within a single "Development Team".

Reduction Time to Market with costs and time of development, far lower than those of the technical structure inside the Company/Customer.

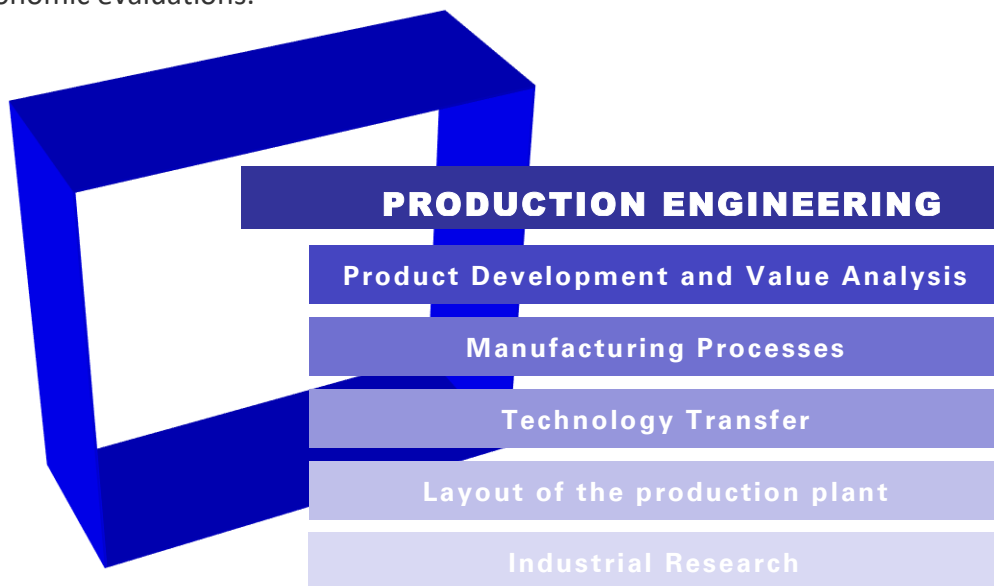
Guaranteed Results from a binding contractual level for achieving the objectives agreed with the Company/Customer, and providing certainty in solutions, costs and development times.

Pricing Process with remuneration based on the "economic results" actually obtained through the application of our solutions. Costs and time of development, far lower than those of the technical structure inside the Company/Customer.

ENGINEERING FOR PRODUCTION

Engineering Resource Unit

The Activity takes place on the basis of analyses and studies that allow to identify the most suitable solutions. The organization, the professional patrimony, the working methodologies applied, the Know-how, allow to realize a diversified series of interventions, studies and projects that always take body on the basis of Technical and Economic evaluations.



DEVELOPMENT OF PRODUCTION ENGINEERING - the Organization, the Professional Patrimony, the Working Methodologies applied, represent our Know-how, applied to a differentiated series of interventions functional to the "Reduction of Production Cost and Improved Product Performance":

Development of new products or modification of existing

- Feasibility study for new products or value analysis,
- Study and functional and technical projects,
- Series of functional prototypes,
- Constructive projects for production,
- Prototypes for production;

Manufacturing Processes (rationalization and/or innovation)

- Verification and determination of the specific manufacturing technologies,
- Identification and sizing means,

- Study and analysis of methods, time and work; Processing cycles;

Technology Transfer

- Feasibility study on the application of innovations,
- Technology transfer and Knowhow (products, processes, materials);

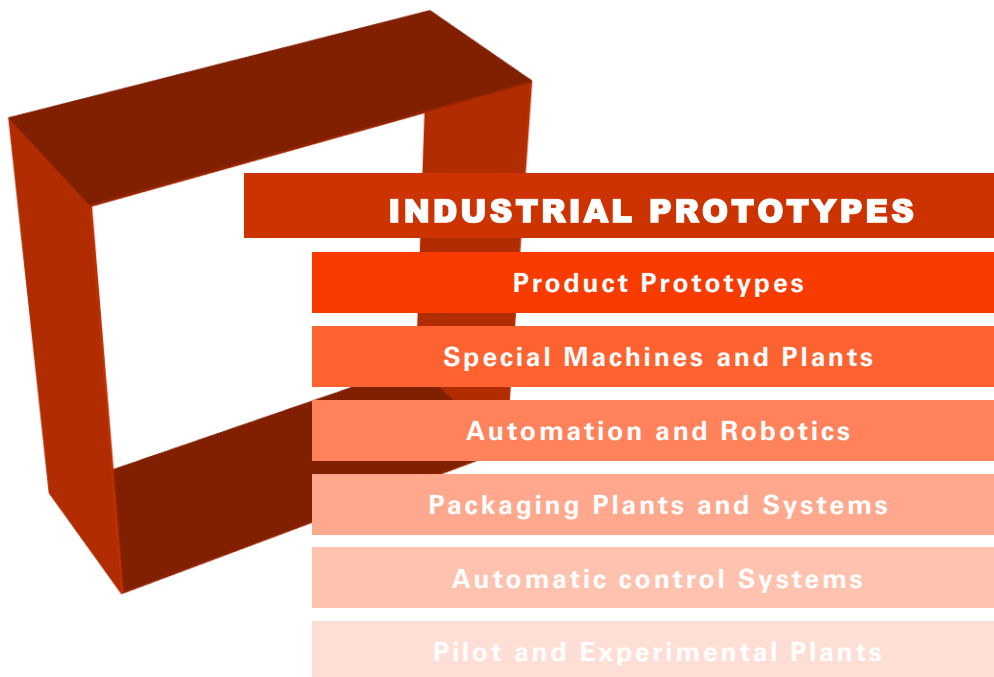
Manufacturing Layout

- Feasibility study on the appropriateness of Layout restructuring,
- Organization of warehouses and logistics systems,
- Plant Layout of the plant and Layout of the manufacture.

PRODUCT AND PROCESS PROTOTYPES

Manufacturing Resource Unit

DVMLABORATORY - **Product Prototypes** are those necessary for industrialisation of industrial products, while **Process Prototypes** are plants or Custom machines built on the needs of rationalization of production.



PRODUCT PROTOTYPES SUPPLY includes either direct realization or assistance to the Company/Customer.

CONSTRUCTION OF PLANTS, MACHINES and SPECIAL SYSTEMS (Process Prototypes)

includes: analysis, studies and projects, construction, testing, installation and start-up in production, technological updating, training of employees, financiability and budgets of Investment In particular:

Special Machines and Plants

- Slave/Machine,
- Assembly Machines and Service Equipment;

Automation and Robotics

- Robotized working islands,
- Assembly Automation Service Equipment;

Packaging Systems

- Packaging Lines and Machines,

- Packaging Machines;

Logistics and Storage Systems

Automatic Systems for Quality Control

- Automatic control machines with technologies: ultrasound, induced currents, X-rays, penetrant liquids, magnetoscopy;

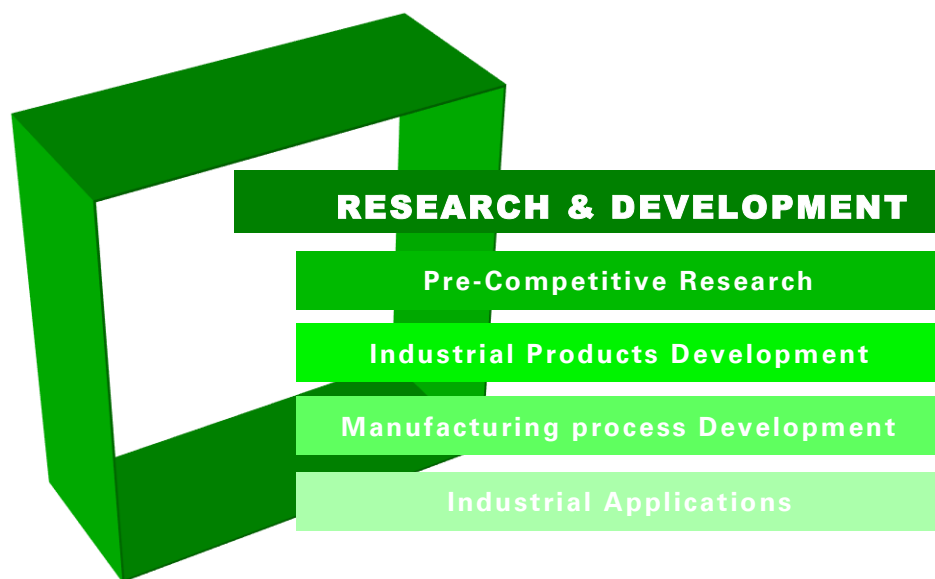
Pilot plants and experimentation

- Machines and plants aimed at the "experimentation" of innovative systems, technologies and products.

PROPRIETARY INNOVATIONS AND INDUSTRIAL RESEARCH R&D Resource Unit

INDUSTRIAL RESEARCH - Activities aimed at acquiring new knowledge aimed at the development of new products, production processes.

PRE-COMPETITIVE DEVELOPMENT - Activities aimed at designing, experimenting, developing new products and processes or improving existing ones; The results of which are realised in the implementation of pilot projects and demonstratives or prototypes.



In this context, based on the competences acquired with the development of on-Demand projects, have been developed autonomously, a series of "proprietary" Innovations ready for industrialization, which are made available to companies Manufacturing interested in its application and commissioning; In particular:

Aeronautical and Naval

AEROLASER - Automated depainting and painting equipment for aircraft fuselage (ref/DVM 080.110).

SHIPLASER - Automated painting system for naval fairings (ref/DVM 080.111).

Agri-Food

SOLARNET - Photovoltaic Protection Network (ref/DVM 080.000.000).

RAPOS - Automatic plant for harvesting, sorting and packaging fruit and

vegetable products in greenhouse (RIF/DVM 080.101).

GREENHOUSE® - Automatic Greenhouse (ref/DVM 080,117).

Industrial Automation

COMBIJET® - Flexible automatic cutting system for leather or fabric (ref/DVM 300.001).

ROBOSOFT - "Upholstered furniture Assembly" automation (ref/DVM 080.130).

SOFÀNEST - "Automatic" System for manual skin cutting (ref/DVM 300.2).

Automotive

SURCAR - Automotive surfaces with low coefficient d'atrito (ref/DVM 080.160).

MOTORAIN® - Protection/Weatherproof "Removable" for Motoscooter (ref/DVM 080.131.1).

AIRJET - Self-suction system for Engine (ref/DVM 080.000.043).

Building and Complements

S/WINDOW - Motorized safety system for windows and doors (ref/DVM 080.131.3).

FIBERFRAME® - Flexible industrial closures-self-repair (ref/DVM 650.000.1).

FIBERFRAME.2 - Rigid industrial closures in 3 variants-self-healing (ref/DVM 650.000.2).

FLEXA - Flexible/Continuous Hinged for vertical and folding sectional closures (ref/DVM 650.000.4).

BADOOR - Overhead and Sectional with micro-cinematic masking (ref/DVM 080.131.1).

FIBERFRAME.3 - Commercial dampers with reduction (-60%) of the weight (ref/DVM 650.000.3).

CARBOLIFT - Modular cab for elevators and freight lifts (ref/DVM 080,133).

EXDOOR® - Counterframe for sliding doors "auto-blocker " (Ref/DVM 080,143).

PARAWINDOW - Tilting System for doors and windows (ref/DVM 080.131.2).

OUTSIDESHUTTER® - Outdoor Shutter with photovoltaic collection (ref/DVM 080.049.2).

Lighting

FOTOLIGHT - Outdoor lighting equipment "photovoltaic" (ref/DVM 080,127).

LEGRAPH - System of lighting fixtures in Graphene (ref/DVM 080.159.1).

LEGRAPH.2 - "Induction" lighting fixtures (ref/DVM 080.159.2).

STILOLIGHT - "Retractable" system for table lamps (ref/DVM 080.142.3).

Home & Office

EXTENSIA® - " Outdoor" System for sofas and armchairs (ref/DVM 080,114).

GLASSHOME - "Interactive Home-Use " System of furniture and complements (ref/DVM 080.112.1).

BOD'UP - Modular Body for Upholstered furniture (ref/DVM 080,151).

BIOSOFT - Foam "Biodegradable" for isothermal panels and padding (ref/DVM 080,122).

K'DISABILITY - Mono-block/kitchen for "disability " (Ref/DVM 080,156).

K'DOMOTIC - Domotic Kitchen (ref/DVM 080.155).

OVERHOOD - Overhead hood to cover the hob (ref/DVM 080.142.1).

SELFHOOD - Self-filtering hood without evacuation tubes, with auto-power supply (ref/DVM 080.142.2).

QUARTER® - Integrated office cells, equipped, modular and composable (ref/DVM 080.131.3).

FIREPLAN - Interactive Ignition of the hob/cooker for gas cookers (ref/DVM 080.142.3).

OBLÒ - Porthole/Overhead washing machine (ref/DVM 080.142.4).

DIPLAST - Singularizer Dispenser for disposable containers (ref/DVM 080,128).

SWITCHOFFICE® - "Interactive Work Office" System of walls, furniture and accessories (ref/DVM 670,002).

ERGOSOFT® - Self-shaping armchairs and sofas (ref/DVM 080,129).

K'BOX® - Monobloc Cabinet for modular and sectional MP furniture (ref/DVM 080,157).

A'PANNEL - Anti-Polluting Panels "Save Environment " for the production of furniture and furnishings (ref/DVM 080,000,006).

BASCULANTA® - "Pantograph" System for Doors and gates (ref/DVM 080,132).

CINETABLE® - "Self-positioning" Kinical System for Extensions/tables (ref/DVM 080.048.1.3).

Logistics and Packaging

TENAX® - Strator "High Tension" (ref/DVM 530.000).

L'BEARING - System of unloading, packaging and packaging "multi-Product" (Ref/DVM 080.000.040).

Mechanics, Electro-Mechanics

COMPOGRAPH® - Mechanical Components in "Graphene 3D " (Ref/DVM 080.159).

CUPWASH - "Continuous washing" apparatus for house and Bar (ref/DVM 080.134).

MOTOCERN.1 - Motorized Kinics and hinge for window frames (ref/DVM 080.135).

MOTOCERN.2 - Motorized Kinics and hinges for door furniture (ref/DVM 080.135.1).

FOTOWID - Electrical slave system for Electro-Mechanical actuators for windows and doors (ref/DVM 080.124).

Health and Medical

T'CATH® - Precision Percutaneous Catheter Tri-Cuspidal (ref/DVM 080.118.1).

INTROPER - Precision percutaneous introducer (ref/DVM 080.15).

LECTA - Transfer Pluriservice/patient module (ref/DVM 080.145.1).

RSSA - Integrated environment Assistance system in RSSA (RIF/DVM 080.126.1).

CARABILITY - Disabled Aid (ref/DVM 080.144).

CRIOHEALTH - Mobile primary body thermal stabilization apparatus (ref/DVM 080.145).

CROMOHEALTH - Chromo-Therapy system for "sanitary" use (ref/DVM 080.126).

FIX-DIAPHRAGM® - 4D Abdominal protection system (ref/DVM 080.158).

FIX-DIAPHRAGM.1 - Laparoscopy Positioning Apparatus (ref/DVM 080.158.1).

HEALTHBED - Therapeutic Island and interactive multifunctional assistance (RIF/DVM 080.147).

ILEOAUTION - Flexible Rod for Ileostomy (ref/DVM 080.150).

STOMABAG - ileostomy and colostomy bag (ref/DVM 080.149).

LIGHTSPACE - Environmental sensing for "blind" (ref/DVM 080.118).

Self-Propelled and Industrial Vehicles

BOOMARM - Components Articulated Arm Composite Earth moving equipment (ref/DVM 080.120).

CARBOTRAILER® - Industrial composite vehicle structure (ref/DVM 600.000).

CARBOTRAILER.1 - Composite pre-assembled longitudinal frame (ref/DVM 600.001).

EARTHADAPTIVE® - Self-propelled weeding: lightened, unmanned, with variable pitch and height, unified Chassis, Green traction (ref/DVM 080.000.042).

Urban Solid Waste Treatment

COMPACT.1- USW sanitising system (ref/DVM 080.116.3).

COMPACT.2 - Side Loading Car Compactors "Automatic" (PTT 80, 100, 120, 150) RSU/differentiated (ref/DVM 080.116.4).

COMPACT.3 - USW/differentiated treatment system on Urban compactors (ref/DVM 080.116.5).

CUTBAG - Automatic opening of the RSU bags (ref/DVM 080.116.1).

DIFFHOME - Automatic condominium collection and treatment system for "differentiated waste" (ref/DVM 080.116.2).

TRITA - Differentiated household waste treatment apparatus (RIF/DVM 080.116.8).

COMPACT.4 - "Volume reduction" system to be mounted on collection equipment from MC 2-6/7 and/or PTT 3.5-5-6-7.5 (ref/DVM 080.116.6).

COMPACT.5 - static/transportable overflow/collection unit with "compaction coefficient 0.9" (ref/DVM 080.116.7).

Glass

GLAFREEZ - Tumbler "Auto-refrigerant" (Ref/DVM 080.148).

PHOTOSLAB - Mono-sheet and Glass-Chamber photovoltaic (ref/DVM 080.148.1).

Industry 4.0

MANUFACTORY® - Manufacturing Process with organizational platform based on Industry 4.0, which allows an important reduction in the cost of production (ref/DVM 080,161).

Note: Other Innovations will be transferred to Company/Prospect of the Sector.

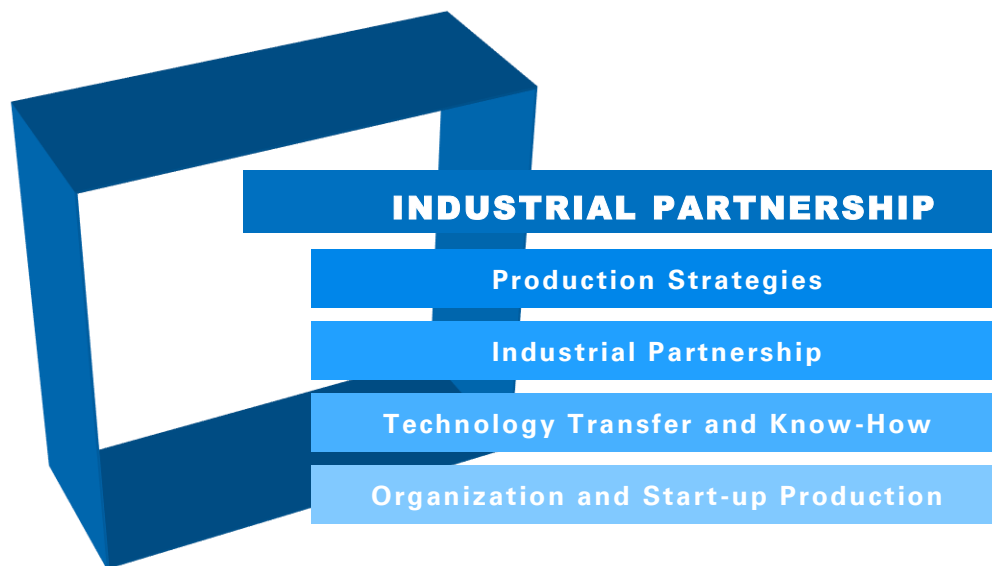
Picasso



INNOVATIVE PRODUCTIONS AND INDUSTRIAL PARTNERSHIPS

Industrial Restructuring

DVMINDUSTRIAL - Industrial promotion is organised on the basis of an entrepreneurial idea relating to the manufacture of a **Product and/or Process Innovation**. It is realized with the establishment of industrial partnerships between different private and/or public entities: Entrepreneurs, Industrial or Service Companies, Universities, Research Centres, Institutions, etc.



The professional assets held by all DVMENGINEERING Partners allows to define the most appropriate production strategies for launching **new (or restructuring) industrial initiatives**:

Production Strategies

- Feasibility analysis of the industrial initiative,
- Identification of products and technologies.

Industrial Partnership

- Business Plan and Planning,
- Sizing Investment and finance (capitalization or support),
- Definition of the structure.

Technology Transfer

- Feasibility study on the application of innovations,
- Technology transfer and Knowhow (products, processes, materials).

Organization and Start-up Production

- Feasibility Study and plant sizing,
- Locating production Area,
- Plant Layout and Layout of manufacture,
- Project implementation and plant construction,
- Assistance at the start of production.

DVMINDUSTRIAL/London is a structure dedicated to the realisation of industrial partnerships and the establishment of new Companies (newco) to which **DVMENGINEERING** transfers innovations.

Partnership and Innovation	Industrial Manufacturing for:
MEDEQUIPMENT - Healthcare & Medical:	<ul style="list-style-type: none"> - Apparato stata selezionata temperatura esterna corporea di pronto intervento. - Ausilio veicolare per disabili. - Isola terapeutica e di assistenza multifunzionale. - Sacca per ileostomia e colostomia. - Asta but per ileostomia.
COMPOTRALIER - Large Structures in Composite:	<ul style="list-style-type: none"> - Structure/Chassis of industrial vehicles (semi-trailers) in composite material. - Articulated arms for self-propelled vehicles, earthmoving and aerial platforms in MC.
SWITCHOFFICE - Interactive Office System:	<ul style="list-style-type: none"> - Office interactive cells, equipped, modular and modular. - "Interactive Work Office" System of walls and furniture.
DVMEQUIPMENT - Automation & Robotics:	<ul style="list-style-type: none"> - Automatic stripping and painting installations of "fuselages/aircraft ". - Automatic painting systems "fairings/naval". - Automatic cutting plant for leather or fabric. - Automatic system for manual skin cutting. - Automatic plant for "transport, selection and packaging of vegetables". - Automated greenhouses, equipped with automatic equipments and aids.
UPsITALY - Furnishing Systems:	<ul style="list-style-type: none"> - "Extensible" system for sofas and armchairs. - "Interactive Home-Use " System of furniture and complements. - Mono-block/kitchen for "disabled ". - Domotics Kitchen System. - "Self-shaping" armchairs and sofas. - Monobloc body for furniture in modular and sectional MP.
WASTEQUIPMENT - Plants for municipal Solid Waste treatment:	<ul style="list-style-type: none"> - Plants and systems for "differentiated waste treatment".

INTEGRATED DEVELOPMENT

(Specialization & Multidisciplinarity)

The product, the process and the means of manufacture must always allow their integration in the context of an optimum cost of production and in relation to the manufacturing strategies. The interaction that is formed between us and our client, constitutes the "propulsive engine", which is articulated on two lines of supply: **On-demand and Outsourcing**, in support of the technological processes for the

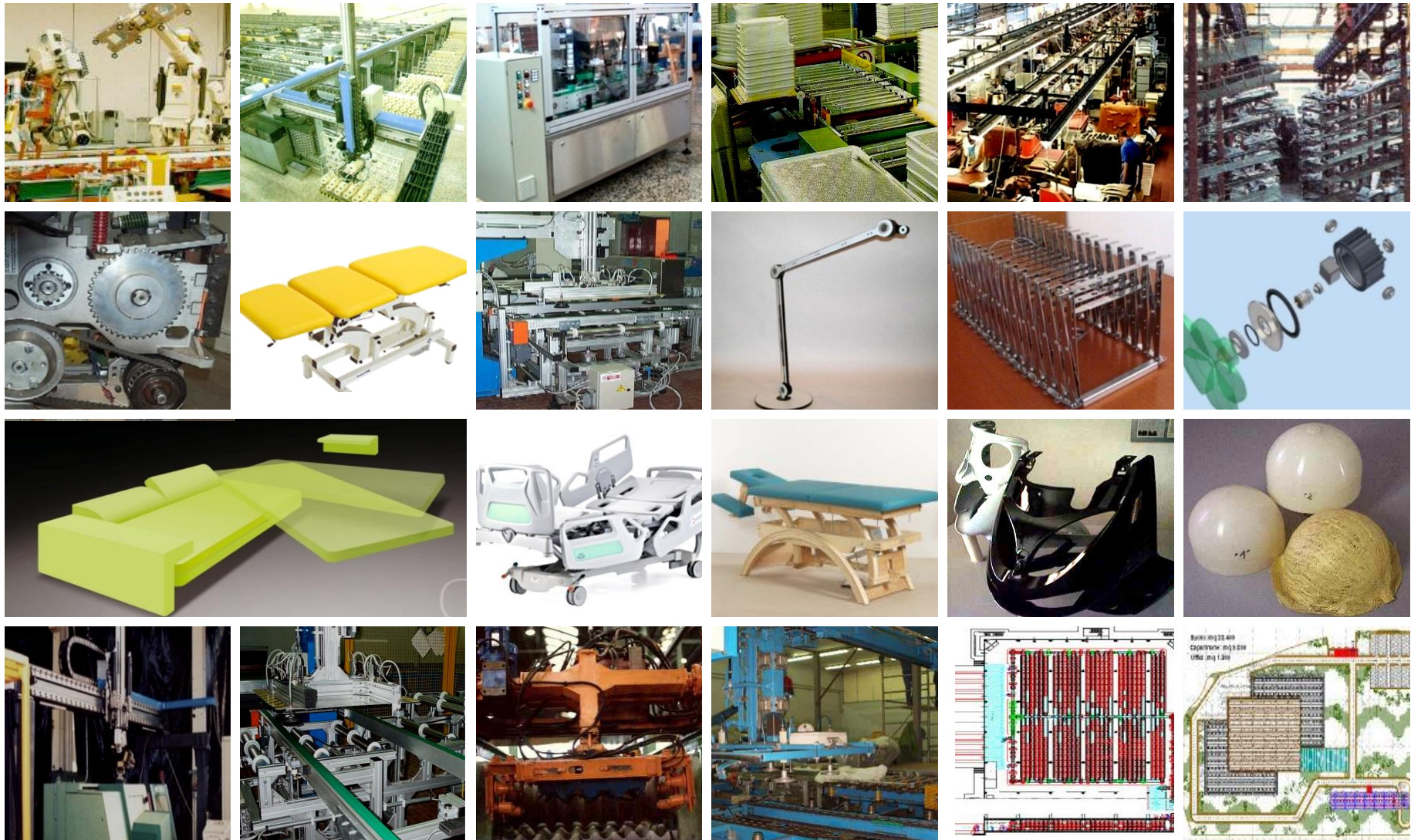
INDUSTRIAL PRODUCTION AND DEVELOPMENT

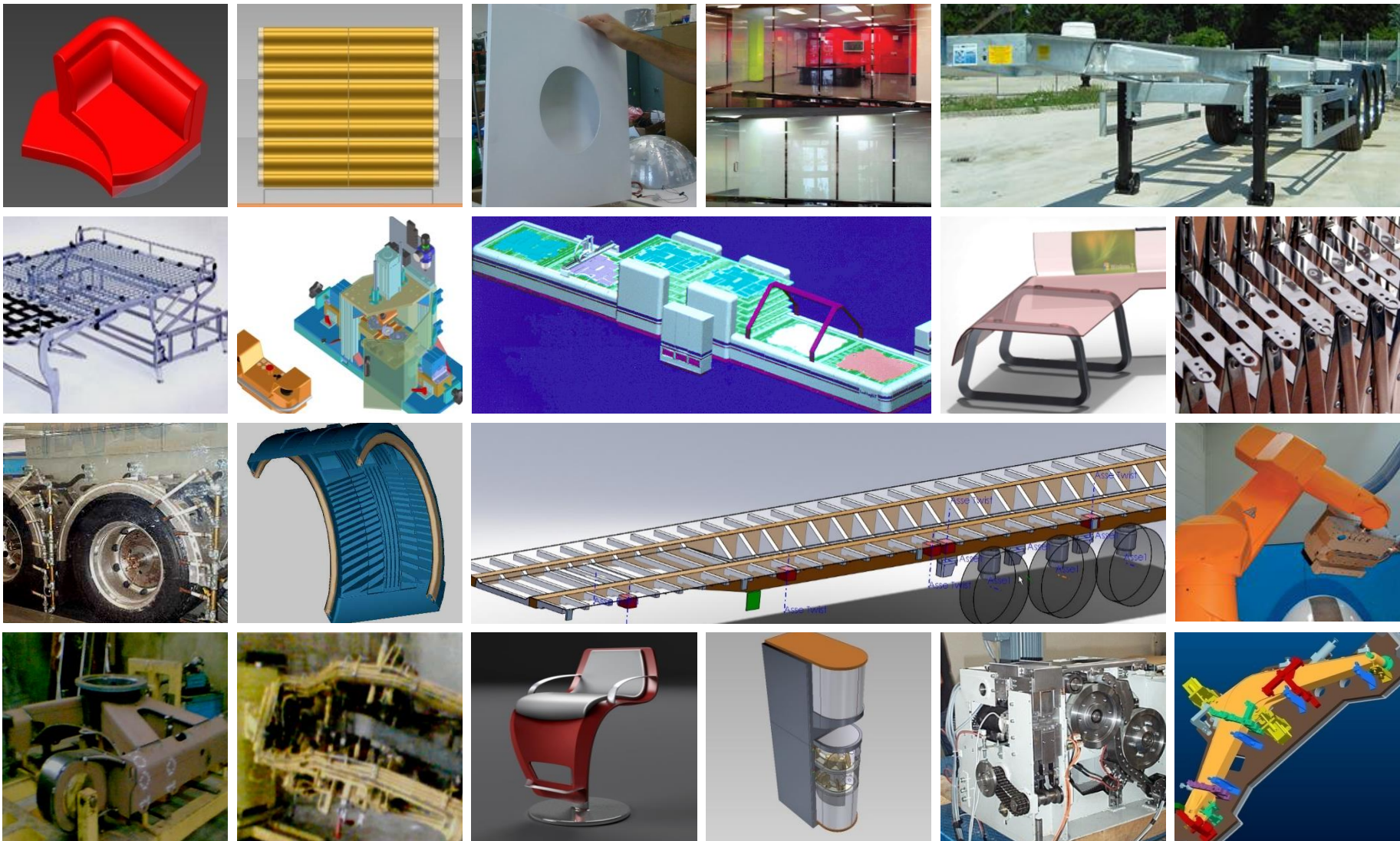
The main advantages of the application of "**collaborative development and production**" methodologies are:

- Multi-disciplinarity and operational flexibility;
- Reduction of *Time to Market* (also of 50%) Compared to a strictly sequential development process;
- Advance of any problems arising from design and production, to correct them in the initial stages of development (when it is less expensive) and solve them completely before starting production.

The DVM Product/Service Supply is divided into 5 autonomous points and can include:

- 1. Product and Industrial Processes on-Demand Development** - both for new and for beginners to improve.
- 2. Updating Existing Products and Processes** - for the improvement of the Product/Process functional performance, reduction of the Manufacturing Cost and rationalization of the Factory Layout.
- 3. Transfer of Proprietary Innovations** - the first 80 are ready for applied in the production of: Clothing & Footwear (qty 2), Agribusiness (3), Elevators (1), Automotive (2), Office and Home Systems (18), Industrial Closures and Doors (11), Appliances (12), Hardware (8), Lighting Fixtures (9), Automation (6), Mechanical (6), Packaging (4), Healthcare & Medical (12), Self-Propelled and Semi-Trailers (4), Municipal Solid Waste Treatment (10), Glass Processing (5).
- 4. Technological Outsourcing for on-site Technology Transfer** - over a period of 3 years following a pre-established program and objectives.
- 5. Pilot Series Implementation** - realization of the Pilot Series as regards the production of new/existing Products and of the Manufacturing Processes; that is, the four previous Services accompanied by Industrialization Prototypes and installation/launch of Machines, Plants and Automations, Employee Training.



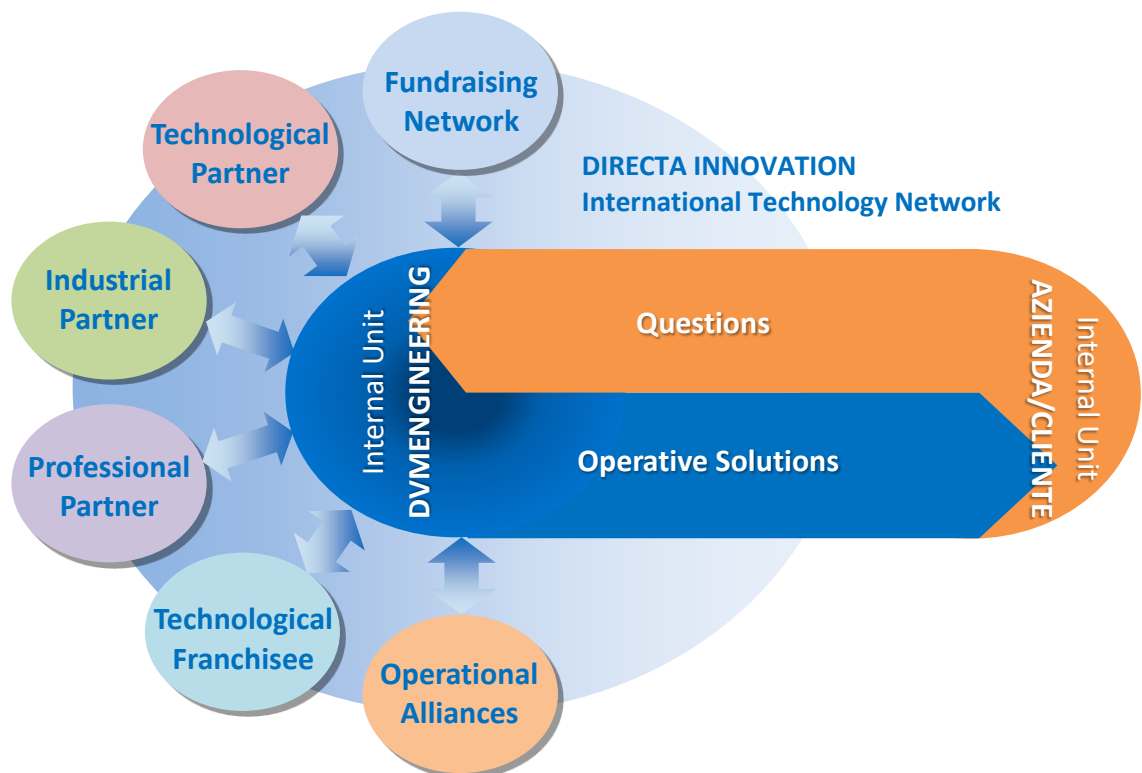


International Technology Network

The Operative Structure

Management - centrally manages the strategy, finance and administration.

DIRECTAMANAGEMENT Ltd / UK - Organizational, administrative and financial management company of the entire DIRECTA INNOVATION Network.



STRATEGIC COMMITTEE - Group of experts in various areas (strategy, legal, Marketing, industrial, social, etc.).

Operative Structure - companies and branches that will manage, develop, produce "Innovation for SME's" on an international scenario, providing immediate availability:

DVMENGINEERING CORP Ltd / UK, Italia, Svezia, USA - Operational Headquarters for industrial Engineering, technological development, R&D activities.

DEVELOPMENT COMMITTEE - Group of Experts (materials, product, processes and organization production, technologies, control, etc.) to support the strategies.

DIRECTACONETH / International - Digital Portal dedicated to the "transfer of industrial innovations".

DVMLABORATORY / Italia - Branch for the construction and Testing of prototypes/product.

FUNDRAISING NETWORK DIRECTA / International - composed of Fundraising partners to support investment in innovation of companies/customers.

DVMINDUSTRIAL Ltd / Londra - Industrial Partnership and Constitution Manufacturing NewCo for the exploitation of developed innovations.

Professional Partnership - widespread in the territory, are characterised by flexibility and high profile specialization levels; Participate in the entire development process:

TECHNOLOGICAL PARTNER / International - represent the "support structure", constituting the most advanced technological part within our working groups; We have, in other words, the availability of "specialization and innovation" according to the commitment required, assuring us the availability of specialized and advanced technological competences in the various technical/technological areas:

- Mechanical and kinematical structures,
- Automation of production systems,
- Calculation and Operational Search,
- Organizational Systems,
- Industrial Design,
- Industrial Technologies,
- Industrial and logistics plants,
- Manufacturing economy,
- Industrial and pre-competitive Research,
- Materials Technologies, etc.

INDUSTRIAL PARTNER / International - Manufacturers of industrial technologies in the following application areas, in support of the development of specific jobs:

- Environment, health, safety;
- Automation and IT;
- Electricity, electronics, optics;
- Hydraulics and pneumatics;
- Logistics and handling;
- Industrial machinery and equipment;
- Materials, detection and measurement;
- Power transmission; et cetera.

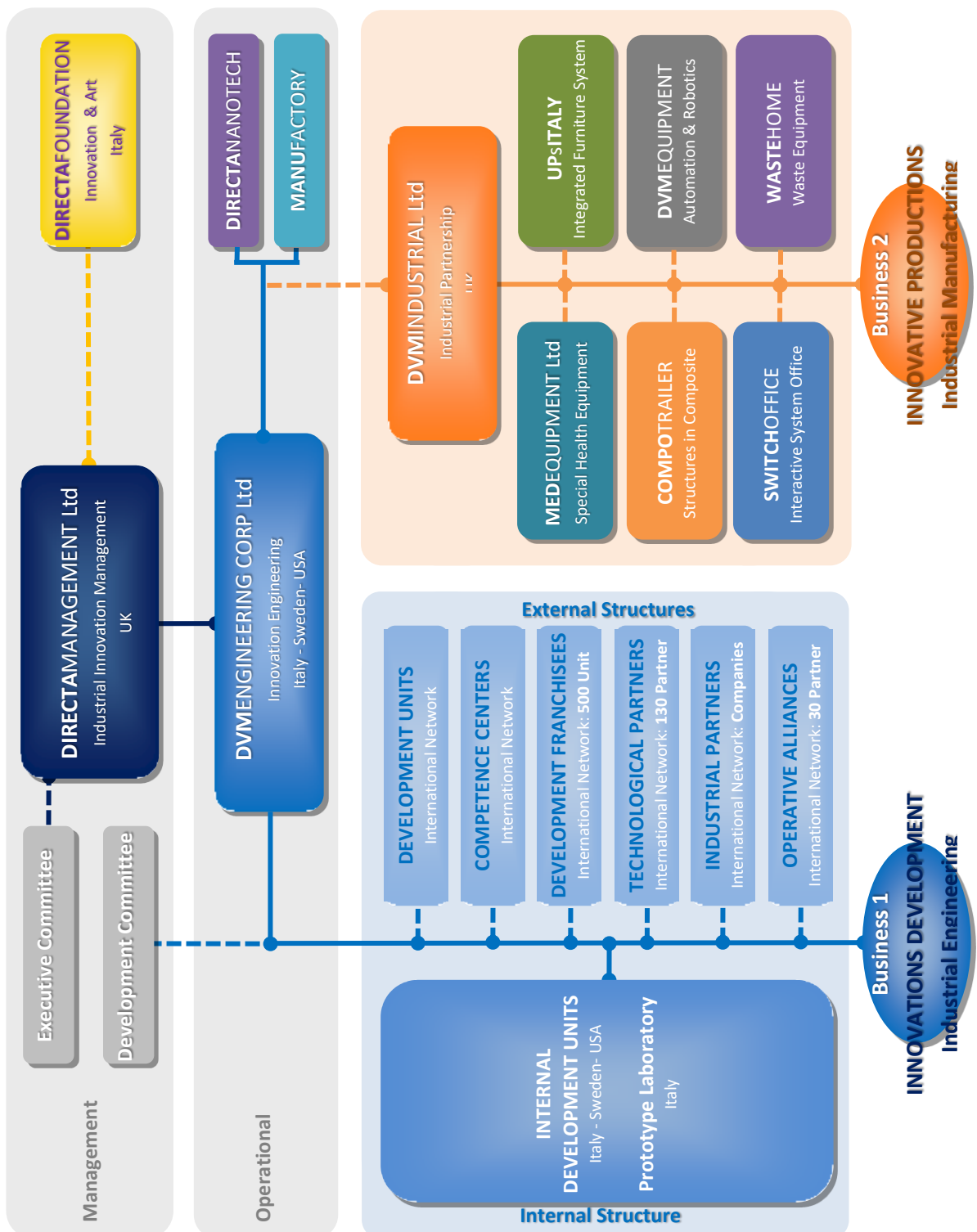
PROFESSIONAL PARTNER / International - Autonomous Consultants or companies with whom to collaborate in the development of integrated projects-which, on the basis of our technical/technological activities and innovation, are supplemented by the competences of the partners, guaranteeing solutions Multi-task.

OPERATIONAL ALLIANCES / International - With Promoter, Project Leader and coordinator functions, partnerships have been created with research and innovation organizations, including:

- American Inst.te Ind.I Engineers (US)
- Italian Design Association (IT)
- European Association for Technology and Industrial Innovation (EU)
- Imperial College of London (UK)
- Massachusetts Inst. Technology (US)
- Moscow Nanotech Center (RU)
- Polytechnic of Bari (IT)
- Politecnico di Milano (IT)
- Politecnico di Torino (IT)
- Scuola Normale Superiore Pisa (IT)
- University of Cologne (DE)
- University of Dresden (DE)
- University of Thessaloniki (GR)
- University of Stockholm (SE)
- University of Udine (IT)
- Zentrum für Innov. und Technik (DE)

TECHNOLOGICAL FRANCHISEE / International - Franchising network composed of professionals or companies widespread and rooted in the territory, in close liaison with the manufacturing companies, to constitute the "proximity structure" of **DVMENGINEERING** with a commercial and technical presence in Europe, medium East/Africa, Asia, North America, Central/South America, Australia.

DIRECTA INNOVATION Structure





Davide VIOLANTE (+39 328 965 1850)
 Senior Consultant in Technological Applications
 Founder **DIRECTA INNOVATION NETWORK**
 management@directainnovation.com

DVMENGINEERING CORP LTD
 Share Capital € 2.270.100
 WD6 1JN Borehamwood, UK
 4, Maxwell Road

Branch Italia
 I-70121 Bari (BA)
 26, Via P. Amedeo

I-20017 Rho (MI)
 21, Via Galleria Gandhi
 directainnovation.com

I-33085 Maniago (PN)
 snc, Via Venezia
 info@directainnovation.com

The contents of this document and the solutions described therein are the property of **DVMENGINEERING CORP Ltd, UK**. The use not expressly authorized is considered fraudulent and detrimental to the rights on industrial property. The recipient of this information acknowledges that all industrial and intellectual property rights relating to what is described in this document, as well as all designs, sketches, photographs, models, specifications and technical descriptions relating to The solutions described herein are our exclusive competence and shall be abstaining from the use of such material in the interests of its own or of third parties for any purpose not expressly authorized and without our prior written consent. It also undertakes to consider the contents of the solutions described in this document as "secret Company Information" within the meaning and for the effects referred to in the Artt. 98 and 99 of the CPI (D. LGs. 10 February 2005 N. 30) and therefore, to keep on them the strictest secrecy. (®) Trademarks and property models of **DVMENGINEERING CORP Ltd**.