



ADVANCED ERGONOMIC SOLUTIONS





PEOPLE AT THE CENTRE FOR A FLEXIBLE MANUFACTURING SYSTEM

We believe in human work as the leading solution to achieve efficiency and flexibility, the main challenges that future of manufacturing currently imposes

Every human's action in a working environment can be a cost or an added value, whether it is mental or manual

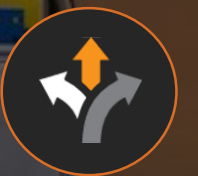
Optimizing the production environment according to the operator characteristics allows to reduce costs and improve productivity



Total quality



Lean production



Flexibility

How to improve your work environment?



↓

ERGONOMICS

Adapting the work environment to the worker capabilities



↓

PROCESS CONTROL

Implementing the objectivation system

Adapting the work environment to the worker

ERGONOMICS



Adapting working tools according to the human body capabilities can reduce physical damages, speed up production and improve operators well-being

Compliance with processes and human cognitive capabilities allows to decrease the information processing effort and to reduce errors rate and time to adapt to new production cycles



+ Productivity
- Costs



Health
Well-being

PROCESS CONTROL



Objectivation
of manual activities



Digital
integration

Objectivation and digital integration are mandatory for automatic control and detailed process mapping



Continuous
monitoring



Traceability



Automatic
control

Monitoring all the manual activities



We have been developing solutions for 25 years

Carlo Pettenon
Confartigianato Padova

We apply the latest technological innovations and material science in order to create ergonomic solutions

Our highlights:



2

Production plants



22

Employees



4.000.000 €
In 2018



5
companies network



1995

Foundation as tooling company in Pianezze (Vi)

2003

Production of assembly workstation and equipment begins

2006

First carbon fiber reaction arm

2009

Start developing technical solution for lean production

2015

Beginning of the intelligent workstation development with AD.E.S network

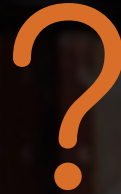
2018

Start of consultancy and process analysis activity

We analyse your process

Which are the critical aspects of your process?

How can you optimize your production?



Which are the real needs of operators?

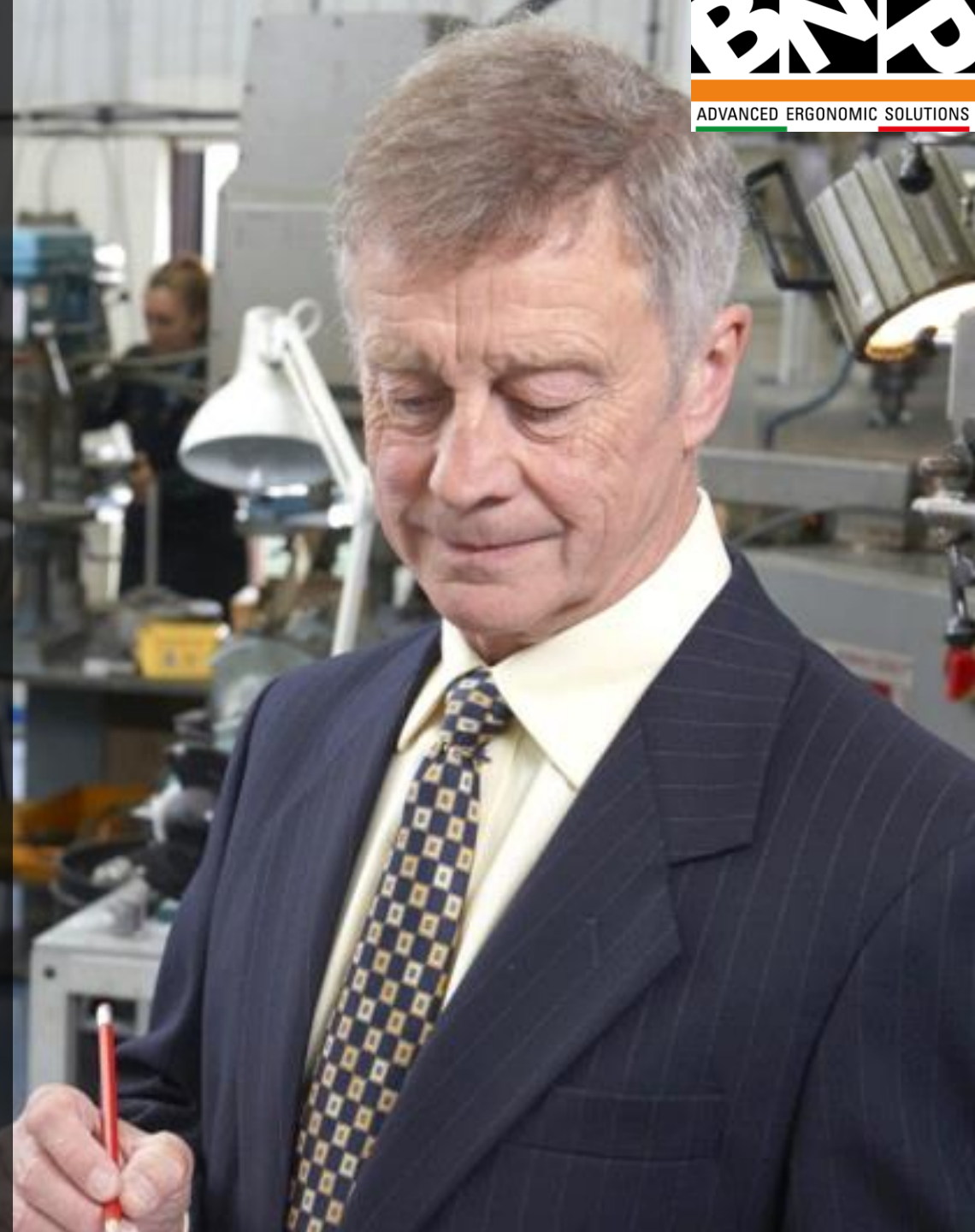
How can you objectivate your production?



...and propose solutions

User Centered Design

Operator's needs are the centre of our design process. End user will be involved in order to guarantee the best match between problem and solution.



We offer standard solutions

Reaction
arms



Manipulators



Ergonomics
accessories



Positioning
systems



Assistive Picking
solutions



Cobots



Process
Control
Software



Thanks to CLERPTEM
Automotive Case History



BNP products overview

TORQUE ARMS

- Carbon fiber arms
- Optimal cost/performance balance
- State of the art materials and manufacturing
- Wide range of models and design configurations
- Customization capability
- Positioning system available



HIGH TORQUE ARMS

- Robust design
- Complete range for telescope and torque tube models
- Torque capacity between 150 and 600Nm
- Customization capability



ZERO GRAVITY TORQUE ARMS

- Carbon fiber arms
- Pneumatic balancing control
- Payload starting from 35 up to 70Kgs
- Reach from 1500 up to 2500mm
- Torque capacity 250 or 500Nm



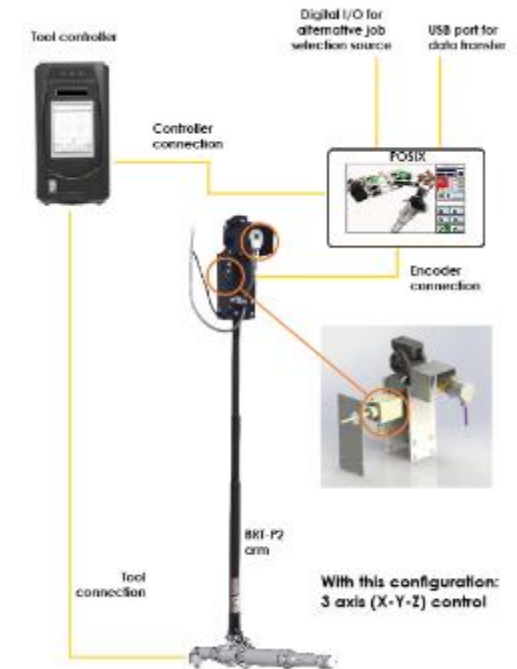
E-ZEROG ARM FOR HANDLING OF LIGHT LOADS

- Handling of light loads for repetitive operations with electronic balanced arm.
- Lifting control through weightless sensitive handle
- Vertical sliding through endless screw linear guide



POSIX - TOOL POSITIONING SYSTEM

- Stand alone device for monitoring the tightening sequence
- Touch screen HMI 7"
- Adaptable to all brands of controllers



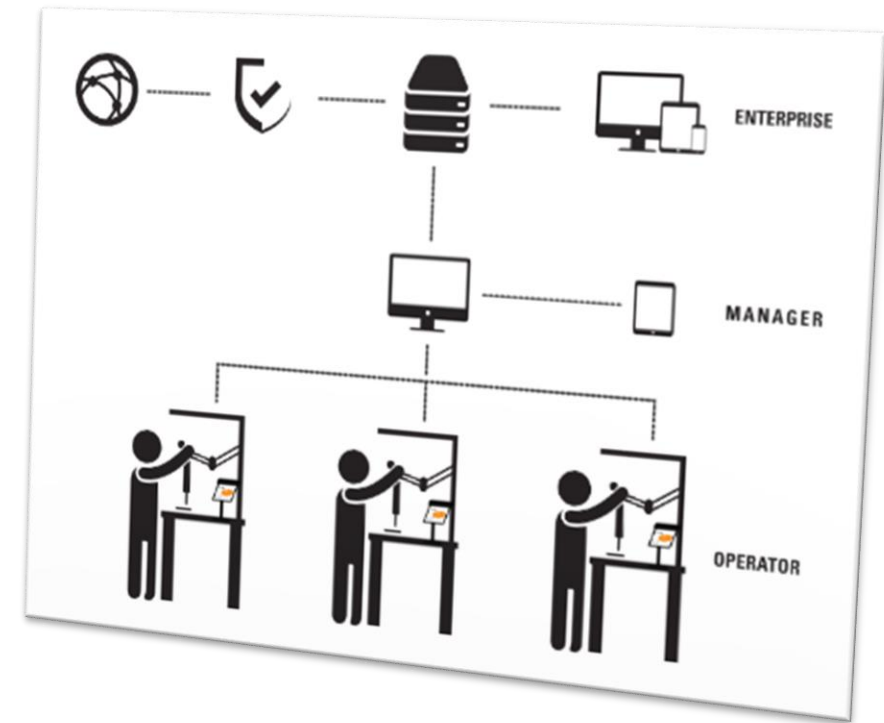
POSIX PRO - TOOL POSITIONING SYSTEM

- error-proof sequential assembly process control
- wide user-friendly touch HMI
- remote control and ERP interconnection
- operator recognition
- model recognition
- working phases view
- multi language instructions



SMM PROCESS CONTROL SOFTWARE

- Multiple workstations integration
- Data sharing and production planning
- Production management optimization
- Easy adaptation to work cycle modifications
- Process monitored at any stage
- Can be built up and expanded through time
- Co-bots management



SMM

PICK-TO-LIGHT CONTROL

- Through SMM software we develop several different solutions where the picking activities are managed by a P2L system that can work either online or offline mode.



SMM

ADAPTIVE WORKBENCH CONTROL

- Through SMM software operator can be recognized and the workbench height is adjusted in accordance with his/her anthropometric characteristics.
- The operator can also adjust the workbench height in accordance with his/her needs using a button panel



SMM

DYNAMIC LIGHT CONTROL

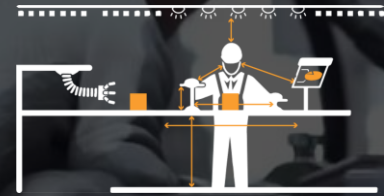
- Through SMM software, all BNP adaptive workstations can automatically adjust the lighting intensity in accordance with operator characteristics and the cycle phase requirements.



...and customized solution according to your needs



- Handling and assembly personalized workstation



- Reaction arms up to 2000 Nm
- Handling solution

Personalized tool holders



Products customization



Why us?



Know-how

- Twenty years of experience in manufacturing
- Heterogeneous knowledge: ergonomic, design, composite materials and process analysis
- Specialist in assembly solution



Research & development

Our R&D team is constantly involved in national and international research projects



Innovative products

We produce a wide range of technological advanced solutions, also with customer brand (private labels projects)



GENERAL INDUSTRY



AUTOMOTIVE



AEROSPACE



MARINE



HOME APPLIANCES

REFERENCES

FCA

FIAT CHRYSLER AUTOMOBILES

IVECO



Audi

CNH
INDUSTRIAL



FENDT

Electrolux
PROFESSIONAL



AERMEC



Better Everyday



Manfrotto

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