



**Custom solutions**  
FROM DESIGN TO MANUFACTURING

**HiCONATIC**

MANUFACTURER & DESIGNER OF INTERCONNECT SOLUTIONS



# Custom Solutions

BY NICOMATIC

## FROM DESIGN TO MANUFACTURING

### Dedicated Structure

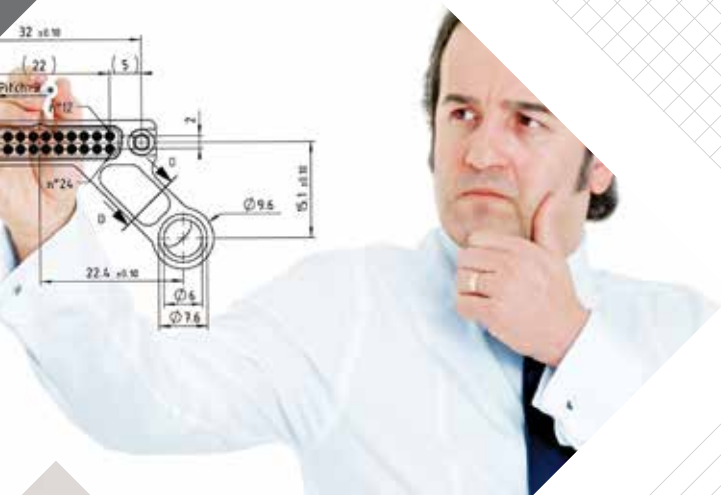
- 1 Project Manager at your service
- 1 complete Project Team following your project
- Dedicated production lines from prototyping to series

### Experience

- Worldwide customers: over 60 projects per year
- EN 9100 processes for risk assessment and traceability
- A diversified customer base: Defense, Aeronautics, Medical, Energy...

### Customer satisfaction

- Design a unique solution to solve customer challenges
- Reactivity in each step: from design to manufacturing
- All capabilities in house for 100% quality

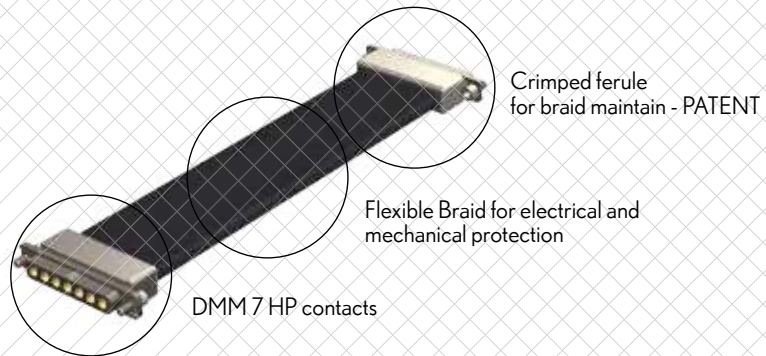


# Project example

## CUSTOMER need

Customer requirements	Environment
Back-to-back shielded harness 12 weeks schedule Save weight and space vs classic backshell	FADEC - Military Engines

## CONCEPT proposal



## NICOMATIC know-how

Electrical	Mechanical	Environmental
High speed signal	Harness	Backpotting
High power contacts	Glue process	Material for vibration resistancy
Mixed layout	Plastic assembly	IP level
Low contact resistance	Crimping technology PATENT	
Signal integrity	Modular crimping tool	

## PROTOTYPE



## QUALIFICATION

Technical data	
Rated current	3 A max@25°C / 2.2 A max@85°C
Rated voltage (sea level)	200 Vrms
Withstanding voltage (sea level)	600 Vrms
Breakdown voltage (sea level)	800 Vrms
Contact resistance (initial)	8.7 mohms max
Insulation resistance	5 Gohms min
Durability	500 cycles min
Contact engagement / separation force	2 N max. / 0.2 N min
Temperature range	From -55°C to +125°C. (Complies with PbFree reflow T° profile)
Vibration severity	10 to 2000Hz / 15g / 3 axis / 12 cycles per axis. (no signal interruption > than 1 µs)
Shock severity	100g for 6 ms sawtooth. (no signal interruption > than 1 µs)
Salt spray	48h, 5% NaCl
Solvent resistance traction	HcFc 141 bMGX (ATOCEM) solvent > 1000Newton

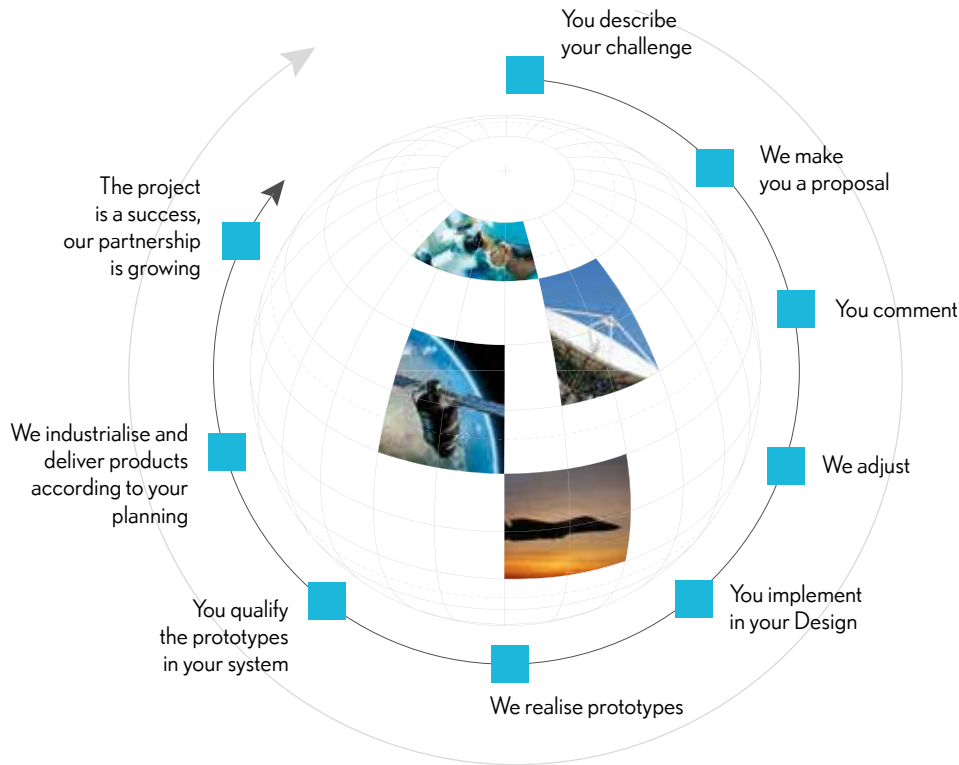
## SERIES

## CUSTOMER satisfaction

12 WEEKS

# From design to manufacturing

## ■ Nicomatic can support you in each step of your project



## ■ Nicomatic can start from

Functional description	Retrofit	Technical specifications	Product customisation	Pictures
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## ■ Unique know how



Functionalities	Technologies
High speed signal	FFC lamination
High power contacts	Harness
High frequency contacts	Shielding
Low contact resistance	Plating
Signal integrity	Glue process
Fixing hardware	Backpotting
Crimpflex technology	High temperature plastics
Mechanical resistance	Material for vibration resistance
Tactile effect	IP Protection

# NICOMATIC Product lines



## ■ High performance connectors

- > 15 million configurations : LF / HP / HF mixed layout - 2mm pitch
- > CMM pps series, DMM Micro-D Mix metal series
- > For military, aerospace and space applications



## ■ Connectors for flexible circuits & FFC cables

- > Connectors for flat cable, contacts, crimping press and jumpers - 1.27 / 2.54mm pitch
- > Flat Flexible Cable standard, gold, shielded and controlled impedance  
From 0.5 to 2.54mm pitch
- > For membrane switches and industrial applications



## ■ Domes & components for man/machine interface

- > Metal Domes (adhesive spacers, bulk, reel) & LEDs (0.35, 0.5)
- > For membrane switches, consumer electronics, and any man/machine interface



## ■ Printed Circuit Board connectors

- > SMD test terminals
- > Pin headers & sockets
- > Discret wire to FFC connection

## ■ ALL CAPABILITY **in house**

Screw machining	Stamping	Plastic injection	Machining
Prototyping	Assembly	100% made in house for 100% quality	Industrialisation

## ■ OUR QUALITY **policy**

In order to better reply to the high technology & electronics market requirements, Nicomatic refers to EN9100 certificate to build its quality system. The control of all steps to market a product is a guarantee for our clients to find an adapted solution to their needs.

Our constant will to improve quality is ensuring a long term development and growth for all NICOMATIC partners.

- EN 9100: 2009
- ISO 9001: 2008
- REACH
- RoHS
- UL standards



## OUR MAIN partners




For more information about  
NICOMATIC distributor network,  
please visit our web site



[www.nicomatic.com](http://www.nicomatic.com)

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