



GEOCONNECTICS

RELIABILITY TESTING LABORATORY

PRESS FIT

OUR VOCATION

Electrical contacts

Conductive metal parts

Insulating parts

The vocation of our company is especially the characterization of electrical contact.

We characterize the conductive metal parts through which circulates electrical energy. We also characterize the insulating parts which isolate the current flow.

We work in the fields of aeronautics, automotive, electrical engineering, aerospace, military, electro medical devices, electronics, energy...



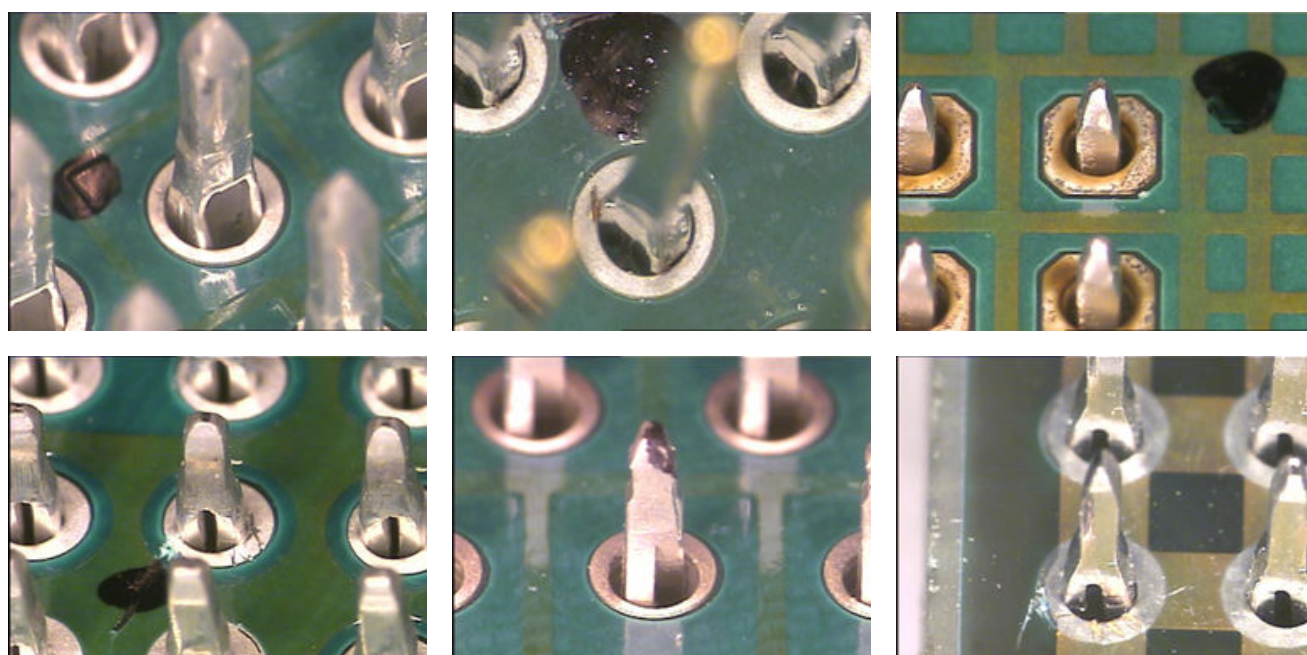
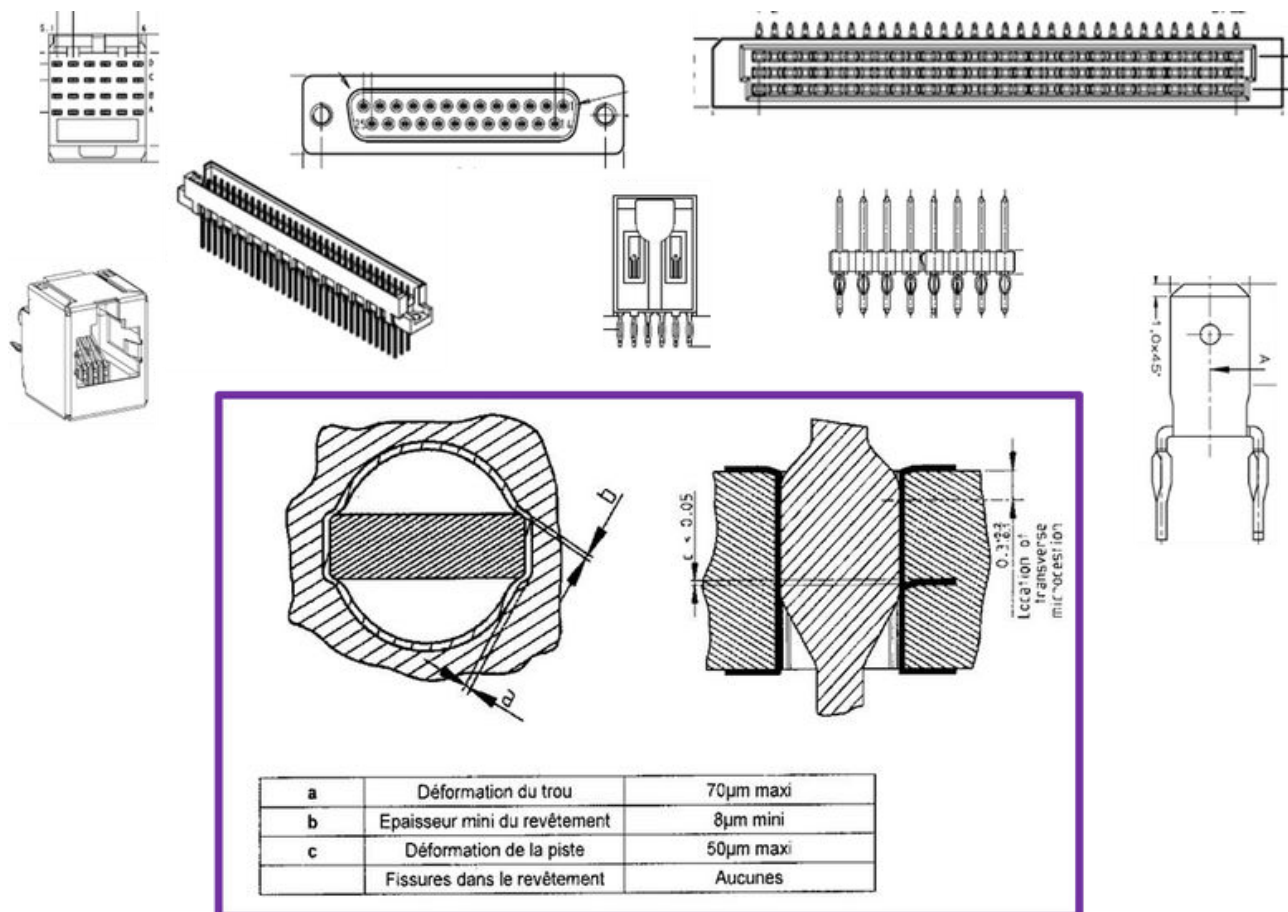
OUR QUALITY APPROACH

We have an **R&D label** called "Agrément crédit d'impôt recherche " allowing our French customers to obtain a tax deduction of 30% on theirs R&D projects.

We are accredited according the standard CEI 17025 by **COFRAC** since the 14 April 2020. Our accreditation perimeter is built on EN 60512 standards (contact resistance). [Scope 1-6763](#) available on the COFRAC website.

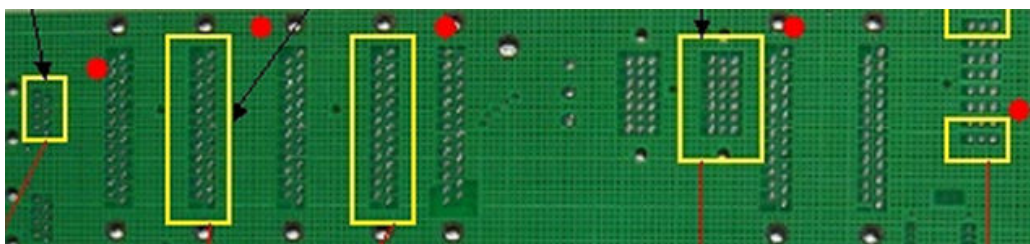
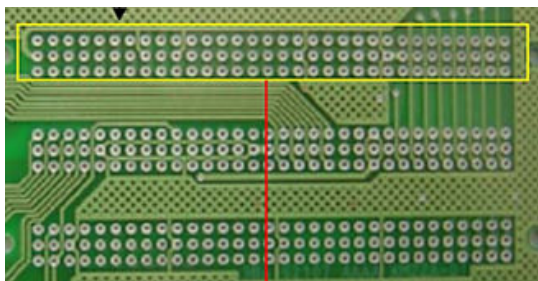


PRESS FIT PRINCIPLE

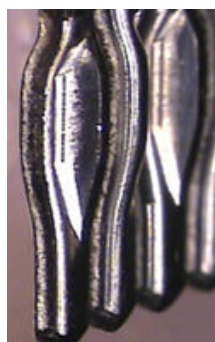
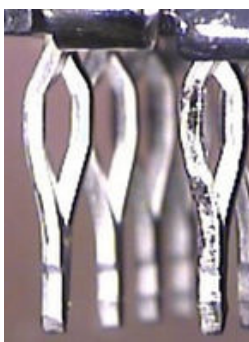
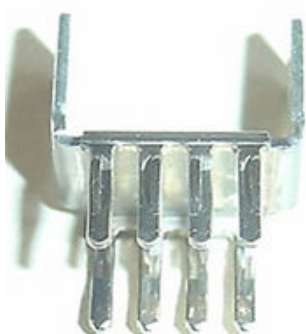




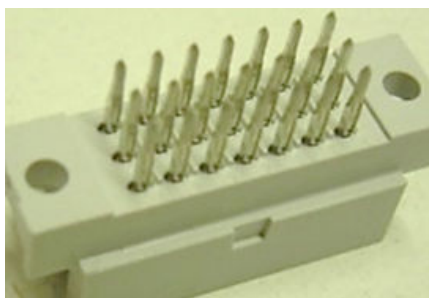
PRESS FIT TYPES OF PRESS FIT



> Action Pin



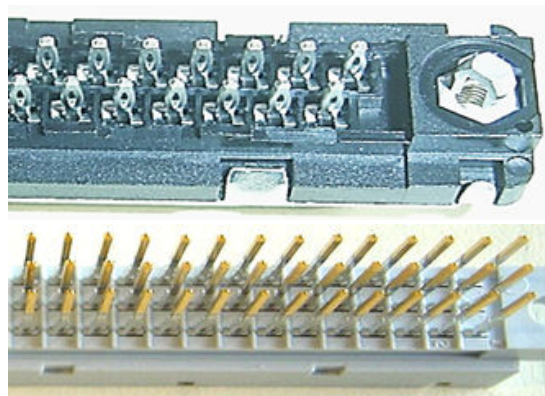
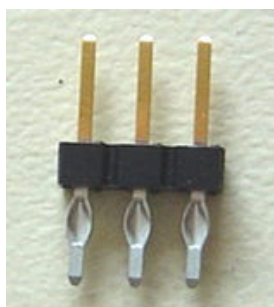
> H-Shape



> Eye of needle



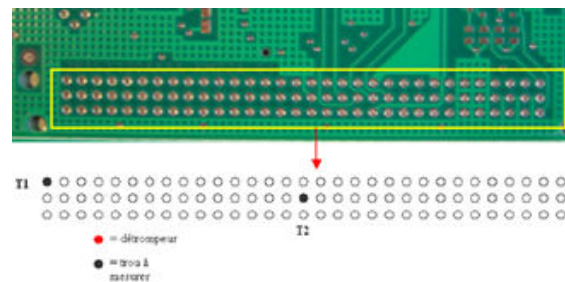
> V-Shape



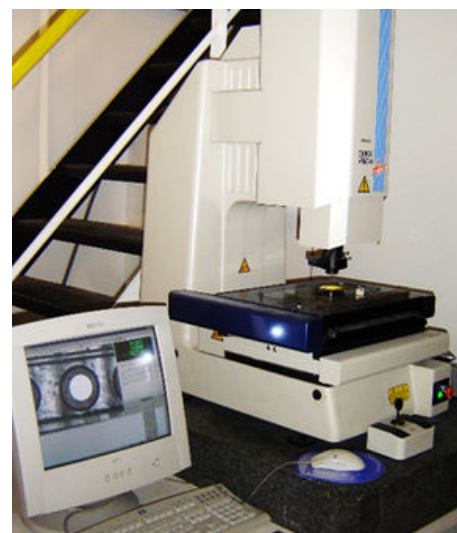
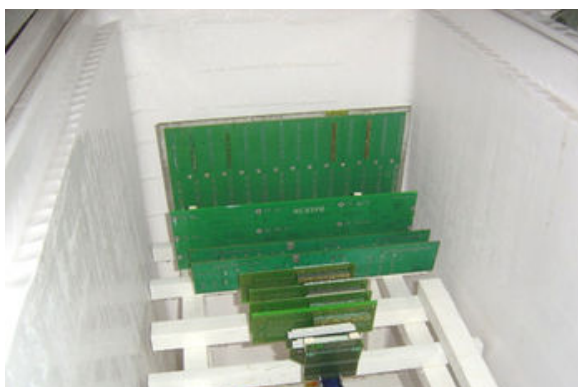


PRESS FIT ENDURANCE TEST

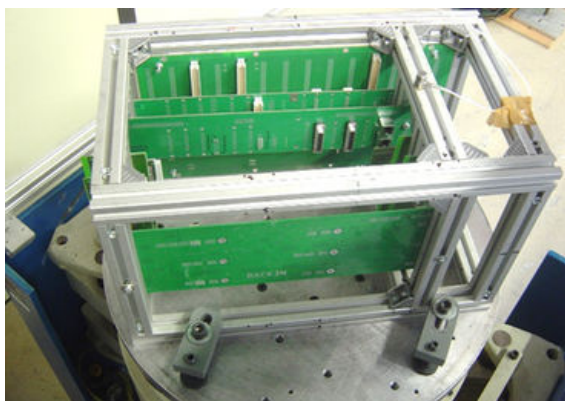
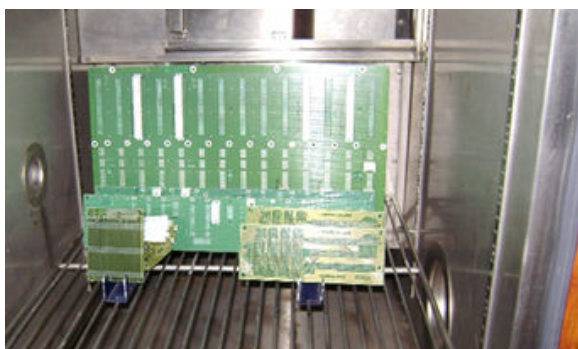
> Metrology



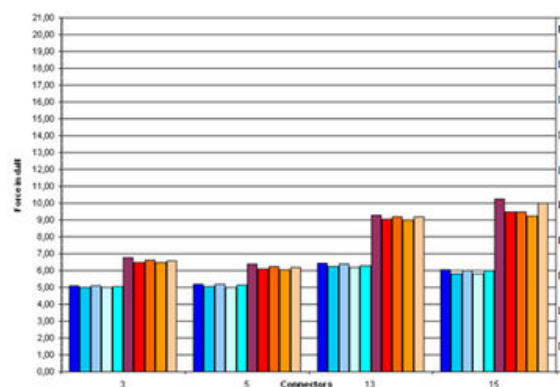
> Salt spray



> Thermal shocks



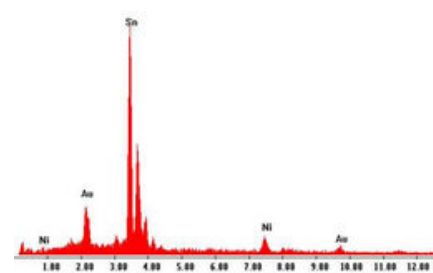
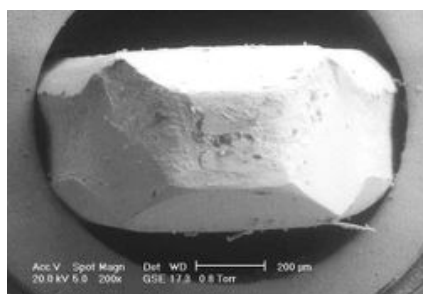
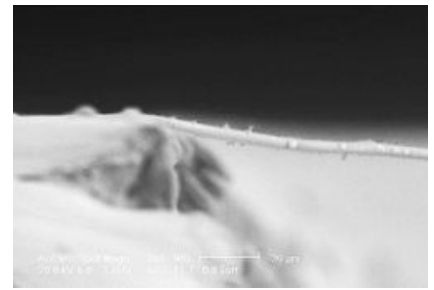
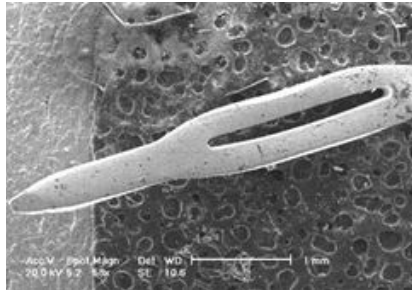
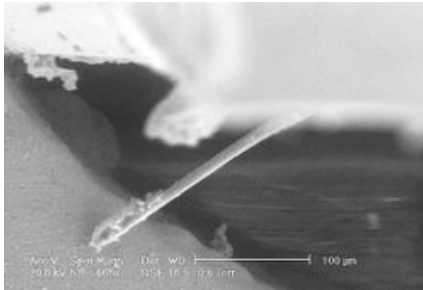
Insertion force measurement of connector: 1AB 001610032 HARTING - 2 repairs



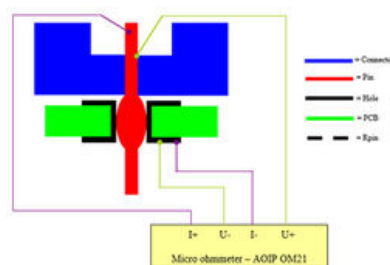
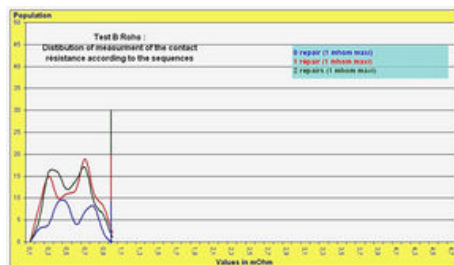


PRESS FIT ENDURANCE TEST

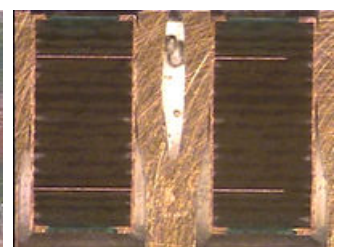
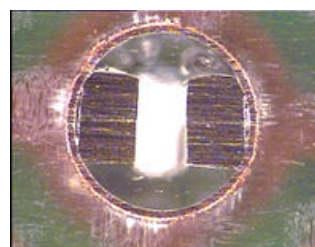
> Visual and SEM inspection



> Contact resistances



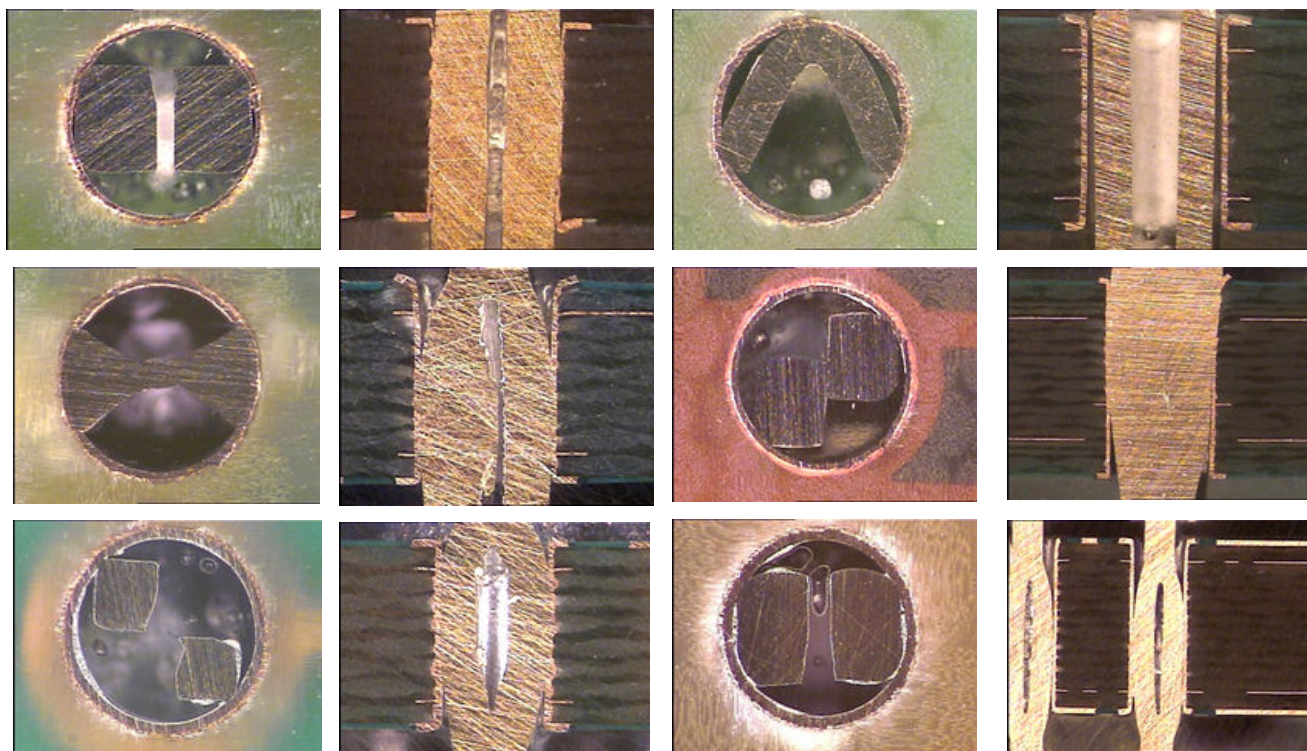
> Cross sections





PRESS FIT ENDURANCE TEST

> Visual and SEM inspection



> Endurance test

Test group			OPERATING MODE TEST D <u>MODE OPERATOIRE TEST D</u>				
Measurements	conditions	Ref.	Test sequences for each batch				
			PD1	PD2	PD3	PD5	PD6
Registering of connectors and PCB	A réception des cartes		0	0	0	0	0
Measurement of vias	6 points de mesure au diamètre avant insertion des composants	Pré-test	1	1	1	1	1
Contact résistance	1 mΩ <u>maxi</u> après compensation	SD1	3	3	3	3	3
Vibration	10-2000Hz 1,5mm, 200m/s ² 2h/3axes	SD2	4	4	4		
Contact résistance	Augmentation de 0,5 mΩ <u>maxi</u>	SD3	5	5	5		
Micro section if resistance failure	Polissage longitudinal et transversal <u>déformation</u> , épaisseurs, fissures	SD4	6	6	6		
Thermal shocks	-40°C à 85°C 30min pour chaque T°(10cycles)	SD5		7	7	4	
Contact résistance	Augmentation de 0,5 mΩ <u>maxi</u>	SD6		8	8	5	
Micro section if resistance failure	Polissage longitudinal et transversal <u>déformation</u> , épaisseurs, fissures	SD7		9	9	6	
Dry heat	1000h à 85°C	SD8			10		4
Contact résistance	Augmentation de 0,5 mΩ <u>maxi</u>	SD9			11		5
Micro section if resistance failure	Polissage longitudinal et transversal <u>déformation</u> , épaisseurs, fissures	SD10			12		6