



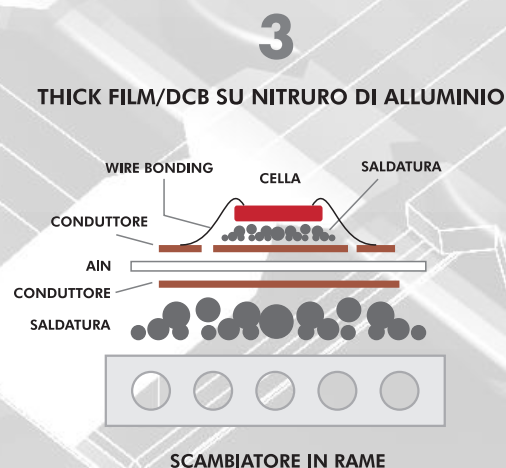
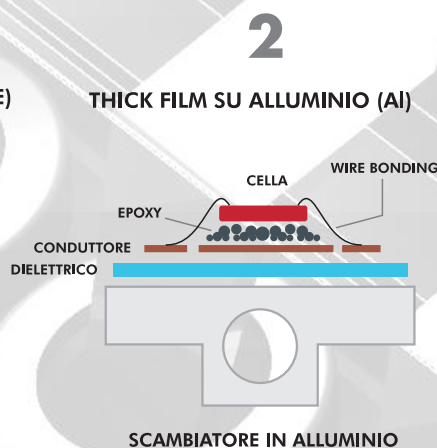
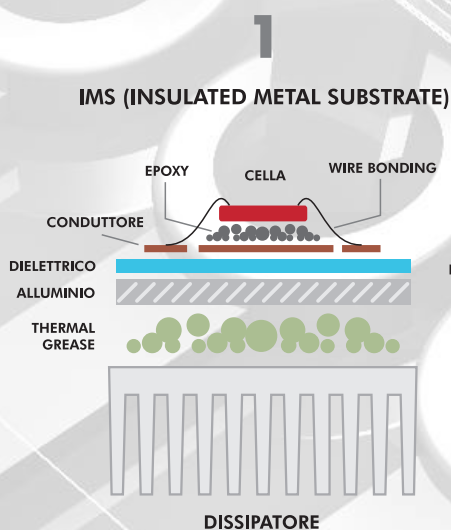
PRELIMINARY
NEW

RICEVITORI PER CONCENTRATORI SOLARI

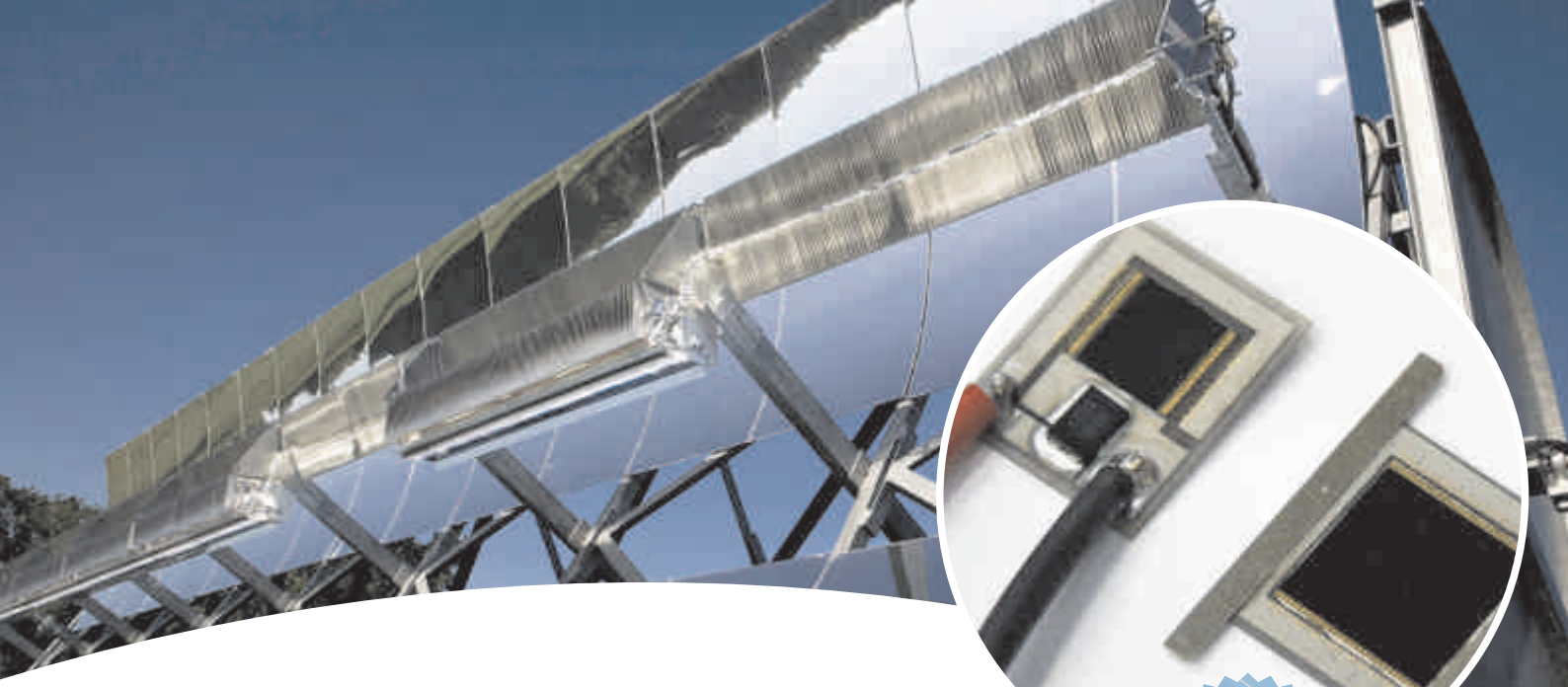
Affinché una cella solare renda il massimo come efficienza e tempo di vita, deve essere assemblata con tecniche estremamente affidabili utilizzando materiali ad altissima conducibilità termica.

AUREL dispone di diverse tecnologie a seconda del grado di concentrazione del ricevitore:

1	IMS (INSULATED METAL SUBSTRATE) BASSA CONCENTRAZIONE	< 50 x
2	THICK FILM SU ALLUMINIO MEDIA CONCENTRAZIONE	~ 100-200 x
3	THICK FILM/DCB SU NITRURO DI ALLUMINIO ALTA CONCENTRAZIONE	1500 ÷ 2000 x



Per quanto riguarda l'assemblaggio delle celle nelle applicazioni a Bassa e Media Concentrazione si usano colle conduttive ad alta conducibilità termica. Per le applicazioni ad Alta Concentrazione si utilizza la tecnologia di saldatura tramite **Vacuum Soldering**. Per il collegamento dell'elettrodo superiore della cella, AUREL propone l'utilizzo del **Wire Bonding**.

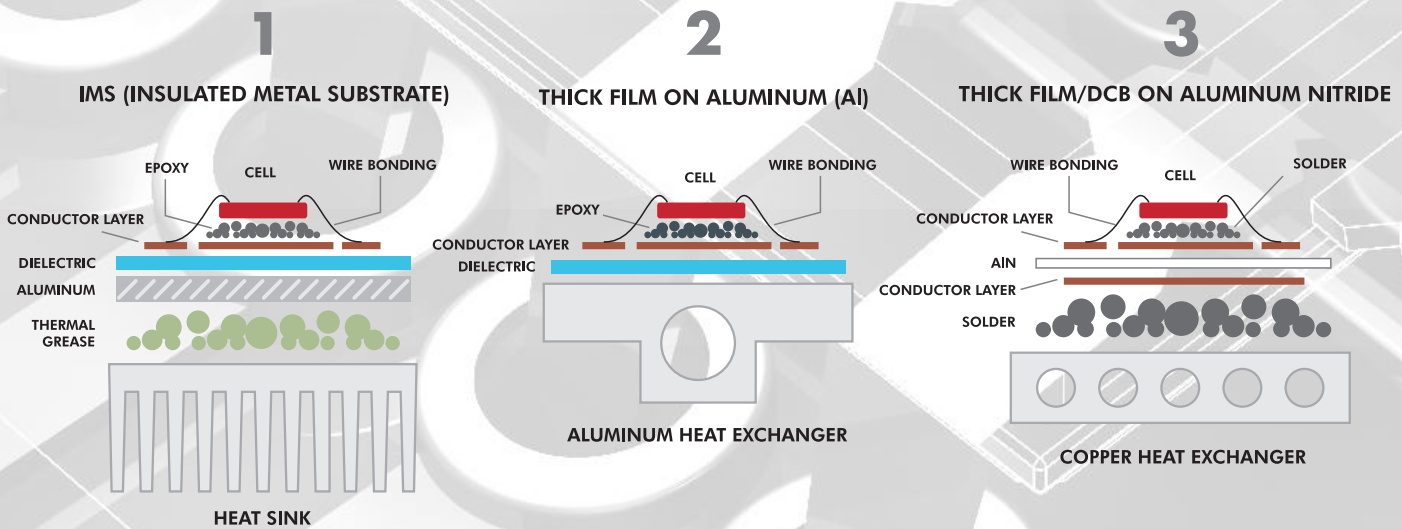


RECEIVERS FOR CONCENTRATION PHOTOVOLTAICS

In order to get the maximum efficiency and life time from a solar cell, it must be assembled with extremely reliable techniques, using very high thermal conductivity materials.

Aurel propose several usable techniques depending on the concentration degree of the receiver:

1	IMS (INSULATED METAL SUBSTRATE) LOW CONCENTRATION	< 50 x
2	THICK FILM ON ALUMINUM MEDIUM CONCENTRATION	~ 100-200 x
3	THICK FILM/DCB ON ALUMINUM NITRIDE HIGH CONCENTRATION	1500 ÷ 2000 x



For the assembly of the solar cells in the applications for low/medium concentration, conductive glues with high thermal conductivity are used. For high concentration applications instead is used Vacuum Soldering Technology. For the connection of the upper electrode of the cell, AUREL proposes **Wire Bonding** application.