



Enertechnic S.A.

Solar Energy “MAG” Space Vacuum Technology

Solar Collectors MAG

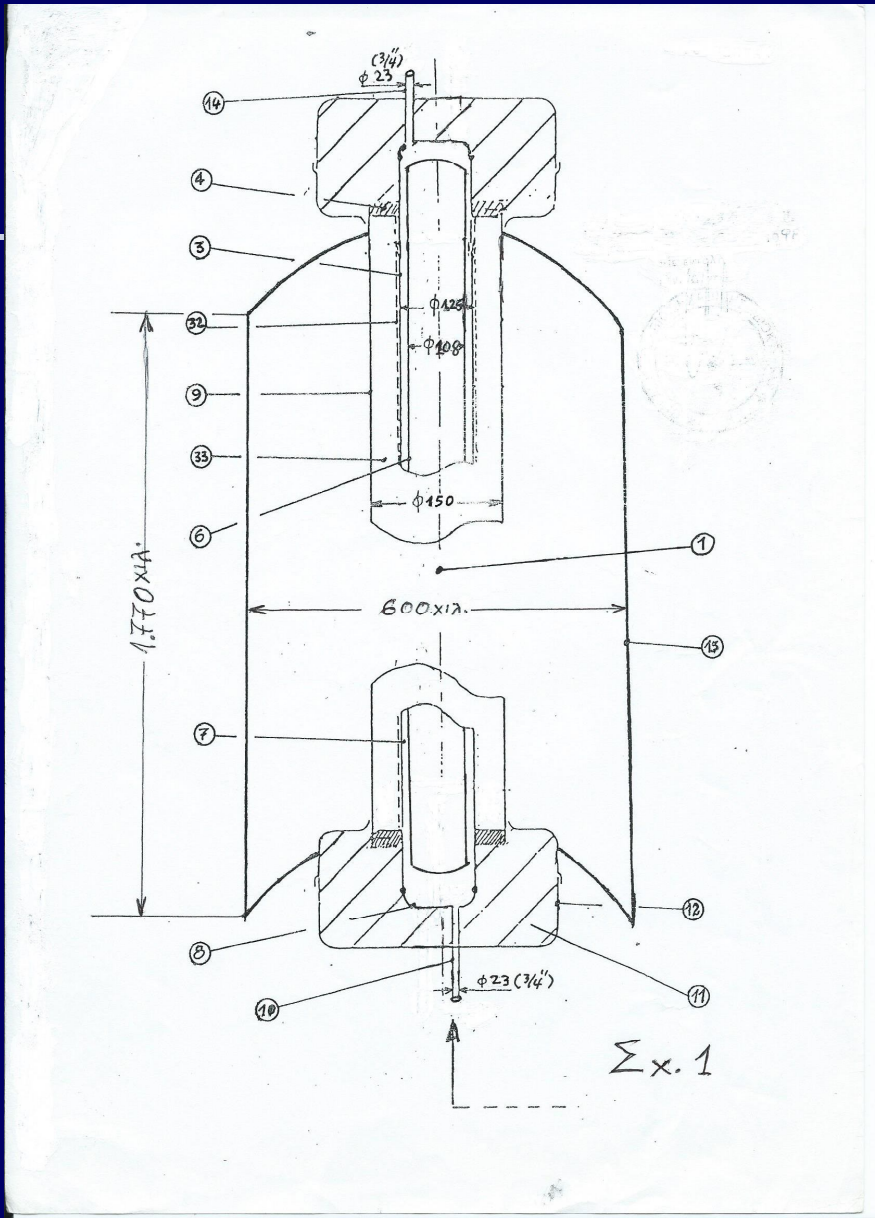
with Vacuum Tubes

in Parabolic

Semi-cylindrical, non-Moving Reflectors



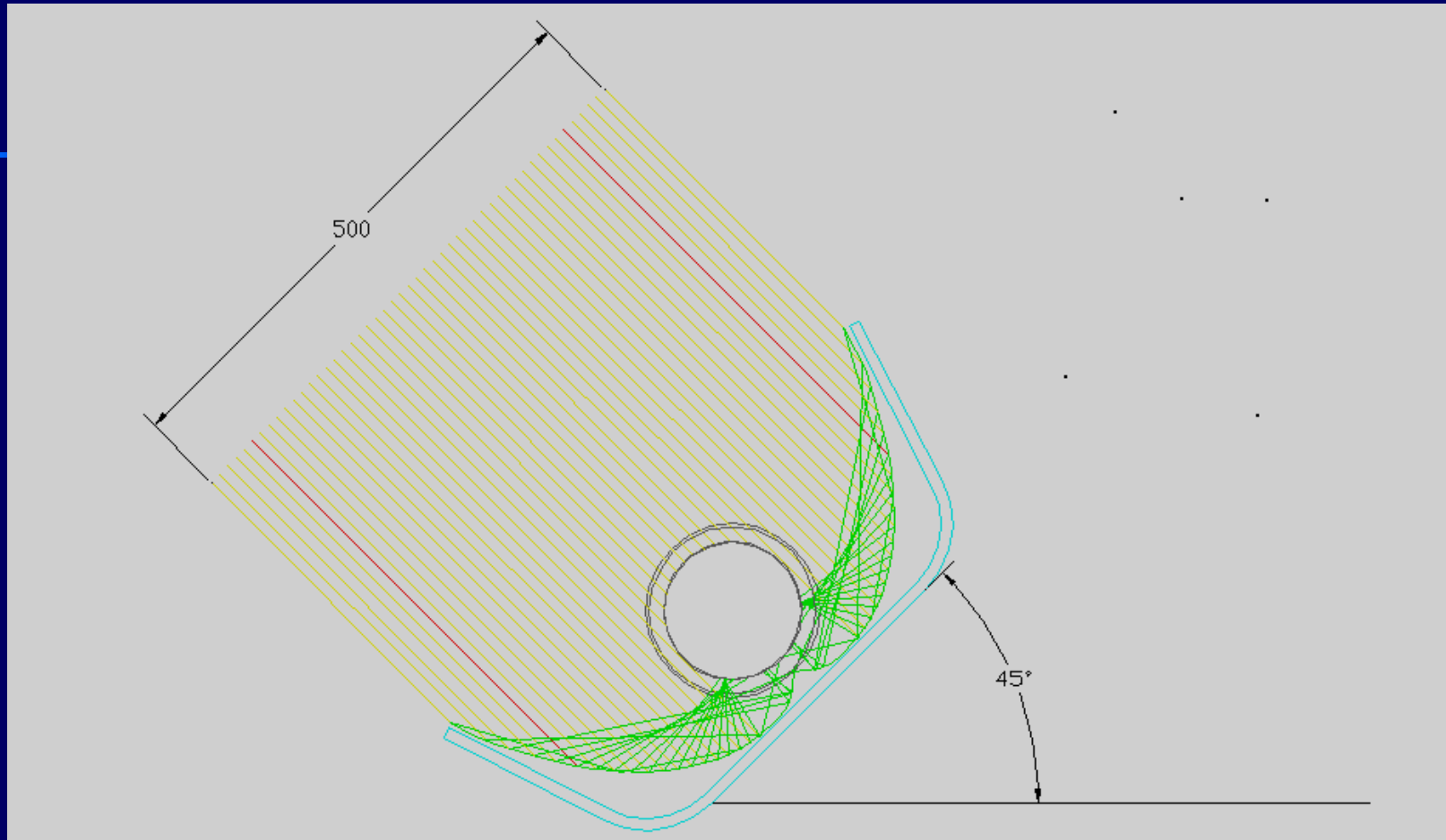
With the solar vacuum tube collector, triple walled and non-moving parabolic reflector, we can achieve energy savings of up to 70% for annualy operation



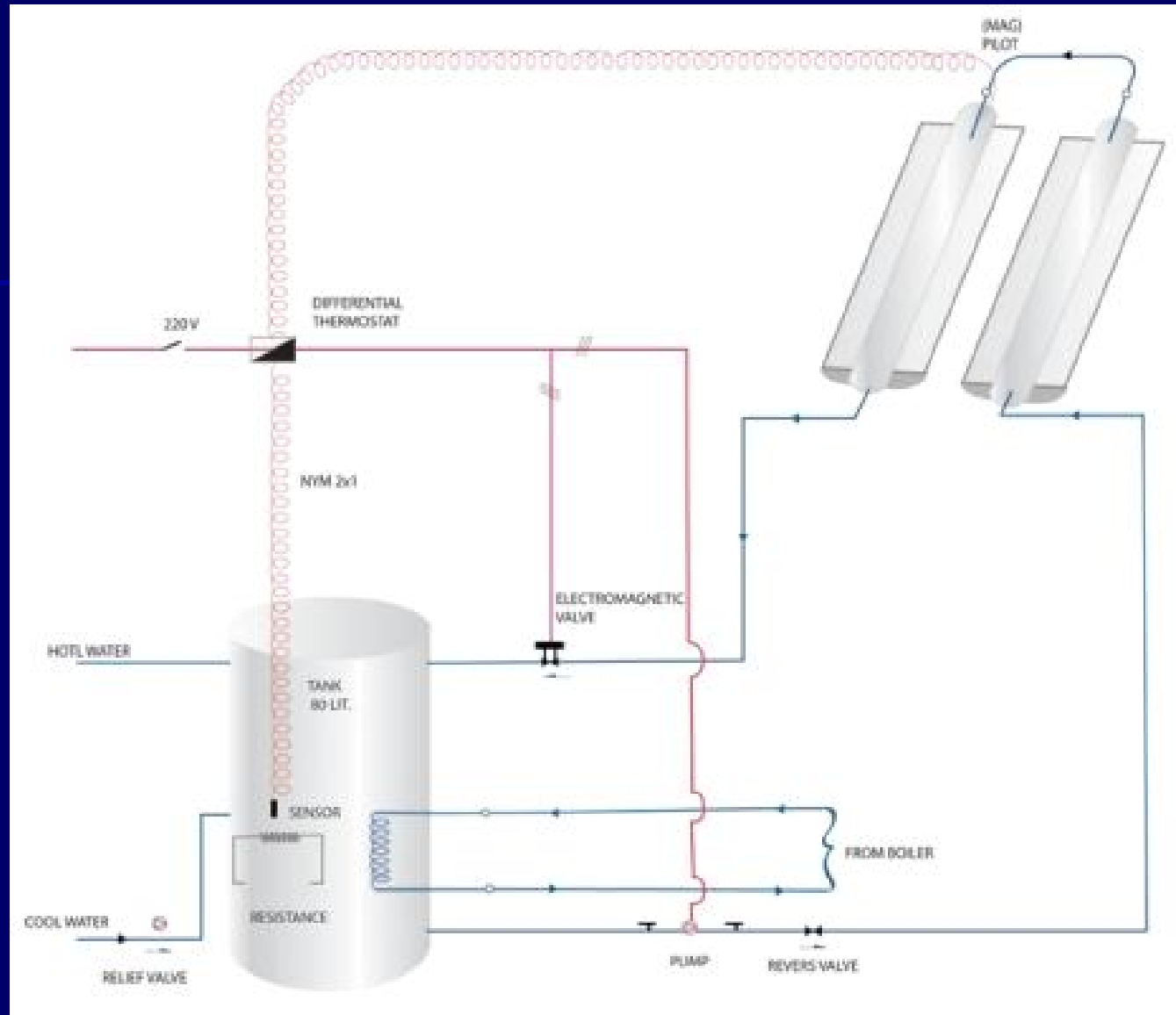
SECTION OF SOLAR COLLECTOR "MAG", THREE WALLED & CLOSED CIRCUIT



**Solar Boiler with
Automatic Thermostatic Mixing
200 liters / day for DHW Use, 40°C**



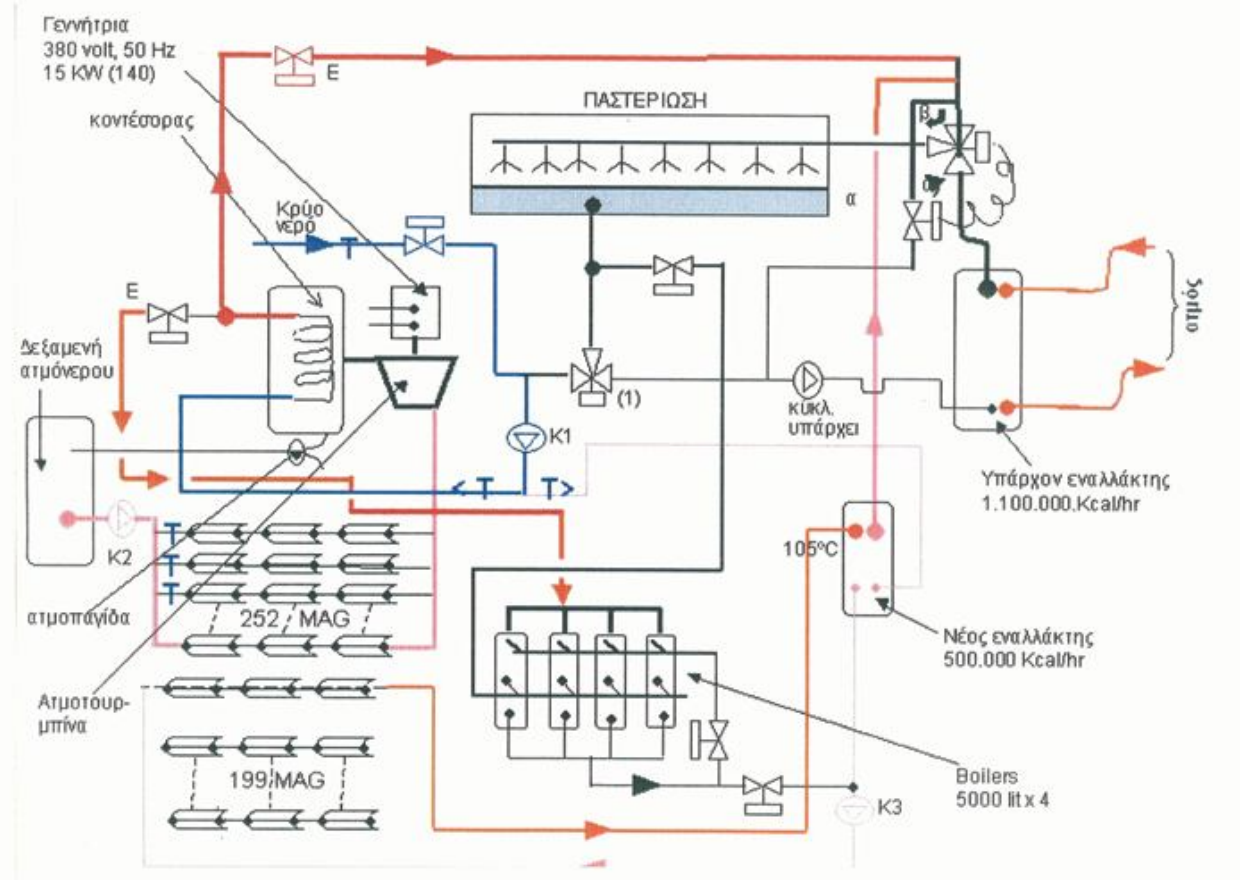
The concentration of the parabolic reflector



A schematic arrangement of a Solar Thermal System with "MAG" collectors

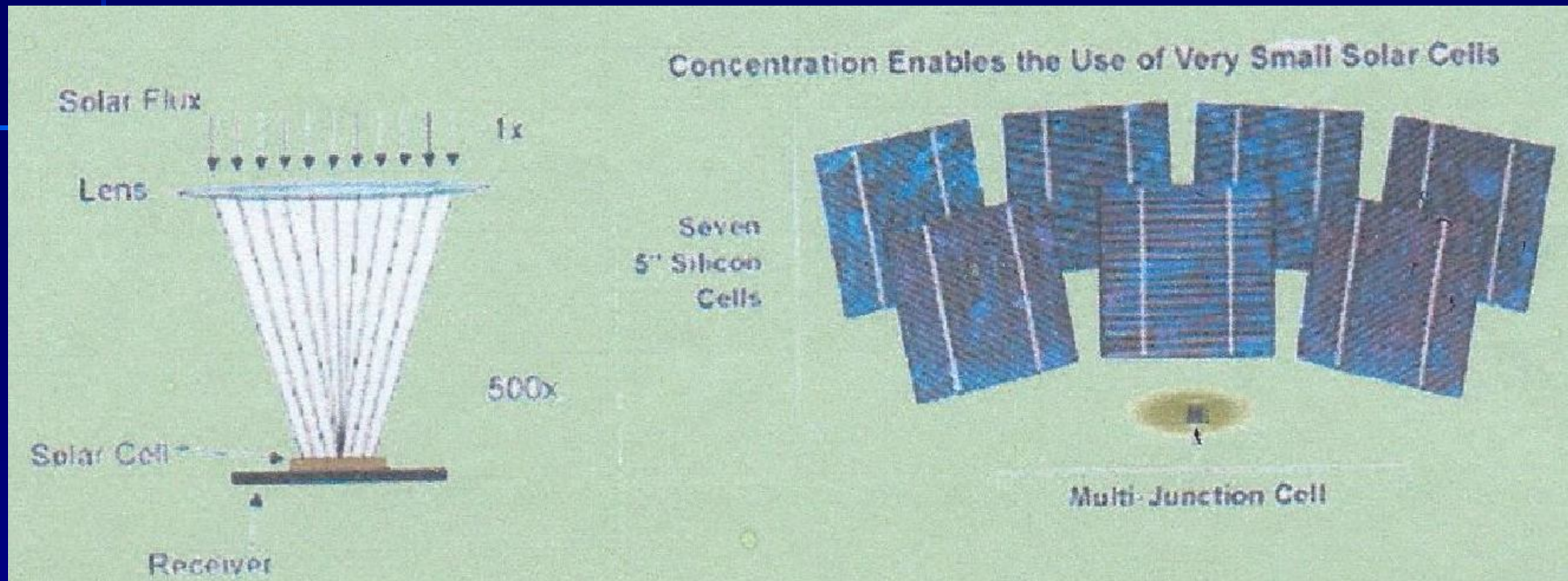


**Production of
superheated steam
270°C / 12,5 bar
for electricity and
thermal energy
production**



**ΠΑΡΑΓΩΓΗ ΗΛΕΚΤΡΙΚΗΣ Κ' ΘΕΡΜΙΚΗΣ ΕΝΕΡΓΕΙΑΣ
ΜΕ ΗΛΙΑΚΗ ΕΝΕΡΓΕΙΑ MAG**

**Application for Industrial Use
(Electric Power 140KWel & Tins Pasteurization at
85°C with Thermal Energy)**



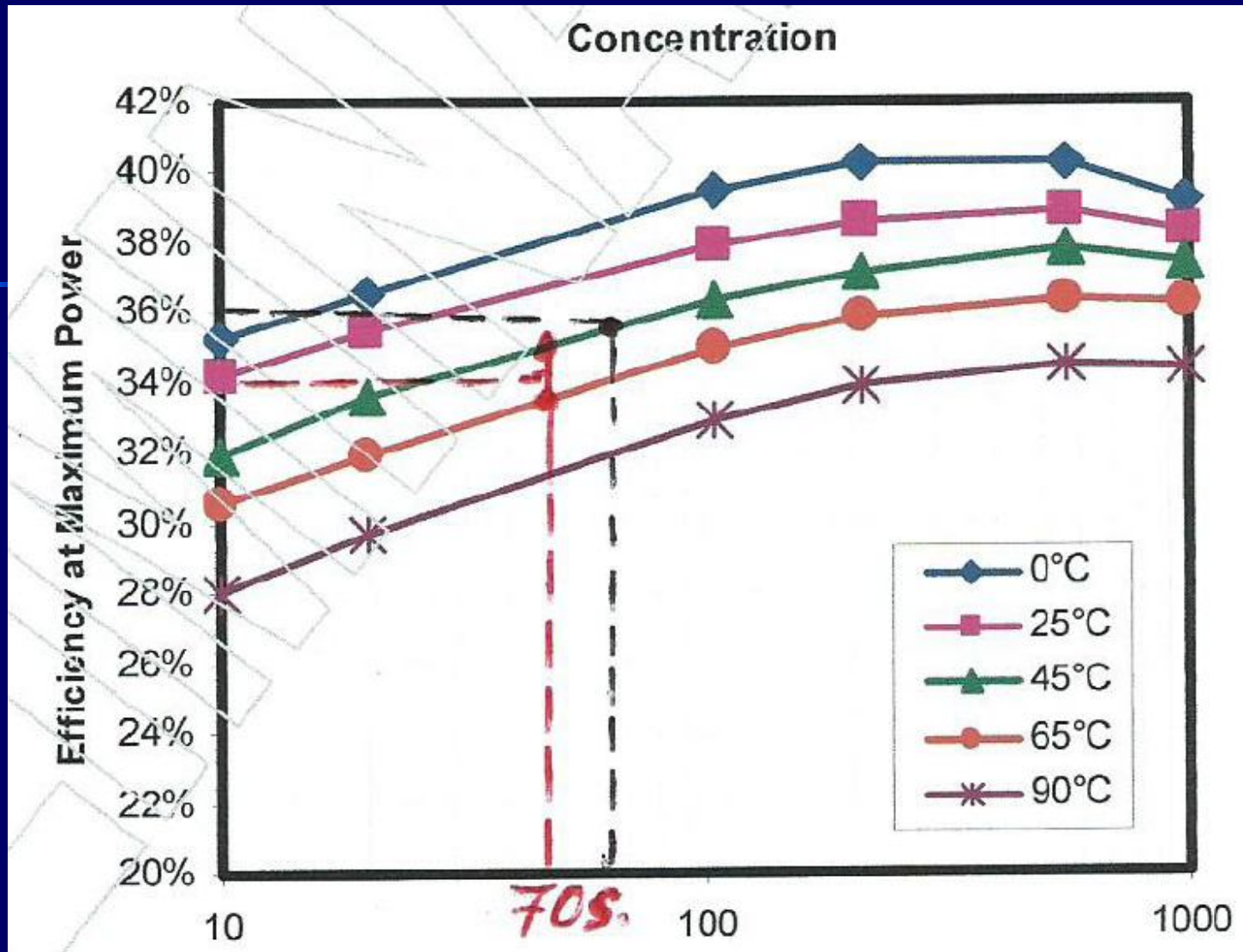
Concentrated Cells for Electricity Production from the Sun (used by NASA in space)



**Measurement Testing
for concentration of
70suns**

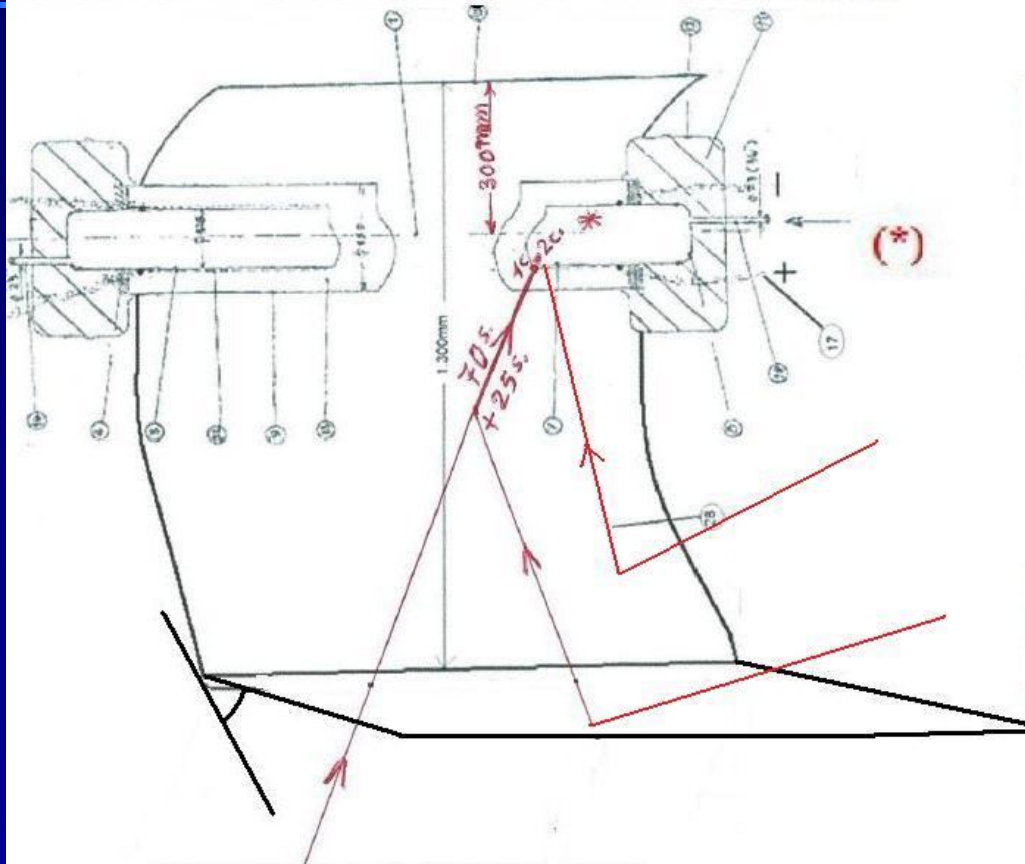


**Measurement of
Concentrated Cells with
80suns**



Efficiency degree Chart - in relation to the concentrated suns and the operating temperatures of the cells, given by manufacturers

Solar Collector for Thermal-photovoltaic System, in tubular form by rows of Concentrated Cells, Water Cooled, with focus on the Stable Semi-Cylindrical Parabolic Mirror & a Flat Reinforcement Mirror



Electric & Thermal Power Production

1c → 95s

2c → 55s

$$\begin{aligned}
 150s &\rightarrow 15W \times 0,35 = \\
 &= 5,25 W / 2c \times 100 (2c) = \\
 &= 525 W / \text{MAG}^* \text{ (PH) POWER}
 \end{aligned}$$

AND 8.000 Kcal / day . MAG
 (Avg capability per year)



Examples of our projects:

Summer Season	Annual operation
ELOUDA BEACH CRETE (5*)	ROYAL OLYMPIC ATHENS (5*)
MYKONOS BLUE HOTEL GREGOTEL (5*)	AKROPOL PATRA (3*)
KONTOKALI BAY CORFU (5*)	AGLA HOTEL RHODES (3*)
MARBELLA HOTEL CORFU (5*)	
AIOLOS HOTEL CORFU (4*)	
PENINSULA HOTEL CRETE (4*)	



Hybrid Residential Heating

**Energy Savings up to 70% (annualy operation)
(Image from Residence 300m² in Athens)**



Royal Olympic Hotel 5*, Athens, 500 beds
Central facility for DHW, since 2006
Energy Savings 70% in Annual Usage



MYKONOS BLUE HOTEL, GREGOTEL 5* (2012)



ELOUNDA BEACH 5* - CRETE (2013)

**Central facility for DHW,
Energy Savings 95% ... !!!
Summer season operation**



**National Technical University of Athens
Research Program for "Pure" desalination & RES
in Tinos island, with MAG solar collectors, 2013**



☆☆☆- MORAITIKA, CORFU 250 BEDS



☆☆☆- CLOSED SIRCUIT MAG FOR STEAM PRODUCTION



AGLA HOTEL, RHODES - 200 BEDS



AIOLOS HOTEL, PERAMA, CORFU
1200 BEDS



HOUSE USE: HOT WATER AND POOL HEATING-10 MAG



KONTOKALI BAY, CORFU 600 BEDS



KRIOPIGI BEACH 82-MAG



MARABELLA HOTEL, MORAITIKA
CORFU 100 BEDS



NASOS & DASY HOTEL MORAITIKA,
CORFU 160 BEDS



PENINSOULA, AG. PELAGIA
HERACLION CRETE 700 BEDS



ROYAL OLYMPIC, ATHENS 500 BEDS
241-MAG



SAINT GEORGE BAY HOTEL,
ARACHAVI, CORFU 300 BEDS



KRIOPIGI BEACH, KRIOPIGI
CHALKIDIKI 82-MAG



OLYMPIC ROYAL ★★★★★
ATHENS 241-MAG

**To our customers, we guarantee the
implementation of a complete and
functional project !**



In short, the MAG collectors :

Have **4X performance** of their respective collectors at the market (for the same thermal efficiency)

+

Simultaneously **require only 1/4** of the corresponding surface area

+

Zero optical pollution, that is, very small height, especially important for architectural constraints, traditional villages,

hotels near airports **(not reflect sunlight)**

+

depreciation of the investment from **1 to 2.5 season**

Thank you for your attention... !!!



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