

Some advises related to Solar Keymark and new production lines

31/7 2007, Jan Erik Nielsen, ESTIF Technical Consultant

Solar Keymark certification of a new product takes some time, primarily due to testing time. Especially the exposure test for collectors - requiring at least 30 days with a certain minimum irradiation - takes times if weather conditions are not “perfect”. All in all the Solar Keymark certification process based on outdoor testing takes typically around half a year.

For manufacturers of new products it is a problem that the license arrives half a year after the production starts.

To minimise the time delay from start of production till certification is in place the following recommendations can be used:

1. Make a reliable time schedule for the start up of production. This time schedule could include a period with production of a low number of “series 0” products, before the production line goes to full capacity. Take into account in the time schedule that outdoor exposure testing takes much more time in the winter - at least at high latitudes.
2. Prepare from the very beginning the factory production control / quality management system to be at ISO 9001 level - it is recommended to aim at an ISO 9001 certificate (which is required for the Spanish market). Be sure that the factory production control / quality management system is in place as soon as possible and before the start of production (of “series 0”) products.
3. In good time (maybe half a year before production start) apply for Solar Keymark at an empowered certification body (listed at the www.solarkeymark.org) to learn about the requirement and procedures in the certification scheme. Discuss with the certification body also ISO 9001 certification and clarify requirements for picking test samples from the “series 0” production (e.g. how many pieces to be made and limitations in changes to be made from “series 0” production to full capacity production).
4. Choose together with the certification body a test lab to do the tests (taking maybe into account the possibility of indoor testing), and fix together with the test lab the test period. If possible make the test lab guarantee the max. duration of the test. Accredited test labs are listed at the www.solarkeymark.org.

Following the recommendations above could bring down the “certification delay” to 3-4 months - see “Ideal time table” below.

The process could be speeded up if some testing can be done indoor in a solar simulator.

(Further more it could be considered to investigate which markets do not require certification and testing, i.e. markets with no subsidy and/or solar obligation in building code). The first part of the production could go to such markets.)

Month:	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Apply for Solar Keymark and ISO 9001	x															
Choose test lab and fix test period	x															
Quality management system in place		x														
“Series 0” production			x													
Factory inspection (for Keymark and ISO 9001)			x													
Test sampling by inspector			x													
ISO 9001 certification				x												
Testing				x	x	x	x									
Start of full capacity production						x										
Solar Keymark license given								x								

“Ideal” time table for Solar Keymark certification of new product. Ideally products can be certified 3 months after full production has started.