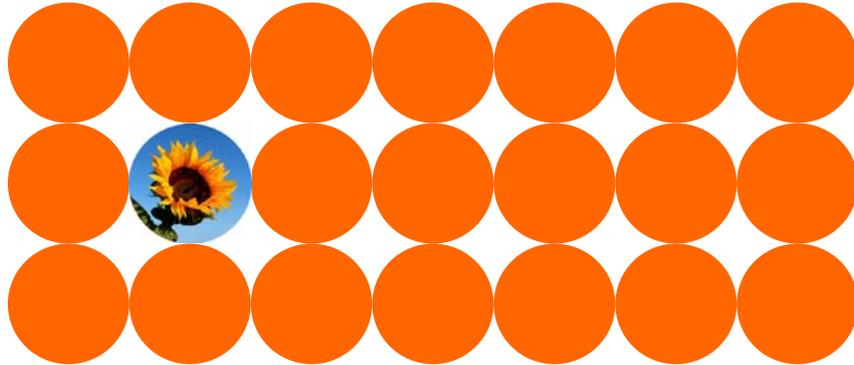


Aluminium tubing products for solar thermal systems

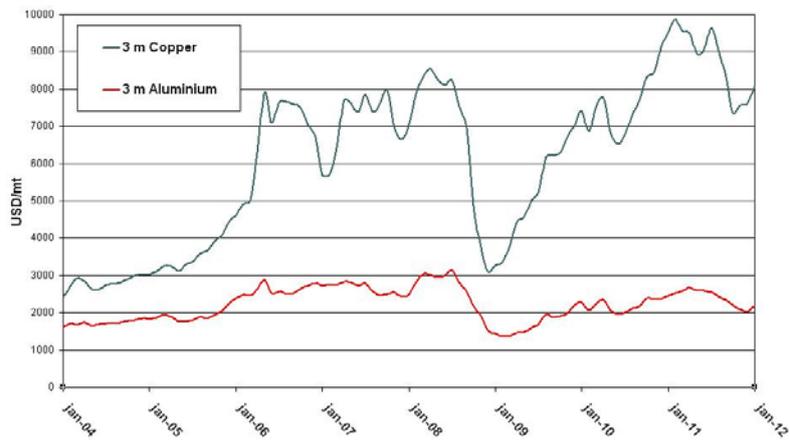


SDH 2013
Patrick Jansson
Sales and Business Development Manager

(1) 2013-04-10



Which advantages does aluminium tubing offer?



Aluminium offers lower costs and price stability

(2) 2013-04-10



Which advantages does aluminium tubing offer?

- Weight saving
- Faster laser welding
- Less stress in absorber and almost no warping
- Ideal recyclability of all aluminium absorber
- New absorber designs



(3) 2013-04-10



Which design possibilities do aluminium offer?

- Aluminium's softness and flexibility offer extruded solutions which are not possible when using traditional absorber materials.
- Most two-dimensional structures may be extruded.
- Three-dimensional tube available.



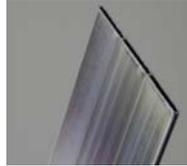
Hygroove – Internally enhanced tubes with radial or spiral grooves

(4) 2013-04-10



The MPE absorber

- Alternative absorber design with MPE profiles



- Significantly reduces average distance between absorbing surface and heat transfer fluid – thereby maximising performance and return of investment



(5) 2013-04-10



The MPE absorber



- Offers 10% better performance

(6) 2013-04-10



Testing of HyLife™ Solar with SPF in Switzerland



Small meander tubing on heating plate



Full scale collector under artificial sun.

- Mixed materials systems
- 20 years simulated
- Temperatures up to 300° C
- Metallurgical examinations
- Corrosion resistance guaranteed

(7) 2013-04-10



Thank you for your attention

We make solar shine with aluminium!

www.hydro.com/solar-tubes

Patrick Jansson
Tel: +45 24 22 10 97
patrick.jansson@hydro.com

(8) 2013-04-10

