Product Information

FELDER-ISO-Tin® - Lead-free „High-Ge /-Refill”

High Ge-stabilised electronic solder for wave and selective soldering units

FELDER-ISO-Tin® - Lead-free „High-Ge”
According to Fuji-Pat.-No. DE19816671C2, US6179.935, JP3296289

Sn100Ni+	High-Ge	Art.-No.: 551293….,	- Refill	Art.-No.: 551295….,
Sn99Ag+	High-Ge	Art.-No.: 551280….,	- Refill	Art.-No.: ….,
Sn98Ag+	High-Ge	Art.-No.: 551271….,	- Refill	Art.-No.: 551270….,
Sn96Ag+	High-Ge	Art.-No.: 551275….,	- Refill	Art.-No.: 551274….,
Sn95Ag+	High-Ge	Art.-No.: 551287….,	- Refill	Art.-No.: 551285…..

Application

The oxide reducing effect of germanium (Ge) in the FELDER NiGe solder is also associated with a usage of this element during the soldering process. The ideal Ge-content at the solder bath ought to be between 0,008% and 0,015%. By the addition of Ge-concentrate, the consumption will be balanced, but this demands additional "care effort".

From our experiences which we win together with our customers, a higher average Ge-consumption has resulted as adopted at first.

The application of a high germanium stabilised solder is **not basically** necessary, because the Ge-usage is highly addicted to the used solder technology. Solder temperature, additional application of inert gas or cover oil and certainly also the throughput of the machine are facts which effects the requirement of Ge.

From the free service analyzes we carry out for our customers, it is possible to determine an average Ge requirement from individual Germanium consumption figures, which can then be covered by a specific mix ratio of standard and high-grade (refill) solder.

Properties

The specific characteristics of the several NiGe-alloys are mentioned in the corresponding product information of the several solder.
It is a question of refill solder, the physical characteristics are exclusively to view in the correct proportion of mixture in the solder bath volume.

Of course, our high-grade solder alloys are also available copper-free as high-grade refill.

Chemical composition according EN ISO 9453:2014

Element	Sn	Cu	Ag	Ni	Ge	Pb
Content (%)	Rest	0,7 ± 0,2	max. 0,06	0,02 – 0,08	0,10 ± 0,01	max. 0,04

Element	Al	As	Bi	Cd	Fe	Sb	Zn
Content (%)	max. 0,001	max. 0,03	max. 0,10	max. 0,002	max. 0,02	max. 0,10	max. 0,001

 Status: 07/18

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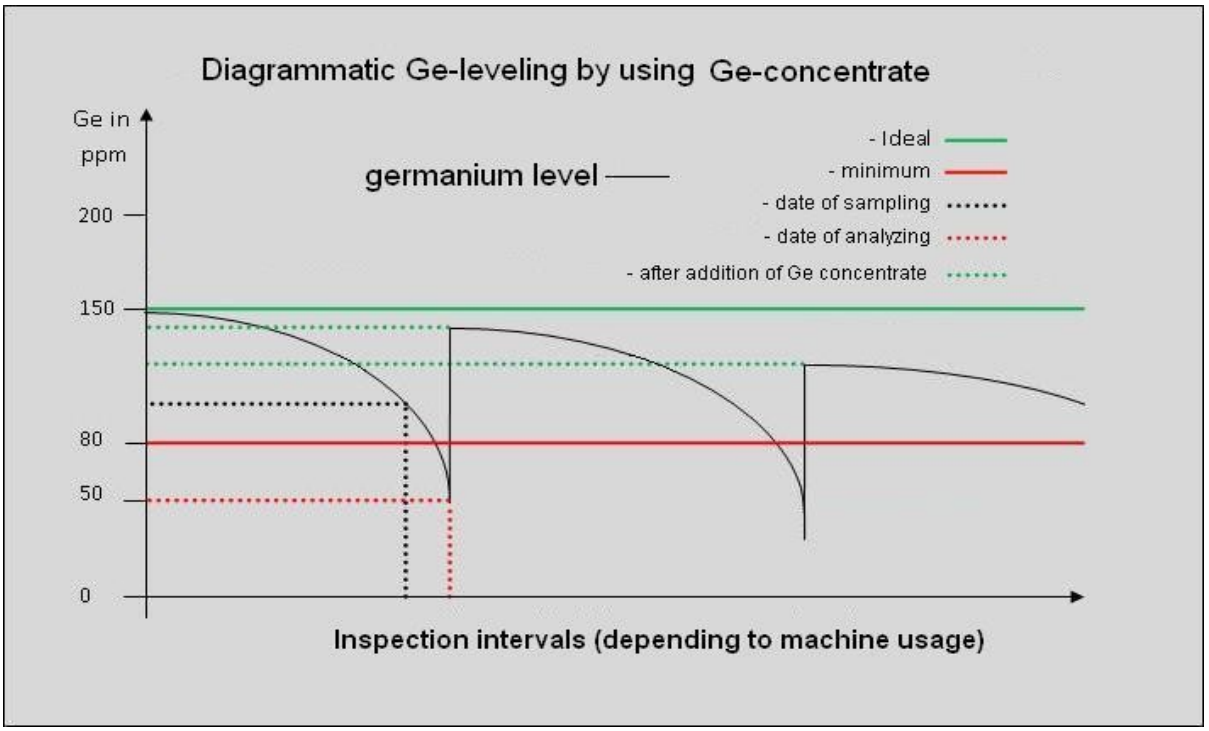
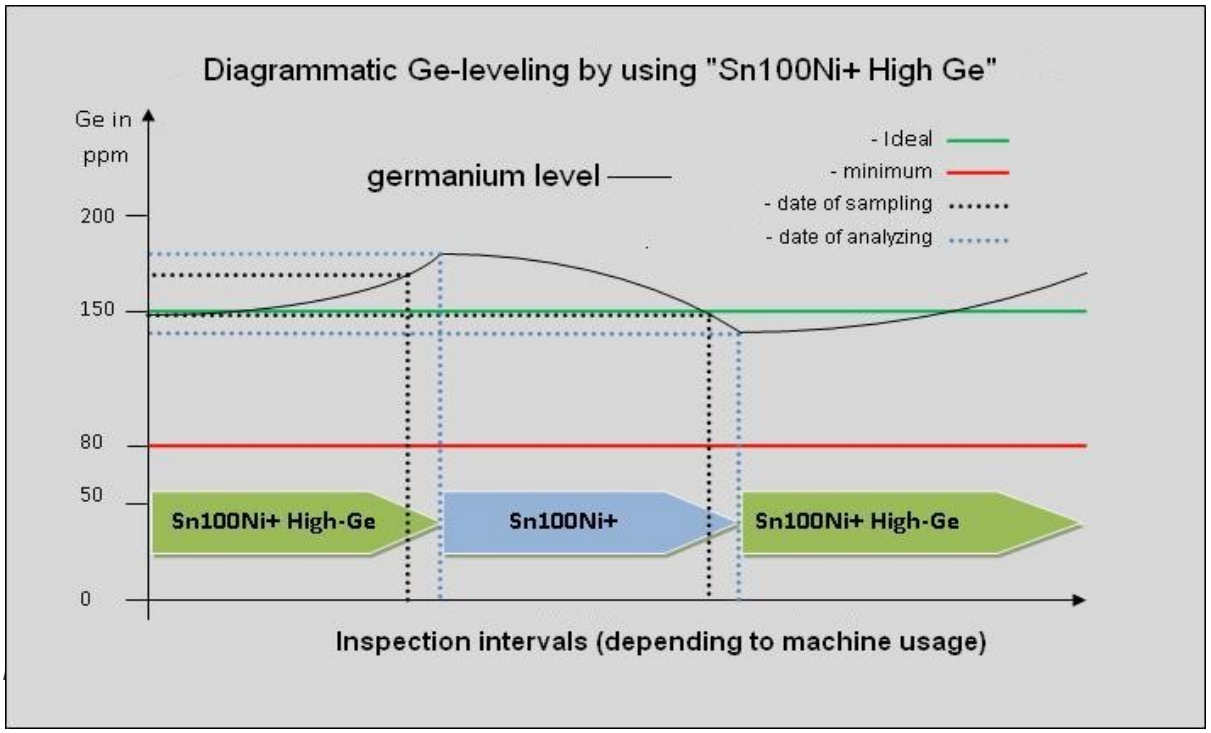
Effect of FELDER "High-Ge"-Alloys





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Delivery Forms

The delivery form is mentioned in the product information of the standard NiGe solders.
Other alloys are included in our standard delivery programme.

Storage

Stored at constant indoor climate durable for an unlimited period!

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