

Long-Term Conservation and Storage in high-security buildings

**WORLDWIDE
UNIQUE!**

HTV-TAB®-method (Thermal-Absorptive Gas-Barrier)

Conservation and Storage of electronic components for currently up to 50 years

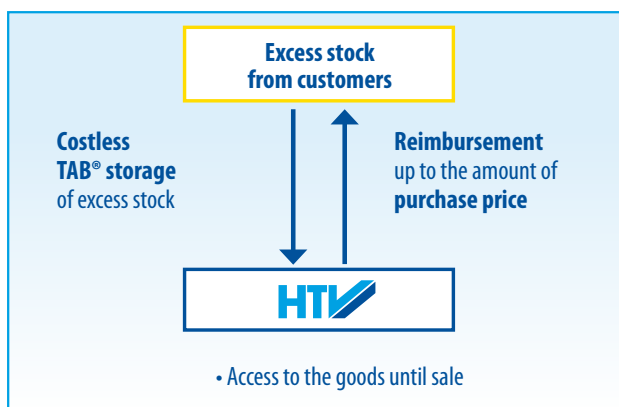
- **Drastic reduction of aging processes, e.g.:**
 - Extreme reduction of **diffusion** (e.g. intermetallic phase growth)
 - Nearly no **corrosion and oxidation processes**
 - Prevention of **whisker formation and tin pest**
 - **Absorption of hazardous substances**
- Storage with **fire-preventing atmosphere in high-security buildings**
- **Availability and processability** of components ensured **for many decades**



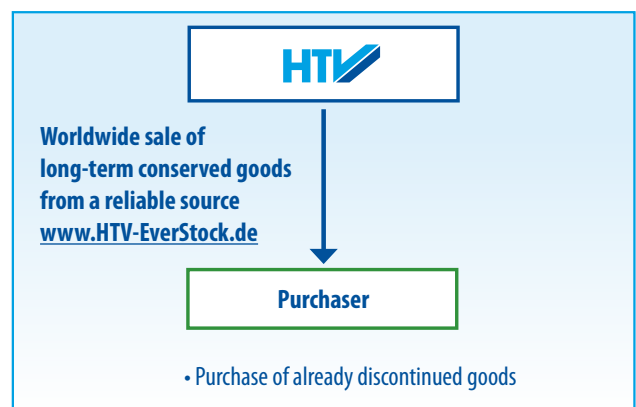
HTV-EverStock®

Free storage of customer excess stock in the worldwide unique TAB®-Long-Term Conservation process.
Sale of long-term conserved, and thus as good as new, original components from a reliable source

EverStock® - storage



EverStock® - sale



HTV-PermaDoc®

Long-Term Storage and Conservation of important documents, files and data carriers

- **PermaDoc®: Safe storage** of important documents such as manufacturing records and files, as well as valuable, sensitive documents and data carriers
- **PermaDoc®PLUS-procedure for archiving and conservation of documents for many decades** with a special storage and protection concept



Component Conditioning

Cleaning and reconditioning of electronic components
for renewing the solderability

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HTV-revivec®

- Removal of inorganic and organic impurities
- Cleaning and reconditioning of oxidised or corroded surface

The **revivec®-method** is especially suitable for **components with a thick tin layer** showing **oxidation at the surface**.



Pin with impurities



Pin after treatment with HTV-revivec®

HTV-NovaTIN®

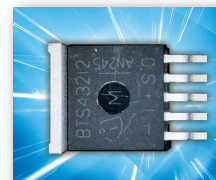
Removal of the complete tin layer followed by a rebuilding of a stable, solderable and lead-free pure tin layer

- Removal of diffused surfaces incl. selective removal of intermetallic phases followed by galvanic retinning
- Retinning (refurbishing) of desoldered components
- Re-alloying from "lead" to "lead-free" (RoHS standard)

HTV-NovaTIN® is particularly suitable for **components** where **diffusion** has already taken place.



Desoldered component



Component after retinning with HTV-NovaTin®

Programming

HTV-OTP-Alive

Erasing and reprogramming of usually only one time programmable components (OTP)

- Complex component decapsulation, localisation of memory areas to be erased, UV erasure
- Quality control followed by reprogramming
- Verification and encapsulation with a special mold mass
- **Reusing a variety of OTP components**

