Pioneering Wear Protection

VAUTID Bi-Metal Castings
The high-end solution for serial parts with complex requirements

VAUTID Bi-Metal Castings

- Bi-metal technology combines two materials in one cast part
- Different requirements for a cast part are thus fulfilled without compromise
- A reliable, substance-locking bond is created between the casting zones
VAUTID Bi-Metal casting combines material worlds to optimize service life

Example of a hammer made of VAUTID Bi-Metal

VAUTID® wear resistant castings
- Highly wear resistant
- Highly impact resistant

VAUTID® steel castings
- High tensile strength
- Heat treatment possible
- Weldable
- Machinable
VAUTID reduces wear costs through individual designs

Example for optimization of castings by VAUTID

- Original design (left)
- Initial Step: Hammer made of VAUTID Bi-Metal casting leads to longer service life (middle)
- Optimization Step: The service life was further increased by adjusting the parts geometry (right)
VAUTID Bi-Metal combines effective materials with optimum design

Hammer for Hammermill

- Thanks to the high tensile strength of cast steel, shaft and eye of the hammer can be designed very slim
- This makes it possible to reinforce the hammer head with wear-resistant material at the same weight and ensures a long service life
Parts made of VAUTID Bi-Metal casting can be fitted quickly and precisely

Roller crusher segment

- Wear-resistant cast alloys can only be mechanically machined with great effort
- VAUTID composite casting reduces machining costs by using easy machinable alloys in the area not exposed to wear
Parts made of VAUTID Bi-Metal casting are easy to assemble

Due to the high carbon content, wear-resistant alloys are not suitable for joint welding

The combination of wear-resistant cast iron and cast steel makes assembly by joint welding possible

Segments for screw conveyor
VAUTID Bi-Metal casting is the optimum solution for many applications

Typical applications for VAUTID bi-metal castings

- Hammers for crushing rock and coal
- Crushing rolls
- Wear tiles
- Parts for screw conveyors
- Weldable wear parts
- Wear parts with narrow dimensional tolerances
- Components for which high material strength is required
“With our innovative spirit and over 70 years of experience in wear protection, we develop leading system solutions in casting and welding technologies worldwide.”