



## Aluminium recycling – a mainstay of the AMAG Group

**In order to keep the ecological footprint to a minimum, manufacturers of individual components or complete systems are increasingly completing life cycle analyses and taking the results into account during their selection of materials. Such analyses involve the systematic gathering of data regarding environmental impact during production, the utilization phase and disposal.**

As part of lightweight design (e.g. in vehicles), aluminium alloys provide at least one very positive input to the eco-balance in the utilization phase due to the reduction in fuel consumption derived from less weight. However, the high energy levels involved in the production of primary aluminium (approx. 14 MWh/t) represent a negative factor. By contrast, aluminium recycling requires only 5 per cent of the original energy needed for primary production and therefore offers a highly beneficial contribution to sustainable component production.

For this reason, AMAG is one of the largest Al recycling companies in Europe, processing over 200,000 t of aluminium scrap annually. Ranshofen possesses melting systems that are capable of dealing with an extremely diverse range of charge materials. Accordingly, the company can handle virtually every type of scrap from clean uncoated material and profiles containing plastic, to dross with a high oxide content. This extensive capacity is of major strategic significance, as in future increased exports of clean scrap to non-EU states can be anticipated. Therefore, AMAG continues to strengthen the scrap processing competence of its Recycling Center Ranshofen (AMAG-RCR), in order to exploit fully the positive effects of scrap with regard to the ecological balance of aluminium products.

commissioning of a scrap shredder of the latest design. The “Red Giant – Blue Edition” converts bulky scrap into a form ready for the furnace and also separates both adhesive and free iron content. This provides major benefits with regard to improved yield and greater metallic purity.

### **What are the advantages for AMAG customers?**

As a result of its extensive competence and advanced infrastructure, AMAG can offer its customers professional consulting along the entire value added chain from scrap to semis. The company is able to handle all customer aluminium scrap from a logistics standpoint, process it and then return the material as top quality casting and wrought alloys in the shape of sheet,

shates, plates, liquid aluminium, ingots and sows in a closed-loop, one-stop-shopping operation. ■

**AMAG cast alloys, including those of the AMAG TopCast® product series, which are specially matched to customer requirements, are virtually entirely produced from recycling material. AMAG rolled products are manufactured with a high average recycled material content and in particular this applies to the high strength alloys on offer. As a consequence, AMAG can meet the expectations relating to “green aluminium” in full.**



Pict. 1: A new shredder of the AMAG Casting GmbH

In an initial step, January 2011 saw the