

Magnesium chips caught in the processing centre

Keywords: Automotive supplier, flammability averted, running for more than 20 years, more than 60.000 working hours, density 1,5 kg/l

The lightweight construction metal Magnesium incl. alloys has been of use in industry since the 1930's, especially in automotive and aircraft construction. The reason lies in its low density of only about 1.75 (Al 2.70) kg/l. With the increasing trend towards lightweight construction, magnesium is always the material of choice in the field of automotive and aircraft construction, but also for other devices (e.g. chain saws casings, pencil sharpeners) overall wherever the parts low weight matters.

Magnesium shavings have the unfortunate quality to easily self-ignite. Briquetting therefore makes sense, because loose storage and transport are possible, but very complicated. In briquette form the fire risk is averted. RUF has already sold several dozen briquetting systems for Magnesium shavings.



In 1995 one of the first presses for the magnesium shavings was sold to a company in the South of Germany. A year later the customer invested in an additional briquetting press – also for magnesium shavings. The customer produces door and steering locks whose basic body is made out of magnesium.

Both systems of the company RUF continue until present without interruption. The first plants sold were converted to other briquetting formats, so since 20 years a RUF 5,5/5000/60 and a shutter press RUF 2,2/2500/60 are actually still working, with approx. 29,000 to 31,000 working hours. The reconstruction was carried out to meet the specific needs of magnesium shavings. Magnesium shavings require a particularly high press pressure (compared to aluminium), in order to obtain impact resistant briquettes. This is achieved with both systems. The briquettes achieve a density of 1.50 kg/l (Sampling briquettes from August 2015 on site, press pressure 200 bar = 2,700kg/cm²).



Another special feature lies in the construction concept: Both plants receive the shavings over spiral conveyers from a production centre, to which they are directly bound. In addition there is the possibility to fill the shavings externally via a hopper.

With help from the reliably working RUF-Presses, our customer controls the handling of the magnesium shavings, reducing the volume and averting in particular the fire risk. In addition, a marketable briquette is produced. A safe company: also over 20 years since first opening.