Universal Alloy Corporation (UAC) takes off, OTTO JUNKER is on board too

UAC, one of the leading suppliers of hard alloy extrusions with international orientation, certified according to the latest standards, awarded OTTO JUNKER as supplier for one induction furnace with overhead cross conveyor for a new location in the immediate vicinity of the airport Baia Mare. In the future, extruded aluminum tubes and titanium profiles for the aerospace industry will be produced there.

OTTO JUNKER, an experienced supplier of modern billet heating furnaces, makes its contribution to this ambitious project. In future, all extrusion billets in this plant will be heated in an OTTO JUNKER JuDy-MC (JunkerDynamicHeater®-MultiCoil) in front of the extrusion press.

In addition to high temperature tolerance, flexibility and reliability, this modern billet heater is characterized by its energy-saving design.

The division into several independently controllable zones ensures an optimum temperature gradient for isothermal extrusion. The system is connected to a OTTO JUNKER IGBT converter, which offers enormous advantages both for the heating process and for reasons of grid stability.

OTTO JUNKER will deliver the induction furnace with all necessary auxiliary equipment at the end of 2019, commissioning with a specialist from OTTO JUNKER is planned for the beginning of 2020.

Universal Alloy Corporation, one of the leading suppliers of hard alloy extrusions with international orientation, certified according to the strict NADCAP, AS9100, ISO and PART 21 POA standards, expands its capacity by another plant in Romania. This will be built in the immediate vicinity of the Romanian international airport Baia Mare and near the European headquarters in Dumbravita/ Maramures. In the future, extruded aluminum tubes and titanium profiles for the aerospace industry will be produced there. This unique location will in future enable UAC not only to supply the assembled products, but also to carry out service and maintenance for airplanes, directly at the airport, thus extending the value-added chain.
OTTO JUNKER, an experienced supplier of modern billet heating furnaces, is proud to make its contribution to this ambitious project. In future, all extrusion billets in this plant will be heated in an OTTO JUNKER JuDy-MC (JunkerDynamicHeater®-MultiCoil) in front of the extrusion press.

In addition to high temperature tolerance and reliability, this modern inductive billet heating system is characterized by its energy-saving design: Instead of a conventional stainless steel protection tube, a ceramic protection tube is used. In addition to an energy saving this also permits a longer service life and does not store any heat.

The billet is transported in front of the furnace by an overhead manipulator and in the furnace by a trough conveyor system. In this way, damages and scratches to the billet are effectively avoided, as is any aluminum abrasion that can adhere to the furnace and cause problems.

The division of the single-billet heater into several independently controllable zones ensures an optimum temperature gradient for isothermal extrusion.

The system is connected to a state-of-the-art OTTO JUNKER IGBT converter. This offers enormous advantages both for the heating process and for reasons of grid stability: The furnace behaves like a single-phase mains connection, which means that there is no phase shift leading to temperature drops between the individual coils. In addition, each sub-coil of the inductive billet heating can be infinitely controlled so that a particularly fine temperature gradient can be achieved. By using a particularly short, low-maintenance field extender, the furnace can be filled flexibly with changing billet lengths. Due to the optimal symmetry, the cosφ=0.99 and the avoidance of any voltage peaks, better conditions for the energy supplier are also possible.

OTTO JUNKER will deliver the induction oven system with all necessary auxiliary equipment at the end of 2019, commissioning with a specialist from OTTO JUNKER is planned for the beginning of 2020.