Casting line at Hangte with two AL 18-16 FSC.

KURTZ
FOUNDRY MACHINES

Sophisticated moulded parts made in China

Hubei Hangte Equipment Manufacturing Co., Ltd. belongs to the Chinese state-owned Chinese aerospace corporation AVIC. The company, which was founded in 1993, is located in the city of Jingmen in the high-tech development zone in Hubei Province and employees over 1,400 staff. The most important products include steering gear elements, cooling systems and engine mounts for motor vehicles as well as brake systems and catalytic converters for automobiles and motorbikes.

Since its establishment, Hangte has met the requirements of all the mandatory quality management systems such as TS16949 and the ISO14001 environmental management certification. Over the years, Hangte has developed into a renowned brand name from Hubei Province. Hangte's manufacturing centre is equipped with over 120 special fittings, over 120 casting systems, 360 processing centres and CNC turning centres as well as over 400 further systems. In addition, the company boasts its own fully-equipped test centre with cutting-edge machinery to ensure the highest quality. The company gears itself to the basic principle "quality first, users first, the credibility of the best" and produces for both the Chinese market and for the US, Japan, Korea, the Czech Republic, Germany, Italy and India.

Kurtz is delighted that Hangte has chosen moulding machines from Kurtz to meet its own high standards. The product diversity and the complexity of the moulded parts demonstrate that Hangte can call on a wealth of experience in aluminium chill casting. The range of parts is enormous, extending from knuckles and structural parts to complete frames as hollow cast elements – this means, the parts are cast with sand cores. Hangte not only produces complex parts, but also casts these in a multicast process with multiple cavities. This extensive know how is particularly in evidence in

riser tubes with a diameter of 1,050 mm. This allows the customer to ideally cut the joint in the moulded parts and place gates where they are required without being faced with restrictions of space.

For moulded parts with sand cores, Kurtz offers the option of core gas extraction. This too was selected by the customer. This allows the core gasses which occur to be extracted from the chill mould so that they cannot negatively impact on the casting process. Hangte places great emphasis on cooling and process control, and Kurtz was pleased to meet these demands. The machinery is equipped with 72 cooling cycles, thermal elements for temperature management and cooling control. Multi-coupling for cooling cycles from the machine to the chill mould allows smooth and error-free fitting, to mention but a few of the features.

Not only was the machinery coordinated in close cooperation between Hangte, Kurtz China and Kurtz Deutschland, the line layout was also established. Following successful commissioning of the first casting line we are now hard at work producing the second one and looking forward to the first cast with Line Two. We are confident of continued positive cooperation and wish us all good luck with the words customary in the industry – Glück auf! ■

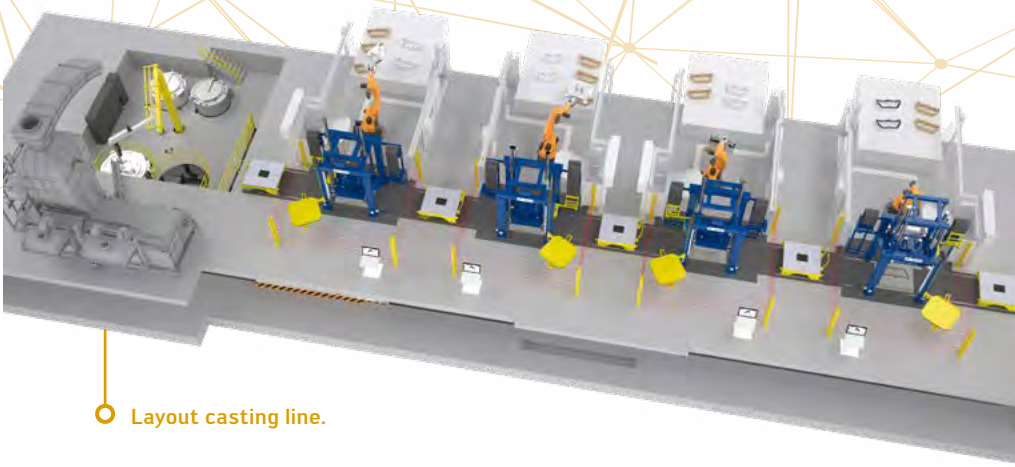
Clamping unit low pressure casting machine AL 18-16 FSC.

Highlights Kurtz AL 22-17 FSC casting line

- Furnace logistics with Kurtz furnace shuttle
- Holding and degassing station
- Kurtz AL 22-17 FSC low-pressure casting machine
- Low-pressure furnace 2,800 kg
- 72 cooling cycles

large frames which are cast twice – and even have sand cores.

Due to the demands of the moulded parts, Hangte selected one line with two AL 18-16 FSC casting machines and a second one with four AL 22-17 FSC casting machines. In order to be able to create large moulds for frames, a correspondingly large machine is required. Hangte shares Kurtz' view that feeder boxes were to be avoided and the riser tubes docked directly onto the chill moulds, to avoid a drop in quality in the molten mass. To achieve this, all the machines are equipped with large low-pressure furnaces with a capacity of 2,800 kg. The large melting pots facilitate the placement of



Layout casting line.