

Assembly of a finished decanter at the customer

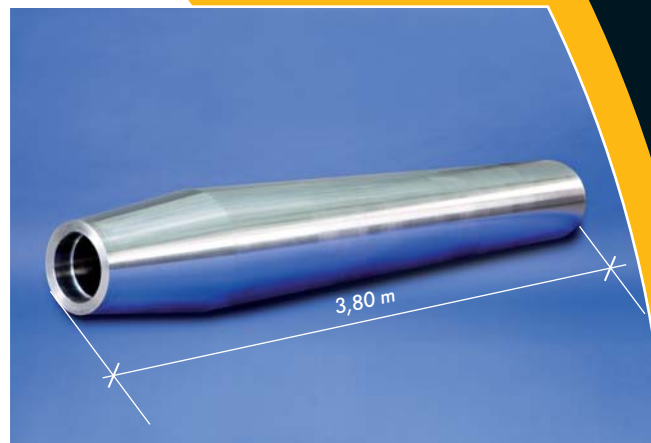
Decanter construction

Whether it's the chemical, pharmaceutical or biotechnical industry, sewage sludge or paint sludge treatment, plastics recycling or even shipbuilding – the global use of decanters is making constantly growing demands in terms of construction, material, precision and stability of performance. These are demands that we are happy to meet with decanters whose components are built by us of stainless steel using the centrifugal casting technique and which therefore have major quality advantages:

- **Optimum strength and corrosion resistance of the material, suitable for the purpose, with cost-conscious materials selection and advice**
- **The highest precision, reliability and efficiency with manufactured components ready to install incl. structural welding of duplex steels and austenites that are hard to machine.**

Individual solutions

With Kuhn Special Steel, you are also benefiting from one of the most comprehensive and up-to-date sets of machinery in a centrifugal casting house in the world. So



Worm gear body

Optimum finishing of a decanter component



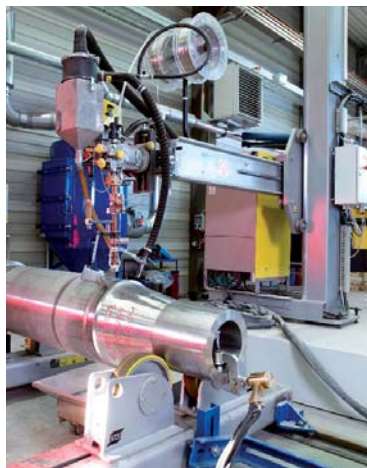
we are capable of manufacturing both cylindrical and tapered drum bodies up to an external diameter of 1,300 mm either as premachined products for further finishing or as finished components ready for installation. The welding, drilling and milling work is included.

Benefit from our strengths!

- Over 45 years' experience in centrifugal casting
- Acknowledged specialist in the centrifugal casting technique in the area of stainless steels
- Special know-how in the centrifugal casting of duplex steels and austenites including logical development of new materials
- 16 centrifugal casting machines and 7 furnaces in use
- To drawings: processing of tubes as base bodies on to which worm gears can be welded and the manufacture of sealing covers, supports or bushes for installing in centrifuges and decanters
- Individual parts or small runs, also with a wide range of dimensions
- Further development of materials within the company, with other foundries and universities



Assembly of a drum body with diameter 1,000 mm



Sub-arc-welding installation

Materials:

Rust-proof and acid-resistant steels:

Duplex steels

- Lean duplex steel
- Standard duplex steel
- High-carbon duplex steel
- Super duplex steel

Austenites

- Standard alloys with and without Mo
- Austenitic alloys with increased Si content
- Fully austenitic special alloys

Nickel-based alloys

Possible size range:

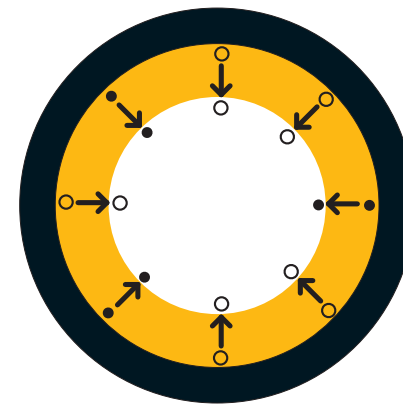
Maximum external diameter up to 1,100 mm (in exceptional cases up to about 1,300 mm) and 3.3 tonnes cast weight depending on the wall thickness



Premachined decanter components

Kuhn Special Steel 
Reliable solutions. Always.

**Decanter
Construction**



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Reliable solutions. Always.

The centrifugal casting technique

Our core competence is in the centrifugal casting technique with subsequent finishing. We have mastered the application of this production technique for the most varied stainless steels and alloys. The range varies from low-alloy steels to iron-free alloys. We contribute our materials know-how as early as the development phase so as to produce a perfect product at the end.

We manufacture over 70 % of our products as finished products individually and precisely to customers' drawings. And individual parts and small runs represent no problem for us. Moreover we manufacture each one in materials that can be cast reliably with the centrifugal casting technique and we are also happy to manufacture special materials to your particular specifications.

In centrifugal casting, the steel is cast via the axis of rotation into a rotating canister and it solidifies at up to 120 times the acceleration due to gravity. These great rotation forces and the solidification in an inward direction create a particularly dense and pure structure. Impurities and gas inclusions are driven to the surface and can be removed in subsequent processing.

The products manufactured with this technique therefore have outstanding technological properties that are greatly superior in many areas to conventional static casting.

Our varied options for the preparation and finishing of rotationally condensed stainless steel meet our customers' most varied requirements. Whether it's lathes, finishing and polishing machines or our CNC processing centres – our great strength as a specialist in centrifugal casting is also matched in finishing.