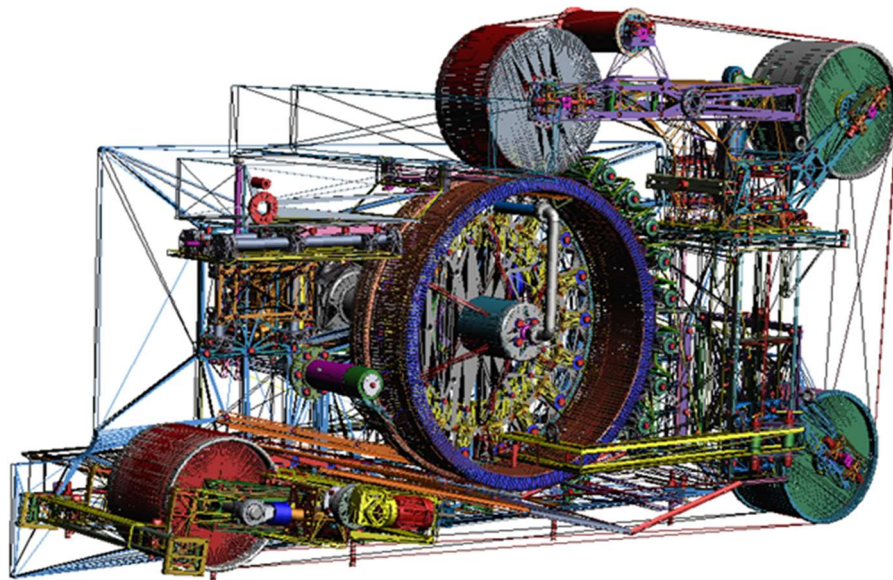


All about Wheel Belt Casting



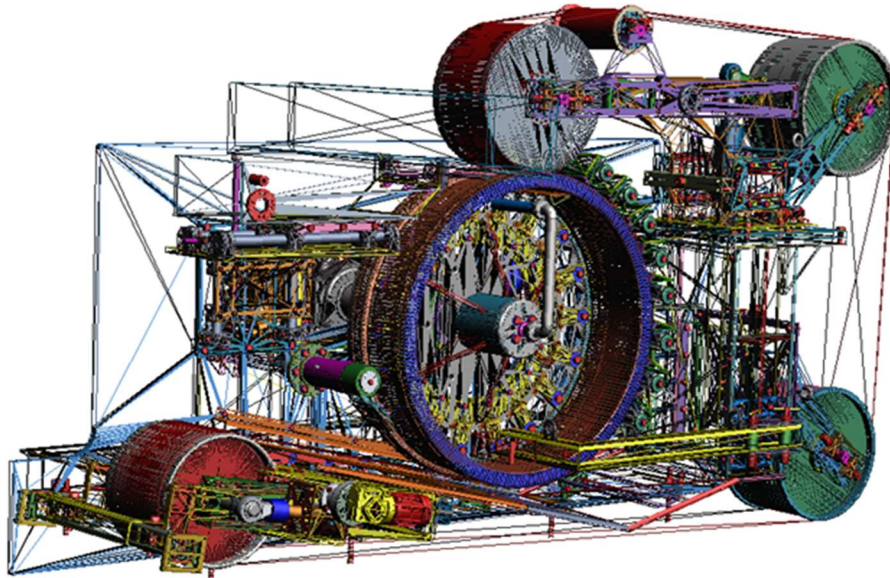
Did you know?

Wheel belt casting is the most productive continuous Aluminum casting technology.

With wheel belt casters designed and built by **C. M. Aluconsult**, casting rates of more than 4 t/hr-100 mm strip width (40 t/hr-m) has been realized until now. What is your goal?

Beside the high productivity, wheel belt casting offers reduced investment and operational costs compared to other continuous casting technologies.

Wheel cast, the new **C. M. Aluconsult** brand for wheel belt casters, is the answer to all question if you think about wheel belt casting.



All **C. M. Aluconsult** activities in the field of design and construction of new wheel belt casters are bundled under the name **Wheel Cast**, pronounced “We Cast”.

All new systems are based on the basic concept for wheel belt casters developed by **C. M. Aluconsult** and proven in practice.

Wheel Cast wheel belt casters, designed by **C. M. Aluconsult**, are characterized by:

- A solid, inherently rigid machine base frame design
- A high-quality bearing system for the central casting wheel
- Minimum casting wheel excentricity
- Generously dimensioned steel belt deflection rollers
- The use of the **Wheel Guide** steel belt guiding system
- The **Wheel Cool** cooling system for flexible steel belt and casting wheel cooling
- The freedom of flexible use of the different **Wheel Pour** series pouring systems

Of course, the design of the system can be adapted to environmental conditions in the customers plant. The system control, automation and networking with other customer systems can also be carried out according to customer requirements.



The steel belt which runs at the wheel belt caster, although it is regularly replaced and is therefore considered a consumable, is of central importance in terms of the safety and productivity of the plant, as well as product quality is concerned.

The **Wheel Guide** steel belt guidance system, developed by **C. M. Aluconsult**, is characterized by:

- A precise run of the steel belt on the caster central main axis → **safety**
- An excellent wrapping of the casting wheel → **product quality, safety**
- Avoidance of steel belt waving → **product quality, safety, steel belt service life**
- No forced guiding of the steel belt → **steel belt service life, productivity**



The influence of the wheel belt caster pouring system on product quality and caster productivity cannot be overestimated.

Turbulent metal flows, oxide build-up at the pouring nozzle or entrained surface oxides are just some of the undesirable side effects of unsuitable pouring systems.

The **Wheel Pour** series pouring systems, developed by **C. M. Aluconsult**, are characterized by:

- Turbulence free, laminar metal flow
- Good to very good filling of the casting wheel groove
- Reliable avoidance of entrained surface oxides
- Low blocking tendency
- Long service life
- Low costs
- Easy maintenance

Wheel Pour series pouring nozzles are available in different versions and can be applied at strip as well as on wire rod casters.



The **Wheel Cool** systems include the steel belt as well as the wheel cooling. Special attention was placed here on the even coverage of the cooling surfaces, the avoidance of vapor cushions and the reduction of the cooling water back spray.

In terms of the casting wheel cooling, the system gives the operator, in addition to the cooling water flow rate adjustment, additional options to adapt the cooling conditions to the respective casting speed and/or the alloy.

Wheel cool systems, developed by **C. M. Aluconsult**, are characterized by:

- Robust construction
- Precise flow rate control
- Homogeneous cooling
- Low cooling water back spray
- Additional options to adjust cooling rates and conditions



Wheel Guide, **Wheel Pour** and **Wheel Cool** are the three columns supporting the **Wheel Cast** system reliability, safety, productivity and product quality.

All systems base is long lasting experience in operation and maintenance of wheel belt casters as well as the high engineering quality.

Wheel Guide, **Wheel Pour** and **Wheel Cool** systems are also available as upgrades or retrofits for existing wheel belt casters.

Interested in more information?

Contact: C. M. Aluconsult

Email: cmueller@cm-aluconsult.de

Phone: +49 151 29531609