

NEWS AND INFORMATION

to our current and prospective customers / May 2016

Editorial



Dear Readers,

Leadership in technology, reliability, success orientation

In the last editorial, I wrote about these three qualities and values to which the vonRoll casting Group subscribes and on which it has built its company culture. These values are meanwhile firmly rooted; our staff believes in them 100% and put them into practice each and every day.

Our track record as a reliable partner for developing and manufacturing large cylinder heads for combustion engines gives impressive proof of this, you will learn more about it in this newsletter. Another example how we put these values into practice are our efforts to create continuous added value for our customers while at the same time constantly developing and increasing our technological competences. Last year, we achieved this by acquiring vR production (nuelles) sas and integrating their expertise in machining competences.

We are and always will be a reliable partner for you in the production of complex components. We look forward to our future collaboration and assure you of our best support in order to ensure our joint success.

Have a good read!

Danilo Fiato
CEO vonRoll casting Group

Legal information

Publisher: vonRoll casting

Address:

vonRoll casting ltd
Rüeggisingerstrasse 2
6020 Emmenbrücke
Switzerland
Tel. +41 41 269 31 29
Fax +41 41 269 31 79
www.vonroll-casting.ch
info@vonroll-casting.ch

vonRoll casting ltd, with the subsidiaries at Emmenbrücke and Delémont, is a company of vonRoll infratec (holding) ltd. Other companies within the group are:

vonRoll hydro: The leading Swiss provider of products and services for water and gas supply systems.

vonRoll itec: An outsourcing specialist in the IT sector

vR bikes: The Swiss supplier of electric mobility solutions

vR handling: Roller conveyor systems for the printing and converting industry

All rights reserved, including those involving the copying of extracts of the text or electronic reproduction

vR production (nuelles) sas – Integrating machining competences opens up new perspectives



For many years now, vonRoll casting has been providing its customers with products ranging from machined parts ready for installation through to pre-assembled components. Customer demand for technically complex machining after the casting process has strongly increased over the past years. This includes not only precision machining but also component cleaning via washing, including cleanliness analysis, strength and pressure testing, leak tests, pre-assembly and final coating or cathaphoretic coating.

The integration of vR production (nuelles) sas last year has strengthened the Group's machining competences and expanded its capacities in the Euro zone. With around 50 employees and approximately 20 machining centres from 630, 800, 1000 and 1250 mm series, vR production (nuelles) sas is specialized in machining parts of medium-sized dimensions. It excels primarily in machining iron castings, but also the machining of steel or aluminium parts designated for the rail, energy, farming and truck industries is provided.

Over the past years, vonRoll casting has worked together with the facility in Nuelles and has developed various complex finished components for customers such as Alstom Transport, GE Power & Water, MTU, Bombardier and Caterpillar.

The quality and logistics standards of our group match perfectly our customers' demands. In short, we offer a very high level of quality, optimum traceability and a logistics system that meets all the requirements of modern-day production planning.



InnoTrans 2016
20. – 23. SEPTEMBER • BERLIN

vonRoll casting to take part in InnoTrans 2016

This leading international fair for transport technology is of utmost importance to the railway industry. It will be taking place in Berlin from 20th to 23rd September. The fair will see 40 halls at Berlin Exhibition Grounds filled with the latest innovations in the field of railway technology. We consider this trade fair highly important for our future business and, therefore, we will be participating this year for the very first time with our own stand. Drop by and see us – we look forward to meeting you there!

Meeting point: Hall 8.1/Stand 207

More power from Mannheim and new dimensions for vonRoll casting

We are pleased to announce that **Caterpillar Energy Solutions GmbH Mannheim** has once again placed a large order with our factory in **Delémont**.

Thanks to our professional collaboration and track record as a dependable supplier of various different engine parts for the TCG 2016 and TCG 2032 series, as well as cylinder heads for the TCG 2020 series, the specialists at vonRoll casting have played a key role in developing the new TCG 3032 engine generation.



TCG 2032 engine

To produce a cylinder head with the required dimensions cost-effectively – i.e. using the green sand automated moulding line – was a huge challenge. The aim was to create a highly sophisticated component using a process that was reliable – and thanks to the close collaboration of the development departments at both companies, all critical issues – in particular the component's height, the considerable differences in wall thickness and the intricate water cooling channels – could be optimally resolved.

The dimensions of the cylinder head needed to be larger than any we had ever made before.

Thanks to involving our casting engineers at an early stage, vonRoll casting is now able to manufacture this cylinder head – measuring 650 x 420 x 325 mm and weighing 285 kg each – cost-effectively on our automated moulding line.



Cylinder head in 3D view

This close collaboration during the development process enabled us to supply Caterpillar Energy Solutions GmbH with yet another highly sophisticated and cost-optimised component. The project also gave us the opportunity to deepen our already extensive knowledge in developing and manufacturing cylinder heads.

The pattern with 19 core boxes was created in our own pattern-making facility with the help of our FZ30 CNC milling machines.



Five-axis portal milling machine

The very first pilot castings already met the company's high standards in every respect. Pre-series have been cast and are now ready and waiting for pre-machining at our sister factory, vR production (nuelles) sas.



Core package

We would like to thank Caterpillar Energy Solutions GmbH for their precious collaboration and for trusting in our capabilities.

Technical conferences

We are pleased to invite you also this year to attend one of our much appreciated technical conferences in German or in French. This year's agenda is as follows:

- **Technical conference in Emmenbrücke (German): 8th-9th June 2016**
- **Technical conference in Delémont (French): 29th September 2016**
- **Workshop in Emmenbrücke (German): 1st December 2016**

Registration for any of these dates is now open – please contact Hansruedi Fellmann by e-mail at hansruedi.fellmann@vonroll-casting.ch or by telephone on +41 (0) 41 269 31 36 to book your place.

We look forward to seeing you there!

Registration form:

<http://www.vonroll-casting.ch/de/%C3%9Cberuns/Kontaktformular/tabid/1949/language/de-CH/Default.aspx>

OHSAS certification for Emmenbrücke and Delémont

The two vonRoll casting plants in Emmenbrücke and Delémont were awarded OHSAS 18001:2007 Occupational Health and Safety Management Systems certification in 2015.

This success is reflecting the culture of safety implemented at both plants and increases at the same time our productivity by reducing down times. Our customers and suppliers can therefore

rest assured that by choosing vonRoll casting as their partner, they are choosing a company whose corporate culture focuses on sustainability and long-term success.



Certificate

SQS herewith certifies that the company named below has a management system which meets the requirements of the standards specified below.

vonRoll casting ltd
2800 Delémont
Switzerland

Certified area
Whole company

Field of activity
Engineering and manufacturing of parts in cast iron and spheroidal graphite, machining and assembly projects

Standards
ISO 9001:2008 Quality Management System
ISO 14001:2004 Environmental Management System
OHSAS 18001:2007 Occupational Health and Safety Management System

Swiss Association for Quality and Management Systems SQS
Bernstrasse 103, CH-3052 Zollikofen
Issue date: September 1, 2015

This SQS Certificate is valid up to and including August 31, 2018
Scope number 18
Registration number 22028

X. Edelmann
X. Edelmann, President SQS

R. Glauser
R. Glauser, CEO SQS

Partner of



Certificate

SQS herewith certifies that the company named below has a management system which meets the requirements of the standards specified below.

vonRoll casting ag
Rüeggisingerstrasse 2
6020 Emmenbrücke
Switzerland

Certified area
Whole company

Field of activity
Manufacturing of parts in grey cast iron and ductile iron

Standards
ISO 9001:2008 Quality Management System
ISO 14001:2004 Environmental Management System
OHSAS 18001:2007 Occupational Health and Safety Management System

Swiss Association for Quality and Management Systems SQS
Bernstrasse 103, CH-3052 Zollikofen
Issue date: April 23, 2016

This SQS Certificate is valid up to and including September 14, 2018
Scope number 17
Registration number 10420

X. Edelmann
X. Edelmann, President SQS

R. Glauser
R. Glauser, CEO SQS



Partner of
IQNet

Approval of Material Manufacturers Zulassung von Werkstoffherstellern



This is to certify that the works of
Hilsmittel wird bescheinigt, dass die Firma

VONROLL CASTING (RONDEZ) AG
DELEMONT
SWITZERLAND

has been subjected to an approval test in accordance with the Society's Rules with satisfactory results and is approved for the manufacture of the following products:
einer Zulassungsprüfung nach den Vorschriften des Germanischen Lloyd unterzogen wurde und für die Herstellung folgender Erzeugnisse zugelassen ist:

Gusseisen mit Kugelgraphit in Übereinstimmung mit den GL-Vorschriften für metallische Werkstoffe, Kapitel 2, Abschnitt 5, B.

Gusseisen mit Lamellengraphit in Übereinstimmung mit den GL-Vorschriften für metallische Werkstoffe, Kapitel 2, Abschnitt 5, C.

This approval is granted provided that all products intended to be used for the construction of ships or installations classed with Germanischer Lloyd comply in every respect with the Society's Rules and Requirements.
Die Zulassung erfolgt unter der Voraussetzung, dass alle Erzeugnisse, die zum Bau von Schiffen und Anlagen mit Klasse des Germanischen Lloyd bestimmt sind, die Vorschriften des Germanischen Lloyd in jeder Hinsicht erfüllen.

Certificate of approval No. WZ 1462 HH 3
Zulassungsbescheinigung Nr.

This Certificate is valid until: 2017-07-31
Diese Bescheinigung ist gültig bis:

Part of the approval is our letter of approval ref. no. 073342-I-14 of 2014-08-15.
Bestandteil der Zulassung ist das Zulassungsanschreiben, Tgb.-Nr. 073342-I-14 vom 2014-08-15.
Hamburg, 2014-08-15

Germanischer Lloyd

M. von Busch
Marcus von Busch

C. Wildhagen
Christian Wildhagen

Lloyd's Register certification

Our plant in Delémont acquired yet another important quality certificate in October 2015. Certification from the Lloyd's Register is essential primarily for marine applications, such as for cylinder heads that will be used in such conditions.

This new certificate provides yet further proof that we are in a position to meet our customers' highly ambitious requirements concerning quality and process reliability.