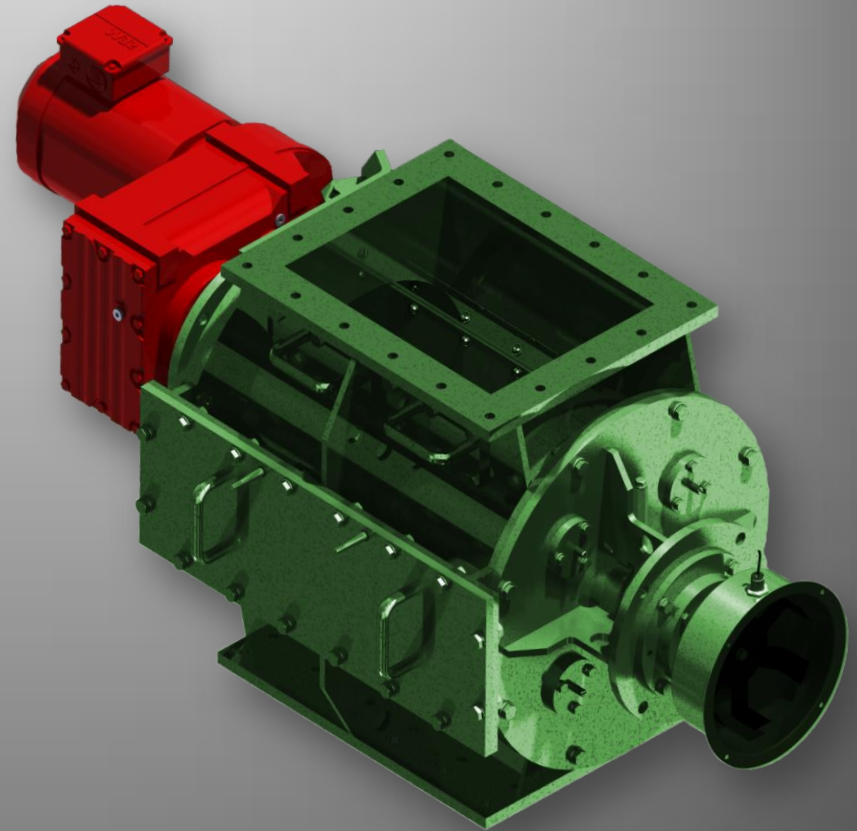


DOSING
SEALING
METERING
CONVEYING
FEEDING



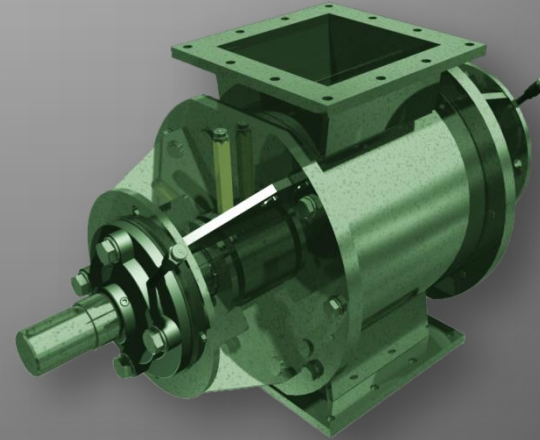
PROCESS TECHNOLOGY

Köllemann GmbH

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-ROTARY VALVES

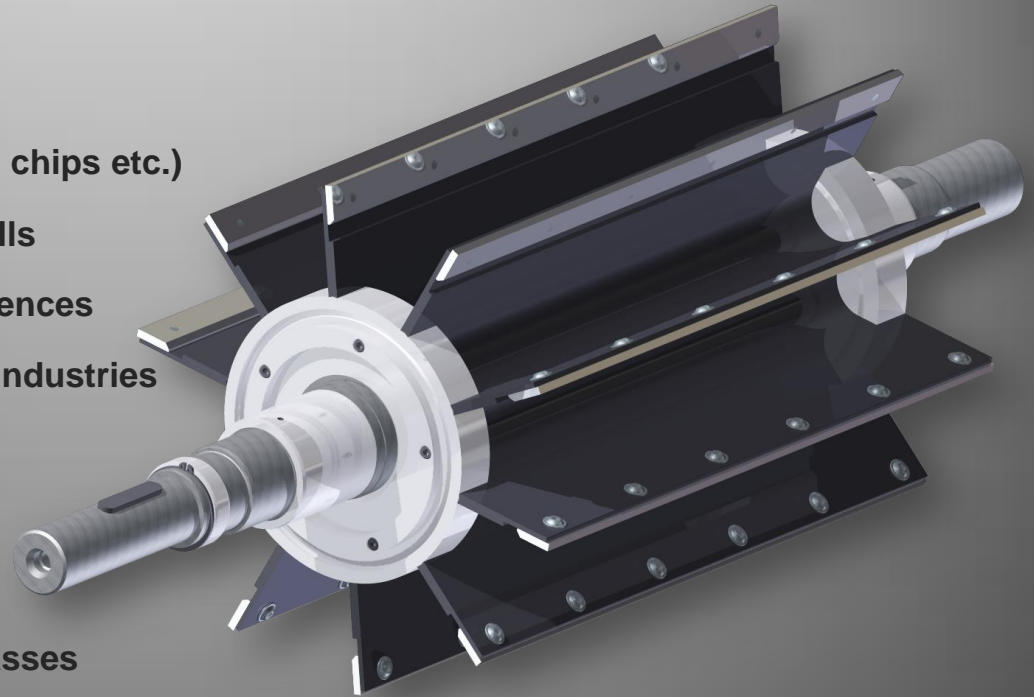
- **Our Design Features**
 - Pressure-Shock resistant
 - Explosion-proof
 - Wide range of materials available
 - Forced cleaning (Self-cleaning)
 - Zero-Gap-Design available
 - Suitable for vacuum applications
 - Wide choice of shaft-sealing-types (acc. to process conditions)
 - Water-cooling of all surfaces in contact with the product in high-temperature-areas
 - Design based on customers requirements
 - Replaceable wear sleeve for surface protection inside the housing against wear



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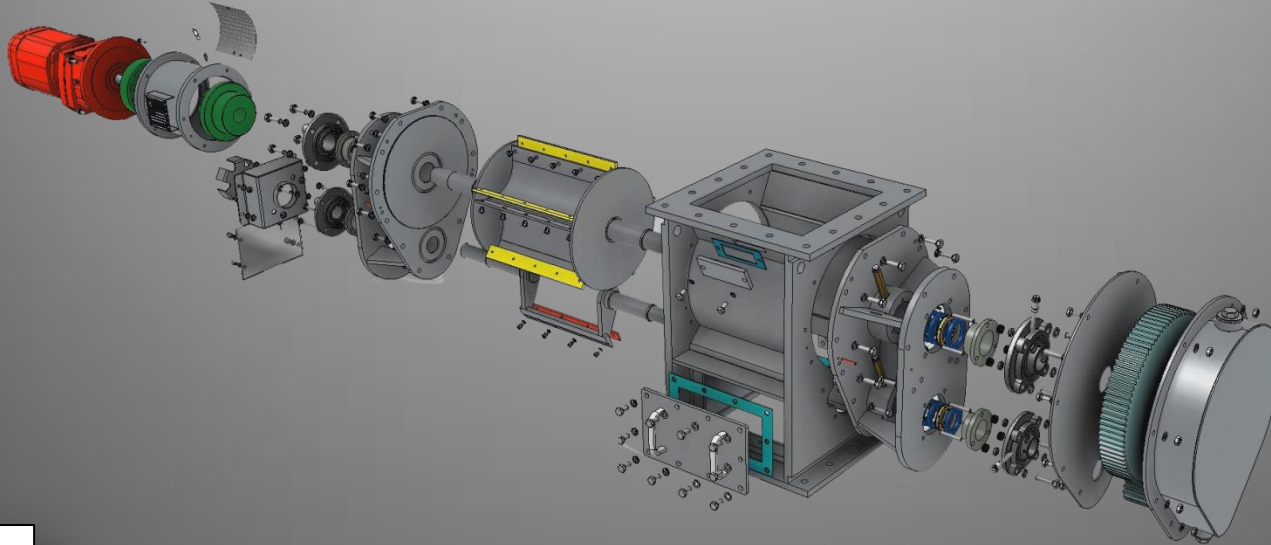
-ROTARY VALVES

- **Fields of application**
 - Fuel feeding (Lignite, coal, wooden chips etc.)
 - Dosing of cement-raw-meal into mills
 - Detention organ for pressure differences
 - Metering of additives for chemical industries
 - Feeding into fluidized beds
 - Discharging from fluidized beds
 - Feeding into vacuum
 - Detention of hazardous process-gasses
 - Shielding against thermal radiation



-ROTARY VALVES

- Modular design
 - Customizable options ensure that the equipment fits perfectly in your plant layout



PROCESS TECHNOLOGY

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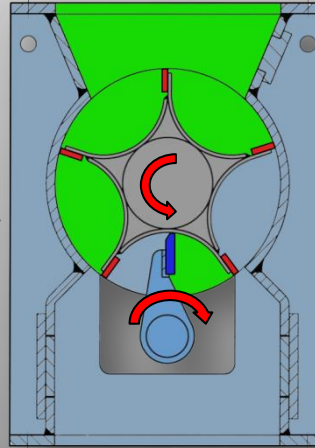
-ROTARY VALVES

- **Self-Cleaning**

- **Mechanical Cleaning**

By means of a rotor (scraper) synchronized with a single-stage spur gear

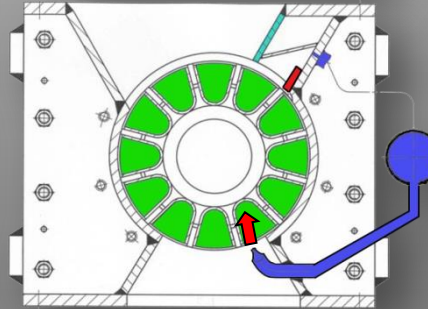
A new developed rotor ensures an optimum in product-flow as it is built without inner shaft



- **Pneumatical Cleaning**

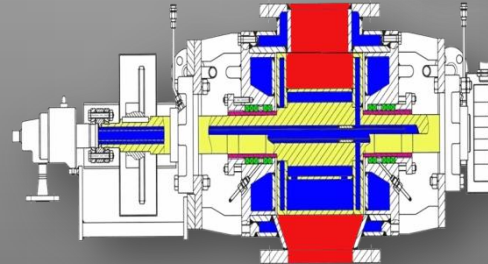
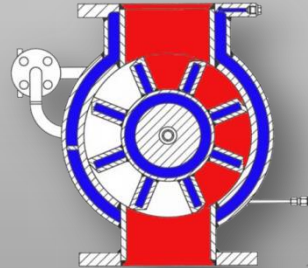
By means of a special shaped nozzle forcing the compressed medium to blow out each chamber

Continuously operating or pulsating triggered by solenoid valves



-ROTARY VALVES

- High-Temperature-Type
 - Cooling of all inner surfaces
 - Cooling of rotor surfaces
 - Cooling of the side-plates
 - Low material stress
 - Maximum temperature 1200°C
 - Possibility of direct discharging of bed ash from fluidized beds



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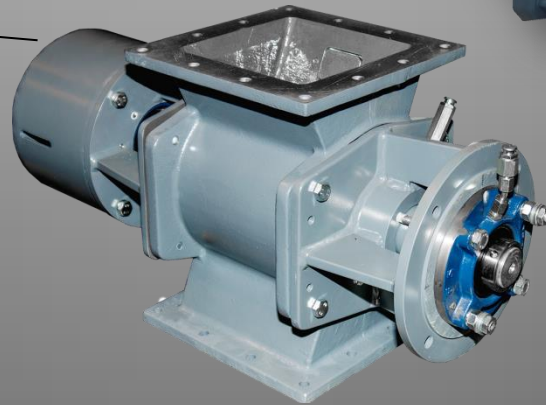
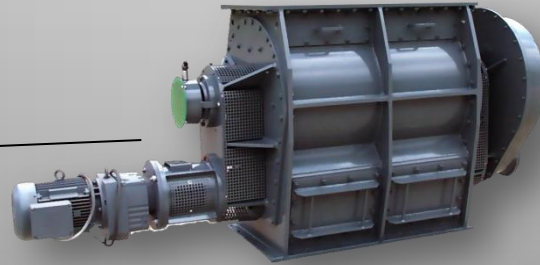
-ROTARY VALVES

- Available Materials

- Carbon Steel

- Stainless-Steel

- Cast Iron



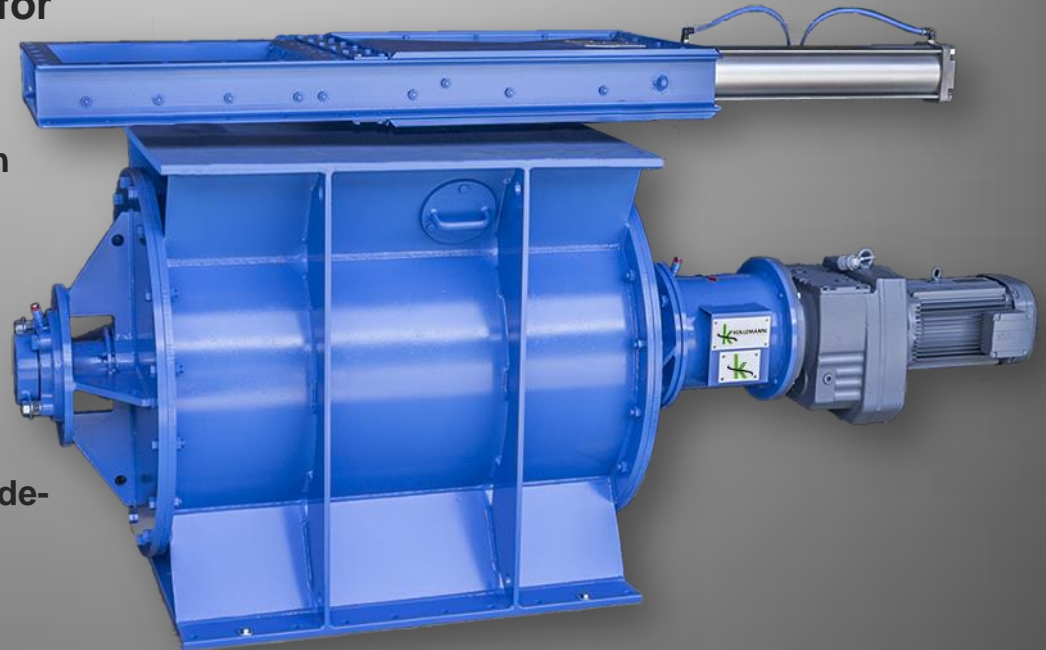
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-ROTARY VALVES

- **Standard-Design (mostly used for Cement Raw-Meal)**
 - Simple Design
 - Currently approx. 300-400 pcs. in operation worldwide
 - Proven operational reliability
 - Several improvements since the archetype was built
 - Customizable options
 - Various sizes available
 - Often combined with suitable slide-gate-valve
 - Less pulsating outlet-flow



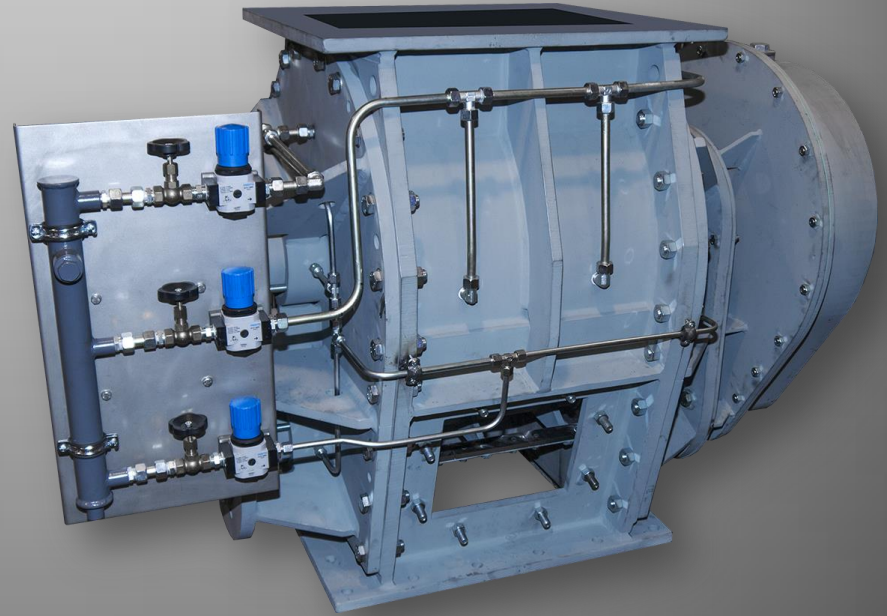
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-ROTARY VALVES

- **Power-Plant-Design (ZZSS)**
 - Optimized for coal / lignite feeding
 - Forced cleaning with separate scraper
 - Separates combustion-chamber and fuel-bunker
 - Suitable for wet-coal
 - Pressure-shock resistant
 - Explosion safe acc. to ATEX guidelines (inner zones as also outer zones)
 - Shaft-passages with gas-purging
 - Crushing of agglomerates
 - Big opening sideways for necessary maintenance on the scraper-parts



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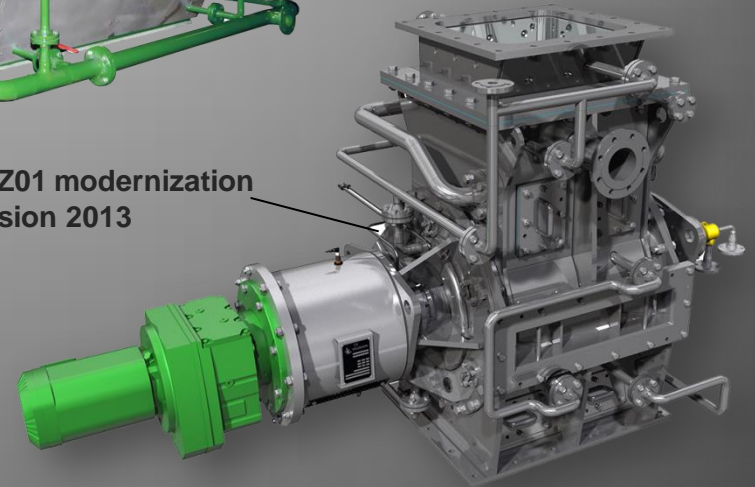
-ROTARY VALVES

- High Pressure / Coal drying
 - Optimized for coal / lignite feeding
 - Works with significant pressure difference
 - Feeds into high pressure environment
 - Discharges from high pressure environment
 - Explosion safe acc. to ATEX guidelines (inner zones as also outer zones)
 - Heated surfaces avoiding adhering of coal inside the equipment
 - A ventbox collects trapped air and ensures a constant product flow
 - Pressure-shock resistant



RWE WTA2-Prototype-Plant
Final version (steam heated)

RWE WT1.FZ01 modernization
version 2013



PROCESS TECHNOLOGY

-ROTARY VALVES

- Proven technology
 - Thousands of our products operate successful in plants all over the world in 24/7 operation mode
 - Spare parts available for countless years – partial delivery of spare-parts availability for products manufactured in the 1980's



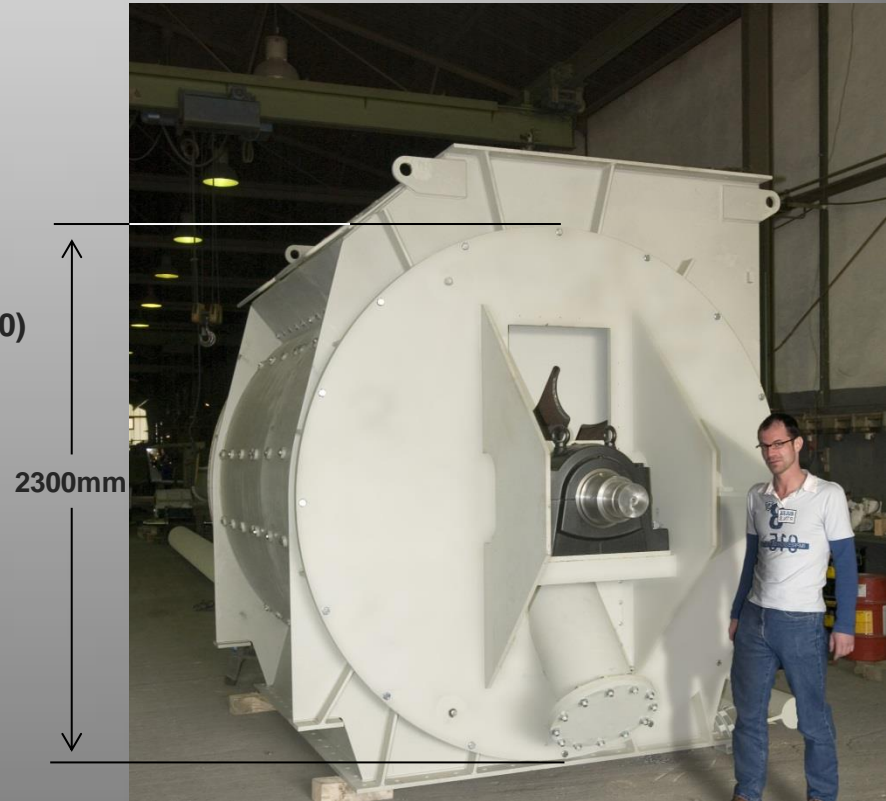
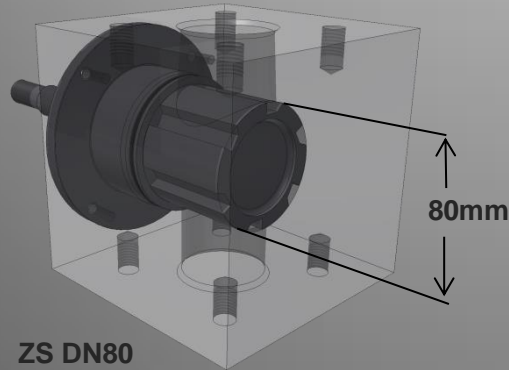
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-ROTARY VALVES

■ Available Sizes

- Product range starts with DN80 with an upper end at DN2300
- Standard-Sizes are available from DN150 (ZS150x150) to DN1250 (ZS1250x1250) with flow rates from 3,5m³/h to 1100m³/h



PROCESS TECHNOLOGY

Köllemann GmbH

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-THE COMPANY

■ Manufacturing

- All products are completely manufactured in our own workshop
- Engineering, cutting, bending, milling, welding, assembly, painting – from raw-plates to shipment-ready machines



-THE COMPANY

■ Plant in Adenau

- The Köllemann plant is located in Adenau in the middle of Germany, approx. 60km south of Cologne – 10 km away from the famous racetrack “Nürburgring”
- Manufacturing area 4800m²




PROCESS TECHNOLOGY

Köllemann GmbH

- OUR CERTIFICATES

The American Society of Mechanical Engineers



CERTIFICATE OF AUTHORIZATION

The named company is authorized by the American Society of Mechanical Engineers (ASME) for the scope of activity shown below in accordance with the applicable rules of the ASME Boiler and Pressure Vessel Code. The use of the certification mark and the authority granted by this Certificate of Authorization are subject to the provisions of the agreement set forth in the application. Any construction stamped with this certification mark shall have been built strictly in accordance with the provisions of the ASME Boiler and Pressure Vessel Code.


COMPANY:
Koellermann GmbH
 Am alten Wehr 9-12
 Adenau 53518
 Germany

SCOPE:
 Manufacture of pressure vessels at the above location only

AUTHORIZED: March 26, 2013
EXPIRES: March 26, 2016
CERTIFICATE NUMBER: 44,490

Bygn A. Bode
 Vice President, Conformity Assessment

Dirk M. W. S. J.
 Director, Conformity Assessment



ASME (Pressure-Vessel Section 8)

Certificate

Standard ISO 9001:2008

Certificate Registr. No. 01 100 110157

TÜV Rheinland Cert GmbH certifies:

Certificate Holder:



Kölleermann GmbH
 Förder- und Verfahrenstechnik
 Am alten Wehr 9-12
 D - 53518 Adenau

Scope: Distribution, Engineering and Manufacturing of Handling and Process Technology

An audit was performed, Report No. 110157. Proof has been furnished that the requirements according to ISO 9001:2008 are fulfilled. The due date for all future audits is 02-09 (dd.mm).

Validity: The certificate is valid from 2012-09-04 until 2014-09-05.

2012-09-05



DGA-ZM-58-95-00

[Signature]
 TÜV Rheinland Cert GmbH
 Am Grauen Stein 11108 Köln

 **TÜVRheinland®**
Precisely Right.

www.tuv.com

ISO 9001:2008

Certificate

Qualification of a production site for the manufacture of pressure equipment

Certificate No.: 01 202 362P-89922/000

Name and address of manufacturer: **Kölleermann GmbH**
 Förder- u. Verfahrenstechnik
 53518 Adenau
 GERMANY

It is herewith certified that the manufacturer has furnished proof of the quality requirements for their welding production and also has experience in piece production in accordance with Directive 97/23/EC.

Specification: AD 2000-Merkblatt HP0 / DIN EN ISO 3834-3
Test Report No: 01 202 362A-11 0012/Rev. 00
Scope: **Manufacture of containers**
 Kölleermann GmbH
Production Sites: Förder- u. Verfahrenstechnik
 D-53512 Adenau
 GERMANY

Valid until: 01. Oktober 2014

Köln, 2011-10-14 *[Signature]* 

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 56075 Koblenz
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www.tuv.com

AD2000 / HP0



PROCESS TECHNOLOGY

Kölleermann GmbH

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