Auger Sampler
Sampling equipment for sample retrieving from coal trucks and rail cars

The samples are retrieved using the hydraulic boom arm with auger assembly. Unique design ensures retrieving samples from any place and any depth inside the coal trucks or rail cars using the method of submerged auger sampling, which ensures fast sampling and representative samples.

**Basic description**

The sampler enables to retrieve and process the coal sample from any place and any depth of the truck in conformity with the international standards.

The sample is being retrieved by the auger assembly installed on the hydraulic boom arm. The standard auger length is designed to sample coal at maximum depth of approx. 2.5 m.

The sample is transported by the slide chute into the sample processing system after sample retrieval. The system contains hammer mill to reach the granularity from 0 to 3 mm and the quartering separator to prepare the samples for the laboratory.

The remaining material is transported by the output belt to be returned to the truck or dumped to stockpile.

In case that the sampler is equipped with Enelex ashmeter, the sample is analyzed to determine the ash content and calorific value immediately after primary crushing.

**Advantages**

- Sample retrieving in any depth
- Operation with a variety of coal quality, including wet or frost coal
- Fast sampling cycle time
- Complete sample processing in one cycle
- Sample environmental protection
- Simple operation and maintenance
- Only one operator is required

**Technical characteristics**

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Specification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Outer dimensions</td>
<td>typ. 2.5 x 6.1 x 4.8 (W x L x H)</td>
</tr>
<tr>
<td>Total weight</td>
<td>14 570 kg</td>
</tr>
<tr>
<td>Hydraulic boom arm length</td>
<td>max. typ. 7 m</td>
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<tr>
<td>Side distance range</td>
<td>typ. 3 m</td>
</tr>
<tr>
<td>Auger diameter</td>
<td>max. 500 mm</td>
</tr>
<tr>
<td>Auger speed</td>
<td>typ. 170 rpm</td>
</tr>
<tr>
<td>Power feed*</td>
<td>3 NPE 400 VAC, TN - S, 3 PEN 400 VAC, IT</td>
</tr>
<tr>
<td>Controlling</td>
<td>Automatic PLC system</td>
</tr>
</tbody>
</table>

* other options available on request
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Hydraulic boom arm
Slide chute
Milling machine
Divider
Feeding belt
Laboratory sample container
Reject conveyor
Online analyzer

Detection stage
- Detector block
- Gamma-ray beam
- Conveyor belt
- Coal
- Radiation source

Control stage
- Signal and power feed cable
- Supervisory system interconnection
- Coal quality measurement system
- GE 3000
- Enelex s.r.o.
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