Krüger offers four different processes based on conventional activated sludge systems:

- AE
- A/O®
- Recirculation
- A2/O
The conventional activated sludge systems are based on the principle that wastewater is admitted to that part of the plant which offers the best process conditions. Consequently, different parts of the plant will have different conditions allowing for the total treatment.

The systems are all capable of removing organic compounds from the wastewater. However, some of the systems are also able to perform biological phosphorus and nitrogen removal as illustrated in the table below.

<table>
<thead>
<tr>
<th></th>
<th>Without Bio-P</th>
<th>With Bio-P</th>
</tr>
</thead>
<tbody>
<tr>
<td>Without biological nitrogen removal</td>
<td>AE</td>
<td>A/O®</td>
</tr>
<tr>
<td>With biological nitrogen removal</td>
<td>Recirculation</td>
<td>A2/O</td>
</tr>
</tbody>
</table>

**AE**

The AE system is a very simple plant with only one aerobic process tank for biological treatment and final clarification. The system is mainly used for reduction of organic compounds and nitrification.

**A/O®**

The A/O® system is mainly used for reduction of organic compounds with Bio-P and no nitrification. The system consists of a Bio-P system in connection with at least two aerobic process tanks in series and a final clarification.

**Recirculation**

The recirculation system consists of 2-3 anoxic process tanks, 2-3 aerobic process tanks and final clarification. The system is mainly used for reduction of organic compounds and nitrogen through nitrification and denitrification.

**A2/O**

The A2/O system is mainly used for reduction of organic compounds, nitrogen through nitrification and denitrification and phosphorus removal through Bio-P. The system consists of a recirculation system combined with a Bio-P system.