Pump characteristics
The CombiDirt is executed with vortex technology.
The impeller is located on the shaft in such a way
that a large free passage area is created between
the impeller blades and the pump housing to
prevent clogging. The basic hydraulic principle of
this technology is based on energy transfer (vortex
generation) of a small secondary flow by the impeller
on the main flow. Vanes on the back side of the
impeller keep solids away from the shaft sealing areas
to avoid heavy wear and damage to the mechanical
seal.

The CombiDirt is part of the modular Combi system
and the hydraulic components can therefore be
used for horizontal, vertical and sump type of pump
executions (e.g. CombiSump) as well.

Applications
The CombiDirt is particularly suitable for transporting
liquids containing solids of all sorts.
The CombiDirt is also capable of handling gaseous
liquids and media requiring self priming conditions.

Pump specifics
• Executed according to the Back Pull Out execution
  for easy maintenance
• Suitable to handle solids, the impeller is specifically
designed to prevent clogging
• Handle liquids with varying amounts of gas
• Optional: oil quench seal execution
• Different types of inlet bend executions
• Rigid bearing bracket construction
• Free hydraulic passage ranges up to 100 mm

Technical data
Maximum capacity:  420 m³/h
Maximum delivery head:  40 m
Maximum liquid temperature:  80 °C
Maximum speed:  1800 rpm
Design pressure:  10 bar

Material
<p>| | |</p>
<table>
<thead>
<tr>
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</thead>
<tbody>
<tr>
<td>Pump casing</td>
<td>cast iron, nodular cast iron, stainless steel, stainless steel wear resistant</td>
</tr>
<tr>
<td>Wear plate</td>
<td>cast iron, stainless steel, stainless steel wear resistant</td>
</tr>
<tr>
<td>Impeller</td>
<td>cast iron, stainless steel, stainless steel wear resistant</td>
</tr>
<tr>
<td>Impeller shaft</td>
<td>steel alloy, stainless steel</td>
</tr>
</tbody>
</table>

Other materials upon request
Performance data

Dimensions

CombiDirt – Horizontal

CombiDirt – Vertical

SPX Process Equipment NL B.V.
Dr. A.F. Philipsweg 51 • P.O. Box 9 • 9400 AA Assen • NETHERLANDS
Phone: +31 (0)592-37 67 67 • Fax: +31 (0)592-37 67 60
E-mail: jp-industry.nl@processequipment.spx.com

For more information about our worldwide locations, approvals, certifications, and local representatives, please visit www.johnson-pump.com and www.spxpe.com. SPX Corporation reserves the right to incorporate our latest design and material changes without notice or obligation.

Design features, materials of construction and dimensional data, as described in this bulletin, are provided for your information only and should not be relied upon unless confirmed in writing.

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