Parameter-Diagram

NOISE FACTORS

<table>
<thead>
<tr>
<th>Piece to Piece Variation</th>
<th>Change Over Time / Mileage</th>
<th>Customer Usage / Duty Cycle</th>
<th>External Environment</th>
<th>System Interaction</th>
</tr>
</thead>
<tbody>
<tr>
<td>Uncontrollable variation in parts and manufacturing processes, such as variation in raw materials, hydraulic pressure, voltage, etc.</td>
<td>Normal degradation of equipment, components or materials, such as corrosion, fatigue, wear, build up of impurities, etc.</td>
<td>All of the intended and unintended customer usage, such as different lubricants or coolants, different operators, different cleaning materials, accessory kits, etc.</td>
<td>Any kind of inherent loss of energy transfer or other undesirable system outputs, such as exhaust gases, heat, vibration, leakage, unusual noise, bad odor, etc.</td>
<td>Known system interactions with affected neighboring systems, either by direct contact or functional connection, such as vibration, heat, movement, roll, electrical interference, etc.</td>
</tr>
</tbody>
</table>

Input Signals

Description of the energy sources required for fulfilling system functionality, such as speed (m/s), acceleration (m/s/s), input torque (Nm), etc.

System

Control Factors

- System design parameters that can be changed by the engineering team, such as shaft diameter, stiffness, density, hardness, etc.
- Control Factor #2
- Control Factor #3
- Control Factor #4

Ideal Response

The primary intended functional output of the system, such as output torque (Nm), voltage (V), motor power (kW), travel (M), etc.

ERROR STATES

- Foreseeable environmental conditions, such as water, snow, dust, mud, salt, wind, temperature swings, etc.