Bently Nevada is pleased to present the v22.1 release of the SCOUT200 SI Collector App, with these new capabilities:

**What’s New: SCOUT200 v22.1**

- **Configure 2 Channels for Dual Plane Balancing**
- **Fixed Positions Node for Weight Positions**
- **CH2 Displayed for Initial Trial Balance & Trim**
- **List of All Balance Jobs, Re-Load To View, Report & Resume.**

Bently Nevada remains focused on delivering the world’s premier plantwide machinery management solutions through bi-annual product releases.

Thank you,

Nigel Leigh, Product Line Manager
Sonu Jain, Technical Product Manager

On behalf of your SCOUT200 Leadership and Development Teams
# 1. V22.1 CAPABILITY OVERVIEW

V22.1 SCOUT200 Overview video located in Bently Nevada Tech Support Training Library  
**Valid M&S Agreement Required**

<table>
<thead>
<tr>
<th>Feature</th>
<th>Description</th>
<th>Section</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dual Plane Rotor Balancing</td>
<td>SCOUT200 now offers the power and convenience of dual plane balancing with dual channel measurement.</td>
<td>2</td>
</tr>
<tr>
<td>Balancing Enhancements</td>
<td>Add/Edit Sensors within Balancing setup</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Fixed-positions option for entering balance weight positions</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Balance History shows all the Balance Jobs performed</td>
<td></td>
</tr>
<tr>
<td>Receive Balance jobs in System 1</td>
<td>Receive balance jobs into System 1 via File mode. Balance tab shows all the Balance jobs performed on selected machine in hierarchy</td>
<td>4</td>
</tr>
<tr>
<td>Generate Balance Job Report</td>
<td>Generate Balance Job report in System 1</td>
<td>5</td>
</tr>
</tbody>
</table>
2. DUAL PLANE ROTOR BALANCING

Building on the release of single plane rotor balancing in v21.2, SCOUT200 now offers the advantage of dual plane balancing with dual channel measurements.

Launch SI Collector app and click on Balance. This launches the Balance menu.

1. **Setup** – Sensors & Tach page allows you to enable Dual Plane Balancing by selecting CH2.

2. **Initial Reading** – Channel 1 and Channel 2 measure initial imbalance
3. **Trial Weight and Reading** – Plane A: Attach Trial weight to the balancing plane A and measure.
4. **Trial Weight and Reading** – Plane B: Attach Trial weight to the balancing plane B and measure.
5. **Balance** – Attach Balance weights to the balancing planes as recommended by SI Collector app. Take measurement to confirm the rotor is balanced.
6. **Trim** – Any residual imbalance can be removed via additional trim balance cycles.
8. Finish – Save the completed Balance Job
3. BALANCING ENHANCEMENTS

3.1 Add/Edit Sensor in Sensor & Tach page

With v22.1, users now have the convenience of Adding and Editing Sensors within the Balancing Setup screens.

3.2 Balancing Fixed Positions mode

As an alternative to measuring the position of balance weights on the rotor in degrees, users can now specify that a fixed number of evenly spaced balance weight locations are available. Examples are rotors with pre-drilled balance weight locations and attaching weights to fan blades. The user need only enter the position number rather than measure the angle. The selected Weight Position mode is used for all weight pages throughout the app.
3.3 Balance History

With v22.1, the Balance menu page has a new addition, the Balance History tab. This shows all the Balance jobs performed using this handheld. The user can select and load a previous job, then view the readings, generate a pdf report, or even resume the balance process.
4. RECEIVE BALANCE JOBS INTO SYSTEM 1

Balance jobs can now be received into System 1. They are stored within the appropriate database and listed on the new “Balance Job” tab within the existing Case History area. The Balance jobs can be opened to view the readings and to print a report.

The transfer of Balance job to System 1 is currently only supported via File mode, but in future releases this will be extended to include WiFi, USB Tethering and Remote Comms.

<table>
<thead>
<tr>
<th>Path</th>
<th>Asset Name</th>
<th>Tag Name</th>
<th>Balance Speed</th>
<th>Device</th>
<th>Created Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>CC Power Plant &gt; Unit 1-2 &gt;...</td>
<td>U1-2 WSAC Spray Wat...</td>
<td>GenericMotorPumps...</td>
<td>1800 rpm</td>
<td>SCOUT200</td>
<td>4/22/2022 5:10:08 PM</td>
</tr>
<tr>
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<td>U1-2 WSAC Spray Wat...</td>
<td>GenericMotorPumps...</td>
<td>1800 rpm</td>
<td>SCOUT200</td>
<td>4/19/2022 5:17:13 PM</td>
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<td>U1-2 WSAC Spray Wat...</td>
<td>GenericMotorPumps...</td>
<td>1800 rpm</td>
<td>SCOUT200</td>
<td>4/22/2022 5:10:47 PM</td>
</tr>
<tr>
<td>CC Power Plant &gt; Unit 1-2 &gt;...</td>
<td>U1-2 WSAC Spray Wat...</td>
<td>GenericMotorPumps...</td>
<td>1800 rpm</td>
<td>SCOUT200</td>
<td>4/22/2022 5:11:09 PM</td>
</tr>
<tr>
<td>CC Power Plant &gt; Unit 3 Air...</td>
<td>ACC Cooling Fan/Mtr 1A</td>
<td>MtrGbx2StgParCTF</td>
<td>1800 rpm</td>
<td>SCOUT200</td>
<td>4/19/2022 7:31:19 PM</td>
</tr>
<tr>
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<td>ACC Cooling Fan/Mtr 1A</td>
<td>MtrGbx2StgParCTF</td>
<td>1800 rpm</td>
<td>SCOUT200</td>
<td>4/19/2022 4:25:15 PM</td>
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<td>CC Power Plant &gt; Unit 3 Air...</td>
<td>ACC Cooling Fan/Mtr 1A</td>
<td>MtrGbx2StgParCTF</td>
<td>1800 rpm</td>
<td>SCOUT200</td>
<td>4/19/2022 5:02:29 PM</td>
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<td>CC Power Plant &gt; Unit 3 Air...</td>
<td>ACC Cooling Fan/Mtr 1A</td>
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<td>1800 rpm</td>
<td>SCOUT200</td>
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<tr>
<td>CC Power Plant &gt; Unit 3 Air...</td>
<td>ACC Cooling Fan/Mtr 1B</td>
<td>MtrGbx2StgParCTF</td>
<td>1800 rpm</td>
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<tr>
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<td>ACC Cooling Fan/Mtr 1C</td>
<td>MtrGbx2StgParCTF</td>
<td>1800 rpm</td>
<td>SCOUT200</td>
<td>4/19/2022 5:05:31 PM</td>
</tr>
<tr>
<td>CC Power Plant &gt; Test &gt; Rot...</td>
<td>Dual Plane Machine</td>
<td>Machine</td>
<td>3000 rpm</td>
<td>SCOUT200</td>
<td>4/21/2022 4:59:40 PM</td>
</tr>
</tbody>
</table>
5. GENERATE BALANCE JOB REPORT IN SYSTEM 1

System 1 v22.1 allows you to view and print Balance Reports. Within the Case History – Balance Jobs tab, select a Balance Job and click on the Generate Balance Report icon (at top right of screen).

**Balance Report**
Database: CC Power Plant
Balance Job Creation Time: 22-Apr-2022 05:10:08 PM

**Machine Information**
Folder: CC Power Plant  
Machine Name: U1-2 WSAC Spray Water Pump/Mtr B  
Rotor Weight: 16 kg  
Bearing Convention: NDE/DE  
Rotation Direction: CounterClockwise

**Sensors & Tack**
CH1 Sensor: Accl 106mV/g  
CH2 Sensor: ACCL0547  
Channel 1 Location: DE  
Channel 1 Orientation: 90°  
Channel 2 Location: NDE  
Channel 2 Orientation: 90°  
Tachometer Orientation: 0°

**Weight Planes**
Plane A  
Weight Plane Radius: 60 mm  
Weight Position: Degrees  
Weight Reference Mark: 0°  
View Direction: Driver-to-Driven

Plane B  
Weight Plane Radius: 60 mm  
Weight Position: Degrees  
Weight Reference Mark: 0°  
View Direction: Driver-to-Driven

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**Balance Report**
Database: CC Power Plant
Balance Job Creation Time: 22-Apr-2022 05:10:08 PM

**Machine Speed: 1000 rpm/30 Hz**

<table>
<thead>
<tr>
<th></th>
<th>Weight Plane A</th>
<th>Weight Plane B</th>
<th>Ch1 (m/s² pk)</th>
<th>Ch2 (m/s² pk)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Initial Reading</td>
<td>-</td>
<td>-</td>
<td>1.565@104°</td>
<td>1.553@115°</td>
</tr>
<tr>
<td>Trial A</td>
<td>7.36@139°</td>
<td>-</td>
<td>1.171@154°</td>
<td>1.161@84°</td>
</tr>
<tr>
<td>Trial B</td>
<td>-</td>
<td>7.36@76°</td>
<td>0.78@124°</td>
<td>0.77@62°</td>
</tr>
<tr>
<td>Balance</td>
<td>44.85@141.07°</td>
<td>32.54@275.7°</td>
<td>0.312@84°</td>
<td>0.386@30°</td>
</tr>
</tbody>
</table>
6. UPDATING SI COLLECTOR APP

Before updating the app, first ensure all data has been received into System 1.

To update both System 1 and the System 1 Collector App (and for handhelds without an Internet Connection):

1. Using your computer, locate the "System 1 Collector App" through your System 1 licensing account on: Flexnet: https://bakerhughes.flexnetoperations.com/
2. Download the *.apk” installation file to your computer.
3. Transfer the file via USB to the handheld.
4. Locate the .apk file on your hand-held device and install the SI Collector app.
5. If prompted, follow the displayed instructions to allow unknown sources to install an app on your hand-held device.
6. Follow the app instructions and when requested, allow the app permissions for Pictures, Location, Audio, and Phone.
7. Download and update System 1 as usual.

To update the System 1 Collector App only, via an internet connection on the handheld:

1. Make sure your handheld device is connected to the internet (e.g. via Wi-Fi.)
2. Open the Google Play Store app.

If any problems are encountered, first un-install the existing version of SI Collector app, the try again.

For further instructions, see the SCOUT200 User Guide, Quickstart Guide, or the Readme file which is provided via Flexnet.
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