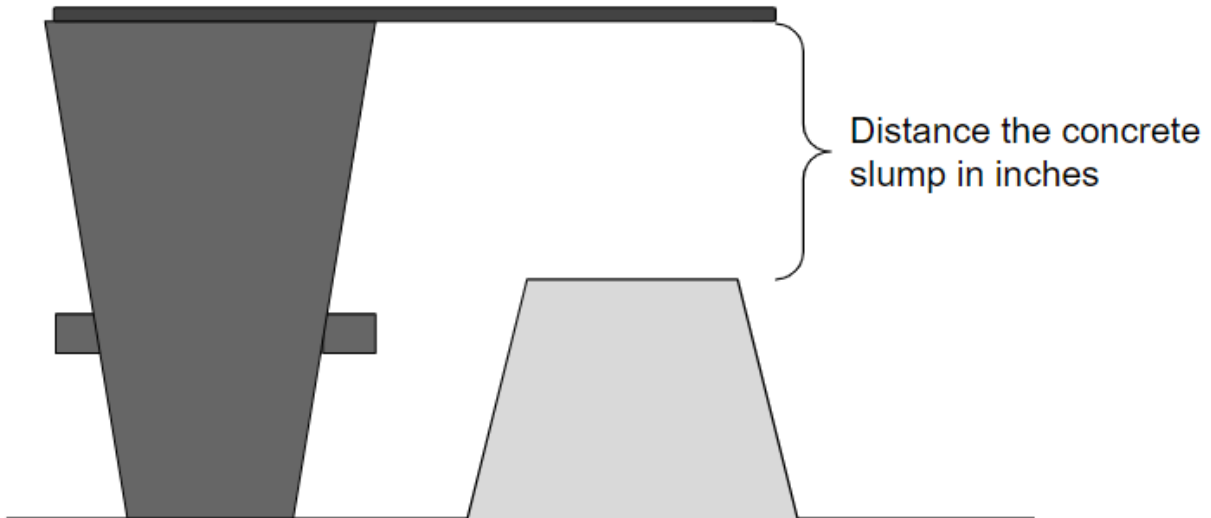


What is slump

Slump is a measurement of workability. Slump is determined by the ASTM standard Slump Cone test. Fill the 12" cone with concrete, flip over and measure the distance the concrete slumps down in inches. Reference the ASTM standard for specific information.



How to use a hydraulic charge pressure gauge to determine slump

Charge the drum at the slump profile drum speed, read the charge pressure psi, and compare against the psi/inch profile to get slump in inches.

Example Company Profile of Slump Measurement

Company: *Digital Fleet Ready Mix*

Take readings while the drum is spinning full speed at truck idle (~7RPM).

	IDLE
0"	2260psi
1"	2000psi
2"	1650psi
3"	1400psi
4"	1250psi
5"	1100psi
6"	1000psi
7"	900psi
8"	800psi



Figure 1: Hydraulic Charge Pressure Gauge with Slump Inch Markers

Example walkthrough of Digital Fleet Ready Mix

When arriving at the job, spin the drum in full speed charge at truck idle until stable drum speed is established, this will read approximately 7 RPM. Look at the psi reading, let's say it reads 1250psi. For this profile, we have a 4" slump.

Companies typically have a profile sheet in each of the trucks and/or the charge pressure gauge has inch markers on the perimeter of the gauge.

Common Questions

What is the slump profile drum speed?

The speed of the drum when the slump cones tests were taken. This same speed was used for each of the psi vs inch slump cone tests. Typical is 7RPM (full drum speed at truck idle). Please verify your company's drum speed before attempting to use the charge pressure to determine slump.

Can I spin the drum at any speed and determine the slump from the charge pressure?

No. Slump is calculated from the charge pressure gauge and is drum speed and direction dependent. If you are spinning in the discharge direction, the charge pressure can not be used to determine the slump. If the drum is spinning at a different speed than the company profile, the charge pressure will not determine the slump (in) accurately because the profile will be wrong.

How do I know what my slump profile is?

Please reach out to your administrator, check DigiTrack, or contact DF support.

How do I know what my slump profile drum speed is?

Please reach out to your administrator or contact DF support.

How does the DF+ system report slump?

The DF+ system reports slump in inches based on a pressure sensor that reads the hydraulic charge pressure. This is used the same way as the hydraulic manual gauge. Read the psi compare against the profile for a preset drum speed. I.e. Charging at 7 RPM, the sensor reads 1250psi, we have a 4" slump.

DigiTrack

When the charge pressure is in a certain range DigiTrack will report Empty.

The screenshot shows the DigiTrack interface with the following elements:

- Top left: "Waiting for address" with a blue background and three dots below it.
- Top right: "Previous truck" with a dashed line below it.
- Center: "Waiting for ticket information..."
- Below center: A green progress bar with "DF+" on the left and "PAUSED" in the center.
- Middle row (left to right):
 - Drum Speed: 0.0 RPM
 - Slump: Empty/250 IN/PSI
 - Water Added: 0.0 GAL (with a "Reset" link below)
- Bottom row (left to right):
 - "CURRENT STATUS" button with "Driver Prep" below it.
 - "NEXT STATUS" button with a right arrow.
 - "MESSAGES" button with "0" below it.
- Right sidebar (bottom to top):
 - "D. Briggs" with "Menu / Log Out" below it.
 - "Time" with "4:07 PM" below it.

DigiTrack reads out both the charge pressure and the calculated slump (in). DigiTrack does not account for your company's profile drum speed. It is always calculated. ONLY USE SLUMP (in) VALUE WHEN IN THE PROFILE DRUM SPEED!

The screenshot shows the DigiTrack interface with the following elements:

- Top left: "Waiting for address" with a blue background and three dots below it.
- Top right: "Previous truck" with a dashed line below it.
- Center: "Waiting for ticket information..."
- Below center: A green progress bar with "DF+" on the left and "CHARGING" in the center.
- Middle row (left to right):
 - Drum Speed: 2.9 RPM
 - Slump: 8.9/427 IN/PSI
 - Water Added: 3.4 GAL (with a "Reset" link below)
- Bottom row (left to right):
 - "CURRENT STATUS" button with "Driver Prep" below it.
 - "NEXT STATUS" button with a right arrow.
 - "MESSAGES" button with "0" below it.
- Right sidebar (bottom to top):
 - "D. Briggs" with "Menu / Log Out" below it.
 - "Time" with "4:08 PM" below it.