MINING IS A TOUGH INDUSTRY.
DAY IN AND DAY OUT, THE GOAL IS
TO MOVE AS MUCH MATERIAL AS
POSSIBLE. This is demanding on min-
ers and equipment alike, both of which
are prone to frequent breakdowns. For
Ferreyros, a Peruvian company supplying
Caterpillar® trucks to local mines, equip-
ment failure can lead to enormous war-
ranty costs. They needed to make sure
any warranty claims are valid and not
due to trucks being loaded over capacity, a
tempting practice for mine operators.
Ferreyros contacted Scale International
Service S.A.C. (SISSAC) in Lima, where
Jaime Raya came up with a solution:
use two axle scales, Rice Lake’s 920i®
indicator, and an Android™ smartphone
to document truck weighments. The
open architecture of Android’s operating
system would make the app develop-
ment possible. By mounting the 920i in a
Pelican™ case, the entire system would be
portable and durable.
SISSAC developed the custom app to
track all the needed information: truck ID
number, gas tank level, engine RPMs at the
time of weighing, number of front-loader
scoops used to fill the truck, and weight
on the onboard weighing instrument. This
data is manually entered into the app’s
prompts as the truck is parked on the axle
scale. Because the indicator and phone are
connected to the same Wi-Fi network, live
weighments from the 920i are captured by
the app and attached to the truck’s ID.
This offered the ultimate portable, self-
contained weighing system. SISSAC can
transport the equipment to different sites
to take instant weighments, ensuring
trucks at any location are not being mis-
treated. Once back at the office, all data is
transferred from the app to a PC where a
report is generated, analyzing the weights.
With the increasing functionality of tab-
lets, SISSAC programmed their app to be
scalable to larger screens. Now, they can
use their original Motorola Milestone™
or the new kid in the office—a Samsung
Galaxy Tab™ with a larger touchscreen for
easier data entry.
SISSAC is currently working on more
improvements to be released in the app’s
second phase. The future version will
automatically capture all data from the
truck’s computer to their Android device
through the computer’s serial output.
Rice Lake’s 920i and the latest mobile
technology—a combination that’s des-
tined to hit pay dirt! ■

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1. The weighing system is set up and on standby
   for vehicles.
2. A truck enters the weighing station and parks
   on the axle scale. Its front axle is weighed and
   information is entered in the application.
3. The 920i obtains the weight, which is wirelessly
   captured and saved in the smartphone.
4. The rear axle is then weighed.
5. Later, the information is transferred from the
   smartphone to a PC to produce a final report that
   analyzes the weight.