

## 3-D MEASUREMENT SYSTEM Enhances Our Field Service Precision

SMS group continually adds facilities, equipment and new technologies to improve our services and reduce our costs so we can help our customers reduce costs and produce superior products. To enhance our field service capabilities, we've acquired the latest advancement in measurement technology.

With a portable 3-D computer-aided contact coordinate measurement system, SMS group's staff of technical, operational and process control experts can now more precisely align, inspect and set-up any type of primary metals-making or power generation equipment that requires precision alignment.

### Amazing accuracy and speed

Compared to standard optical measuring equipment, our new laser system allows us to take extremely accurate measurements over large distances with a point-to-point accuracy up to 0.002 inches (0.0508 mm), faster and with fewer technicians. Using laser technology, our new system also measures 3-D coordinates in real time and has Active Thermal Compensation so it's accurate in all environments.

And because our system uses a proprietary Absolute Distance Measurement (ADM) method, if the laser beam is interrupted, the operator can instantly reacquire the beam



▲ Equipped with a 3-D laser measurement system, our technicians can align, inspect and set-up equipment faster and more precisely than ever before

and continue to take measurements. This ADM method makes our technicians more efficient and helps them align and inspect equipment faster with greater accuracy.

### Amazing precision and flexibility

Because our laser system provides extremely accurate data and is very flexible, we can precisely set-up, align and inspect more types of equipment than ever before. Pre-

mise, fast measurements also make it easier for us to trouble-shoot operating problems by comparing measurements to benchmarks established at the initial alignment.

The flexibility of our new system also allows us to take equipment measurements that weren't feasible before. Increased precise measurements will provide additional equipment parameters that enhance equipment alignment and further facilitate trouble shooting.

### More than measurements

Our field service experts don't just take measurements and provide raw data. Our technicians know what the data means and have the expertise to know what adjustments need to be made and the skills to precisely align equipment so it operates at peak efficiency.

### Amazing results for you

With our new measurement system and our long-established field service expertise, we can help you optimize your processes. Equipment we have precisely aligned operates better, longer and provides consistently better quality product. Longer runs mean less down time. Plus our new laser system allows us to align equipment faster, which also reduces costly downtime.

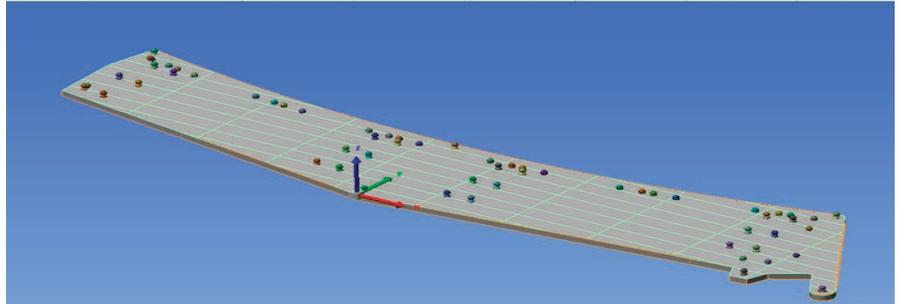
To learn more about how SMS group's laser-enhanced field services can help you optimize your equipment's operation, reduce downtime and improve your products, call us at +1-412-231-1200 or send an email to [Info.TechnicalServices@SMS-group.com](mailto:Info.TechnicalServices@SMS-group.com)



- ▲ Laser measurement system provides accuracy up to 0.002 inches
- ▼ Dimensional inspection and certification of a segment apron frame.

#### Cross Beam Measurements

Units	Inches					
Coordinate System	world					
Name	Control	Nominal	Measured	Tolerance	Deviation	Test
HOLE 06	X	94.260	94.262	±0.005	0.002	Pass
HOLE 06	Y	44.176	44.175	±0.005	-0.001	Pass
HOLE 07	X	96.716	96.716	±0.005	0.000	Pass
HOLE 07	Y	33.454	33.452	±0.005	-0.002	Pass
HOLE 08	X	99.174	99.171	±0.005	-0.003	Pass
HOLE 08	Y	22.732	22.730	±0.005	-0.002	Pass
HOLE 09	X	87.680	87.680	±0.005	0.000	Pass
HOLE 09	Y	42.668	42.664	±0.005	-0.004	Pass
HOLE 10	X	90.137	90.135	±0.005	-0.002	Pass
HOLE 10	Y	31.946	31.945	±0.005	-0.001	Pass



### SMS GROUP

100 Sandusky Street  
Pittsburgh, PA 15212 USA

P: +1-412-231-1200

Email: [Info.TechnicalServices@SMS-group.com](mailto:Info.TechnicalServices@SMS-group.com)  
[www.sms-group.us](http://www.sms-group.us)