



# LANCELESS BLAST FURNACE 3D PROFILE METER

**MWS-BF-3D** PAT.

# MILLI-SCANNER



The Wadeco MWS-BF-3D Milli-Scanner is a combination of a mechanical scanning system and high-speed rangefinder which can be used to display both a 3D surface map after every charge or after every feeder rotation or a 2D profile after every feeder rotation.

**WADECO CO.,LTD.**

# LANCELESS BLAST FURNACE 3D PROFILE METER

**All problems with conventional lance systems solved through measurement of either the 3D surface or 2D stockline!**



## Special Features

- 3D surface map and its profiles at selectable angles measured in 20 seconds and displayed for every charge.
- The descending speed can be measured and displayed for any angle of the 3D surface map (option).
- 2D profile measurement for every feeder rotation when 2D mode is selected. (PAT.).
- 3D surface map measurement for every feeder rotation (option)
- Compact, simple design results in easy maintenance.
- Since the profilometer does not move in and out of the furnace, the structure is simple and space-saving.
- With a valve, the profile meter is separated from the inside of the blast furnace.
- No installation platform required.
- Maximum distance measurement of 15m.
- Since the surface map of the charge can be measured at high speed, proper charge distribution control is possible.
- Special filter for elimination of unwanted signals (chattering, obstructions inside the blast furnace).
- The amount of build-up in the profilometer can be measured by attenuation of the milliwaves from outside the furnace.
- Water cooling is not required.

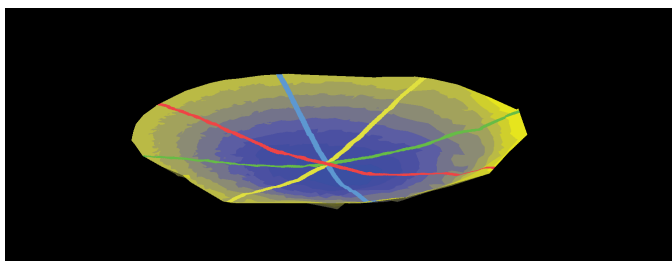
## Specifications

- |                          |                                     |
|--------------------------|-------------------------------------|
| ● Field of view          | Front/Back: 80°<br>Left/Right: 80°  |
| ● Accuracy               | ±50mm                               |
| ● Measurement Time       | 3D: Min. 20 sec.<br>2D: Min. 1 sec. |
| ● Installation hole size |                                     |
| Without valve            | Approx. φ 500mm                     |
| With valve               | Approx. φ 872mm                     |

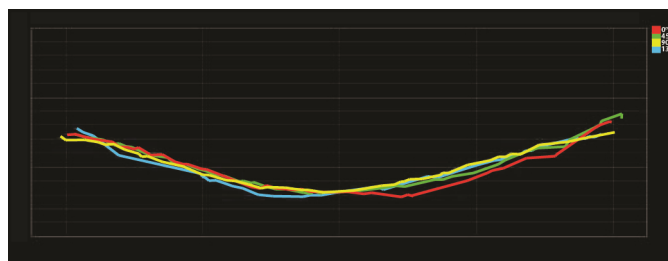
## Output or Display

- 3D surface measurement map data
- 2D profile measurement data
- 3D descending speed measurement map data
- 2D descending speed measurement data

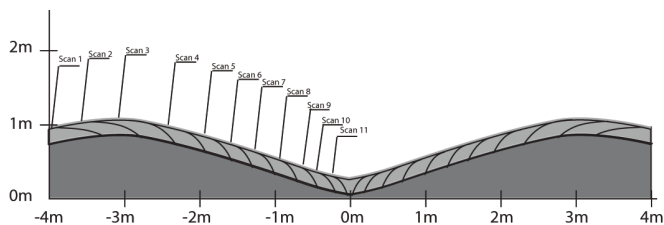
## Actual Measurement Data



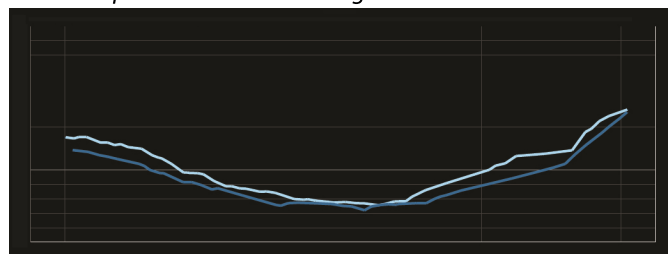
3D surface map divided at selectable angles



Sectional profile at selectable angles



2D profile for every feeder rotation (image)



Actual 2D profile

These specifications may be changed without notice.



**WADEGO CO.,LTD.**

HEAD OFFICE 1-12-9, Meishin-cho, Amagasaki-shi, Hyogo-ken, 661-0021, Japan  
TEL.(06)6422-1248 FAX.(06)6422-1247

TOKYO BRANCH 202 Shibuya-homes,2-1,Udagawa-cho,Shibuya-ku,Tokyo  
150-0042,Japan  
TEL.+81-3-3770-5519 FAX.+81-3-3770-5520  
www.wadeco.co.jp