Laser measuring heads LDS



Applications

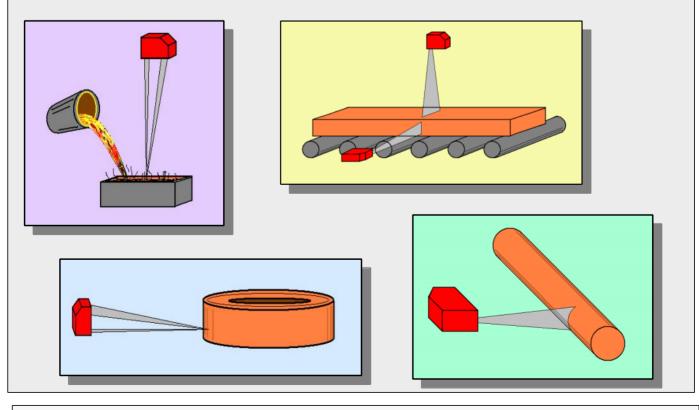
- Level measurement of liquid aluminium.
- Diameter measurement of rings in hot rolling mill.
- Dimensional controls in siderurgy.
- Distance and length measurement.

Description

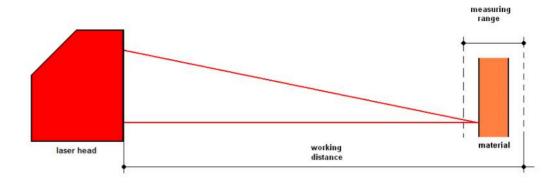
The laser heads LDS are used in heavy industrial environments where it is necessary to protect the measuring sensors and instruments against **high temperature**, **dust**, **possible crashes**, **etc...** typical of metal industry and of all production processes with heat sources.

The main function of LDS laser heads is to provide a solid **thermal and mechanical protection** to laser sensors in order to maintain their performances in presence of hostile environment.

The heads are equipped with air or water cooling system, optical windows air purging system, double wall construction and automatic temperature control system in the measuring room.



Technical data



Model	LDS-xxxx-HHT	LDS-xxxx-HHTW	LDS/Scan-xxxxx-HHTW
Working principle	Fixed point triangulation		Scanning triangulation
Working distance	from 500 to 4000 mm		from 500 to 2000 mm
Measuring range	from 100 to 2000 mm		from 100 to 1400 mm
Resolution	from 0,01 to 0,5 mm		from 0,08 to 0,8 mm
Oscillating angle	-		from 10 to 50°
Scanning length	•		from 80 to 2000 mm
Scanning frequency	-		from 5 to 30 Hz
Angular resolution	-		from 0,08 to 0,4°
Sampling rate	up to 1	0 KHz	up to 6 KHz
Material temperature	up to 1300°C (higher on request)		
Analog output	4 – 20 mA		-
Digital I/O	measure ON, regulation ON, overtemperature alarm, laser ON/OFF		
Data interface	RS-232, RS-422, SSI		RS-232, RS-422
Power supply	24 V dc +/- 10%		

Examples



