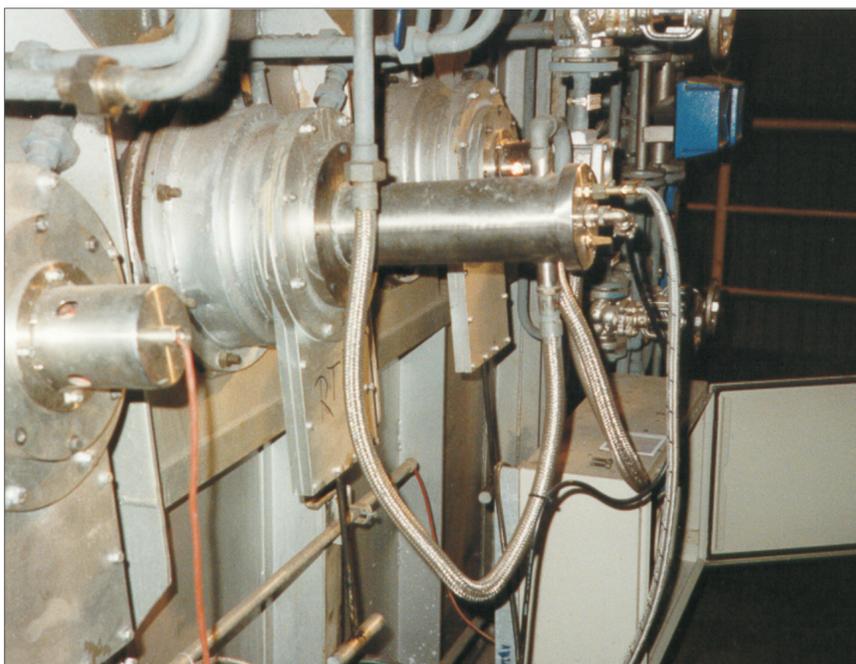


Furnace Observation without Transfer Device

Watercooled furnace probes with integrated CCD cameras and especially designed furnace objectives enable high quality continuous visual observation of processes in furnace rooms.

When to use Furnace Observation without Transfer Device?

- ❑ Furnace Observation without Transfer Device is the first choice for all observation tasks that require absolute tightness of the observation hole. (e.g. observing process under vacuum condition or special atmosphere)
- ❑ Moreover the lack of space can call for an System without Transfer Device. The automatic Transfer Device requires space outside the furnace according to wall thickness and the respectively chosen stroke. For all cases that lack sufficient space the system without Transfer Device is the optimal solution.
- ❑ Last but not least this system is a reasonable alternative for observation tasks with very low budget.



Pros and Cons for Furnace Observation without TD

Pros

- The small dimensions of this system enable observation in very narrow places.
- The system can be used in furnace rooms that have to be absolutely tight.
- Investment costs are comparatively low.

Cons

- In any case of alarm the furnace probe has to be removed immediately from the furnace to prevent fatal damage caused by over temperature. This has to be done manually by staff member.

System Components



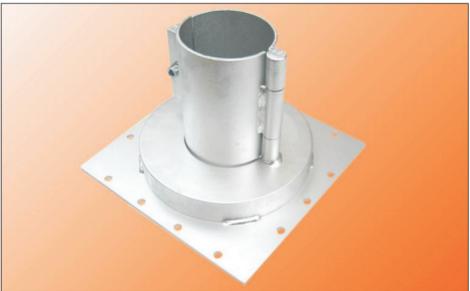
Furnace Probe

Alternatively with axial or radial view direction. View angles vary from 10° to 110°
Cameras with colour or black/white imaging
see sheet with furnace probe componentst



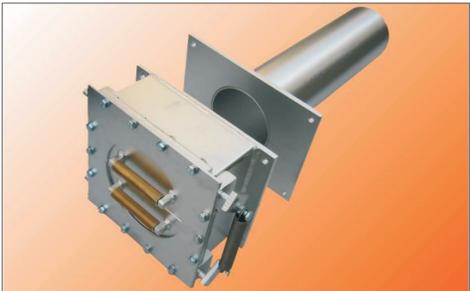
Camera-System-Cable

12 x flex 0,25 mm² with integrated
1 x 75 Ohm video conductor, double shielded
both ends with 16-channel heavy duty plug
cable coated with SILTEMP protection heat resistant
up to 230 °C



Mounting Flange

for mounting the furnace probe,
assembling possible even at very narrow places.
The furnace probe is connected by a clamping device
allowing dip length to be chosen according to
requirements.



Sicromal Tube and Shutter Box

to be inserted into the furnace opening. A sicromal
tube made of material No. 1.4841 will be inserted into
the view opening. The shutter box operates
automatically by spring power and shuts the furnace
opening in case the furnace probe is removed.



Control and Supply Cabinet

for monitoring of cooling media and purging air. Any
mdeia failure will be indicated visually and/or
acoutically at the cabinet. All alarms will be reported
pot. free to control center also.



Metal flex Hoses

1 x NW 8 DKL 10 for purging air
2 x NW 13 DKL 15 for cooling medium