

Furnace Tensiometers



FEATURES

- For strip tension measurements in a continuous furnace
- From 0 - 100daN up to 0 - 5000daN
- Accuracy better than 0.1% of the maximum strip tension
- Non sensitive to thermal expansion of the deflecting roller
- Non sensitive to side load forces
- Compact and rugged
- Class accuracy better than 0.1 % of the maximum tension strip
- Very well adapted to strip tension with ratio $T_{max}/T_{min} > 20$
- Based around standard KIS loadcells, i.e. low cost spare parts
- Easy for maintenance and calibration
- Custom design adapted to existing bearing blocks

DESCRIPTION

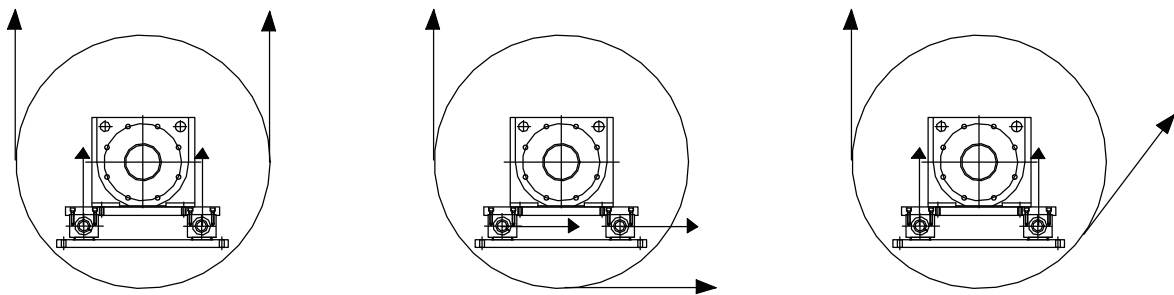
The PST has been specially designed for strip tension applications into a continuous furnace where very specific requests are needed in order to have a good accuracy at maximum strip tension, and mainly at minimum strip tension. The PST tensiometer is using four standards KIS

load cells into a specific arrangement which makes the PST tensiometer totally non sensitive to axial forces and bending moments induced by the deflecting rollers due to high thermal expansion.

APPLICATIONS

- Mainly for steel industry
- Continuous furnaces for hot galvanizing lines and annealed lines

OUTLINE DIMENSIONS



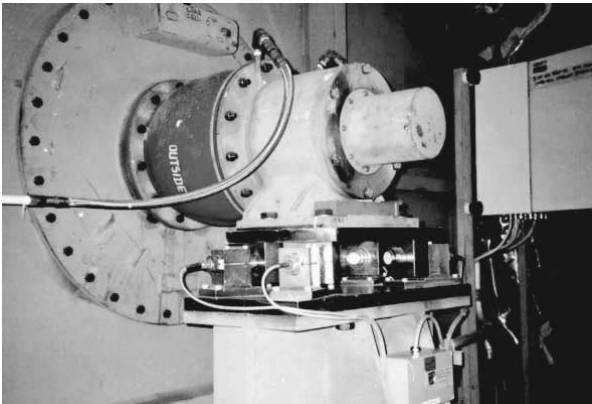
What ever is the profile of the strip tension on the measuring roller, what ever is the mechanical mounting of the measuring roller on the new or existing furnace, the PST will be mechanically adapted to the customer application

SPECIFICATIONS

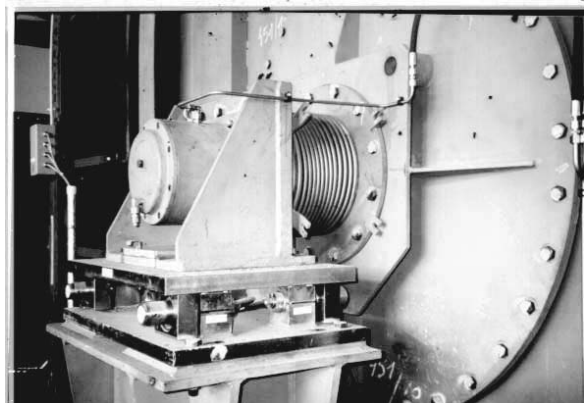
PARAMETER		VALUE	UNIT
Nominal Range (N.R.)		20-40-80 & 200	kN
Combined error		<0.05	% of N.R.
Repeatability		<0.03	% of N.R.
Safe overload	safe with no zero shift	100	% of N.R.
	safe with zero shift	200	% of N.R.
Thermal drift		-10 to +50	°C
Thermal drift	of the zero	<0.003	% of N.R./°C
	of the output	<0.003	% of N.R./°C
Nominal output at N.R.		2.04	mV/V
Electrical output		Four cables length: 5m	
Protection		IP67	
Material		Loadcells in stainless steel Mounting kit electro zinc chromated	

Note: Depending on furnace applications, the KIS loadcells of the PST can be delivered with an ATEX approval

APPLICATIONS



Tensiometer PST-40kN under a furnace roller



Tensiometer PST-80kN under a furnace roller

MEASURING SYSTEM: APPLICATION EXAMPLE

