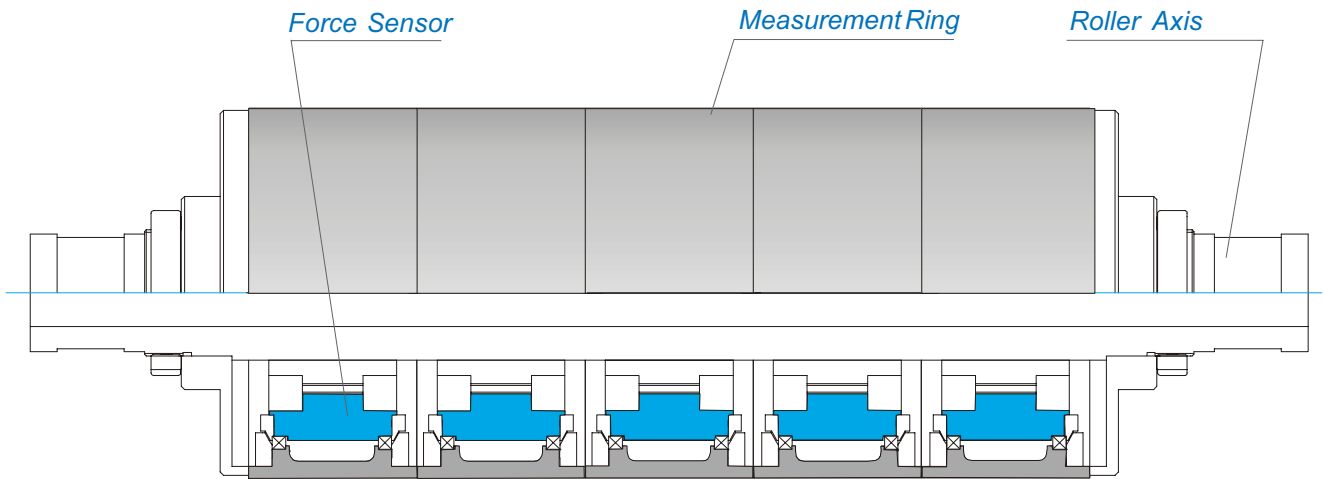




Shapemeter Roll - System Vollmer for Tension Levellers



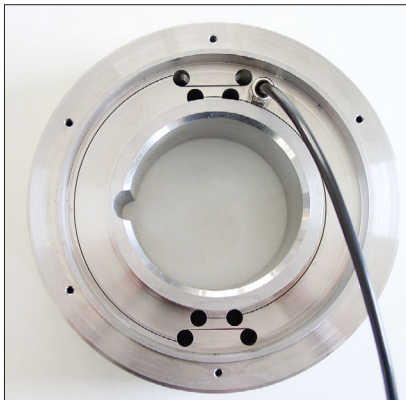
The strip runs under or over the shapemeter roll installed at the exit end of the tension leveller.

This shapemeter has been specially designed for tension levellers. Its measuring rings have very low inertia for **easy rotation**, thus allowing high precision shape measurement even under **low strip tension** as normally found at the exit end of a tension leveller.

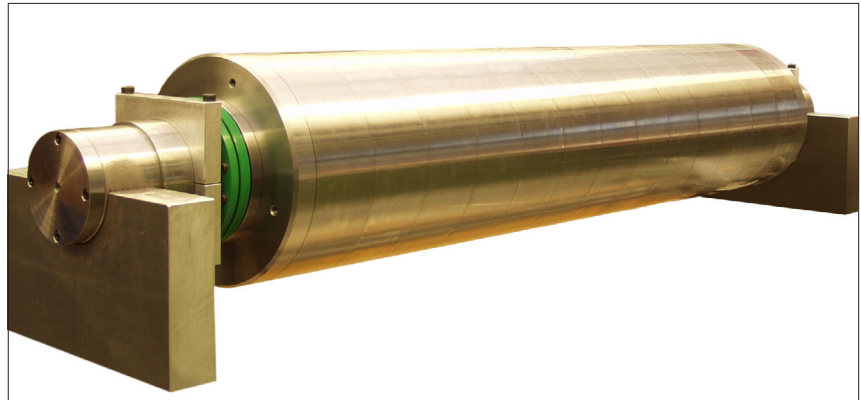
A rigid cylinder forms the axis upon which several roller bearings are mounted. The inner race of these bearings have **sensitive force sensors** integrated into their construction. The sensors operate according to the bending beam principle to sense the strip tension. The outer bear-

ing races form the measurement rings. Each ring transmits the strip tension of that zone to the pressure sensor below.

This system updates **especially fast** because the strip shape is being permanently measured across the entire strip width.



Each measurement ring contains a force sensor utilizing the bending beam principle. The high resolution



sensors are maintenance free and overload protected. Measurement data is transferred via cable through the stationary roll axis in the industry standard Profibus protocol.

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