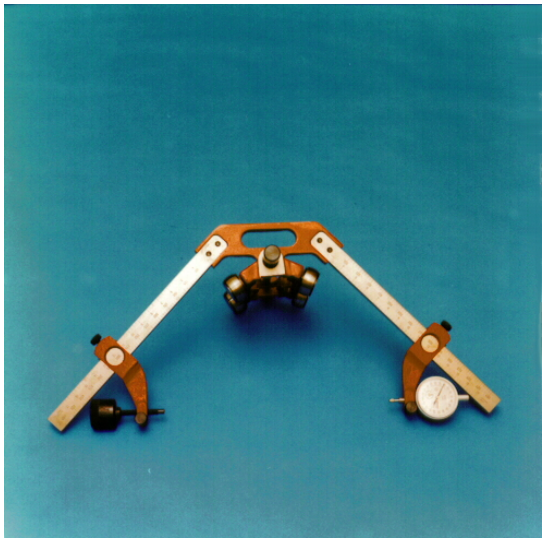
TAILORED DESIGN

The design of the instrument can be tailored to your particular needs. For example, for customers dealing with mirror finish rolls, we supply the instrument with soft carriage wheel tyres and contact probe tips to avoid marking the roll surface.

Please contact us with your particular requirements

REFURBISHMENT

We offer a full refurbishment service to return callipers to the "as new" condition following prolonged periods of use in the harsh environment of the roll shop. This maintains the optimum measurement performance.



IN SHORT

The callipers are based on the well – established scanning micrometer principle. The rugged, self-contained instrument has a proven track record and is easy to use, having been designed for continuous use in the harsh conditions of the average roll shop or mill. The price is a fraction of the price of an average roll and will be recouped in a very short time through better roll usage and improvements in product quality.

These callipers have also been transformed by the use of innovative electronics and software into a comprehensive ***roll inspection and management system (CADNO)***

Please ask for the accompanying brochure on this system.

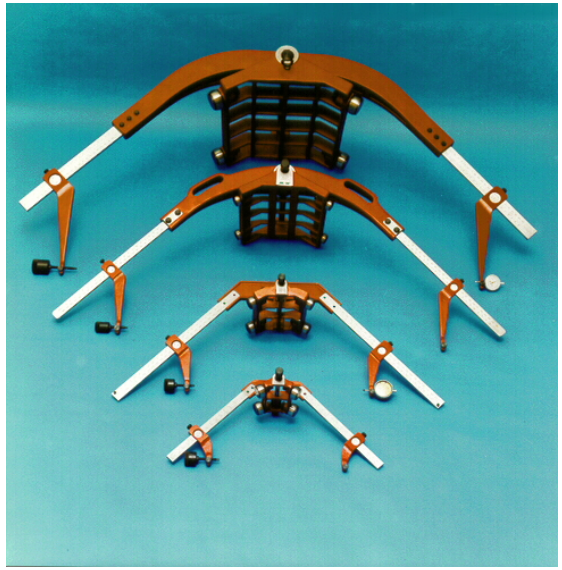
MSW

Metrology Systems Wales
21 Bessant Close
Cowbridge
Vale of Glamorgan
United Kingdom CF71 7HP
Phone & Fax +44(0)1446 772926
E-Mail: D.A.Armstrong@open.ac.uk
Internet: www.MetrologySystems.co.uk

METROLOGY SYSTEMS WALES

ROLL CALLIPER GAUGES

Accurate Roll Measurement



MSW

Simply the Best Roll Measurement!

ROLL CALLIPER GAUGES

These roll calliper gauges are based on the "Trotter", or scanning micrometer gauges familiar to the paper, aluminium and steel industries throughout the world for controlling the quality of roll regrinding. They offer a quick, accurate and operator-insensitive means of roll measurement, quantifying both the **camber** and **taper** of the roll.

The design permits measurements to be made right to the **ends of the roll barrel**.

A pre-adjustable yoke is carried within a four-wheeled carriage, which traverses the roll barrel length.

The yoke carries the dial indicator to measure changes in roll diameter as the roll is traversed.

OPERATOR VARIABILITY

The geometry of roll measurement is such that failing to measure across the maximum chord (diameter) can produce significant errors in the measured variation in roll diameter. It is common for operators using the same micrometer on the same roll to differ in their assessment of absolute diameter by as much as 0.15mm.*

These callipers virtually eliminate this variability due to operator technique.

The geometry and sources of error are described in more detail in our Technical Note No. 9801. We would be pleased to supply a copy on request.

* ("The metrology of large cylinders – exploiting the geometry" Dr. D.A.Armstrong & Dr. R.H.Thomas, Chartered Mechanical Engineer Sept. 1987)

ROLL DIAMETER RANGES

The gauges are produced in four standard sizes to measure the following diameter ranges:

Diameter Range	Part Number
100 – 450 mm (4 –17 in)	M559770
275 – 825 mm (11 – 32 in)	M559772
700 – 1300 mm (28 – 50 in)	M559774
1150 – 1650 mm (45 – 65 in)	M559776

RECOMMENDED DIAL INDICATORS

For **maximum sensitivity** the recommended dial indicators are:

	Metric	Imperial
Graduations	0.002 mm	0.0001 in
Max. Stroke	5 mm	0.2 in
Part Number	900859	900857

Where a **longer stroke** is required the following indicators are available:

	Metric	Imperial
Graduations	0.01 mm	0.0005 in
Max. Stroke	12 mm	0.5 in
Part Number	900858	900856