

Specification

- Steel Straight Edges manufactured in Germany
- Deviations of flatness to DIN 874 & VDI/VDE/DGQ 2618
- Marked with supporting points on side face
- Both working surfaces & side faces are fine ground
- Each straight edge is individually serialised



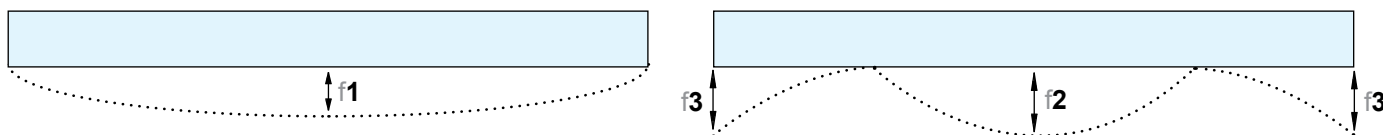
Deflection Data

The deflection data is statically calculated and only approximate for the two shown ways:

f1 (worst support): highest deflection of the straightedge.

f2, f3 (best support): used when the deviations of flatness of the straightedge according to DIN 874 and VDI/VDE/DGQ 2618 are measured.

Support at the so called "Support Points" (Airie points). The position of the Support-Points from ends = 0.22 x length of straightedge



Steel Straight Edges

DIN
874/2

Order Code	Length (mm)	Height (mm)	Thickness (mm)	Tolerance (μm)	Deflection f1 (μm)	Deflection f2 (μm)	Deflection f3 (μm)
59-010-050	500	30	6	21	4	0	0
59-010-075	750	40	8	27	12	0	0
59-010-100	1000	40	8	33	37	1	0
59-010-150*	1500	50	10	46	118	3	2
59-010-200*	2000	60	12	58	259	7	3

Steel Straight Edges

DIN
874/1

Order Code	Length (mm)	Height (mm)	Thickness (mm)	Tolerance (μm)	Deflection f1 (μm)	Deflection f2 (μm)	Deflection f3 (μm)
59-000-050	500	40	8	12	2	0	0
59-000-075	750	50	10	17	7	0	0
59-000-100	1000	50	10	21	23	1	0
59-000-150*	1500	60	12	29	82	2	1
59-000-200*	2000	70	15	37	146	4	2

Steel Straight Edges

DIN
874/0

Order Code	Length (mm)	Height (mm)	Thickness (mm)	Tolerance (μm)	Deflection f1 (μm)	Deflection f2 (μm)	Deflection f3 (μm)
59-005-050	500	50	10	7	2	0	0
59-005-075	750	50	10	9.5	7	0	0
59-005-100	1000	60	12	12	16	0	0

Bevelled Straight Edges

DIN
874/1

Order Code	Length (mm)	Height (mm)	Thickness (mm)	Tolerance (μm)
59-015-050	500	30	6	12
59-015-100	1000	40	8	21

Graduated Bevelled Straight Edges

DIN
866/B

Order Code	Length (mm)	Height (mm)	Thickness (mm)	Tolerance (μm)
59-016-050	500	30	6	12
59-016-100	1000	40	8	21


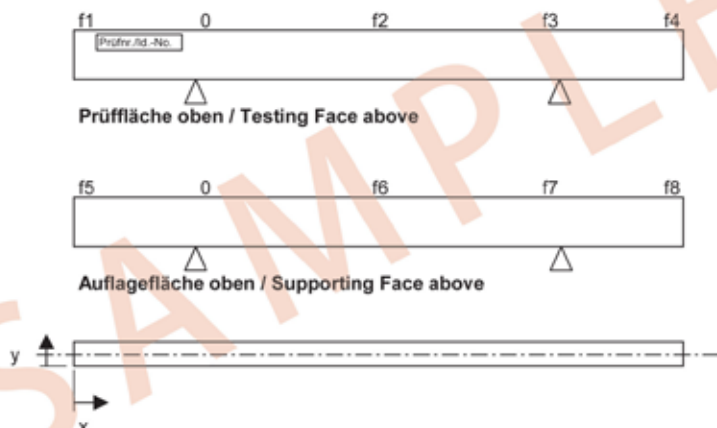
Calibration

According to the requirements of EN 29 000 ff. (DIN EN ISO 9000 ff.), all PZA-products pass a completely recorded 100% final inspection. Our quality assurance system is based on DIN EN ISO 9002.

Straight edges can be supplied with a calibration certificate, indicating retraceability on the national German standards of the PTB/DKD. This calibration certificate is available for an additional cost. For further details of this service, please call our sales team.

The inspection and measuring equipment is regularly calibrated and adjusted, having a known valid relationship to the recognised standards of the PTB (Physikalisch-Technische Bundesanstalt).

Please see page three of this data Sheet for a sample Calibration Certificate.

MESSPROTOKOLL CALIBRATION CHART		MESSZEUGFABRIK PHILIPP ZIMLICH D-63741 ASCHAFFENBURG - www.pza.de				
FLACHLINEAL / STRAIGHT EDGE						
Prüfnummer, Id.-No.:	050430	Accuracy acc. /				
Bestellnummer, Cat.-No.:	030 00 1500	Genauigkeit nach DIN 874/0				
Abmessungen (l x h x b) / Dimensions (l x h x w):	1500 x 70 x 15 mm					
						
Ebenheitsabweichungen f Prüfflächen / Deviations f of flatness, testing faces [µm]						
Pos. x [mm]	7,5	330	750	1170	1492,5	y = 7,5 mm
Test. Face	f1=	ref.	f2=	f3=	f4=	Max. / face:
Prüffläche	1	0	4	6	4	Max. / Seite:
Supp. Face	f5=	ref.	f6=	f7=	f8=	6
Auflagefläche	-6	0	-2	3	3	9
Max. Abweichung gesamt / Max. total deviation						9 µm
Zul. Ebenheitsabw. / Tolerance flatness DIN 874/0						17 µm
Ebenheitsabweichungen g Seitenfläche / Deviations g of flatness, side face [µm]						
gref=	0	g2=	19	g4=	10	
g1=	4	g3=	7	g5=	10	
Max. Abweichung gesamt / Max. total deviation						19 µm
Zul. Ebenheitsabw. / Tolerance flatness DIN 874/0						51 µm
Winkelabweichung Seitenfläche / Squareness of side faces						ok
Zul. Winkelabw. / Tolerance squareness DIN 874/0						51 µm
Durchbiegg. d. Eigengewicht ca. / Deflection caused by weight in f1, f4, f5, f8 app.:						1 µm
Durchbiegg. d. Eigengewicht ca. / Deflection caused by weight in f2, f6 app.:						2 µm
Meßunsicherheit / Measuring uncertainty (+/-):						3,5 µm
Bezugstemperatur / Reference temperature:						20°C
Datum/Date: 31.03.2006			Prüfer/Inspector: R. Denk			
<small>Die Prüfmittel sind durch dokumentierte Vergleichsmessungen auf folgende Normale zurückgeführt / The testing equipment is traceable on the following standards: AKF 4691 PTB 04, Parallelenmaßsatz DKD-K-14501/95-10</small>						