Minebea intec
The true measure

Flat-bed scale IF

For precise weighing results and simple loading and unloading



Explosion protection

GERMAN QUALITY

German Quality

The flat-bed scale IF was developed for ground-level use in tough industrial environments. It is a high-quality, flexible and mobile weighing station and can be used in production processes wherever reliable measurement results and hygienic solutions are required.

The right solution for all of these applications:

- Weighing
- Counting
- Filling and dosing
- Formulation
- Fill quantity control
- Statistics
- Classification
- Statistical process control

Technical specifications

General technical data for the flat-bed scale IF

Parameters	Description
IFP	– Powder-coated steel (colour: RAL7030) – Protection class IP65 – Option Y2 for use in Ex zone 2 and 22 ATEX: II 3 GD EEx nA II T6 T80°C
IFS	– Blasted stainless steel 1.4301 – Protection class IP68 Optional: – Load plate in electropolished stainless steel 1.4301 or electropolished stainless steel 1.4571 – Option Y2 for use in Ex zone 2 and 22 ATEX: II 3 GD EEx nA II T6 T80°C
IFXS	– Blasted stainless steel 1.4301 – Protection class IP69K – Ex version for use in Ex zone 1 and 21 ATEX: II 2 GD EEx ib II C T4 T150°C Optional: – Load plate in electropolished stainless steel 1.4301 or electropolished stainless steel 1.4571
Platform cable length	6 m, mounted as standard on the weighing platform
Operating temperature range accuracy class III	-10 ... +40 °C
Operating temperature range not verified	-10 ... +40 °C
Storage temperature range	-10 ... +40 °C
Weighing system	Four C3 load cells
Resolution	Verifiable in class III (1×3,000 e, 2×3,000 e) or non-verifiable up to 30,000 d (with options T10/T16: up to 15,000 d)
Miscellaneous	Four height adjustable feet, levelling equipment, overload protection

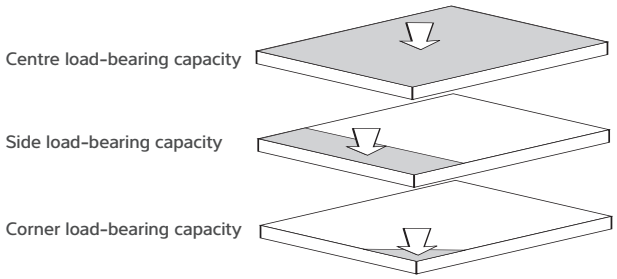
Resolutions of single-range scale

Weighing range in kg	-I 30,000 d in g	-L 15,000 d in g	-LCE 1×3,000 e verifiable in g
150	5	10	50
300	10	20	100
600	20	50	200
1,000	50	100	500
1,500	50	100	500
3,000	100	200	1,000

Resolutions of multi-range scale

	-NCE, 2×3,000 e verifiable			
Weighing range in kg	Weighing range 1 in kg	Resolution for weighing range 1 in g	Weighing range 2 in kg	Resolution for weighing range 2 in g
150	60	20	150*	50
300	150	50	300	100
600	300	100	600	200
1,000	600	200	1,000	500
1,500	600	200	1,500	500
3,000	1,500	500	3,000	1,000

* 150 kg weighing range not possible for sizes NN, RN, RR, WR as -NCE variant.



Operating limits – Load capacity in accordance with DIN 1925/normal load 2

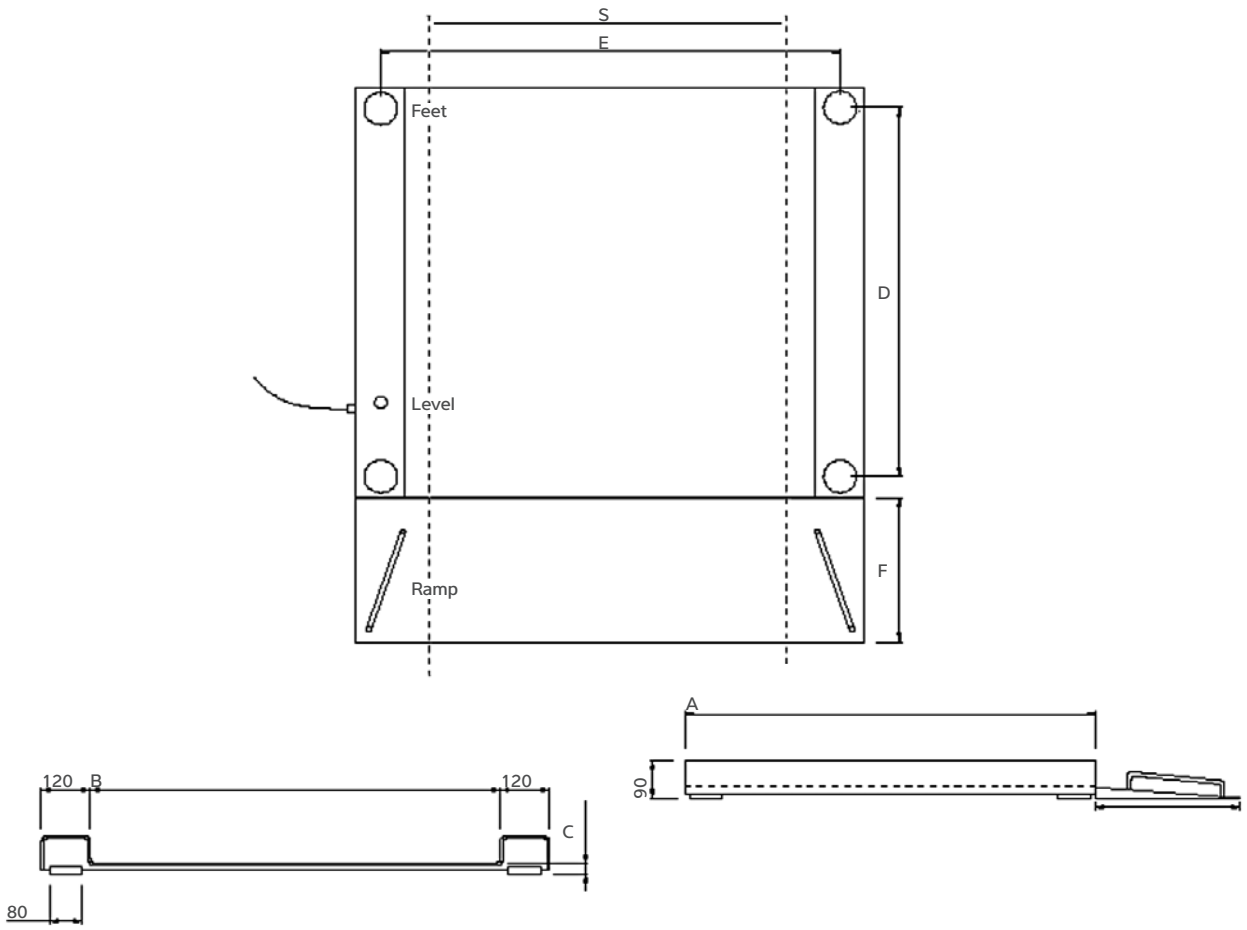
Weighing range in kg	Dimension codes	Centre load-bearing capacity in kg	Side load-bearing capacity in kg	Corner load-bearing capacity in kg	Load-bearing capacity per axle with optional installation heights*
150	GG to NL	300	150	75	150
150	NN to WR	600	300	150	300
300		600	300	150	300
600		1,700	850	425	850
1,000		2,000	1,000	500	1,000
1,500		3,000	1,500	750	1,500
3,000		3,500	1,500	750	1,500

Own weight and packaging data

Size code	Dimensions (A×B in mm)	Net weight (incl. 1 ramp) in kg	Gross weight (with palette) in kg	Weight of the ramp in kg	Packaging		
					Length in mm	Width in mm	Height in mm
GG	600×600	55	90	14	1,160	1,230	260
IG	800×600	65	100	14	1,160	1,230	260
II	800×800	75	110	18	1,160	1,230	260
LG	1,000×600	75	110	14	1,160	1,230	260
LI	1,000×800	85	120	18	1,160	1,230	260
LL	1,000×1,000	130	170	30	1,400	1,440	280
NL	1,250×1,000	140	180	30	1,400	1,440	280
NN	1,250×1,250	170	218	35	1,650	1,680	280
RN	1,500×1,250	200	248	35	1,650	1,680	280
RR	1,500×1,500	230	285	40	1,650	1,680	280
WR	2,000×1,500	270	335	40	2,150	1,900	280

Technical diagrams

Flat-bed scale IF



*** Minimum track width of the scale (S in mm)**
- NB: 25 or 35 mm with optional installation heights
- Calculation basis for min. track width (S): width (B) minus 150 mm

Platform dimensions flat-bed scale IF

Size code	GG	IG	II	LG	LI	LL	NL	NN	RN	RR	WR
A (mm)	600	800	800	1,000	1,000	1,000	1,250	1,250	1,500	1,500	2,000
B (mm)	600	600	800	600	800	1,000	1,000	1,250	1,250	1,500	1,500
E (mm)	720	720	920	720	920	1,120	1,120	1,370	1,370	1,620	1,620
D (mm)	500	700	700	900	900	900	1,150	1,150	1,400	1,400	1,900

Dimensions (A×B in mm) Weighing range	Size code	Standard installation height/optional installation height C (mm)					
		150 kg	300 kg	600 kg	1,000 kg	1,500 kg	3,000 kg
600×600	GG	35/25	35/25	35/25	35/25	–	–
800×600	IG	35/25	35/25	35/25	35/25	–	–
800×800	II	35/25	35/25	35/25	35/25	35/25	–
1,000×600	LG	35/25	35/25	35/25	35/25	35/25	–
1,000×800	LI	35/25	35/25	35/25	35/25	45/35	–
1,000×1,000	LL	35/25	35/25	35/25	35/–	45/35	45/–

All dimensions in mm

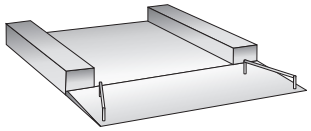
Dimensions (A×B in mm)	Size code	Standard installation height/optional installation height C (mm)					
Weighing range		150 kg	300 kg	600 kg	1,000 kg	1,500 kg	3,000 kg
1,250×1,000	NL	35/25	35/25	35/25	35/–	45/35	45/–
1,250×1,250	NN	35/25	35/25	45/35	45/35	45/35	45/–
1,500×1,250	RN	35/25	35/25	45/35	45/35	45/35	45/–
1,500×1,500	RR	45/35	45/35	45/35	45/–	45/–	45/–
2,000×1,500	WR	45/35	45/35	45/35	45/–	45/–	45/–

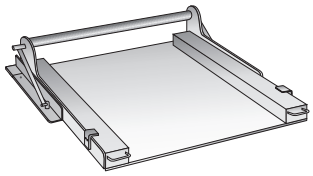
Access ramp dimensions flat-bed scale IF

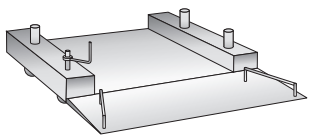
Size code	GG	IG	II	LG	LI	LL	NL	NN	RN	RR	WR
F (mm), at 35/25 mm installation height	350	350	350	350	350	350	350	350	350	350	–
F (mm), at 45 mm installation height	–	–	–	–	500	500	500	500	500	500	500

Options

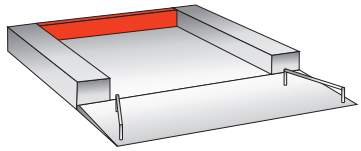
Flat-bed scale IF overview

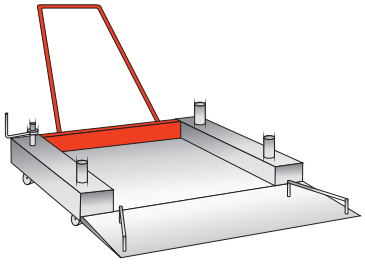
Standard model	Option	Description
	T4	Drive-through protection for loading and unloading from one side only
	T13	Four transport grips on front and rear side
	T6	Rollers on the rear side and grips on the front side for one-sided lifting and manoeuvring
	T15	Second ramp for two-sided loading and use as a drive-through scale
	T14	Column for mounting an electronic scale display
	T9	Cover plate for additional protection of the underside of the platform with openings for the feet

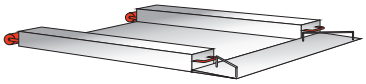
Folding models	Option	Description
	T16	Premium folding device: meets NIOSH requirements for one-person operability (required lifting force < 20 kg)
	T17	As with option T16, however, with a second ramp for two-sided loading and use as a drive-through scale
	T10	Basic folding device with folding hinge and gas-pressure spring for two-person operation
	T11	As with option T10, however, with a second ramp for two-sided loading and use as a drive-through scale
	T4	Drive-through protection for loading and unloading from one side only
	T9	Cover plate for additional protection of the underside of the platform with openings for the feet

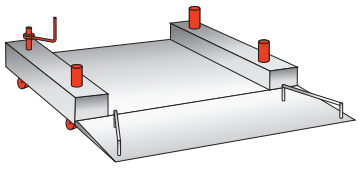
Models with wheels	Option	Description
	T7	Four built-in, foldaway wheels for easy manoeuvring of the platform
	T5	Steering drawbar for easy movement, combined with drive-through protection as standard
	T4	Drive-through protection for loading and unloading from one side only
	T9	Cover plate for additional protection of the underside of the platform with openings for the feet
	T15	Second ramp for two-sided loading and use as a drive-through scale
	T14	Column for mounting an electronic scale display

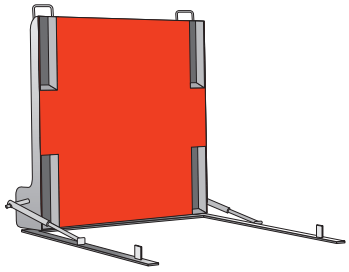
The options for each model variant in detail

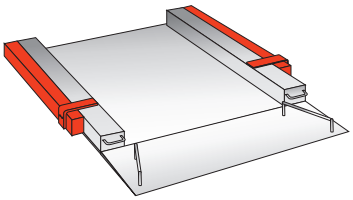
Option T4: closing panel	Description
	Drive-through protection for loading and unloading from one side only

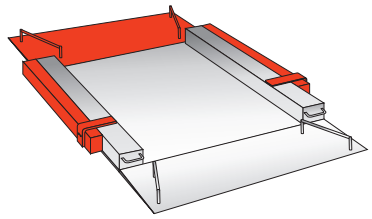
Option T5: drawbar (incl. closing panel)	Description
	Steering drawbar for easy movement, combined with drive-through protection as standard

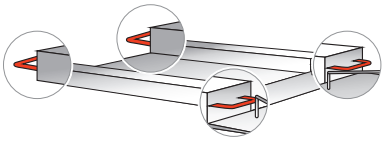
Option T6: two grips, two rollers	Description
	Rollers on the rear side and grips on the front side for one-sided lifting and manoeuvring

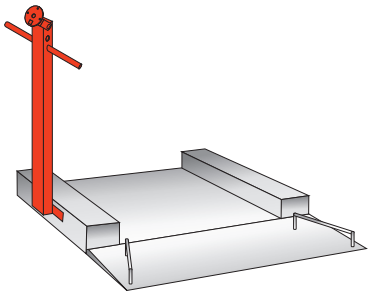
Option T7: manual lifting mechanism	Description
	Four built-in, foldaway and integrated wheels for easy manoeuvring of the platform

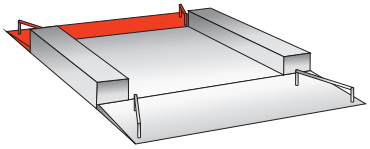
Option T9: bottom plate	Description
	Cover plate for additional protection of the underside of the platform with openings for the feet

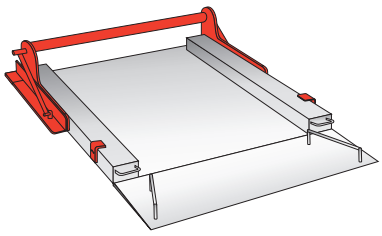
Option T10: basic folding device	Description
	Basic folding device with folding hinge and gas-pressure spring for two-man operation

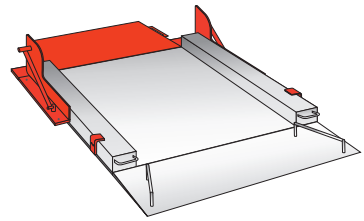
Option T11: basic folding device with second Ramp	Description
	Basic folding device with folding hinge and gas-pressure spring for two-man operation, with second ramp for two-sided loading and use as a drive-through scale

Option T13: four grips	Description
	Four transport grips on front and rear side

Option T14: stainless steel column	Description
	Column for mounting an electronic scale display

Option T15: basic model with second Ramp	Description
	Basic model with a second ramp for two-sided loading and use as a drive-through scale

Option T16: premium lifting mechanism	Description
	– Premium folding mechanism: compliant with NIOSH requirements for one-person operation (required lifting force < 20 kg) – Deep weighing surface for safe and easy loading – 88° lifting angle for easy cleaning – Optional surface finish (roughness< 0.4 µm)

Option T17: premium folding device with second Ramp	Description
	Premium folding device: meets NIOSH requirements for one-person operability (required lifting force < 20 kg), with a second ramp for two-sided loading and use as a drive-through scale

Ex solutions

Explosion protection

Ex application areas for flat-bed scale IFP4.../IFS4... with option Y2

Zone	Labelling
2	ATEX: II 3G Ex nA IIC T6 Gc
22	ATEX: II 3D Ex tc IIIC T80°C Dc

Ex application areas for flat-bed scale IFXS4...

Zone	Labelling
1	ATEX: (II 2 G) EEx ib IIC T4 USA (FM): IS CL I, II, III, DIV 1, 2, GP A,B,C,D,E,F,G T4 CL I, zone 1, AEx ib IIC T4 CL II, zone 20 Canada (CSA): Ex ia CL I,II,III, DIV 1, 2, GP A,B,C,D,E,F,G T4 zone 1, Ex ib IIC T4 zone 20 DIV 2: Ta = 50°C
21	ATEX: (II 1D) T155°C

Ordering information

Ordering system legend for flat-bed scale IF

Product range	Explosion protection	Material/ Version	Number of load cells		Weighing range (kg)	Weighing platform size		Display resolution
IF	X	P	4	–	150	GG	–	L
		S			300	IG		I
					600	II		LCE
					1,000	LG		NCE
					1,500	LI		
					3,000	LL		
						NL		
						NN		
						RN		
						RR		
						WR		

Example order code: IFP4-1500RR-L

Versions	
P	Painted steel
S	Stainless steel
X	Ex-protected

Resolutions	
L	15,000 d, non-verifiable
I	30,000 d, non-verifiable
LCE	3,000 e, verifiable
NCE	2×3,000 e, verifiable

The products and solutions presented in this data sheet make major contributions in the following sectors:



The technical data given serves as a product description only and should not be understood as guaranteed properties in the legal sense.

Specifications subject to change without notice.
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