High-performance clamping

Clamping force of up to 35,000 N

Increasingly high clamping pressures with larger throat depths and wider openings. These are the daily requirements of the original BESSEY high -performance clamps. Applications include steel fabrication, welding, shipbuilding and automotive manufacturing as well as heavy timber construction, wood laminations and general carpentry. In other words, wherever sturdy or heavy parts need to be clamped securely and with high clamping pressure. Developed on the basis of the tried-and-tested BESSEY all-steel screw clamp, the original BESSEY high-performance clamps fulfil all requirements with panache... again and again!

The high-performance clamp STBS – very sturdy and long-lasting, offering exceptional clamping pressures.

High-performance clamps

You Tube

20 % more clamping force per spindle rotation

Your benefits at a glance:

1 Maximum stability
The optimised profile shape guarantees greater clamping force build-up in the shortest time, while maintaining greater stability and safety. The fixed clamp forged from a single piece with moulded pressure plate is hardened, tempered and galvanised, making it highly durable and torsion-resistant.

2 Forged sliding arm
The sliding arm has a shape that allows for more efficient transfer of force. As a result of its more linear transfer of force, the U-shaped sliding arm offers maximum security with the heaviest of loads. You can rely on that.

3 Special tilting pressure plate
The heat-resistant pressure plate is replaceable and can be tilted up to 35° so it can even clamp on angled or sloping surfaces. It has an extremely long service-life due to the oil-soaked sintered steel insert's excellent sliding and emergency running properties.

4 Tempered spindle
The tempered spindle is particularly sturdy and wear-resistant. This considerably increases its durability.

Improved rail profile means greater productivity

The innovative shape of the BESSEY rail profile and sliding arm provide a number of productivity enhancing benefits. These benefits include more clamping force per spindle rotation and more clamping stability for faster and safer work. Moreover, the shape of the rail profile and sliding arm guarantees better contact with the work surface at higher clamping forces. The BESSEY high-performance clamp is the ideal tool for your clamping jobs, day after day.

High-performance clamps

- Clamping force up to 8,500 N at tightening torque of 25 Nm
- 20 % more clamping force per spindle rotation with optimised rail profile
- Maximum safety due to the better linear transfer of force of the sliding arm
- Long life due to heat-resistant pressure plate with sintered steel insert, which can be tilted up to 35°

- Clamping force up to 12,000 N at tightening torque of 40 Nm
- 20 % more clamping force per spindle rotation with optimised rail profile
- Maximum safety due to the better linear transfer of force of the sliding arm
- Long life due to heat-resistant pressure plate with sintered steel insert, which can be tilted up to 35°

Fitters' clamp SLM

№	←a→	←b→	←x→			€
	mm	mm	mm	kg	qty.	V2
SL20M	200	120	28 x 11	1.88	5	74,50
SL25M	250	120	28 x 11	2.00	5	76,80
SL30M	300	120	28 x 11	2.11	5	79,60
SL40M	400	120	28 x 11	2.34	5	84,20
SL50M	500	120	28 x 11	2.60	5	89,10
SL60M	600	120	28 x 11	2.82	5	93,70

High-performance clamp SGM

№	←a→	←b→	←x→			€
	mm	mm	mm	kg	qty.	V2
SG25M	250	140	34 x 13	2.58	5	88,20
SG30M	300	140	34 x 13	3.06	5	90,20
SG40M	400	140	34 x 13	3.17	5	101,70
SG50M	500	140	34 x 13	3.40	5	113,10
SG60M	600	140	34 x 13	3.80	5	119,10
SG80M	800	140	34 x 13	4.45	5	130,50
SG100M	1000	140	34 x 13	4.95	5	146,80
SG125M	1250	140	34 x 13	5.87	1	170,10
SG150M	1500	140	34 x 13	6.65	1	192,60

High-performance clamps

High-performance clamp SGTM, large throat depth

№	↔a↔	↔b↔	↔x↔			€
	mm	mm	mm	kg	qty.	V2
SG30T20M	300	200	30 x 15	3.50	1	103,60
SG60T20M	600	200	30 x 15	4.30	1	135,90

- Clamping force up to 8,500 N at tightening torque of 40 Nm
- Long life due to heat-resistant pressure plate with sintered steel insert, which can be tilted up to 35°
- Opening 200 mm

High-performance clamp STBM, heavy duty

№	↔a↔	↔b↔	↔x↔			€
	mm	mm	mm	kg	qty.	V2
STB30M	300	175	40 x 20	5.61	1	169,10
STB40M	400	175	40 x 20	6.10	1	178,10
STB50M	500	175	40 x 20	6.67	1	185,70
STB60M	600	175	40 x 20	7.23	1	192,20
STB80M	800	175	40 x 20	8.35	1	204,90
STB100M	1000	175	40 x 20	9.42	1	221,50
STB125M	1250	175	40 x 20	10.77	1	270,90
STB150M	1500	175	40 x 20	12.20	1	304,70

- Clamping force up to 22,000 N at tightening torque of 70 Nm
- Long life due to heat-resistant pressure plate with sintered steel insert, which can be tilted up to 35°
- With 19 mm hexagonal bolt on the end of the spindle

High-performance clamp STBS, extremely heavy duty

№	↔a↔	↔b↔	↔x↔			€
	mm	mm	mm	kg	qty.	V2
STBS30	300	200	50 x 25	10.46	1	359,80
STBS50	500	200	50 x 25	12.17	1	390,80
STBS100	1000	200	50 x 25	17.30	1	461,00

- Clamping force up to 35,000 N at tightening torque of 100 Nm
- Long life due to heat-resistant pressure plate with sintered steel insert, which can be tilted up to 35°
- With 36 mm hexagonal bolt on the end of the spindle
- With wedge for fixing the sliding arm

High-performance clamps

- Clamping force up to 35,000 N at tightening torque of 105 Nm
- Long life due to heat-resistant pressure plate with sintered steel insert, which can be tilted up to 35°
- With 19 mm hexagonal bolt on the end of the spindle
- With wedge for fixing the sliding arm

- Long life due to heat-resistant pressure plate with sintered steel insert, which can be tilted up to 35°

Three design versions:

- Smooth faced (standard version)
- Rough faced for secure clamping on dirty surfaces
- V-groove face for round, oval and edged workpieces

High-performance clamp STBVC, extremely heavy duty

№	←a→	←b→	←x→			€
	mm	mm	mm	kg	qty.	V2
STBVC15	150	100	40 x 20	4.06	1	148,30
STBVC25	250	100	40 x 20	4.62	1	162,50
STBVC35	350	100	40 x 20	5.13	1	181,40

Special pressure plate

№	Description	Suitable for	€
			V3
3100736	Standard	SLM, SGM, SGTM, STBM, STBVC, SGU, SLV, GSV, SPZ80K	20,30
3100737	Standard	STBS, STBU	30,60
3101192	Serrated	SLM, SGM, SGTM, STBM, STBVC, SGU, SLV, GSV, SPZ80K	22,80
3101193	V-grooved	SLM, SGM, SGTM, STBM, STBVC, SGU, SLV, GSV, SPZ80K	22,80

High-performance clamps

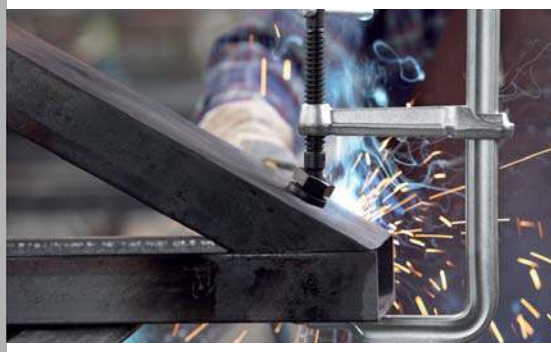
Fitters' clamp classiX GSL

№	↔a↔	↔b↔	↔x↔			€
	mm	mm	mm	kg	qty.	V2
GSL30	300	120	27 x 13	2.11	5	65,30
GSL60	600	120	27 x 13	2.82	5	76,80

- Clamping force up to 7,500 N with a tightening torque of 25 Nm
- Special heat-resistant pressure plate, can be tilted by up to 35°

High-performance clamp classiX GSM

№	↔a↔	↔b↔	↔x↔			€
	mm	mm	mm	kg	qty.	V2
GSM25	250	140	30 x 15	2.58	5	72,30
GSM30	300	140	30 x 15	3.00	5	74,00
GSM40	400	140	30 x 15	3.17	5	83,40
GSM50	500	140	30 x 15	3.40	5	92,70
GSM60	600	140	30 x 15	3.80	5	97,70



- Clamping force up to 11,000 N with a tightening torque of 40 Nm
- Special heat-resistant pressure plate, can be tilted by up to 35°

Comparison of the first and second line on BESSEY high-performance clamps

	BESSEY high-performance clamps		classiX	
Order no.	SLM	SGM	GSL	GSM
Product range	+++	+++	+	+
Clamping width	200-600 mm	250-1,500 mm	300-600 mm	250-600 mm
Throat depth	120 mm	140 mm	120 mm	140 mm
Optimised rail profile	✔	✔		
Clamping force up to	+++	+++++	++	++++
	8,500 N	12,000 N	7,500 N	11,000 N
Special pressure plate with sintered steel insert	✔	✔		
Intellectual property rights	on rail, sliding arm, pressure plate and appearance			