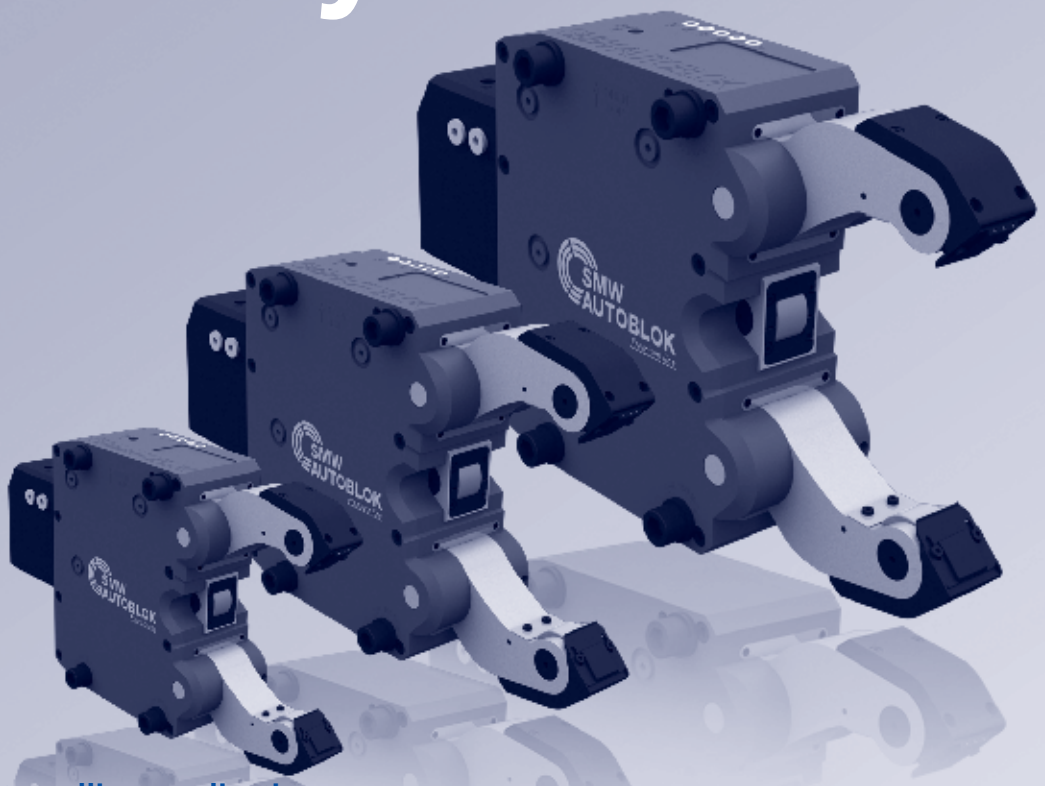
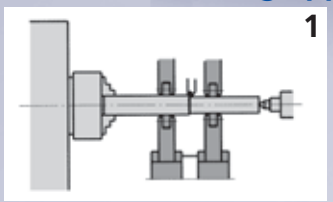
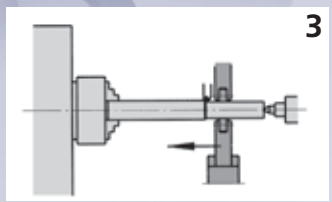
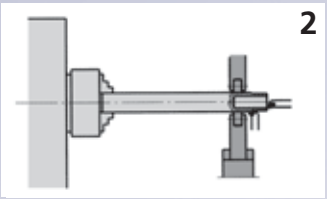
SMW-AUTOBLOK worldwide leader in Steady Rests



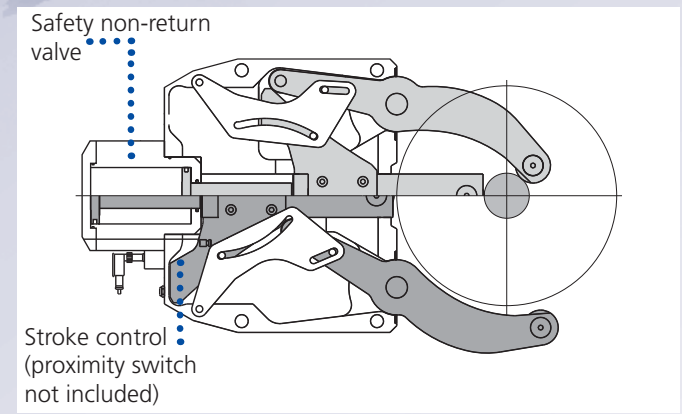
Fixed or travelling application







1. Tandem Steady Rest fixed
2. Steady Rest fixed for end machining
3. Steady Rest travelling

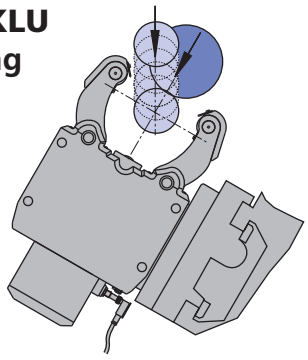


Features included in standard range

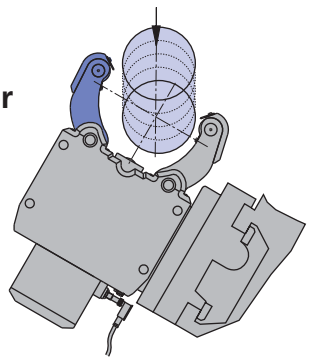
Steady Rest type	Standard Line		Premium Line			
	SLU-X, SLUA-X	SLU-B, SLUA-B	SR	SRA	K, KA	KLU
Steady Rest size	**1 - 5.1**	**3 - 6**	**1 - 6**	**2 - 6**	**3 - 7.1**	**215 - 540**
Sealed body	■		■	■	■	■
Safety valve	■	■	■	■	■	■
Stroke control (open position)	■	■	■	■	■	■
1 set swarf guard 3-piece	■	■				
1 set swarf guard with integrated coolant flush			■	■	■	■
1 set cylindrical rollers	■	■	■	■	■	■
Port for compressed air	■	■	■	■	■	■
Port for coolant through arms incl. chipguard			■	■	■	■

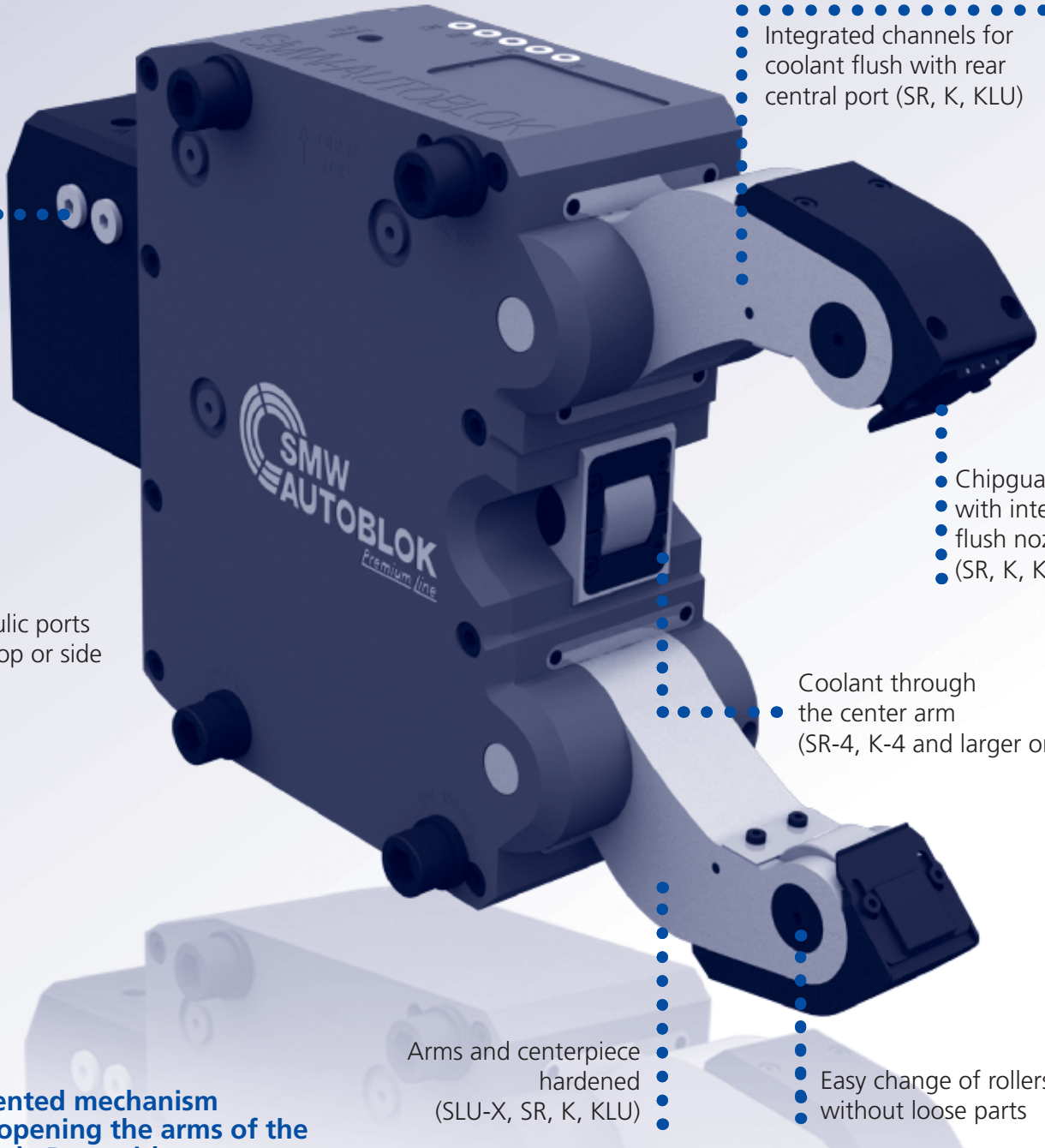
SLU-X® / SR® / K / KLU

SLU-X/SR/K/KLU
large clamping range



SLUA-X/SRA
additional pivoting upper arm
for automatic vertical loading (worldwide patented)





Integrated channels for coolant flush with rear central port (SR, K, KLU)

Chipguard with integrated flush nozzle (SR, K, KLU)

Hydraulic ports from top or side

Coolant through the center arm (SR-4, K-4 and larger only)

Arms and centerpiece hardened (SLU-X, SR, K, KLU)

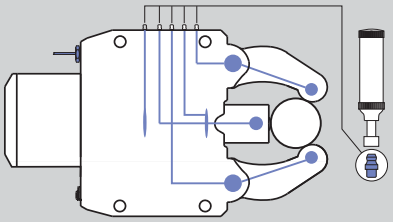
Easy change of rollers without loose parts

Patented mechanism for opening the arms of the Steady Rest without springs and free from wear. (worldwide patented)

Option of manual lubrication (M)

- Low cost solution for medium working conditions and low build up of swarf.
- The lubrication points and rollers are supplied with lubrication grease via the grease nipples and the grease gun.
- Lubrication intervals depending on the working conditions normally every 4 to 8 operating hours.
- Grease: KPE 2R-20 DIN 51502

Manual lubrication (M)



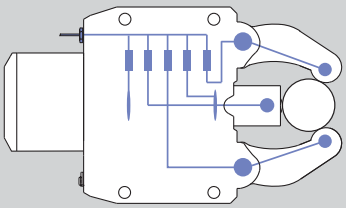
4/5 cone grease nipples DIN 71412

Option of central oil lubrication (Z)

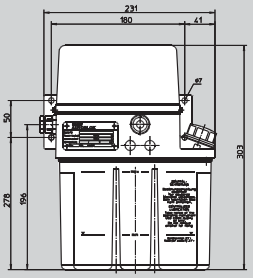
- For heavy working conditions and high build up of swarf
- For travelling Steady Rest applications.
- The use of our separate complete lubrication unit with timer control is recommended.
- Lubricating intervals 5 - 20 min
- Min./max. operating pressure 10 to 45 bar.
- Oil: Viscosity of 46 mm²/s (viscosity class ISO)

Central lubrication (Z)

Centralized lubrication G 1/8"



Lubrication unit oil
Id. No. 088707

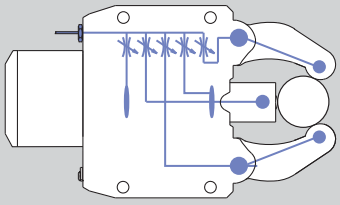


Option of central lubrication oil + air (OLD)

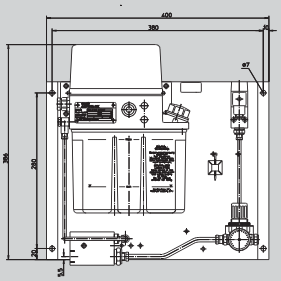
- For heaviest cutting conditions with high built up of swarf, dust or coolant.
- The SMW-AUTOBLOK oil + air unit for lubrication with built-in timer control is mandatory.
- This unit injects oil for lubrication into the air hose in adjustable intervals (2 -12 min.).
- The permanent air flow (min. 3 bar) feeds the oil to the rollers and keeps them clean.
- Oil: Viscosity of 46 mm²/s (viscosity class ISO)

Oil + air lubrication (OLD)

Centralized lubrication G 1/8"



Lubrication unit oil + air
Id. No. 088708

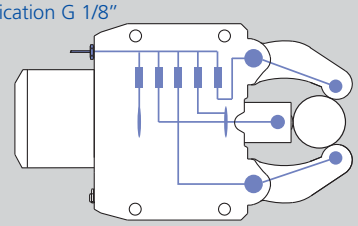


Option of central grease lubrication (F)

- For machines with central grease lubrication
- For application and intervals please follow the instruction of the machine maker.
- Min./max. operating pressure 30 to 45 bar.
- Grease: NLGI class 0 or 1

Central grease lubrication (F)

Centralized lubrication G 1/8"

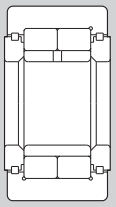


Option of rollers

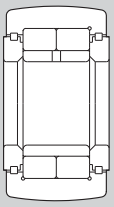
- SMW-AUTOBLOK rollers (precision class P05) specially developed for our Steady Rests.
- Special sealing ensures highest precision and service life.
- Standard equipment: 1 set of cylindrical rollers.
- Option: Spherical rollers (for travelling Steady Rests), synthetic material rollers, carbide rollers.

Original SMW-AUTOBLOK roller

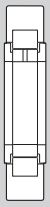
cylindrical



spherical



narrow



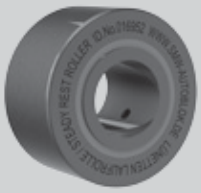
Rollers (all types)

- Rollers steel (standard): Surface of workpiece not hardened

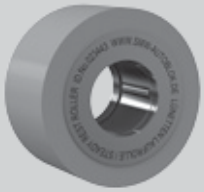
Available optional materials:

- Rollers synthetic material: Surface of workpiece polished or chrome plated
- Rollers carbide: Surface of workpiece hardened

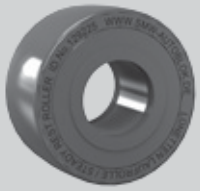
Rollers steel



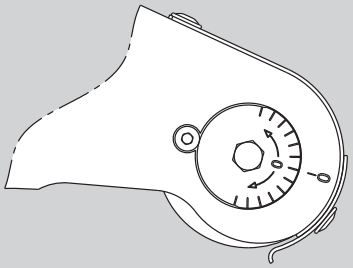
Rollers synthetic material



Rollers carbide



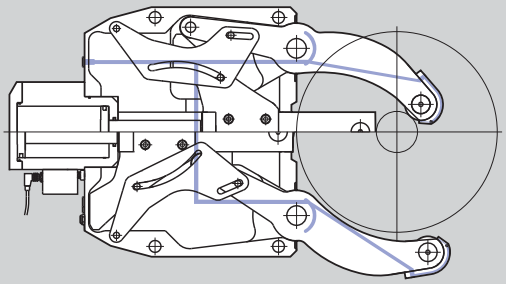
Eccentric fine adjustment



Option fine adjustment of center line

- Eccentric roller pins on the two Steady Rest arms allow a quick fine adjustment of the center line.
- This avoids to unlock and adjust the entire Steady Rest on the bracket for small adjusting movements.
- Adjustment of open steady rest only!

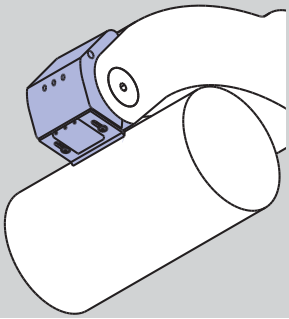
Coolant/air feed



Coolant/air feed (SR/K/KLU only)

- Built-in channels to feed coolant or air from a central connecting port to the Steady Rest arms.
- Basic equipment for SR/K/KLU steady rests
- From size SR-4 / K4 and larger with coolant through the center arm

Chipguard coolant/air



Patented coolant/air chipguard with integrated flush nozzles (SR/K/KLU only)

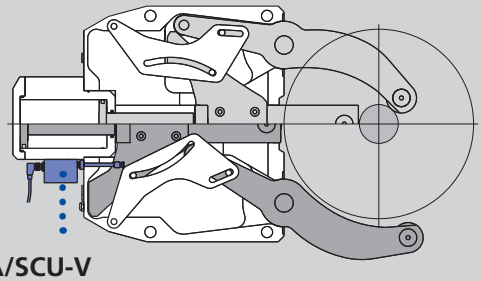
- Keeps roller clamping area free from chips
- The patented double flush nozzles keep front and rear of the wiper area clean.

Only for steady rests with coolant / air feed.

Benefit:

- Constant centering accuracy
- No damage of workpiece and rollers caused by chips/swarf
- Less roller consumption = less costs

SCU-A/SCU-V diameter measuring system

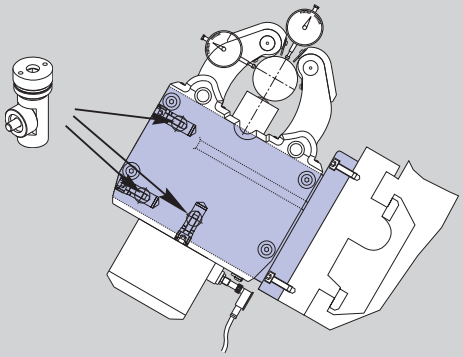


SCU-A/SCU-V

Option linear diameter measuring system SCU-A/SCU-V

- The position of the clamping arms is monitored by the linear measuring system SCU-A/SCU-V.
- Avoids collision with workpieces, turret, loader etc.
- Reduced cycle time due to position controlled opening of the arms to the requested opening only.
- SCU-A: In: 24 V Out: 4 – 20 mA
  SCU-V: In: 24 V Out: 0 – 10 V

Steady Rest bracket with adjustment device



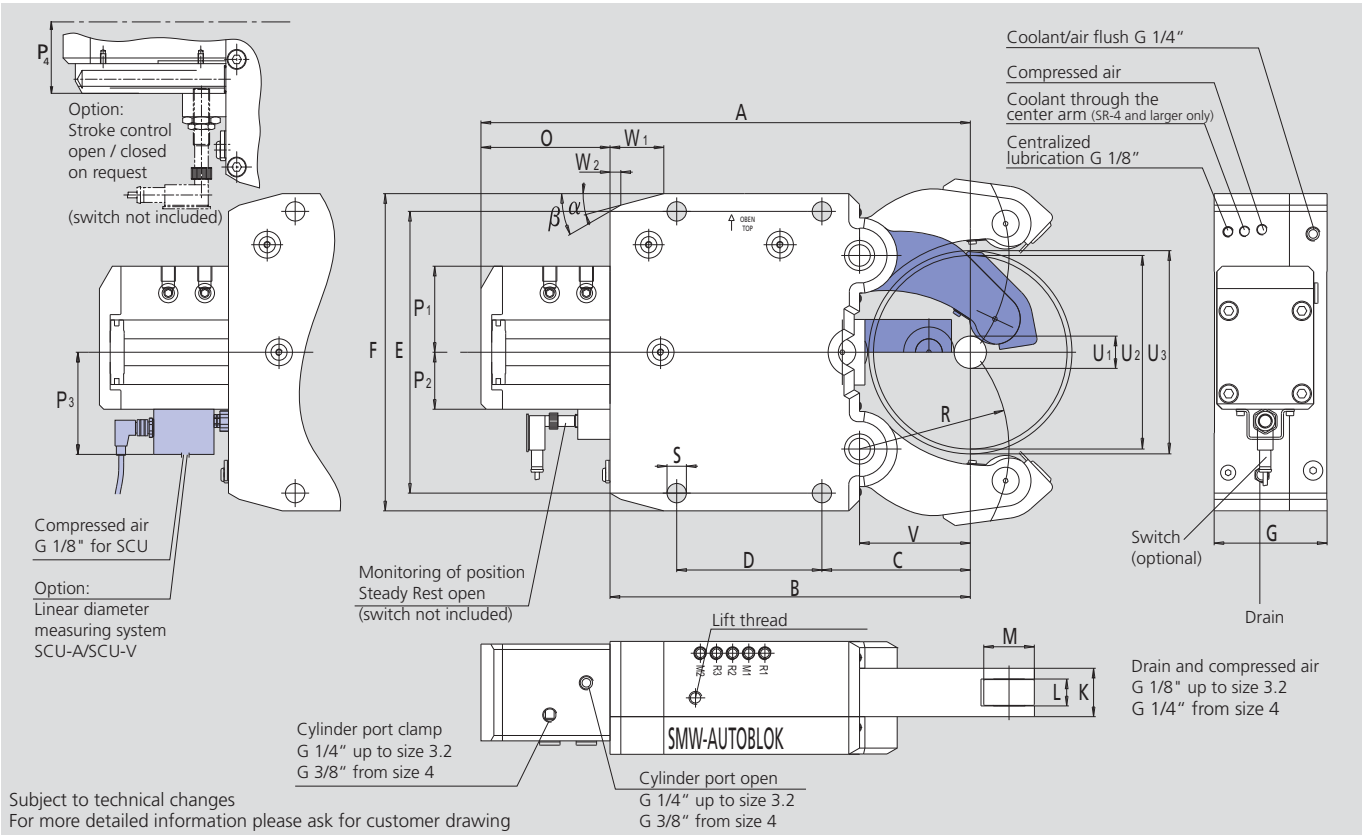
Steady Rest bracket

- A perfect bracket is very important for the function/precision of the Steady Rest.
- Fast and easy adjustment can be done with the SMW-AUTOBLOK adjustment device integrated into the bracket.
- SMW-AUTOBLOK supplies the correct bracket for all applications as a turnkey solution.

SR®

Self-centering Steady Rests
Premium Line

- **Sealed body**
- **Integrated coolant flush**
- **Chip guard with coolant nozzles**
- **Stroke control unit or proximity switch for end position open**



Subject to technical changes
For more detailed information please ask for customer drawing

SMW-AUTOBLOK Type / Size		SR 2	SR 3	SR 3.1	SR 3.2	SR 4	SR 5	SR 5.1	SR 6
Centering range with coolant chip guard	**U_1**	**20 (8*)**	**28 (12*)**	**25 (20*)**	**50**	**30**	**45**	**85**	**125**
	U_2	**101**	**152**	**165**	**200**	**245**	**310**	**350**	**460**
Max. axial clearing diameter	**U_3**	**106**	**162**	**172**	**202**	**253**	**320**	**352**	**466**
	A	277	428	436	455	603	697	717	953.5
	B	195	312	320	335	448	510	530	715
	C	70	115	123	138	146	178	198	215
	D	85	135	135	135	240	270	270	330
	E	170	262	262	262	365	400	400	610/640
	F	195	295	295	295	405	440	440	680
	G	75	105	105	105	125	150	150	175
	K	35	45	45	45	60	75	75	85
Width of rollers	L	19	25	25	25	25	29	29	32
Diameter of rollers	M	35	47	47	47	52	62	62	90
	O	82	116	116	120	155	187	187	238.5
	P_1	63	85	85	85	91	97	97	122
	P_2	40	53	53	53	61	63	63	88
	P_3	89	102	102	102	110	112	112	137
	P_4	61	74	74	74	82	84	84	109
	R	74	119	124	139	172	209	229	290
	S	14	18	18	18	23	23	23	27
	V	51	85	93	103	128	160	180	190
	W_1	30	50	50	50	58	62	62	100
	W_2	11.2	10	10	10	18.3	19.1	19.1	22
	α	15°	15°	15°	15°	15°	18°	18°	10°
	β	30°	30°	30°	30°	40°	40°	40°	50°
Piston area**	cm^2	19.6	38.5	38.5	38.5	63.6	78.5	78.5	176.7
Operating pressure min./max.	bar	8/70	8/80	8/80	8/80	8/70	8/80	8/80	8/75
max. clamping force/roller	daN	450	1000	1000	1000	1500	2000	2000	4500
Centering accuracy within the whole range	mm	0.02	0.04	0.04	0.04	0.05	0.06	0.06	0.06
Repeatability accuracy	mm	0.005	0.007	0.007	0.007	0.007	0.01	0.01	0.01
Max. roller surface speed	m/min	800	725	725	725	715	600	600	560
Weight approx.	kg	14	56	57	59	117	174	178	436

* The Steady Rest can be modified to this clamping range if the coolant chip guard is not used
** Cylinder sizes different from standard available on request

SR Steady Rest with stroke control Steady Rest open via proximity switch (without proximity switch)***

Steady Rest size		2	3	3.1	3.2	4	5	5.1	6
SR-M manual lubrication	Id. No.	128161	128167	128184	127511	127001	128001	128039	128426
SR-Z central lubrication oil	Id. No.	128160	128166	128185	127510	127000	128000	128038	128425
SR-OLD central lubrication oil + air	Id. No.	128162	128168	128186	127512	127002	128002	128040	128427
SR-F central grease lubrication	Id. No.	on request	on request	222282	on request	on request	on request	on request	on request

SR Steady Rest with stroke control via linear stroke control SCU-A, output 4–20 mA

Steady Rest size		2	3	3.1	3.2	4	5	5.1	6
SR-M manual lubrication	Id. No.	on request	128169	128187	126559	127017	128017	128046	128451
SR-Z central lubrication oil	Id. No.	220432	128170	128188	126560	127016	128016	128045	128450
SR-OLD central lubrication oil + air	Id. No.	on request	128171	128189	126561	127018	128018	128047	128452
SR-F central grease lubrication	Id. No.	on request	on request	on request	on request	on request	on request	on request	on request

SR Steady Rest with stroke control via linear stroke control SCU-V, output 0–10 V

Steady Rest size		2	3	3.1	3.2	4	5	5.1	6
SR-M manual lubrication	Id. No.	on request	128172	128190	126563	127022	128021	128049	128453
SR-Z central lubrication oil	Id. No.	220434	128173	128191	126564	127021	128020	128048	128454
SR-OLD central lubrication oil + air	Id. No.	on request	128174	128192	126565	127023	128022	128050	128455
SR-F central grease lubrication	Id. No.	on request	on request	on request	on request	on request	on request	on request	on request

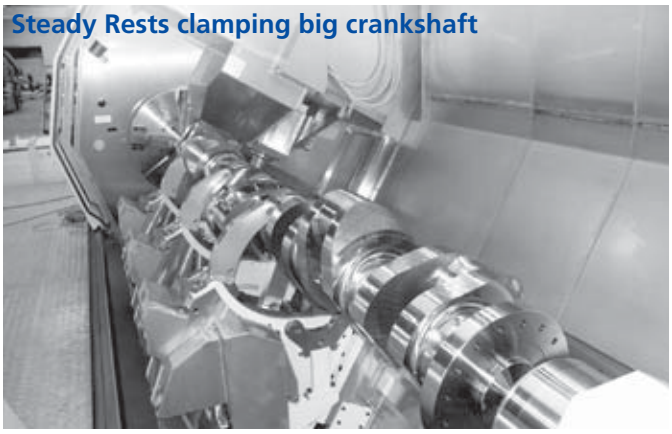
Type SR

♦ **denotes wearing parts, recommended stock items**

Steady Rest size	2	3	3.1	3.2	4	5	5.1	6
Compact lubrication system for oil pressure lubrication Container 2.7 l, 220 V *,**	088707	088707	088707	088707	088707	088707	088707	088707
Compact lubrication system for oil + air lubrication Container 2.7 l, 220 V *,**	088708	088708	088708	088708	088708	088708	088708	088708
Eccenter fine adjustment compl. at lever arm (2 pieces per Steady Rest) manual/central lubrication	127237	127240	127240	127240	128474	128584	128584	128585
Inductive limit switch	087926	087926	087926	087926	087926	087926	087926	087926
Swarf guard coolant/air with wiper	128106	124024	124024	124024	125797	125816	125816	128442
♦ Wiper for swarf guard coolant/air	128108	124026	124026	124026	126904	126888	126888	128444
♦ Swarf guard 3-pieces	026116	026117	026117	-	-	-	-	-
♦ Roller stripper for middle piece	200154	198950	198950	198950	200151	200152	200152	200153
♦ Rollers, cylindrical design	016952	016951	016951	016951	016953	018345	018345	028971
♦ Rollers spherical design	017658	018433	018433	018433	018443	019545	019545	129825
♦ Rollers synthetic material	029451	023443	023443	023443	023672	023650	023650	on request
♦ Roller stripper (2-pieces) for middle piece with roller synthetic material	204211	204212	204212	204212	204214	204216	204216	-
♦ Rollers carbide	129223	129225	129225	129225	220918	222038	222038	on request
Adjustment device 1 set = 3 pieces	-	200178	200178	200178	200179	200179	200179	200179

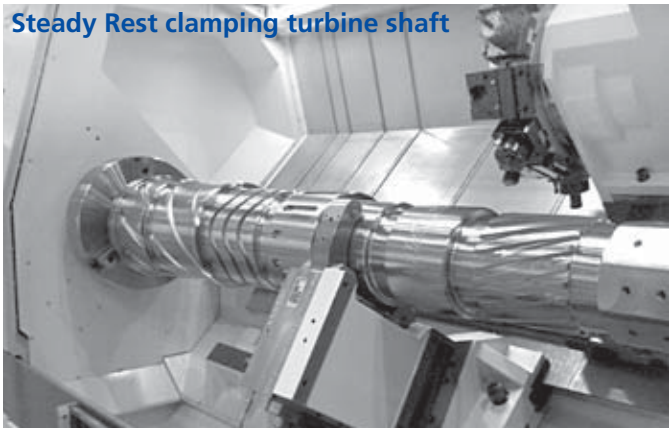
* When placing an order, please advise voltage
** On request 110 V available
*** Stroke control open / closed on request

SLU-X® SLU-B	SLUA®-X SLUA®-B	SR® SRA	KLU K	Our additional program: ■ Special Steady Rests ■ Turret Steady Rests ■ Crankshaft Steady Rests ■ Grinding Steady Rests



Steady Rests clamping big crankshaft

Steady Rests clamping big crankshaft

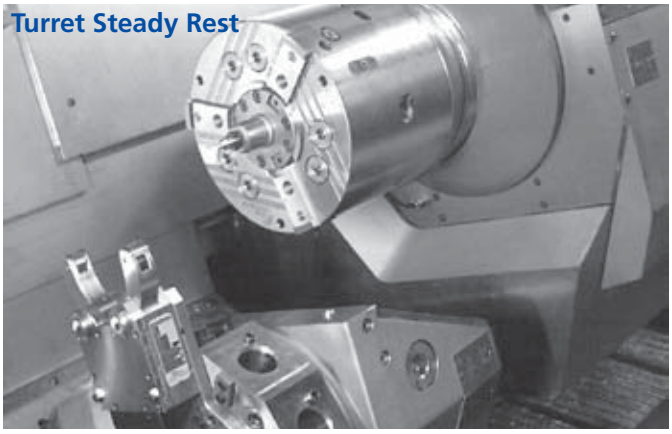


Steady Rest clamping turbine shaft

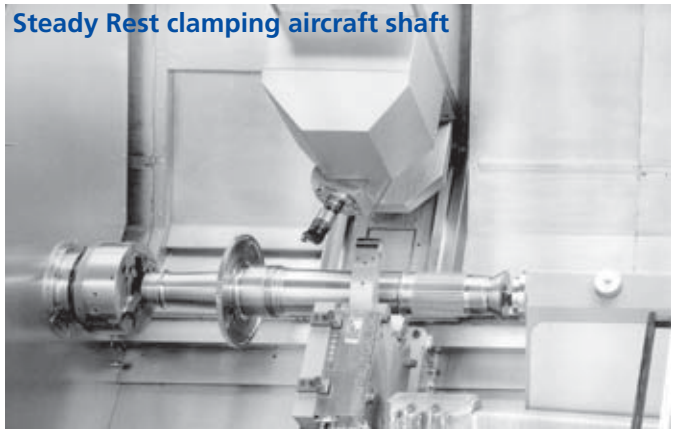
Steady Rest clamping special shaft

Steady Rest clamping train axle

Steady Rest with diamond pads clamping input shaft in hard turning/grinding operation



Turret Steady Rest



Steady Rest clamping aircraft shaft