

Professional Thread Repair

silber tool[®]

THE BEST OF THREADS.

SERIES

X-R

X-R16: Ø 3-16mm
X-R60 MAX: Ø 10-60mm
X-R120 MAX: Ø 50-120mm

X-Nut: Ø 12-14mm
X-Nut XL: Ø 16-22mm

Adapted Solutions



2024



Content

Welcome to the only patented and professional thread repair technology. The silbertool® technology can be applied on any damaged thread. The thread is simply formed back into its original geometry and fully preserved!

silbertool®

External thread repair tools:

Silbertool® X-R16	3
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silbertool®
THE BEST OF THREADS.

Don't Replace, Repair!

Original parts are repaired and preserved instead of replaced.

SAFETY FIRST!

External threads are repaired without the removal of material and thereby not weakened.

One Tool Fits All

Silbertool® thread repair tools work on all threads such as metric, fine and imperial threads. One pitch size covers the entire diameter range of the tool.



Higher Endurance

The Material Testing Institute Hannover (MPA) has proven that threads repaired with silbertool® withstands the same static and dynamic loads as a new undamaged thread. Moreover, they even had a higher fatigue endurance limit.

Work Hardening

During the rolling process the surface of the thread is hardened through work hardening.

German Engineering

Individual solutions, serial products and certified services, all meet highest German standards according to the seal of approval 'MADE IN GERMANY'. Only the best choice of materials, precise implementation and conscientious quality controls meet the demand of silbertool®.

Silbertool® ADVANTAGES

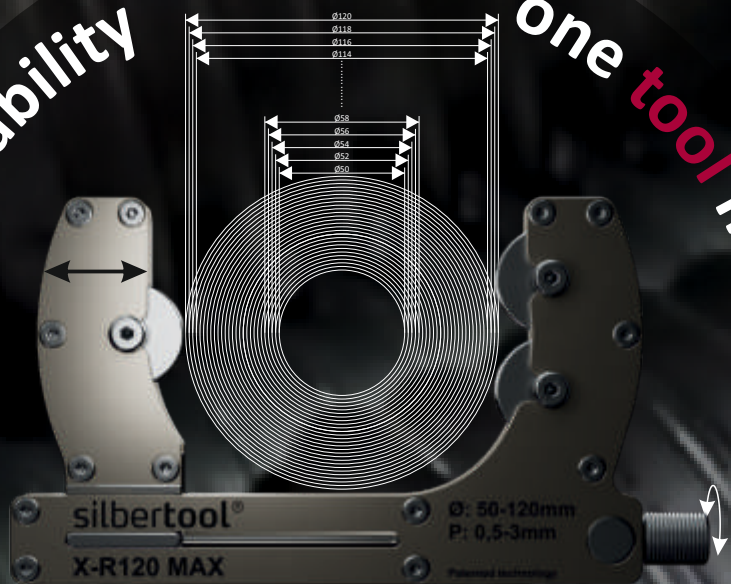
silbertool®
X-R120 MAX
+
1.5mm rollers
e.g.



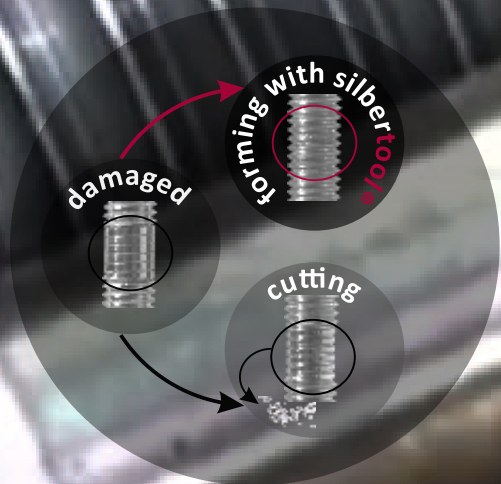
- M50x1.5 M52x1.5 M54x1.5
 - M56x1.5 M58x1.5 M60x1.5
 - M62x1.5 M64x1.5 M68x1.5
 - M70x1.5 M74x1.5 M76x1.5
 - M78x1.5 M80x1.5 M82x1.5
 - M84x1.5 M88x1.5 M90x1.5
 - M92x1.5 M96x1.5 M98x1.5
 - M100x1.5 M102x1.5 M104x1.5
 - M106x1.5 M108x1.5 M110x1.5
 - M112x1.5 M114x1.5 M116x1.5
 - M118x1.5 M120x1.5
- equivalent cutting dies
(value: ~40k)

Variability

one tool fits all



Any Pitch Available:
Metric, UN, UNS, BSW, BSP.....



X-R16

Thread Diameter:

Minimum: \varnothing 3 mm

Maximum: \varnothing 16 mm

Pitch:

Minimum: 0.5 mm

Maximum: 2.0 mm

Material:

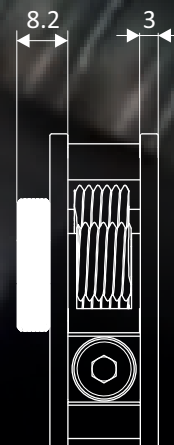
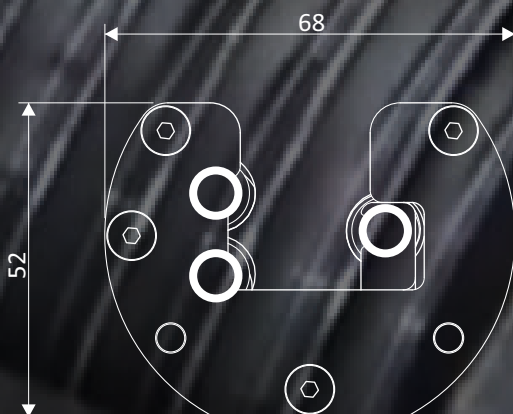
Stainless Steel (partially hardened)

Maximum Radius Of Action:




38 mm (while working with \varnothing 3 mm)

Weight:

193g



X-R16

X-R16					
Article	Article-No.	[mm]	[mm]	[g]	GTIN
X-R16 tool	ST-XR-16		3-16mm	173	4260402350158
Set of rollers (3 pcs.)	STR16-0.5	0.5	3-16mm	19	4260402350028
metric DIN ISO 13	STR16-0.75	0.75	3-16mm	19	4260402350035
	STR16-0.8	0.8	3-16mm	19	4260402350042
	STR16-1	1	3-16mm	19	4260402350059
	STR16-1.25	1.25	3-16mm	19	4260402350066
	STR16-1.5	1.5	3-16mm	19	4260402350073
	STR16-1.75	1.75	3-16mm	19	4260402350080
	STR16-2	2	3-16mm	19	4260402350097
	STR16-0.5LH	0.5 LH	3-16mm	19	4260402350103
	STR16-0.75LH	0.75 LH	3-16mm	19	4260402350110
	STR16-0.8LH	0.8 LH	3-16mm	19	4260402350127
	STR16-1LH	1 LH	3-16mm	19	4260402350134
	STR16-1.25LH	1.25 LH	3-16mm	19	4260402350141
	STR16-1.5LH	1.5 LH	3-16mm	19	4260402350158
	STR16-1.75LH	1.75 LH	3-16mm	19	4260402350165
	STR16-2LH	2 LH	3-16mm	19	4260402350172
	UNC/UNF/UNEF/UNR ANSI B1.1	Art.-No.	Pitch [tpi]	Dimensions	[g]
STR16-32U		32	3-16mm	19	4260402350189
STR16-28U		28	3-16mm	19	4260402350196
STR16-24U		24	3-16mm	19	4260402350202
STR16-20U		20	3-16mm	19	4260402350219
STR16-18U		18	3-16mm	19	4260402350226
STR16-16U		16	3-16mm	19	4260402350233
STR16-14U		14	3-16mm	19	4260402350240
STR16-13U		13	3-16mm	19	4260402350257
STR16-12U		12	3-16mm	19	4260402350264
STR16-11U	11	3-16mm	19	4260402350271	
BSW/BSF/BSPP BS84/ DIN ISO 228	Art.-No.	Pitch [tpi]	Dimensions	[g]	GTIN
	STR16-32B	32	3-16mm	19	4260402350288
	STR16-28B	28	3-16mm	19	4260402350295
	STR16-26B	26	3-16mm	19	4260402350301
	STR16-24B	24	3-16mm	19	4260402350318
	STR16-20B	20	3-16mm	19	4260402350325
	STR16-19B	19	3-16mm	19	4260402350332
	STR16-18B	18	3-16mm	19	4260402350349
	STR16-16B	16	3-16mm	19	4260402350356
	STR16-14B	14	3-16mm	19	4260402350363
STR16-12B	12	3-16mm	19	4260402350370	
STR16-11B	11	3-16mm	19	4260402350387	
G (BSP) DIN ISO 228	Art.-No.	Pitch [tpi]	Dimensions	[g]	GTIN
	STR16-28P	28	3-16mm	19	4260402351254
	STR16-19P	19	3-16mm	19	4260402351261

X-R60 MAX

Thread Diameter:

Minimum: \varnothing 10 mm

Maximum: \varnothing 60 mm

Pitch:

Minimum: 0.5 mm

Maximum: 4.0 mm

Material:

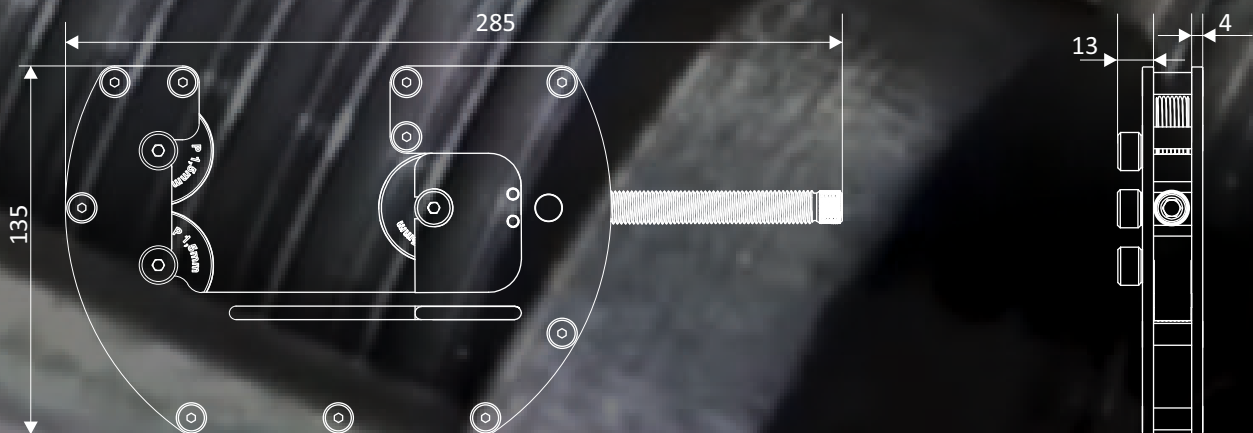
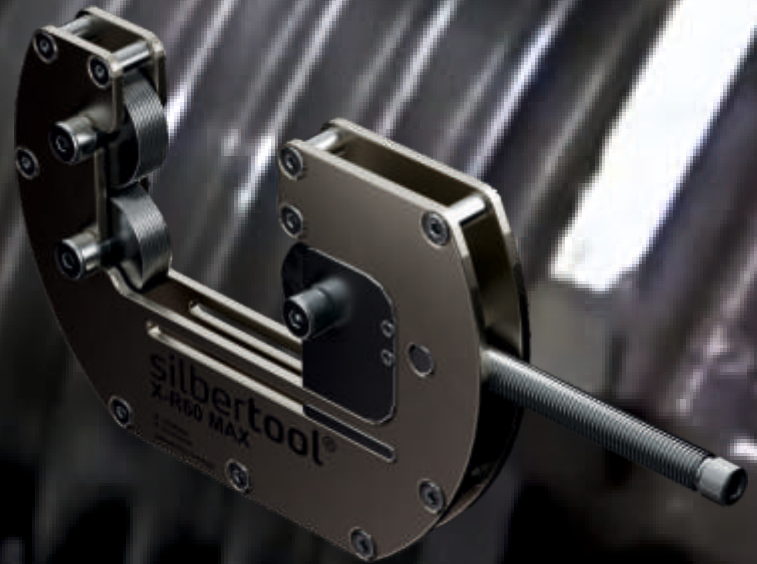
Stainless Steel (partially hardened)

Maximum Radius Of Action:

183 mm (while working with \varnothing 60 mm)

Weight:

1794g



X-R120 MAX



Thread Diameter:

Minimum: \varnothing 50 mm

Maximum: \varnothing 120 mm

Pitch:

Minimum: 0.5 mm

Maximum: 3.0 mm

Material:

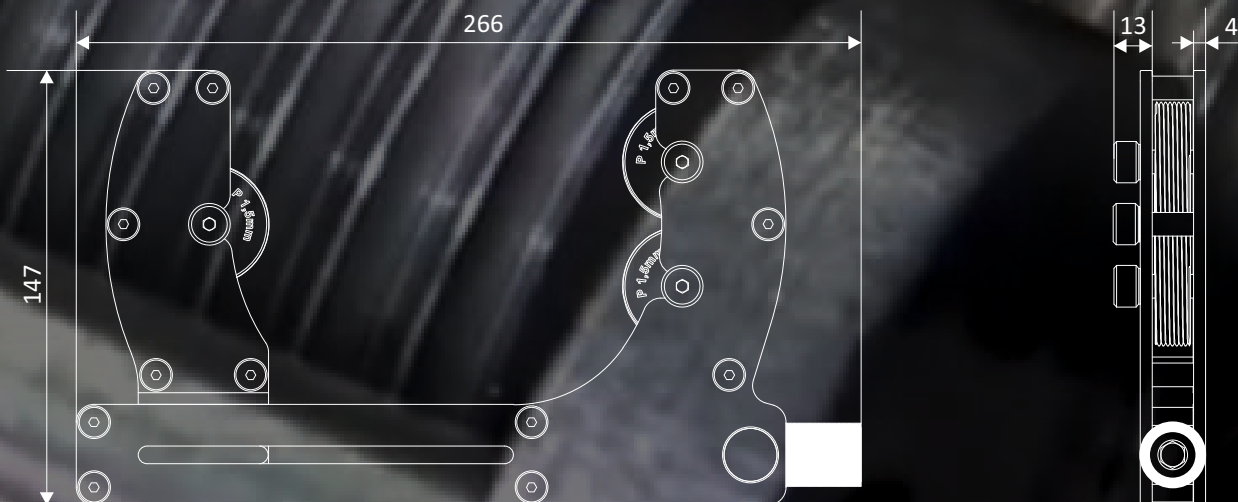
Stainless Steel (partially hardened)

Maximum Radius Of Action:




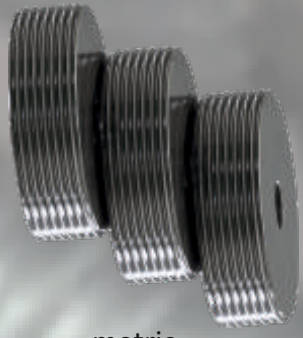
192 mm (while working with \varnothing 50 mm)

Weight:

2002g



X-R60 & X-R120 MAX

Article	Article-No.	 [mm]	 [mm]	 [g]	GTIN	
X-R60 MAX tool	ST-XR-60 MAX		M10-M60	1468	4260402351247	
X-R120 MAX tool	ST-XR-120 MAX		10-120	1661	4260402350844	
Set of rollers (3 pcs.)	STRXR60120-0.5	0.5	10-120	339	4260402350851	
 metric DIN ISO 13	STRXR60120-0.8	0.8	10-120	339	4260402350868	
	STRXR60120-1	1	10-120	339	4260402350875	
	STRXR60120-1.25	1.25	10-120	339	4260402350882	
	STRXR60120-1.5	1.5	10-120	339	4260402350899	
	STRXR60120-1.75	1.75	10-120	339	4260402350905	
	STRXR60120-2	2	10-120	339	4260402350912	
	STRXR60120-2.5	2.5	10-120	339	4260402350929	
	STRXR60120-3	3	10-120	339	4260402350936	
	STRXR60120-3.5	3.5	10-60	339	4260402351339	
	STRXR60120-4	4	10-60	339	4260402351322	
	STRXR60120-1LH	1 LH	10-120	339	4260402350967	
	STRXR60120-1.25LH	1.25 LH	10-120	339	4260402350974	
	STRXR60120-1.5LH	1.5 LH	10-120	339	4260402350981	
	STRXR60120-1.75LH	1.75 LH	10-120	339	4260402350998	
	STRXR60120-2LH	2 LH	10-120	339	4260402351001	
	STRXR60120-2.5LH	2.5 LH	10-120	339	4260402351018	
	STRXR60120-3LH	3 LH	10-120	339	4260402351025	
	UNC/UNF/UNEF/UNR ANSI B1.1	Art.-No.	Pitch [tpi]	Dimensions	Weight [g]	GTIN
		STRXR60120-28U	28	10-120	339	4260402351032
STRXR60120-24U		24	10-120	339	4260402351049	
STRXR60120-20U		20	10-120	339	4260402351056	
STRXR60120-18U		18	10-120	339	4260402351063	
STRXR60120-16U		16	10-120	339	4260402351070	
STRXR60120-14U		14	10-120	339	4260402351087	
STRXR60120-12U		12	10-120	339	4260402351094	
STRXR60120-11U		11	10-120	339	4260402351100	
STRXR60120-10U		10	10-120	339	4260402351117	
BSW/BSF/BSPP BS84/ DIN ISO 228	Art.-No.	Pitch [tpi]	Dimensions	Weight [g]	GTIN	
	STRXR60120-19B	19	10-120	339	4260402351131	
	STRXR60120-18B	18	10-120	339	4260402351148	
	STRXR60120-16B	16	10-120	339	4260402351155	
	STRXR60120-14B	14	10-120	339	4260402351162	
	STRXR60120-12B	12	10-120	339	4260402351179	
	STRXR60120-11B	11	10-120	339	4260402351186	
	STRXR60120-10B	10	10-120	339	4260402351193	
G (BSP) DIN ISO 228	Art.-No.	Pitch [tpi]	Dimensions	Weight [g]	GTIN	
	STRXR60120-19P	19	10-120	339	4260402351377	
	STRXR60120-14P	14	10-120	339	4260402351292	
	STRXR60120-11P	11	10-120	339	4260402351308	

X-Nut

Thread Diameter:

Minimum: \varnothing 12mm

Maximum: \varnothing 14mm

Pitch:

Minimum: 1.25mm

Maximum: 1.5mm

Material:

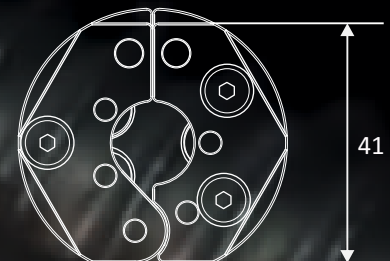
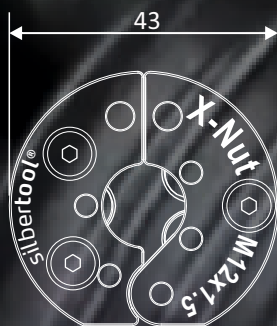
Stainless Steel (partially hardened)




Maximum Radius Of Action:

46mm (while working with \varnothing 14mm)

Weight:

100g



Article	Article-No.	 Pitch	 [mm]	 [g]	GTIN
M12 x 1.25	STXN12-1.25	1,25	M12	100	4260402351841
M12 x 1.5	STXN12-1.5	1,5	M12	100	4260402351834
M14 x 1.5	STXN14-1.5	1,5	M14	100	4260402351827
		TPI			
1/2" x 20 (UN)	STXN1/2-20	20	1/2"	100	4260402351858
9/16" x 18 (UN)	STXN9/16-18	18,0	9/16"	123	4260402351315

X-Nut XL



Thread Diameter:

Minimum: \varnothing 16mm

Maximum : \varnothing 22,23mm

Pitch:

Minimum: 1.25mm

Maximum: 1.5mm

Material:

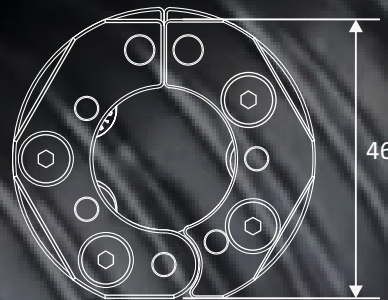
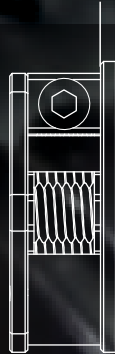
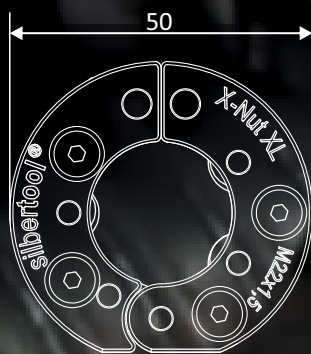
Stainless Steel (partially hardened)




Maximum Radius Of Action:

50mm (while working with \varnothing 22mm)

Weight:

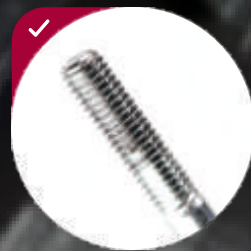
123g



Article	Article-No.	 Pitch	 [mm]	 [g]	GTIN-Code
M16 x 1.5	STXNXL16-1.5	1,5	M16	123	4260402351216
M18 x 1.5	STXNXL18-1.5	1,5	M18	123	4260402350004
M20 x 1.5	STXNXL20-1.5	1,5	M20	123	4260402350011
M22 x 1.5	STXNXL22-1.5	1,5	M22	123	4260402350028
M18 x 2.0	STXNXL18-2	2,0	M18	123	4260402351223
M20 x 2.0	STXNXL20-2	2,0	M20	123	4260402351230
7/8" x 11 (BSF)	STXNXL7/8-11	TPI 11	7/8"	123	4260402350035

Handling

- Silbertool® is used manually, no external power supply is required.
- Choose the rollers with the required pitch and mount them in the tool.
- To reduce the friction, apply some customary lubricant on the damaged area as well as the bordering area.
- Place the Silbertool® next to the damaged area and tighten the tool hand-tight with the allen key.
- Rotate the tool around the thread over the damaged parts and thereby form the material back into its original geometry.
- To achieve best results re-tighten the tool and roll over the damaged part. If required, this can be repeated several times.



Adapted Solutions

It may happen that your thread diameter or the required pitch exceeds our standard solutions. In some cases the design of your threaded part and the geometry of our standard tools are not compatible.

This is where we can provide custom solutions to solve any of your threading problem, no matter what diameter or pitch you require. We can adapt the patented silbertool thread repair technology to any internal or external threading problem.

If you require special rollers for standard tools or adapted solutions we are happy to provide you with whatever you need to fully restore your thread within an instant.

Contact us any time if you require help from our thread experts!



Example of tailor made silbertool[®]

A nuclear power plant from the 1970s was to be technically upgraded. The thread of a pipe made of high-strength, heat- and corrosion-resistant steel, with which heated water (300°C) is transported from the reactor room to the generators, was damaged. A replacement would have taken months and cost millions. With this tailor-made thread repair tool, the thread (400mm diameter) could be repaired from a distance of 5m with the help of a robot in a very short time, despite the high level of radioactivity. The thread was completely restored and fully leakproof after the repair even at high pressures. The costs of the thread repair tool (298 kg) were a fraction of a tube replacement.

silbertool[®]

THE BEST OF THREADS.



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