

STEERING PRODUCTS™

ReSpec™

STEMCO® RESPEC

**THREAD REPAIR THAT
SAFELY AND EFFICIENTLY
RESTORES THREADS WITHOUT
REMOVING MATERIAL**




STEMCO®
Making the Roadways Safer®
— An ENPRO Company —

WHEN THREADS FAIL, SAFETY IS AT STAKE

Stripped threads, damaged bolts, and worn-out nuts can bring your operations to a halt, and it also introduces potential safety hazards to the roadways. Traditional repair methods? They're flawed, but not STEMCO® ReSpec — the world's only patented thread repair technology that works on virtually any damaged thread to bring it back to life with precision and lasting strength. Prolong the lifetime of parts with the tool that's designed to do it right the first time, every time.

DON'T REPLACE, REPAIR

Restore and preserve original components instead of discarding them. ReSpec restores external threads without removing any material, ensuring they remain at full strength and are never weakened, while the RST-70I repairs internal threads on steering knuckle bores, which were previously nearly impossible to repair.

ONE TOOL, ALL THREADS

ReSpec is compatible with all thread types: metric, fine, coarse, and imperial. Available in different sizes to ensure precision and reliability for diameters from 3 mm to 120 mm, one pitch size covers the full diameter range of the tool.

PROVEN HIGHER ENDURANCE

Independent testing by the Material Testing Institute Hanover, Germany (MPA) confirms that ReSpec-repaired threads withstand the same static and dynamic loads as new, undamaged threads — often with an even higher fatigue endurance limit.

WORK HARDENING ADVANTAGE

During the rolling process, the thread surface is work-hardened — rather than being cut or removing materials — which increases durability and resistance to future wear.

ENGINEERED TO THE HIGHEST STANDARDS

Through an ongoing commitment to develop groundbreaking, innovative solutions, ReSpec is built with the highest quality materials, precision manufacturing, and rigorous quality assurance.

RESPEC ADVANTAGES

VARIABILITY — ONE TOOL FITS ALL

Engineered to adjust to your needs, every ReSpec product covers a wide diameter range. These solutions deliver a cost-effective, efficient, and versatile tool that's able to seamlessly adapt to many different sizes to give you more value in a single tool.



**SERIES XR
External Repair**

RST-60X: Ø 10-60 mm
 3/8"–2 3/8"

RST-120X: Ø 50–120 mm
 2"–4 3/4"

RSSR 22-1.5X: Ø 22 mm

**SERIES IR
Internal Repair**

RST-70I: ~51–70 mm
 2"–2 3/4"

HANDLING

XR-SERIES — QUICK OPERATING GUIDE

1. Measure the Diameter

Measure the diameter of the damaged thread to determine the correct tool size — 60 or 120 — for proper repair.

2. Use Thread Pitch Gauge to Select Roller

Place the thread pitch gauge on the damaged thread to determine the thread pitch. Match the pitch to the corresponding roller to ensure proper thread repair.

3. Select and Install Rollers

Choose the rollers matching the required thread pitch and securely mount them in the tool.

4. Lubricate the Thread

Apply a suitable lubricant to the damaged thread area and its surrounding surface to reduce friction during operation.

5. Position the Tool

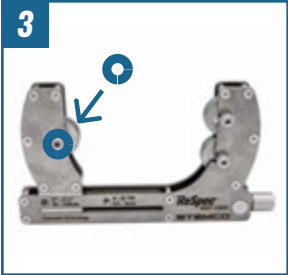
Place the ReSpec over the damaged section. Using the supplied Allen key, tighten until hand-tight.

6. Restore the Thread & Repeat for Best Results

Rotate the tool around the thread, passing over the damaged section to form the material back to its original geometry.

For optimal restoration, re-tighten the tool and roll over the damaged area again. Repeat as necessary until the thread is fully restored.

7. Completed Restore



TAILORED SOLUTIONS

OFFERING CUSTOMIZED SOLUTIONS FOR THOSE WITH SPECIFIC NEEDS AND UNCONVENTIONAL SITUATIONS

In certain situations, the specified thread diameter or pitch may exceed our standard range, or the geometry of the threaded component may be incompatible with our standard tool designs.

That's where our custom-engineered solutions come in. We can adapt the patented STEMCO ReSpec technology to address any internal or external threading challenge — regardless of diameter or pitch.

Whether you need specially designed rollers for our standard tools or fully customized solutions, we will provide exactly what's required to restore your threads quickly, precisely, and permanently.

Contact the thread experts at any time — we are here to help you find the perfect solution for your unique application.

RST-60X

Thread Diameter

Minimum: Ø 10 mm / 3/8"
Maximum: Ø 60 mm / 2 3/8"

Pitch

Minimum: 0.5 mm / 32 TPI
Maximum: 4.0 mm / 6 TPI

Material

Stainless Steel (partially hardened)

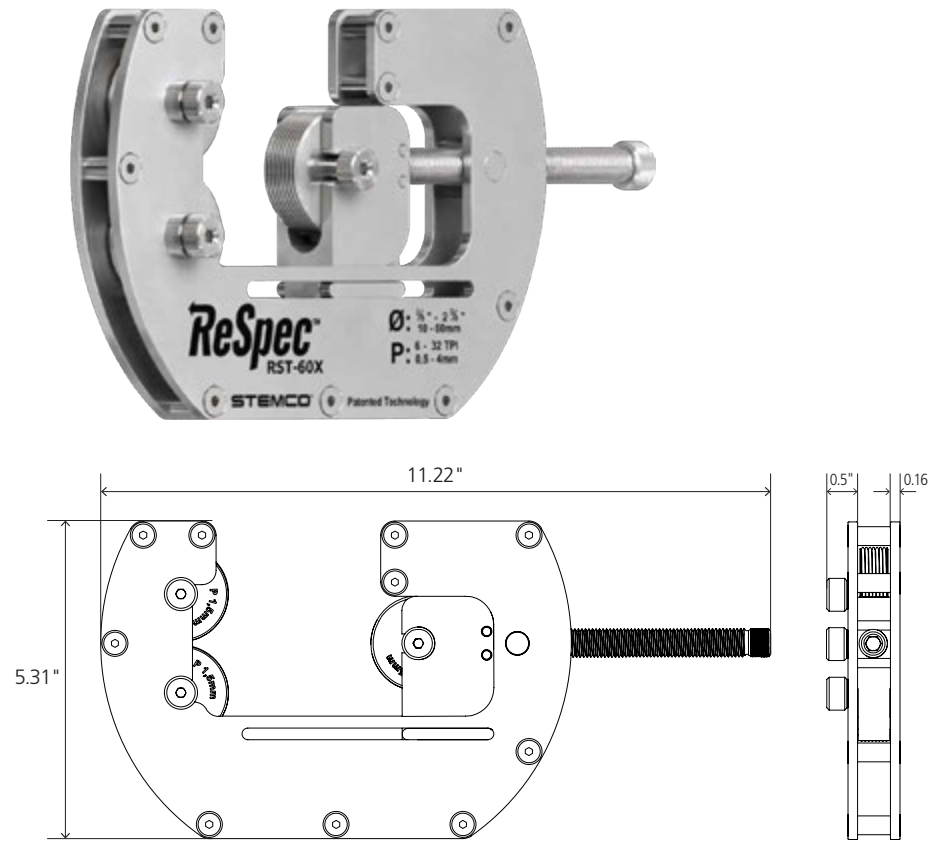
Maximum Radius Of Action

183 mm / 7 1/5" (while working with Ø 60 mm / 2 3/8")

Weight

1794 g / 4 lbs

Available as a kit —
RSK-60X



RST-120X

Thread Diameter

Minimum: Ø 50 mm / 2"
Maximum: Ø 120 mm / 4 3/4"

Pitch

Minimum: 0.5 mm / 32 TPI
Maximum: 3.0 mm / 9 TPI

Material

Stainless Steel (partially hardened)

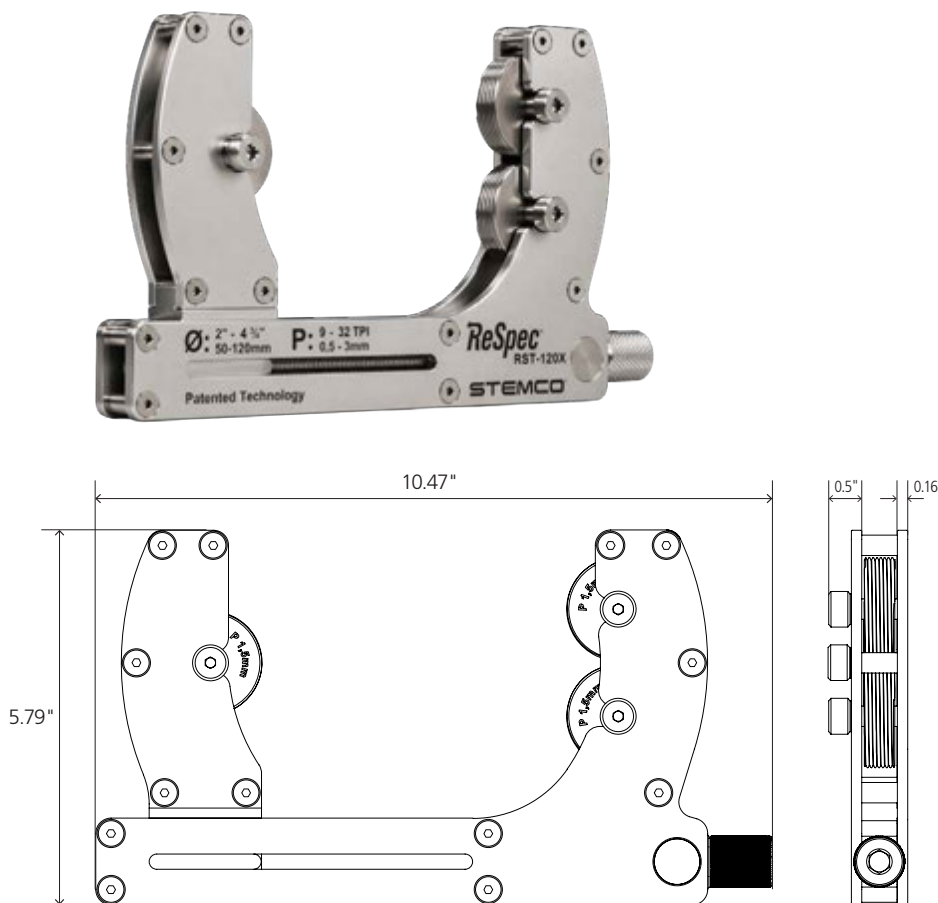
Maximum Radius Of Action

192 mm / 7 1/2" (while working with Ø 50 mm / 2")

Weight

1390 g / 3 lbs

Available as a kit —
RSK-120X



RSK-60X & RSK-120X-TK



	PART NO.	[MM]	[MM]	[IN]	[G]	[LBS]
RST-60X tool	RSK-60X		M10-M60	3/8" - 2 3/8"	1468	3.24
RST-120X tool	RSK-120X		10-120	3/8" - 4 3/4"	1661	3.66
Set of rollers (3 pcs.)	Set of rollers (3pcs.)	1	10-120	3/8" - 4 3/4"	339	0.75
	RSR-60120-1.25	1.25	10-120	3/8" - 4 3/4"	339	0.75
	RSR-60120-1.5	1.5	10-120	3/8" - 4 3/4"	339	0.75
	RSR-60120-1.75	1.75	10-120	3/8" - 4 3/4"	339	0.75
	RSR-60120-2.0	2	10-120	3/8" - 4 3/4"	339	0.75
	RSR-60120-2.5	2.5	10-120	3/8" - 4 3/4"	339	0.75
	RSR-60120-3.0	3	10-120	3/8" - 4 3/4"	339	0.75
	RSR-60120-3.5	3.5	10-60	3/8" - 2 3/8"	339	0.75
	RSR-60120-4.0	4	10-60	3/8" - 2 3/8"	339	0.75
	RSR-60120-1.0LH	1	10-120	3/8" - 4 3/4"	339	0.75
	RSR-60120-1.25LH	1.25	10-120	3/8" - 4 3/4"	339	0.75
	RSR-60120-1.5LH	1.5	10-120	3/8" - 4 3/4"	339	0.75
	RSR-60120-1.75LH	1.75	10-120	3/8" - 4 3/4"	339	0.75
	RSR-60120-2.0LH	2	10-120	3/8" - 4 3/4"	339	0.75



	PART NO.	PITCH [TPI]	DIMENSIONS WEIGHT	[IN]	[G]	[LBS]
	RSR-60120-28	28	10-120	3/8" - 4 3/4"	339	0.75
	RSR-60120-24	24	10-120	3/8" - 4 3/4"	339	0.75
	RSR-60120-20	20	10-120	3/8" - 4 3/4"	339	0.75
	RSR-60120-18	18	10-120	3/8" - 4 3/4"	339	0.75
	RSR-60120-16	16	10-120	3/8" - 4 3/4"	339	0.75
	RSR-60120-14	14	10-120	3/8" - 4 3/4"	339	0.75
	RSR-60120-12	12	10-120	3/8" - 4 3/4"	339	0.75
	RSR-60120-11	11	10-120	3/8" - 4 3/4"	339	0.75
	RSR-60120-10	10	10-120	3/8" - 4 3/4"	339	0.75
	RSR-60120-9	9	10-120	3/8" - 4 3/4"	339	0.75
	RSR-60120-8	8	10-120	3/8" - 4 3/4"	339	0.75
	RSR-60120-7	7	10-120	3/8" - 4 3/4"	339	0.75
	RSR-60120-6	6	10-120	3/8" - 4 3/4"	339	0.75



Complete roller sets

RSR-60120-M-L
RSR-60120-UN

Tools: XR-60; XR-120 American and metric roller set

RSK-SMS

Trucker Kit US

RSK-120-LTK

The RST-60X and RST-120X are available to purchase as kits

RSSR

Material

Stainless Steel (partially hardened)

Maximum Radius Of Action

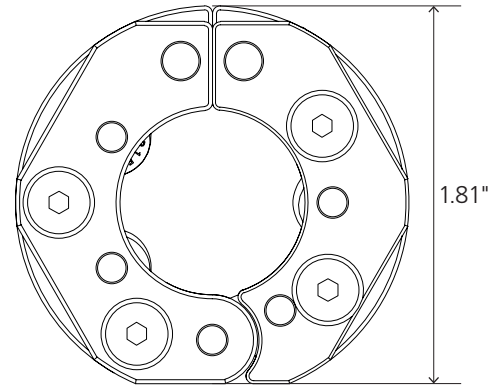
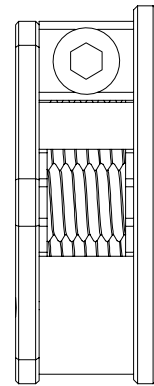
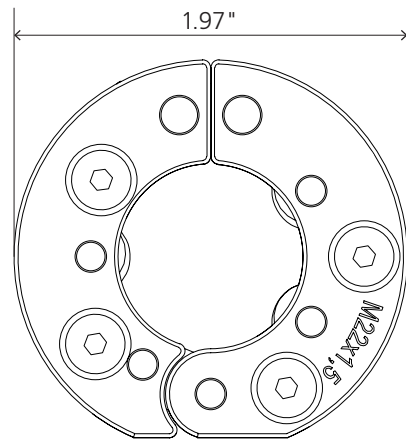
50 mm / 2" (while working with \varnothing 22mm / 7/8")

Weight

123 g / 0.27 lbs



PART NO.	STEMCO NO.	PITCH	[MM]	[IN]	[G]	[LBS]
STXNXL22-1.5	RSSR22-1.5X	1.5	M18	3/4"	123	0.27



RST-701

Internal Thread Diameter

Minimum: \varnothing 50 mm / 2"

Maximum: \varnothing 70 mm / 2.75"

Pitch

Minimum: 20 TPI

Maximum: 12 TPI

Material

Stainless Steel (partially hardened) + Anodized Aluminum

Maximum Radius Of Action

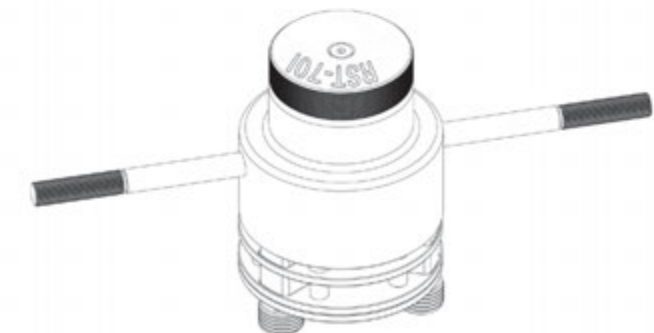
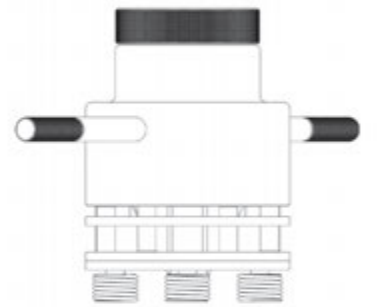
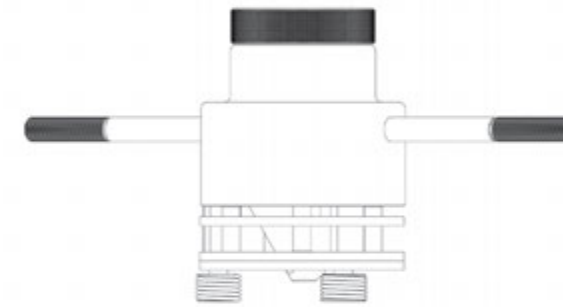
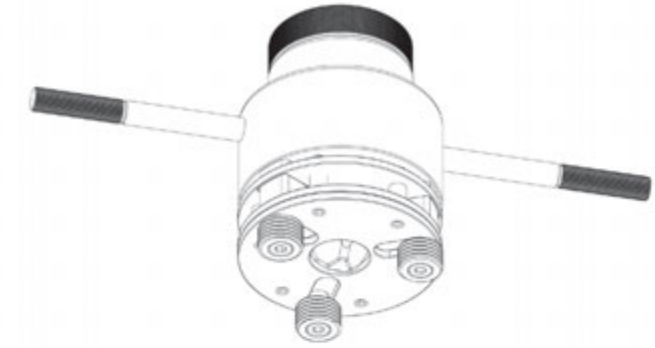
38 mm / 1 1/2" (while working with \varnothing 3 mm / 1/8")

Weight

1.05 kg / 2.3 lbs

Available as a kit —

RSK-701



STEMCO®

Visit stemco.com/contact to reach your nearest sales representative
or call the STEMCO Tech Line at 1-(800)-527-8492

UNITED STATES | 800-527-8492 | 903-758-9981

300 Industrial Drive
Longview, Texas 75602 | US

4641 Industrial Drive
Millington, Michigan 48746 | US

CANADA | 877-232-9111 | 905-206-9700
1020 Lorimar Drive
Mississauga, ON L5S 1R8 | Canada

MEXICO | 444-804-1736

Eje Central Sahop No 215, Zona Ind
San Luis Potosi SLP 78395 | Mexico

AUSTRALIA, NEW ZEALAND, PAPUA

011-61-2-9793-2599
2/198 Walters Road
Arndell Park NSW 2148 | Australia



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