

» THREAD REPAIR TOOL





N Thread chaser

By using the RUKO external and internal thread chasers you save money on maintenance and installation work on construction sites and in agricultural industry, vehicle repairs, and many other applications where thread damage may occur. Compare the effort for the complete dismantling of a component with the possibility of IMMEDIATE repair by the external and internal thread chasers from RUKO.

The thread chasers adjust automatically to the thread diameter and pitch. They are suitable for left-hand and right-hand threads (metric and inches) and require no prior thread measurement.

The threaded ends are so often damaged that neither common screw taps nor threading dies can be used for repair. The external and internal thread chasers from RUKO can be applied BELOW the damage and then used for recutting up to the threaded end.

The blades made of hardened tool steel reach into the grooves of the intact thread and trim the damaged area.

The internal thread chaser from RUKO is available in nine sizes and can be used for trimming threads with a diameter of 5,0 mm (3/16") to 108,0 mm (4 1/4").

The external thread chaser from RUKO is available in four sizes and can be used for trimming threads with a diameter of 4,0 mm ($^{5}/_{32}$ ") to 152,0 mm (6").





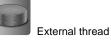
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Overview of symbols

HSS



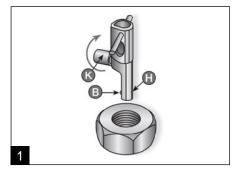
Internal thread



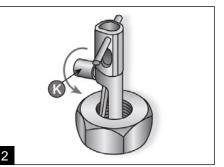


bright / black surface

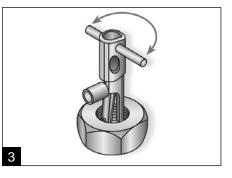
Internal thread chaser - Product Information



By turning the knurled knob (K) the blade (B) moves into the housing (H) completely. Then insert the internal thread chaser into the threaded hole or bore hole to be repaired.

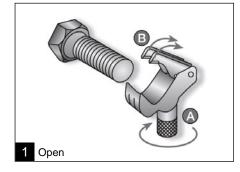


By turning the knurled knob (K) the blade (B) lowers into a thread groove in the undamaged area and then tighten securely by hand.

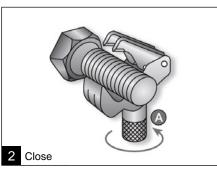


As illustrated, the internal thread chaser then turns with the holder in the desired direction.

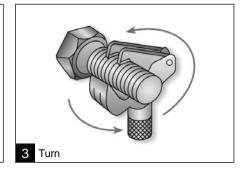
External thread chaser - Product Information



By turning the handle (A) the blades (B) lift and put the external thread chaser on the damaged thread.



By turning the handle (A) lower the blades into the thread grooves and tighten securely by hand.



Then turn the external thread chaser in the direction of arrow.





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N Internal thread chaser



- No calibration required. ~
- √
- Self-adapting in terms of pitch and size. Uses intact threaded parts as a guide and repairs only the damaged areas. √
- Hardened blades (HSS). Removes rust and burrs. √
- √
- ✓ Yellow polyamide protective caps - indispensable in the repair of soft metal threads.



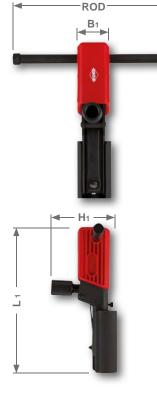


| Drilling range Ø mm | Ø inch | L ₁ mm/inch | B1 mm/inch | H1 mm/inch | ROD mm/inch | Ør mm/inch | ØR mm/inch | Article no. |
|------------------------|-----------------------------------------------------------------|---------------------------|-----------------------------|----------------------------|---------------------|----------------------------|----------------------------|-------------|
| 8,0 - 11,0 | ⁵ / ₁₆ " - ⁷ / ₁₆ " | 109,0 | 18,0 | 45,0 | 116,0 | 17,0 | 39,0 | 244 800 |
| | | 4 ⁵ /16" | ¹¹ /16" | 1 ³ /4" | 4 ⁹ /16" | 11/16" | 1 ⁹ /16" | |
| | | | | | | | | |
| 12,0 - 16,0 | 1/2" - 5/8" | 109,0 | 18,0 | 45,0 | 116,0 | 17,0 | 39,0 | 244 801 |
| | | 4 ⁵ /16" | 11/16" | 1 3/4" | 4 ⁹ /16" | 11/16" | 1 9/16" | |
| | | | | | | | | |
| 16,0 - 20,0 | ¹¹ /16" - ¹³ /16" | 111,0 | 21,0 | 53,0 | 130,0 | 20,0 | 45,0 | 244 802 |
| | | 4 ³ /8" | 13/ ₁₆ " | 2 1/16" | 5 ¹ /8" | 13/16" | 1 3/4" | |
| | | | | | | | | |
| 22,0 - 32,0 | 7/8" - 1 1/4" | 136,0 | 27,0 | 64,0 | 161,0 | 27,0 | 54,0 | 244 803 |
| | | 5 ³ /8" | 1 ¹ /16" | 2 ¹ /2" | 6 ³ /8" | 1 ¹ /16" | 2 1/8" | |
| | | | | | | | | |
| 32,0 - 54,0 | 1 1/4" - 2 1/8" | 163,0 | 38,0 | 81,0 | 192,0 | 35,0 | 62,0 | 244 804 |
| | | 6 7/16" | 1 1/2" | 3 ³ /16" | 7 ⁹ /16" | 1 ³ /8" | 2 7/16" | |
| | | | | | | | | |
| 32,0 - 68,0 | 1 ¹ /4" - 2 ⁵ /8" | 163,0 | 50,0 | 92,0 | 192,0 | 41,0 | 70,0 | 244 805 |
| | | 6 ⁷ /16" | 1 ^{15/} 16" | 3 ^{5/8} " | 7 ⁹ /16" | 1 5/8" | 2 3/4" | |

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N Internal thread chaser



- Specially reinforced design for large threads. ~
- √ Thread measurement not required.
- ~ Quick adaptation to all thread pitches and diameters.
- Thread types: Inch, metric, left-hand, right-hand, coarse and fine threads.
- 1 Great advantage over screw taps - can be set below the areas of damaged threads. √
 - Uses intact threaded parts as a guide and repairs only the damaged areas.
- ~ Hardened steel blades are inserted in the intact thread to repair the damaged area.
- ✓ Removes rust and burrs.

Recommended for large internal thread:

Oil/gas production and pipelines, mines, heavy production machinery, heavy duty transporters and heavy civil engineering machinery.

Packing unit: in plastic tubes of 1

| Drilling range Ø mm | Ø inch | L1 mm/inch | B1 mm/inch | H1 mm/inch | ROD mm/inch | Ør mm/inch | ØR mm/inch | Article no. |
|------------------------|------------------------------------------|-----------------------------------------|-----------------------------|---------------------|---------------------|---------------|---------------|-------------|
| 69,0 - 81,0 | 2 ³ /4" - 3 ³ /16" | 163,0 | 50,0 | 103,0 | 192,0 | 48,0 | 76,0 | 244 806 |
| | | 6 ⁷ /16" | 1 15/16" | 4 1/16" | 7 ⁹ /16" | 1 7/8" | 3" | |
| | | | | | | | | |
| 82,0 - 95,0 | 3 1/4" - 3 3/4" | 163,0 | 50,0 | 118,0 | 192,0 | 54,0 | 82,0 | 244 807 |
| | | 6 ⁷ /16" | 1 ^{15/} 16" | 4 5/8" | 7 ⁹ /16" | 2 1/8" | 3 1/4" | |
| | | | | | | | | |
| 96,0 - 108,0 | 3 3/4" - 4 1/4" | 163,0 | 50,0 | 132,0 | 192,0 | 61,0 | 88,0 | 244 808 |
| | | 6 ⁷ / ₁₆ " | 1 ^{15/} 16" | 5 ^{3/} 16" | 7 ^{9/} 16" | 2 3/8" | 3 1/2" | |

Spare blades for internal thread chaser

Blade 60° = Standard

Blade 55° = Suitable for British standard thread

Packing unit: in plastic tubes of 1



| Drilling range Ø mm | Ø inch | Description | Article no. Blade 60° | Article no. Blade 55° |
|------------------------|------------------------------------------|-----------------------------------------|--------------------------|--------------------------|
| 8,0 - 11,0 | 5/16" - 7/16" | | 244 800-1 | 244 800-2 |
| 12,0 - 16,0 | 1/2" - 5/8" | | 244 801-1 | 244 801-2 |
| 16,0 - 20,0 | 11/16" - 13/16" | | 244 802-1 | 244 802-2 |
| 22,0 - 32,0 | 7/8" - 1 1/4" | | 244 803-1 | 244 803-2 |
| 22,0 - 32,0 | 7/8" - 1 1/4" | for thread coarser than 10 TPI / 2.5 mm | 244 803-3 | 244 803-4 |
| 32,0 - 54,0 | 7/8" - 2 1/8" | | 244 804-1 | 244 804-2 |
| 32,0 - 54,0 | 7/8" - 2 1/8" | for thread finer than 14 TPI / 1.75 mm | 244 804-3 | 244 804-4 |
| 32,0 - 68,0 | 1 ¹ /4" - 2 ⁵ /8" | | 244 805-1 | 244 805-2 |
| 32,0 - 68,0 | 1 1/4" - 2 5/8" | for thread finer than 14 TPI / 1.75 mm | 244 805-3 | 244 805-4 |
| 69,0 - 81,0 | 2 ³ /4" - 3 ³ /16" | | 244 805-1 | 244 805-2 |
| 69,0 - 81,0 | 2 3/4" - 3 3/16" | for thread finer than 14 TPI / 1.75 mm | 244 805-3 | 244 805-4 |
| 82,0 - 95,0 | 3 ¹ /4" - 3 ³ /4" | | 244 805-1 | 244 805-2 |
| 82,0 - 95,0 | 3 1/4" - 3 3/4" | for thread finer than 14 TPI / 1.75 mm | 244 805-3 | 244 805-4 |
| 96,0 - 108,0 | 3 3/4" - 4 1/4" | | 244 805-1 | 244 805-2 |
| 96,0 - 108,0 | 3 3/4" - 4 1/4" | for thread finer than 14 TPI / 1.75 mm | 244 805-3 | 244 805-4 |

130







Protective cap for internal thread chaser

Suitable for repairing aluminium or other soft metal threads.

RUKO protective caps are made of high-quality polyamide plastic, which is characterised by toughness, elasticity and excellent mechanical properties over a wide range. The pads are designed for multiple uses - irrespective of the severity of the damage.

Packing unit: in plastic box of 5



| | Protective caps for trimmer | Drilling range Ø mm | Ø inch | Article no. |
|------------|--------------------------------|------------------------|-----------------------------------------------------------------|-------------|
| Size no. 1 | Article no. 244 800 | 9,0 - 12,0 | 3/8" - 1/2" | 244 809-1 |
| Size no. 2 | Article no. 244 801 | 14,0 - 18,0 | 9/16" - 11/16" | 244 809-2 |
| Size no. 3 | Article no. 244 802 | 18,0 - 22,0 | ¹¹ / ₁₆ " - ⁷ / ₈ " | 244 809-3 |
| Size no. 4 | Article no. 244 803 | 22,0 - 33,0 | ⁷ /8" - 1 ⁵ /16" | 244 809-4 |

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Slip-on sleeve for internal thread chaser

| | | | | N |
|------------|--------------------------------------------|------------------------|-----------------------------------------|-------------|
| | Slip-on sleeve for trimmer | Drilling range Ø mm | Ø inch | Article no. |
| Size no. 1 | Article no. 244 804 Article no. 244 805 | 44,0 - 54,0 | 1 ³ /4" - 2 ¹ /8" | 244 810-1 |
| Size no. 2 | Article no. 244 805 | 54,0 - 68,0 | 2 1/8" - 2 5/8" | 244 810-2 |



N External thread chaser





- ✓ No calibration required.
- ✓ Self-adaptation to any pitch and size within the range.
- $\checkmark\,$ Uses intact threaded parts as a guide and repairs only the damaged areas.
- ✓ Hardened cutters (HSS).

Packing unit: in plastic tubes of 1

Removes rust and burrs.





| Drilling range Ø mm | Ø inch | L1 mm/inch | W1 mm/inch | H1 mm/inch | Ø _R mm/inch | Article no. | |
|------------------------|------------------------------------|---------------|---------------------|----------------------------------|---------------------------|-------------|--|
| 4,0 - 19,0 | 5/ ₃₂ " - 3/4" | 61,0 | 23,0 | 62,0 | 68,0 | 244 700 | |
| | | 2 3/8" | 29/ ₃₂ " | 2 7/16" | 2 11/16" | | |
| | | | | | | | |
| 17,0 - 38,0 | ¹¹ /16" - 1 1/2" | 105,0 | 32,0 | 110,0 | 117,0 | 244 701 | |
| | | 4 1/8" | 1 1/2" | 4 ⁵ / ₁₆ " | 4 5/8" | | |



External thread chaser - the large version!





- The V-shaped threaded seat is narrower in order to reduce the distance between the blades on the tool sides.
 If the thread diameter is smaller than the stepped shaft, the device can be placed at the last 3 mm of the
- threaded end.
- \checkmark The tool is narrower (35 mm) and lighter (1.8 kg).
- ✓ The maximum diameter is larger than the previous two, up to 152 mm (6").
- ✓ Thanks to the multi-toothed blades, the thread is machined perfectly.
- ✓ The combination of multi-toothed blades and keyway skip accessories facilitates repair and also produces perfect results for thread with groove.

| Drilling range Ø mm | Ø inch | L1 mm/inch | W₁ mm/inch | H1 mm/inch | Ø _R mm/inch | Article no. |
|------------------------|-------------------------|---------------|--------------------|--------------------|---------------------------|-------------|
| 35,0 - 152,0 | 1 ³ /8" - 6" | 305,0 | 32,0 | 130,0 | 250,0 | 244 702 |
| | | 12" | 1 ¹ /4" | 5 ¹ /8" | 9 7/8" | |







Spare blades for external thread chaser

Blade 60° = Standard Blade 55° = Suitable for British standard thread

Packing unit: in plastic tubes of 1

| | | | N | |
|------------------------|--------------------------------------------------------------------------|------------------------------------|--------------------------|--------------------------|
| Drilling range Ø mm | Ø inch | Description | Article no. Blade 60° | Article no. Blade 55° |
| 4,0 - 19,0 | 5/32" - 3/4" | | 244 700-1 | 244 700-2 |
| 17,0 - 38,0 | 11/16" - 1 1/2" | | 244 701-1 | 244 701-2 |
| 17,0 - 38,0 | ¹¹ / ₁₆ " - 1 ¹ / ₂ " | Thread finer than 17 TPI / 1.5 mm | 244 701-3 | 244 701-4 |
| 35,0 - 152,0 | 1 ³ /8" - 6" | | 244 702-1 | 244 702-2 |
| 35,0 - 152,0 | 1 ³ /8" - 6" | Thread coarser than 7 TPI / 3.5 mm | 244 702-3 | 244 702-4 |
| 35,0 - 152,0 | 1 3/8" - 6" | Thread finer than 14 TPI / 1.75 mm | 244 702-5 | 244 702-6 |



N Adapter for external thread chaser

With this accessory, the screw tap key grooves, slots, notches and channels can be machined. To machine damaged threaded shafts with grooves for pins or washers successfully, please select the appropriate cutter.

Packing unit: in plastic tubes of 1

| Drilling range Ø mm | Ø inch | Description | Article no. Blade 60° |
|------------------------|-------------------------|-------------------------------------|--------------------------|
| 35,0 - 152,0 | 1 ³ /8" - 6" | Thread finer than 10 TPI / 2.5 mm | 244 703-1 |
| 35,0 - 152,0 | 1 ³ /8" - 6" | Thread coarser than 10 TPI / 2.5 mm | 244 703-2 |



Multi-toothed blade for machining with keyway skip accessories.

Blade 60° = Standard

| keyway skip for | Description | | Article no. |
|---------------------|---------------|-----------|-------------|
| Article no. 244 702 | Pitch 1,00 mm | Blade 60° | 244 703-3 |
| | Pitch 1,25 mm | Blade 60° | 244 703-4 |
| | Pitch 1,50 mm | Blade 60° | 244 703-5 |
| | Pitch 1,75 mm | Blade 60° | 244 703-6 |
| | Pitch 2,00 mm | Blade 60° | 244 703-7 |
| | Pitch 24 TPI | Blade 60° | 244 703-8 |
| | Pitch 20 TPI | Blade 60° | 244 703-9 |
| | Pitch 18 TPI | Blade 60° | 244 703-10 |
| | Pitch 16 TPI | Blade 60° | 244 703-11 |
| | Pitch 14 TPI | Blade 60° | 244 703-12 |



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N External thread chaser sets in plastic case





Set 1

Recommended for:

Garages, small and medium-sized industrial workshops, farms and yacht maintenance.

| arages, small | and medium-siz | zed industrial workshops, farms and yacht maintenance. | N |
|------------------------|-----------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------|
| Drilling range Ø mm | Ø inch | Description | Article no. |
| 4,0 - 38,0 | 5/ ₃₂ " - 1 1/2" | 4-piece external thread chaser set 1x external thread chaser – Ø 4.0 - 19.0 mm 1x external thread chaser – Ø 17.0 - 38.0 mm 1x spare blade 60° external – Ø 4.0 - 19.0 mm 1x spare blade 60° external – Ø 17.0 - 38.0 mm | 244 900 |

Set 2

Recommended for:

Lorry & tractor workshops, industrial maintenance in all industries, power, shipyard, marine and coastal enterprises.

| Drilling range Ø mm | Ø inch | Description | Article no. |
|------------------------|------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------|
| 4,0 - 152,0 | 5/32" - 6" | 8-piece external thread chaser set 1x external thread chaser $- \emptyset$ 4.0 - 19.0 mm 1x external thread chaser $- \emptyset$ 17.0 - 38.0 mm 1x external thread chaser $- \emptyset$ 35.0 - 152.0 mm 1x spare blade 60° external $- \emptyset$ 4.0 - 19.0 mm 1x spare blade 60° external $- \emptyset$ 17.0 - 38.0 mm 1x spare blade 60° external $- \emptyset$ 35.0 - 152.0 mm 1x quick deburrer with HSS blade E100 - Part No. 107 054 1x handle extension | 244 901 |





207





Internal thread chaser sets in plastic case







244 904

Set 3

Recommended for: Industrial maintenance, power industry, construction.

| Drilling range Ø mm | Ø inch | Description | Article no. |
|------------------------|------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------|
| 8,0 - 20,0 | 5/ ₁₆ " - 13/ ₁₆ " | 6-piece internal thread chaser set 1x internal thread chaser each – Ø 8.0 - 11.0 / Ø 12.0 - 16.0 / Ø 16.0 - 20.0 mm 1 blade each 60° - Ø 8.0 - 11.0 / Ø 12.0 - 16.0 / Ø 16.0 - 20.0 mm | 244 902 |

Set 4

Recommended for:

Industrial maintenance, technicians, energy industry, construction and plumbing.

| ndustriai mainte | enance, technici | lans, energy industry, construction and plumbing. | N |
|------------------------|-----------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------|
| Drilling range Ø mm | Ø inch | Description | Article no. |
| 8,0 - 32,0 | 5/16" - 1 1/4" | 8-piece internal thread chaser set 1x internal thread chaser each – Ø 8.0 - 11.0 / Ø 12.0 - 16.0 / Ø 16.0 - 20.0 / Ø 22.0 - 32.0 mm 1 blade each 60° - Ø 8.0 - 11.0 / Ø 12.0 - 16.0 / Ø 16.0 - 20.0 / Ø 22.0 - 32.0 mm | 244 903 |



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Recommended for:

Industrial maintenance, technicians, energy industry, construction, shipyard, marine and coastal enterprises.

| Drilling range Ø mm | Ø inch | Description | Article no. |
|------------------------|---------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------|
| 22,0 - 68,0 | 7/8" - 2 5/8" | 8-piece internal thread chaser set 1x internal thread chaser each – Ø 22.0 - 32.0 / Ø 32.0 - 68.0 mm 1 slip-on sleeve each - Ø 44.0 - 54.0 / Ø 54.0 - 68.0mm 1 blade each 60° - Ø 22.0 - 32.0 mm 1 blade each 60° - Ø 22 - 32 mm for thread coarser than 10 TPI / 2.5 mm 1 blade each 60° - Ø 32.0 - 68.0 mm 1 blade each 60° - Ø 32.0 - 68.0 mm | 244 904 |





External and internal thread chaser "COMBI" sets in plastic case







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Set 6

Recommended for: Garages, small and medium-sized industrial workshops, farms and yacht maintenance.

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|--------------------------|-------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------|
| Drilling range Ø mm | Ø inch | Description | Article no. |
| 4,0 - 19,0 8,0 - 16,0 | 5/ ₃₂ " - 3/4" 5/16" - 5/8" | 6-piece external and internal thread chaser set 1x external thread chaser $-\emptyset$ 4.0 - 19.0 mm 1x blade 60° external $-\emptyset$ 4.0 - 19.0 mm 1x internal thread chaser each $-\emptyset$ 8.0 - 11.0 / \emptyset 12.0 - 16.0 mm | 244 905 |
| 0,0 10,0 | , /0 | 1 blade each $60^{\circ} - \emptyset 8.0 - 11.0 / \emptyset 12.0 - 16.0 \text{ mm}$ | |

Set 7

Recommended for:

Garages, industrial maintenance in small to large businesses, construction, agricultural operations and plumbing.

| Drilling range Ø mm | Ø inch | Description | Article no. |
|------------------------|------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------|
| 4,0 - 19,0 | 5/ ₃₂ " - 3/4" | 8-piece external and internal thread chaser set 1x external thread chaser $-\emptyset$ 4.0 - 19.0 mm 1x blade 60° external $-\emptyset$ 4.0 - 19.0 mm | 244 906 |
| 8,0 - 20,0 | 5/ ₁₆ " - 13/ ₁₆ " | 1x internal thread chaser each $-\emptyset$ 8.0 - 11.0 / \emptyset 12.0 - 16.0 / \emptyset 16.0 - 20.0 mm 1 blade each 60° - \emptyset 8.0 - 11.0 / \emptyset 12.0 - 16.0 / \emptyset 16.0 - 20.0 mm | |

Set 8

Recommended for:

Lorry & tractor workshops, industrial maintenance in all industries, shipyard, marine and coastal enterprises.

| Drilling range Ø mm | Ø inch | Description | Article no. |
|------------------------|-----------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------|
| 4,0 - 38,0 | 5/32" - 1 1/2" | 12-piece external and internal thread chaser set 1x external thread chaser each $- \emptyset$ 4.0 - 19.0 / \emptyset 17.0 - 38.0 mm 1x blade 60° external each $- \emptyset$ 4.0 - 19.0 / \emptyset 17.0 - 38.0 mm | 244 907 |
| 8,0 - 32,0 | 5/16" - 1 1/4" | 1x internal thread chaser each – Ø 8.0 - 11.0 / Ø 12.0 - 16.0 / Ø 16.0 - 20.0 / Ø 22.0 - 32.0 mm 1 blade each 60° - Ø 8.0 - 11.0 / Ø 12.0 - 16.0 / Ø 16.0 - 20.0 / Ø 22.0 - 32.0 mm | |





Reference values for internal thread chaser sets

Select the appropriate tool on the basis of colour in the table. Vertical: Diameter of the workpiece to be machined. Horizontal: Pitch of the thread to be repaired.

| Size Inch | | | 1/4 | 5/16 | 3/8 | 7/16 | 1/2 | 9/16 | 5/8 | 11/16 - 3/4 | | 13/16 | | 7/8 | 15/16 | 1-1 1/16 | 1 1/8 | 1 3/16 | 1 1/4 | 1 5/16 | 1 3/8 - 1 9/16 | 1 5/8 | 1 3/4 | 1 7/8 | 2 - 2 ^{3/16} | 2 3/16 - 2 5/8 |
|--------------|----------|---|-----|------|-----|------|-----|---------|-----|-------------|----|-------|----|-----|-------|----------|-------|--------|-------|--------|----------------|-------|-------|---------|------------------------------|----------------|
| Size mm | | 5 | 9 | œ | 10 | 11 | 12 | 14 - 15 | 16 | 17 - 19 | 20 | | 21 | 22 | 24 | 25 - 27 | 28 | 30 | 32 | 33 | 35 - 40 | 42 | 44 | 45 - 48 | 50 - 55 | 54 - 68 |
| tpi | Pitch | | | | | | | | | | | | | | | | | | | | | | | | | |
| 32 | 0,8 | | | | | | | | | | | | | | | | | | | | | | | | | |
| 28 | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 26 | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 24 | 1 | | | | | | | | | | | | | | | | | | | | | | | | | |
| 22 | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 20 | 1,25 | | | | | | | | | | | | | | | | | | | | | | | | | |
| 18 | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | 1,5 | | | | | | | | | | | | | | | | | | | | | | | | | |
| 16 | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 14 | 1,75 | | | | | | | | | | | | | | | | | | | | | | | | | |
| 13 | 2 | | | | | | | | | | | | | | | | | | | | | | | | | |
| 12 | | _ | _ | _ | _ | _ | _ | | | | | | | | | | | | | | | | | | | |
| 11,5 | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 11 | | | _ | _ | | | _ | _ | | | | | | | | | | | | | | | | | | |
| 10 | 2,5 | | | | | | | | | | | | | | | | | | | | | | | | | |
| 9 | - | | _ | | | | _ | _ | | _ | _ | _ | | | | | | | | | | | | | | |
| | 3 | | | | | | | | | | | | | | | | | | | | | | | | | |
| 8 | 0.5 | | | | | | | | | | | | | | | | | | | | | | | | | |
| 7 | 3,5 | | | | | | | | | | | | | | | | | | | | | | | | | |
| 7 | Λ | | | | | | | | | | | | | | | | | | | | | | | | | |
| 6 | 4 | | | | | | | | | | | | | | | | | | | | | | | | | |
| 0 | 4,5 | | | | | | | | | | | | | | | | | | | | | | | | | |
| 5 | 4,5 5 | | | | | | | | | | | | | | | | | | | | | | | | | |
| 4,5 | 5 | | | | | | | | | | | | | | | | | | | | | | | | | |

Colour code:

- Internal thread chaser article no. 244 800
- Internal thread chaser article no. 244 801
- Internal thread chaser article no. 244 802

- Internal thread chaser article no. 244 803
- Internal thread chaser article no. 244 804
- Internal thread chaser article no. 244 804 + slip-on sleeve
- Internal thread chaser article no. 244 805

210 «

Reference values for external thread chaser sets

Select the appropriate tool on the basis of colour in the table. Vertical: Diameter of the workpiece to be machined. Horizontal: Pitch of the thread to be repaired.

| Size Inch | | 5/32 | 3/16 | 1/4 | 5/16 | 3/8 | | 7/16 | 1/2 | 9/16 | | 5/8 | 11/16 | | 3/4 | | 13/16 | 7/8 | 15/16 | - | 1 1/8 | 1 3/16 | 1 1/4 | 1 3/8 | 11/2 | | 1 5/8 | 1 3/4 | 2 | 2 1/2 | e | 3 1/2 | 4 | 5 | 9 |
|--------------|----------|------|------|-----|------|-----|----|------|-----|------|----|-----|-------|----|-----|----|-------|-----|-------|----|-------|--------|-------|-------|------|----|-------|-------|----|-------|----|-------|-----|-----|-----|
| Size mm | | 4 | 5 | 9 | œ | 6 | 10 | 11 | 12 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | | 22 | 24 | 25 | 28 | 30 | 32 | 35 | 38 | 40 | 42 | 44 | 50 | 64 | 80 | | 100 | 128 | 152 |
| tpi | Pitch | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 28 | | Γ | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 26 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 24 | 1 | | | | | | | | | | | | Γ | | | | | | | | | | | | | | | | | | | | | | |
| 22 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 20 | 1,25 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 18 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | 1,5 | | | | | | | | | | | | | | | | | | | | | | Г | | | | | | | | | | | | |
| 16 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 14 | 1,75 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 13 | 2 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 12 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 11,5 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 11 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 10 | 2,5 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 9 | - | _ | | | | | - | - | _ | | _ | | | | | | | | | | | | | | | | | | | | | | | | |
| | 3 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 8 | 0.5 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| -7 | 3,5 | | | | | | - | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 7 | 4 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 6 | 4 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 0 | 4,5 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 5 | 4,5 5 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 4,5 | 5 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 4,5 | 6 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

Colour code:

- External thread chaser article no. 244 700
- External thread chaser article no. 244 701
- External thread chaser article no. 244 702

1.07



N Thread repair tool

There are various causes that lead to the destruction of threads.

These include for instance corrosion, wear or a too high tightening torque. The **ProCoil** thread repair range by RUKO allows for a low-cost, simple and quick repair of damaged and worn out threads. Galvanized steel guarantees high quality internal threads that withstand effects of temperature and corrosion.

One more advantage of the **ProCoil** range is the simple and quick installation.

Application areas are for instance machine and plant construction, automotive and electrical engineering, power plant technology or shipbuilding. Besides repair, scrap recycling is also of great significance to the industry.



New at

1.07

« www.**ruko**.de »

Overview of symbols



Height-speed steel



DIN 352



metric, DIN ISO 13



Thread angle

Type N

Shape C:

Split point





right hand cutting









bright surface



Tenacity classes

square as per DIN 10





Shank: cylindrical

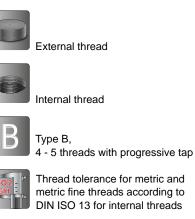
118°

Shank:



right hand cutting

Point angle:



Thread tolerance for metric and metric fine threads according to DIN ISO 13 for internal threads





Drilling depth e.g. 5 x diameter



Helix angle e.g. 25-30°

Tolerance

e.g. h8

Product Information

1. Drilling out:

Firstly drill out the damaged thread with a RUKO twist drill. In this regard it should be noted that larger drill holes are necessary with thread formers. Check that the screw tap and threaded bolt from the ProCoil set have the same thread and pitch.

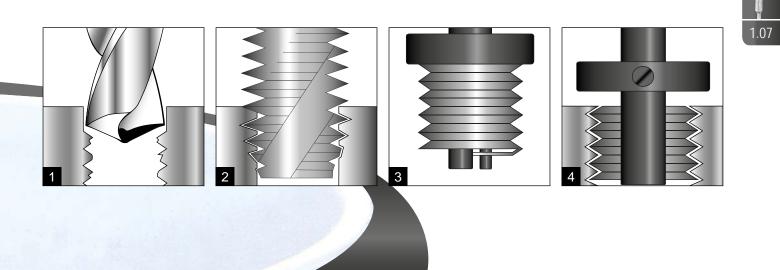
2. Thread cutting:

The new internal thread is now cut into the drilled out hole with a RUKO screw tap. Using RUKO cutting oil is recommended.

3. Fitting the thread insert:

Place the insert onto the insertion tool. Care should be taken here that the tang fits in the groove and the adjusting ring is correctly set. Now use light pressure to twist the thread insert in the direction of the thread. Attention: Do NOT twist against the thread direction, as the tang may break off.

4. Breaking the tang: Remove the insertion tool and break the tang with the tang breaking tool. The new thread with the ProCoil thread insert is now ready for use.



213



N Thread Inserts

Standard design, stainless steel and free running.

Thread reinforcement for materials with low shearing strenght, e.g. aluminium alloys and magnesium alloys as well as to repair enables worn and damaged threads.

Packing unit: in plastic box

| | | | | N |
|-------------|-------|---------------------|-------|-------------|
| Nominal | Pitch | Height = factor x Ø | Cont. | Article no. |
| thread size | mm | | pcs. | |
| M 3 | 0,50 | 1,0 | 50 | 244 303 |
| M 4 | 0,70 | 1,0 | 50 | 244 304 |
| M 5 | 0,80 | 1,0 | 50 | 244 305 |
| M 6 | 1,00 | 1,0 | 50 | 244 306 |
| M 8 | 1,25 | 1,0 | 50 | 244 308 |
| M 10 | 1,50 | 1,0 | 50 | 244 310 |
| M 12 | 1,75 | 1,0 | 25 | 244 312 |
| M 14 | 2,00 | 1,0 | 25 | 244 314 |
| M 14 | 1,25 | 1,0 | 25 | 244 315 |
| | | | | |
| M 3 | 0,50 | 1,5 | 50 | 244 403 |
| M 4 | 0,70 | 1,5 | 50 | 244 404 |
| M 5 | 0,80 | 1,5 | 50 | 244 405 |
| M 6 | 1,00 | 1,5 | 50 | 244 406 |
| M 8 | 1,25 | 1,5 | 50 | 244 408 |
| M 10 | 1,50 | 1,5 | 50 | 244 410 |
| M 12 | 1,75 | 1,5 | 25 | 244 412 |
| M 14 | 2,00 | 1,5 | 25 | 244 414 |
| M 14 | 1,25 | 1,5 | 25 | 244 415 |
| | 0.50 | 0.0 | | 044 500 |
| M 3 | 0,50 | 2,0 | 50 | 244 503 |
| M 4 | 0,70 | 2,0 | 50 | 244 504 |
| M 5 | 0,80 | 2,0 | 50 | 244 505 |
| M 6 | 1,00 | 2,0 | 50 | 244 506 |
| M 8 | 1,25 | 2,0 | 50 | 244 508 |
| M 10 | 1,50 | 2,0 | 50 | 244 510 |
| M 12 | 1,75 | 2,0 | 25 | 244 512 |
| M 14 | 2,00 | 2,0 | 25 | 244 514 |
| M 14 | 1,25 | 2,0 | 25 | 244 515 |



N Pin-Breaker

| Nominal thread size | Pitch mm | Ø1 mm | L1 mm | Article no. |
|------------------------|-------------|----------|----------|-------------|
| M 3 | 0,50 | 2,0 | 100,0 | 244 163 |
| M 4 | 0,70 | 2,8 | 100,0 | 244 164 |
| M 5 | 0,80 | 3,5 | 100,0 | 244 165 |
| M 6 | 1,00 | 4,8 | 100,0 | 244 166 |
| M 8 | 1,25 | 6,0 | 100,0 | 244 168 |
| M 10 | 1,50 | 7,5 | 100,0 | 244 170 |
| M 12 | 1,75 | 9,5 | 100,0 | 244 172 |
| M 14 | 2,00 | 11,2 | 100,0 | 244 174 |





N Fitting-Tools

Packing unit: in plastic tubes of 1

| Nominal thread size | Pitch mm | Ø1 mm | L1 mm | Article no. |
|---------------------|-------------|----------|----------|-------------|
| М З | 0,50 | 2,0 | 60,0 | 244 183 |
| M 4 | 0,70 | 2,8 | 60,0 | 244 184 |
| M 5 | 0,80 | 3,5 | 60,0 | 244 185 |
| M 6 | 1,00 | 4,8 | 60,0 | 244 186 |
| M 8 | 1,25 | 6,0 | 80,0 | 244 188 |
| M 10 | 1,50 | 7,5 | 80,0 | 244 190 |
| M 12 | 1,75 | 9,5 | 80,0 | 244 192 |
| M 14 | 2,00 | 11,2 | 80,0 | 244 194 |

ProCoil Thread repairing assortment in steel case

45-piece set of ProCoil thread repairing tools





| | Description | Article no. |
|--------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------|
| Assortment 1 | Assortment M 5 - M12 5 twist drills HSS Ø 5,2 - 6,2 - 8,3 - 10,3 - 12,4 mm + 5 single-cut taps DIN 352 HSS M 5 - M 6 - M 8 - M 10 - M 12 + 5 fitting tools M 5 - M 6 - M 8 - M 10 - M 12 + 5 pin-Breakers Ø 3,5 - 4,8 - 6,0 - 7,5 - 9,5 mm + 20 inserts M 5 - M 10: Height = 1,0 x Ø + 5 inserts M 12: Height = 1,0 x Ø | 244 208 |
| Assortment 2 | Assortment M 6 - M14 5 twist drills HSS Ø 6,2 - 8,3 - 10,3 - 12,4 - 14,5 mm + 5 single-cut taps DIN 352 HSS M 6 - M 8 - M 10 - M 12 - M 14 + 5 fitting tools M 6 - M 8 - M 10 - M 12 - M 14 + 5 pin-Breakers Ø 4,8 - 6,0 - 7,5 - 9,5 - 11,2 mm + 20 inserts M 6 - M 12: Height = 1,0 x Ø + 5 inserts M 14: Height = 1,0 x Ø | 244 209 |





☑ ProCoil Thread repairing sets in steel case

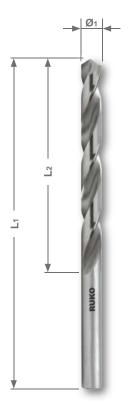
18-piece set of ProCoil thread repairing tools



| | Description | Article no. |
|----------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------|
| Set M 3 | 1 twist drill Ø 3,1 mm + 1 single-cut tap DIN 352 HSS M 3 x 0,5 + 1 fitting tool M 3 + 1 pin-Breaker Ø 2,0 mm + each 5 inserts Height = 1,0 x Ø / Height = 1,5 x Ø / Height = 2,0 x Ø | 244 200 |
| Set M 4 | 1 twist drill Ø 4,1 mm + 1 single-cut tap DIN 352 HSS M 4 x 0,7 + 1 fitting tool M 4 + 1 pin-Breaker Ø 2,8 mm + each 5 inserts Height = 1,0 x Ø / Height = 1,5 x Ø / Height = 2,0 x Ø | 244 201 |
| Set M 5 | 1 twist drill Ø 5,2 mm + 1 single-cut tap DIN 352 HSS M 5 x 0,8 + 1 fitting tool M 5 + 1 pin-Breaker Ø 3,5 mm + each 5 inserts Height = 1,0 x Ø / Height = 1,5 x Ø / Height = 2,0 x Ø | 244 202 |
| Set M 6 | 1 twist drill Ø 6,2 mm + 1 single-cut tap DIN 352 HSS M 6 x 1,0 + 1 fitting tool M 6 + 1 pin-Breaker Ø 4,8 mm + each 5 inserts Height = 1,0 x Ø / Height = 1,5 x Ø / Height = 2,0 x Ø | 244 203 |
| Set M 8 | 1 twist drill Ø 8,3 mm + 1 single-cut tap DIN 352 HSS M 8 x 1,25 + 1 fitting tool M 8 + 1 pin-Breaker Ø 6,0 mm + each 5 inserts Height = 1,0 x Ø / Height = 1,5 x Ø / Height = 2,0 x Ø | 244 204 |
| Set M 10 | 1 twist drill Ø 10,3 mm + 1 single-cut tap DIN 352 HSS M 10 x 1,5 + 1 fitting tool M 10 + 1 pin-Breaker Ø 7,5 mm + each 5 inserts Height = 1,0 x Ø / Height = 1,5 x Ø / Height = 2,0 x Ø | 244 205 |
| Set M 12 | 1 twist drill Ø 12,4 mm + 1 single-cut tap DIN 352 HSS M 12 x 1,75 + 1 fitting tool M 12 + 1 pin-Breaker Ø 9,5 mm + each 5 inserts Height = 1,0 x Ø / Height = 1,5 x Ø / Height = 2,0 x Ø | 244 206 |
| Set M 14 | 1 twist drill Ø 14,5 mm + 1 single-cut tap DIN 352 HSS M 14 x 2,0 + 1 fitting tool M 14 + 1 pin-Breaker Ø 11,2 mm + each 5 inserts Height = 1,0 x Ø / Height = 1,5 x Ø / Height = 2,0 x Ø | 244 207 |



216 **«**



Twist drills DIN 338 type N HSS ground



Height performance ground twist drill consisting of heavy-duty high speed steel. The fully ground twist drill has a more precise concentricity. Application areas: for steel, alloyed and unalloyed cast iron (up to a strength of 900 N/mm²), grey, malleable, ductile and die-cast iron, sintered iron, nickel silver, graphite, short chipping aluminium alloys, brass and bronze.

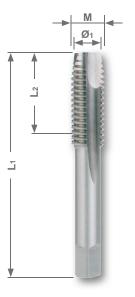
Packing unit:

Ø 3,10 mm up to 10,3 mm in plastic box of 10

Ø 12,40 mm up to 14,50 mm in plastic box of 5

| Ø1 mm | L1 mm | L2 mm | Article no. HSS |
|----------|----------|----------|--------------------|
| 3,10 | 65,0 | 36,0 | 214 031 |
| 4,10 | 75,0 | 43,0 | 214 041 |
| 5,20 | 86,0 | 52,0 | 214 052 |
| 6,20 | 101,0 | 63,0 | 214 062 |
| 8,30 | 117,0 | 75,0 | 214 083 |
| 10,30 | 133,0 | 87,0 | 214 103 |
| 12,40 | 151,0 | 101,0 | 214 124 |
| 14,50 | 169,0 | 114,0 | 214 145 |





Single-cut taps HSS ground



The single-cut tap HSS for through threads in unalloyed and low-alloyed steels up to a strength of 800 N/mm², malleable cast iron and non-ferrous metals. The thread can be cut in one operation by hand or machine.



Packing unit: individual plastic pack

| Nominal thread size M | Pitch mm | Thread core hole Ø1 mm | L1 mm | L2 mm | Article no. HSS |
|-----------------------------|-------------|------------------------------|----------|----------|--------------------|
| M 3 | 0,5 | 3,6 | 53,0 | 13,0 | 244 603 |
| M 4 | 0,7 | 4,9 | 58,0 | 16,0 | 244 604 |
| M 5 | 0,8 | 6,0 | 66,0 | 19,0 | 244 605 |
| M 6 | 1,0 | 7,3 | 72,0 | 22,0 | 244 606 |
| M 8 | 1,3 | 9,6 | 80,0 | 24,0 | 244 608 |
| M 10 | 1,5 | 11,9 | 89,0 | 29,0 | 244 610 |
| M 12 | 1,8 | 14,3 | 95,0 | 30,0 | 244 612 |
| M 14 | 2,0 | 16,6 | 102,0 | 32,0 | 244 614 |
| M 14 | 1,3 | 15,6 | 102,0 | 32,0 | 244 615 |



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