SINO ORTHO LIMITED

(2025-2026)

PRODUCT INSTRUCTIONS
- MINI SCREWS & KITS -





[YOUR TRUST,OUR RESPONSIBILITY]

Orthodontic Mini Screws

[Product Description]

A micro-screw implant used to provide temporary skeletal anchorage during orthodontic treatment. The design supports common traction methods and auxiliary attachments, with attention to initial stability and soft-tissue compatibility. Used with the compatible **screw driver** or **driver kits**.





[Material Composition]

Medical-grade titanium alloy or **medical-grade stainless steel**.

[Size Range]

- **Diameters:**
  1.4 mm / 1.6 mm / 1.8 mm / 2.0 mm.
- **Lengths:**
  6 mm / 8 mm / 10 mm / 12 mm / 14 mm.
- **Compatible tools:**
  Dedicated **screw driver**;
  optional **driver kits**.
- **Unit of supply:** 1 pc/pack.

Ref	Φ(mm)	L(mm)
MS-1406	1.4	6
MS-1408	1.4	8
MS-1410	1.4	10
MS-1608	1.6	8
MS-1610	1.6	10
MS-1612	1.6	12
MS-1808	1.8	8
MS-1810	1.8	10
MS-1812	1.8	12
MS-2006	2.0	6
MS-2008	2.0	8
MS-2010	2.0	10
MS-2012	2.0	12
MS-2014	2.0	14



[Intended Use]

To provide temporary skeletal anchorage for orthodontic mechanics (e.g., en-masse retraction, distalization, intrusion/extrusion, space management) under the prescription and supervision of a licensed dental professional.

[Instructions for Use]

1. Pre-procedure and device processing

- Process **all instruments and this product** per your department's validated **cleaning and sterilization** procedures before they enter the surgical field.
- Prepare the operative field with routine oral cleansing and disinfection according to clinic policy.

2. Post-placement care and behavior

- Instruct the patient to maintain good oral hygiene and follow local cleaning advice.
- **Avoid biting hard objects, chewing non-food items, chin-resting habits, or similar behaviors** that increase micromotion or soft-tissue irritation.

3. Follow-up and monitoring

- Review at prescribed intervals to assess stability and soft-tissue health.
- If pain, swelling, discharge, marked mobility, or appliance interference occurs, **contact the clinic** promptly.

© 2025 Sino Ortho. All rights reserved.

4. Removal

· Removal is performed by qualified professionals according to departmental procedures.

[Packaging]

Plastic pouch or box, 1 pc/pack.
Compatible **screw driver / driver kits** sold separately or as sets.

[Precautions]

· **Component supply; non-sterile; single-patient use. Sterilize before use according to departmental procedures.**
· **For professional use only. Do not reprocess or reuse across patients.**
· Placement and loading plans are determined by the clinician based on clinical and imaging assessment; avoid critical anatomical structures.
· Compatible **screw driver/driver kits** are **reusable instruments** and must be cleaned, inspected, and **sterilized** according to validated procedures after each use.
· Do not use if the packaging is damaged, the product is beyond its expiration date, or visible defects are present. Dispose of used items as regulated medical waste.

[Contraindications]

· Active infection at or near the intended site, or uncontrolled periodontal disease.
· Poor oral hygiene or inability to comply with follow-up and maintenance.
· Uncontrolled systemic conditions that impair bone healing or increase infection risk (e.g., uncontrolled diabetes, recent high-dose immunosuppression, early post-irradiation).
· Known hypersensitivity to **titanium alloys** or **stainless steel** (select materials accordingly).

[Storage Conditions]

Store in a **clean, dry, well-ventilated** environment, away from corrosive gases and direct sunlight. Separate storage from reusable instruments to prevent contamination.

[Shelf Life]

5 years under specified storage conditions. Do not use beyond the labeled date.

[Warranty]

12 months against materials and manufacturing defects under proper storage and intended clinical use. Damage due to misuse, cross-patient reuse, off-label application, improper torque, or tool incompatibility is excluded.

© 2025 Sino Ortho. All rights reserved.

Orthodontic Mini Screw Kits

[Product Description]

A **reusable** instrument set for the placement and removal of orthodontic mini screws (TADs). Typical kits include a driver handle, interchangeable rotary shafts (long/short), an optional contra-angle shaft/adapter, **driver tips** matched to the target screw system, and accessories for secure coupling. Clinical use is under the prescription and supervision of a licensed dental professional.



[Material Composition]

Primary components: **medical-grade stainless steel**; certain handles/housings may use **anodized aluminum** or other instrument-grade materials (model-dependent).

[Size Range]

Compatibility:

Use **only** with the matching screw system and tips specified for this kit. Do not mix systems unless explicitly declared compatible by the manufacturer.

Composition (kit contents):

- **Screw driver handle** (ergonomic; quick-clamp or threaded coupling)
- **Contra-angle shaft/adapter** (for handpiece, if applicable)
- **Rotary shafts — long / short** (manual straight shafts in two lengths)
- **Driver tips** (bits matched to the mini screw interface) ← *updated from "rotary use shaft"*
- **Torque indicator** (finger ring/marker; not a torque limiter)
- **Connecting rod / sleeve** (if supplied as a separate coupler)
- **Fixing screw** (for securing tips/couplings, if supplied as a separate part)
- **Storage box** (or tray)

Actual contents follow the catalog/packing list for the purchased model.

[Intended Use]

To couple with **compatible** orthodontic mini screws for insertion and removal in clinical procedures.

[Instructions for Use]

© 2025 Sino Ortho. All rights reserved.

	Item	Item Name	Length	Ref
1		Screw Driver Handle	90MM	SDH-02
2		Contra Angle Shaft(1:1)	81MM	CAS-01
3		Torque Ring		ATR-01
4		Connecting rod (For Torque Use)	80MM	ACRT-01
5		Connecting rod(Straight)	80MM	ACRS-01
6		Long Shaft	70MM	LSD-01
7		Short Shaft	35MM	SDS-01
8		Rotary Use Shaft	25MM	RDS-01
9		Fitting Screws	M3X5	FTS-01



Assembly

1. Select the **correct driver tip** for the intended mini screw.

2. Insert the tip into the chosen **rotary shaft (long/short)** or the **contra-angle shaft** (where applicable) and **lock** it.

3. Connect the shaft to the **driver handle** (quick-clamp or threaded). Confirm a **secure, coaxial** coupling with no wobble.

Operation

1. Pick up the mini screw with the driver tip; maintain the intended axis and apply **controlled torque** during placement or removal per clinical protocol.

2. Avoid excessive force that may cause **slippage** or damage to the screw head or adjacent appliances.

Disassembly

After use, detach the **driver tip**, then the **shaft** and **handle**, and keep all parts together for reprocessing.

Reprocessing

Remove gross soil promptly; keep instruments moist until cleaning if delayed.

Cleaning

1. Manual clean with a **neutral-pH enzymatic detergent**; use soft brushes for joints and couplings.

2. Flush internal channels of **contra-angle** parts if present.

3. Rinse thoroughly with clean water.

Inspection & Function Check

1. Inspect for residue, wear, burrs, corrosion, or **loose/failed couplings**.

2. Verify tip engagement on a test screw; **replace** worn or damaged components immediately.

Sterilization

1. Package components in sterilization pouches/trays per clinic policy.

2. Steam sterilization according to the sterilizer IFU (typical 134–135 °C cycle).

3. Allow complete drying and cooling before storage.

4. If any component is not steam-tolerant, use a **validated low-temperature** process specified for that part.

© 2025 Sino Ortho. All rights reserved.

[Packaging]

Non-sterile **kit box or tray**. Contents per catalog/packing list.

[Precautions]

- **For professional use only.**
- **Reusable kit: clean, inspect, and sterilize** before first use and **between patients**.
- Use only with **compatible** screws and tips; mismatches can cause **slippage** or head damage.
- Do not exceed recommended torque; do not lever against teeth or appliances.
- Do not use if packaging is damaged, markings are illegible, or defects are present. Keep out of reach of children.

[Contraindications]

No device-specific contraindications. Follow clinical judgment where mini screw placement is contraindicated (e.g., poor hygiene, active infection, uncontrolled systemic conditions).

[Storage Conditions]

Store in a **clean, dry, well-ventilated** environment, protected from contaminants and corrosive agents. After sterilization, keep sealed in a sterile pouch or closed container until use.

[Service Life]

Reusable; no fixed service life if the kit continues to pass inspection and function checks. **Remove from service** if wear, deformation, corrosion, joint looseness, or coupling failure is detected.

[Warranty]

12 months against materials and manufacturing defects under proper reprocessing and intended clinical use. Damage due to misuse, incompatible components, over-torque, inadequate maintenance, or modification is excluded.

Application 1:

1. Align the tail end of the "7 short shaft" with the head of the "1 Driver handle," and press down the outer ring clamp with your thumb and index finger. During this process, a rod with a hole in the middle will be exposed. Align the tail end of the "7" with the hole and insert it into the hole. Slowly release your thumb and index finger to ensure that "7" and "1" are securely fixed and matched.

2. Hold the combination of "7" and "1" in the palm of your hand, place the selected nail into the hole of "7," and ensure it is firmly secured. Then, place it in the patient's mouth at the intended location for the procedure. Use your index finger and thumb to rotate the middle part of "1" clockwise to implant or remove the nail from the patient's mouth

Application 2:

1. Align the tail end of the "6 long shaft" with the head of the "1 Driver handle," and press down the outer ring clamp with your thumb and index finger. During this process, a rod with a hole in the

© 2025 Sino Ortho. All rights reserved.

middle will be exposed. Align the tail end of the "7" with the hole and insert it into the hole. Slowly release your thumb and index finger to ensure that "6" and "1" are securely fixed and matched.

2. Hold the combination of "6" and "1" in the palm of your hand, place the selected nail into the hole of "6," and ensure it is firmly secured. Then, place it in the patient's mouth at the intended location for the procedure. Use your index finger and thumb to rotate the middle part of "1" clockwise to implant or remove the nail from the patient's mouth.

Application 3:
1. Align the tail end of the "2 Contra Angle shaft" with the head of the "1 Driver handle," and press down the outer ring clamp with your thumb and index finger. During this process, a rod with a hole in the middle will be exposed. Align the tail end of the "7" with the hole and insert it into the hole. Slowly release your thumb and index finger to ensure that "2" and "1" are securely fixed and matched.

2. Insert the tail end of the "5" into the reserved hole on the "1" handle and rotate "2" to the appropriate position, aligning the threaded hole on "2" with the hole on the head of "5." Place "9" into the hole and use an internal hex wrench to clockwise tighten "9" into the threaded hole of "2" to secure "2" and "1."

3. Fit the "8 Rotary use shaft" into the locking hole on "2." Push the control head's lever to the left, insert "8" and ensure it is fully secured, then push the lever back to the normal position.

4. Hold the "1" handle in the palm of your hand, place the selected nail into the hole of "8," and ensure it is firmly secured. Then, place it in the patient's mouth at the intended location for the procedure. Use your index finger and thumb to rotate the middle part of "1" clockwise to implant or remove the nail from the patient's mouth.

SINOORTH

© 2025 Sino Ortho. All rights reserved.

SINO ORTHO LIMITED

Email: info@sinoortho.com Web: www.sinoortho.com
Tel/Fax: 0086-571 89011997 Mobile:0086-137-5823 5369
Address：Room W01 2nd Building Jinjiadu South Road, Yuhang District, Hangzhou City, China.