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Ko32228
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Summary of Safety and Effectiveness

Lorenz 2.4 Self Drilling Screw

Classification Name: Screw, Fixation, Bone

Device Product Code: 87HWC (21 CFR 888.3040)

Intended Use:

Device Name:

Internal fixation devices to aid the surgeon in the stabilization and fixation of oral cranio-maxillofacial skeletal bone, small bones of the hand, feet, wrist, ankles, fingers and toes, for the fixation of fractures, osteotomies, revision procedures, joint fusion and reconstructive procedures.

Description:

The self drilling screws are 2.4 mm in diameter and the lengths may range up to 12mm. The tip of the screw is designed so that a predrilled hole is not required, but may be used.

Sterility Information:

The Lorenz Self Drilling Screws will be marketed as non-sterile, single use devices. Steam Sterilization recommendations are included in the package insert and can be seen in Attachment I.

Substantial Equivalence:

Walter Lorenz considers the Lorenz 2.4 Self Drilling Screws equivalent Lorenz Self Drilling Screw (K013954) TAB 3 includes a substantial equivalence comparison table. TAB 4 includes Premarket clearance (510K) for Lorenz Self Drilling Screw (K013954)

Possible risks:

- 1. Poor bone formation, Osteoporosis, Osteolysis, Osteomyelitis, inhibited revascularization, or infection can cause loosening, bending, cracking or fracture of the device.
- 2. Nonunion or delayed union, which may lead to breakage of the implant.
- 3. Migration, bending, fracture or loosening of the implant.
- 4. Metal sensitivity, or allergic reaction to a foreign body.
- 5. Decrease in bone density due to stress shielding.
- 6. Pain, discomfort, abnormal sensation, or palpability due to the presence of the device.
- 7. Increased fibrous tissue response around the fracture site and/or the implant.
- 8. Necrosis of bone.
- 9. Inadequate healing.

Apart from these adverse effects there are always possible complications of any surgical procedure such as, but not limited to, infection, nerve damage, and pain which may not be related to the implant.



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Food and Drug Administration 9200 Corporate Boulevard Rockville MD 20850

Ms. Kim Reed Senior Regulatory Specialist Walter Lorenz Surgical, Inc. 1520 Tradeport Drive Jacksonville, Florida 32218

Re: K032228

Trade/Device Name: Lorenz 2.4 Self Drilling Screw

Regulation Numbers: 21 CFR 888.3040

Regulation Names: Smooth or threaded metallic bone fixation fastener

Regulatory Class: II Product Codes: HWC Dated: July 18, 2003 Received: July 21, 2003

Dear Ms. Reed:

We have reviewed your Section 510(k) premarket notification of intent to market the device referenced above and have determined the device is substantially equivalent (for the indications for use stated in the enclosure) to legally marketed predicate devices marketed in interstate commerce prior to May 28, 1976, the enactment date of the Medical Device Amendments, or to devices that have been reclassified in accordance with the provisions of the Federal Food, Drug, and Cosmetic Act (Act) that do not require approval of a premarket approval application (PMA). You may, therefore, market the device, subject to the general controls provisions of the Act. The general controls provisions of the Act include requirements for annual registration, listing of devices, good manufacturing practice, labeling, and prohibitions against misbranding and adulteration.

If your device is classified (see above) into either class II (Special Controls) or class III (PMA), it may be subject to such additional controls. Existing major regulations affecting your device can be found in the Code of Federal Regulations, Title 21, Parts 800 to 898. In addition, FDA may publish further announcements concerning your device in the <u>Federal Register</u>.

Please be advised that FDA's issuance of a substantial equivalence determination does not mean that FDA has made a determination that your device complies with other requirements of the Act or any Federal statutes and regulations administered by other Federal agencies. You must comply with all the Act's requirements, including, but not limited to: registration and listing (21 CFR Part 807); labeling (21 CFR Part 801); good manufacturing practice requirements as set

forth in the quality systems (QS) regulation (21 CFR Part 820); and if applicable, the electronic product radiation control provisions (Sections 531-542 of the Act); 21 CFR 1000-1050.

This letter will allow you to begin marketing your device as described in your Section 510(k) premarket notification. The FDA finding of substantial equivalence of your device to a legally marketed predicate device results in a classification for your device and thus, permits your device to proceed to the market.

If you desire specific advice for your device on our labeling regulation (21 CFR Part 801), please contact the Office of Compliance at (301) 594-4659. Also, please note the regulation entitled, "Misbranding by reference to premarket notification" (21CFR Part 807.97). You may obtain other general information on your responsibilities under the Act from the Division of Small Manufacturers, International and Consumer Assistance at its toll-free number (800) 638-2041 or (301) 443-6597 or at its Internet address http://www.fda.gov/cdrh/dsma/dsmamain.html

Sincerely yours,

Celia M. Witten, Ph.D., M.D.

Director

Division of General, Restorative and Neurological Devices Office of Device Evaluation Center for Devices and Radiological Health

Enclosure

STATEMENT OF INDICATIONS FOR USE

510(k) Number: <u>k</u> 0.	3 22 28	
Device Name: Lorenz 2.4	Self Drilling Screw	
Indications For Use:		
cranio-maxillofacial skeleta	al bone, small bones of the	the stabilization and fixation of oral hand, feet, wrist, ankles, fingers and toes, rocedures, joint fusion and reconstructive
(PLEASE DO NOT WRI'	(Division Sign-Off) Division of General, Reand Neurological Devi	
IF NEEDED)	TE DELOW THIS LINE	- CONTINUE ON ANOTHER PAGE
Concurre	nce of CDRH, Office of De	vice Evaluation (ODE)
Prescription Use (Per 21 CFR 801.109)	OR	Over-The-Counter-Use(Optional Format 1-2-96)