

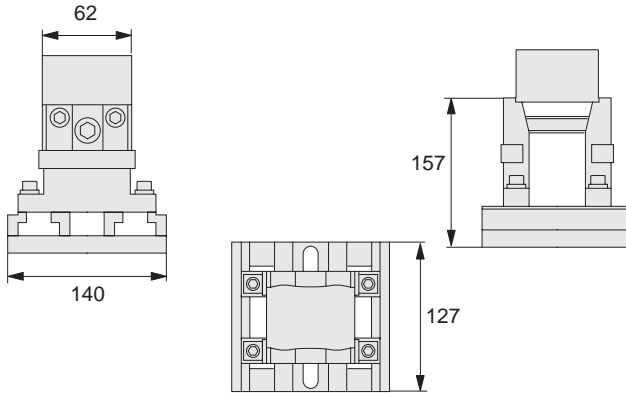
Five Axis Clamping Jaws

HILLCLIFF®

SL0800



CLAMPING SYSTEMS



Technical Notes

Clamping range of 25mm to 100mm. Capable of penetrating 1.52mm deep per gripper into material and producing over 26,5N of holding force. The low profile grippers hold on only 2.54mm allowing full access to all work surfaces including the bottom face. A single support bolt is used to reinforce the gripper towers for rigidity and increased workholding capacity.

Tips

5th axis machining without the need for pre-clamping material preparation.

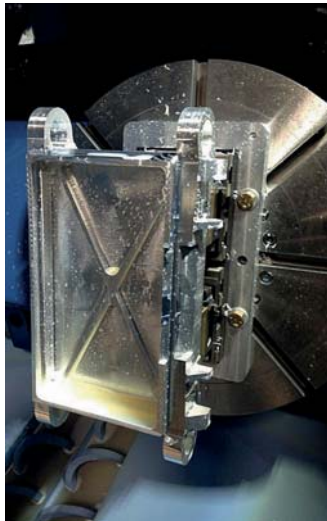
Important Notes

Can be mounted on t-slot machines, hole based systems or directly on indexers. Rails and gripper towers are serrated to provide a solid and easily adjustable base.

Order No.

Set contents

SL0800.14500	Clamping Jaw Set - Base Plate, 2 Jaws, 4 Grips, 4 Serrated Rails, 4 Loc-Down Bolts and Hardware.
SL0800.14501	Support Bolt M10 x 45
SL0800.14502	Support Bolt M10 x 65
SL0800.14503	Support Bolt M10 x 90
SL0800.14504	Support Bolt M10 x 110
SL0800.14505	Gripping Jaws - pair
SL0800.14510	Full Jaw Set - Pair of Jaws, 4 x Grips, Fixing Screws
SL0800.14520	Full Rail Set - 4 x Rails, Fixing Screws & Dowels

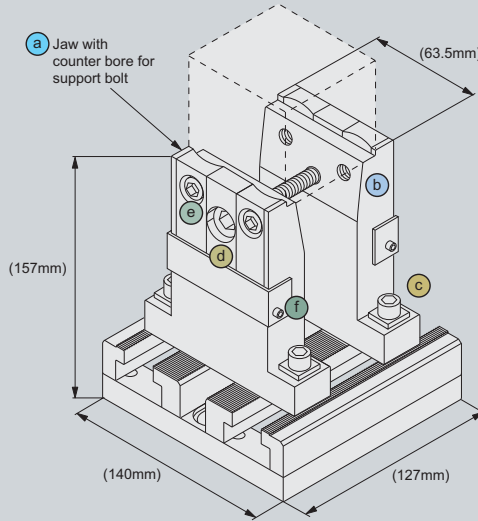
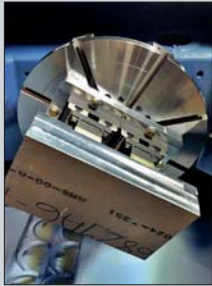


SL0800

The 5-axis clamping jaw system was designed to be a simple solution for 4th and 5th axis machining without having to perform a pre-op prior to running your parts.

A centering disk 38.1mm can be mounted to the bottom of base unit for quick centerline location on faceplates featuring a centering hole. The base plate is also configured with two drill bushings for use with diamond and tapered pins. This provides a quick change and precise mounting option. (Centering disk and pins included in accessory pack.)

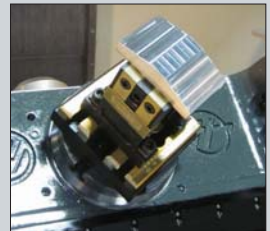
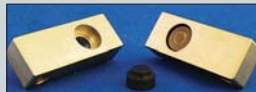
Loc-Jaw™ instructions



1. Mount unit to faceplate/sub-plate using M12 SHCS. **Note:** Gripping Jaws can be adjusted to workpiece size by simply loosening jaw bolts (b) with support bolt (a) removed. Serrated rails have inch and metric indicators, which align with inboard face of jaws.
2. Loosen Jaw bolts and adjust to approximate width using workpiece. Tighten Jaw bolts; ensuring jaws are properly aligned in serrations and not pinching workpiece between hard stops. Tighten support bolt until desired load/unload clearance is achieved. **Note:** An adjustable locator is provided if workpiece extends beyond jaw. Install on either jaw for precise repeatability of workpiece. Adjust and lock in place with provided locking nut (wrench and thumb screw in accessory pack). **Note:** If precise location of workpiece is required a torque sequence on gripper bolts (e) is recommended and must be performed in same manner to achieve consistent results.
3. Secure workpiece by tightening both gripper bolts on one jaw then gripper bolts on opposite jaw. Grippers are capable of producing over 6,000 pounds of force and .060" penetration into workpiece. Part is now ready to machine.

Gripping on workpieces less than 25mm wide

1. Remove Jaw (a) (has counter bore for support bolt).
2. Remove chip cover (f) using 2.5mm hex key.
3. Remove gripper pivot pins, bolts and o-rings (place o-rings in accessory pack).
4. Place gripper plugs in counter bored holes of grippers and rotate grippers 180 degrees, reinstall pins.
5. Reinstall chip cover.
6. Place Jaw (a) back on base unit rotated 180° from removed position.
7. Screw in gripper bolts and support bolt from back side of jaw.
8. Adjust jaws to desired location and tighten jaw bolts (c) and support bolt.
9. Part is ready to machine; tighten grippers on Jaw (e) first then grippers on opposite jaw.



Torque (Nm)	Holding force (kN)
13	8.9
20	13.3
27	17.7
33	22.2
40	26.5

* Maximum 33Nm torque on material harder than 40RC.