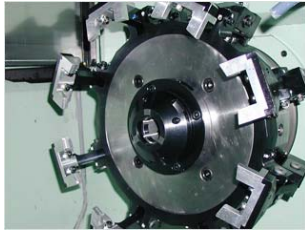
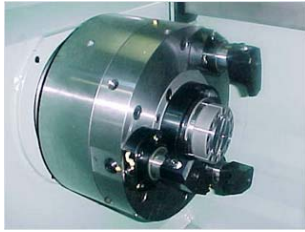


## O.D collet chuck with chattering prevention



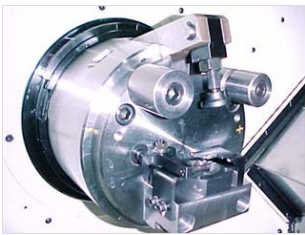
Feature	In addition to the chucking portion, it holds a workpiece in such a way as to wrap the outside diameter.
Advantage	The workpiece is less deformed and chatter is reduced by holding the outside diameter with pneumatic drive.
Clamping Work	Ex) Torque converter

## S Type Collet Chuck with Finger



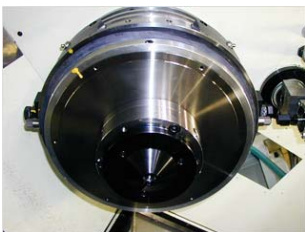
Feature	Workpiece is centered with the collet and clamped at the end face.
Advantage	Parallelism between the reference surface and machined surface can be secured due to end face clamping. If it is used in combination with a triple chuck cylinder, the inside diameter of a workpiece can be machined by moving the inside diameter collet into the chuck after clamping the workpiece end face.
Clamping Work	Ex) Ring gear, Front cover, Cover oil case

## Lever Clamp Chuck



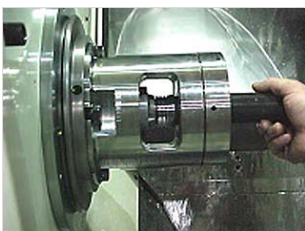
Feature	By changing the lever ratio, it can cope with long stroke as well as workpieces which cannot be clamped with three jaws.
Advantage	It can cope with irregular shaped workpieces.
Clamping Work	Ex) Nozzle, tee piping, L-shaped connector

## Automatic Eccentric O.D Collet Chuck



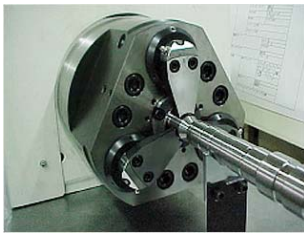
Feature	The drive cylinder is mounted to the machine and performs eccentric machining combined with spindle orientation. Since automatic balance weight is included in the chuck body, weight adjustment when eccentricity occurs is not required.
Advantage	One machine can cope with two different eccentric amounts.
Clamping Work	Ex) Crankshaft, Cam

## Face Clamp Chuck



Feature	Workpiece reference is located in front of the chuck. A workpiece is inserted from the side of the chuck and the inside diameter is machined.
Advantage	By clamping the end face, the roundness of the inside diameter of a cylindrical workpiece is improved.
Clamping Work	Ex) Socket

## Hybrid Chuck



### Feature

A mobile outside diameter clamp and a face clamp are combined in this chuck.

### Advantage

Coexistence of the face clamp and the outside diameter clamp increases the rigidity of workpieces, leading to deflection prevention and cycle time reduction.

Furthermore, a shaft outside diameter can be machined entirely in one process.

### Clamping Work

Ex) Output Shaft, Input Shaft

## Drive Carrier



### Feature

It drives a workpiece with a hooking jig while supporting it with both centers.

### Advantage

Since the workpiece is not clamped, it is not distorted and the runout accuracy against both centers is high.

### Clamping Work

Ex) Rear axle shaft, Crankshaft for motor cycle

## Double Taper Collet Chuck



### Feature

The collet has tapers in the front and rear side and the both ends of a workpiece are clamped by them.

### Advantage

By clamping the both ends of a workpiece, tilting of workpiece is prevented and holding rigidity is increased.

### Clamping Work

Ex) Liner, Sleeve