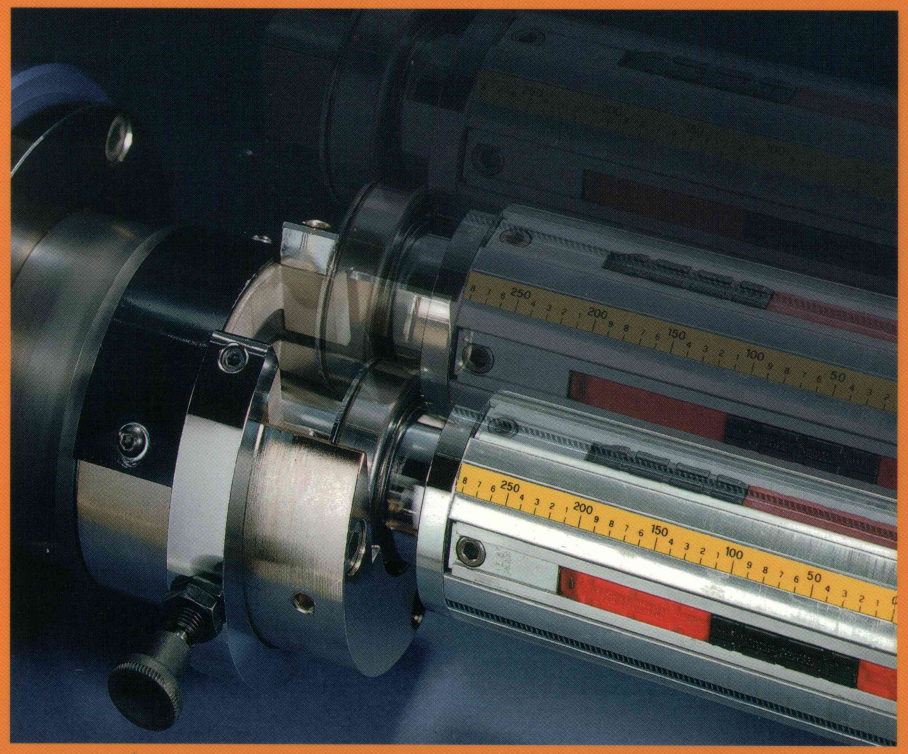
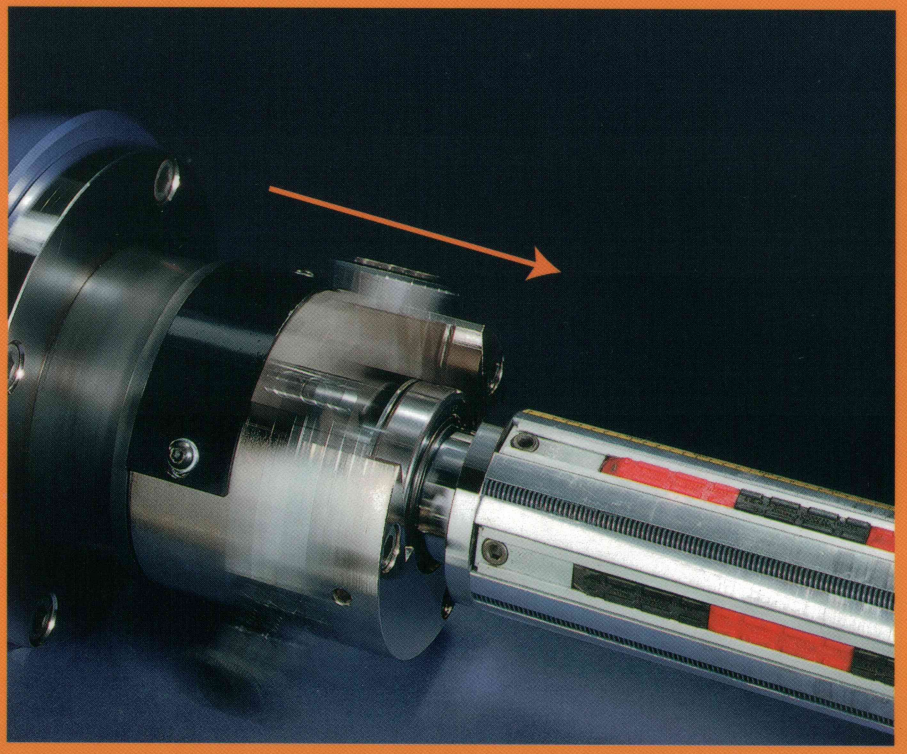
SELF-LOCKING SAFETY CHUCKS

I.E.S.



A

INSERTING EXPANDING SHAFT



B

CLOSING CHUCK ON BEARING

AVR F103 flange and AVR PM 103 foot-mounted

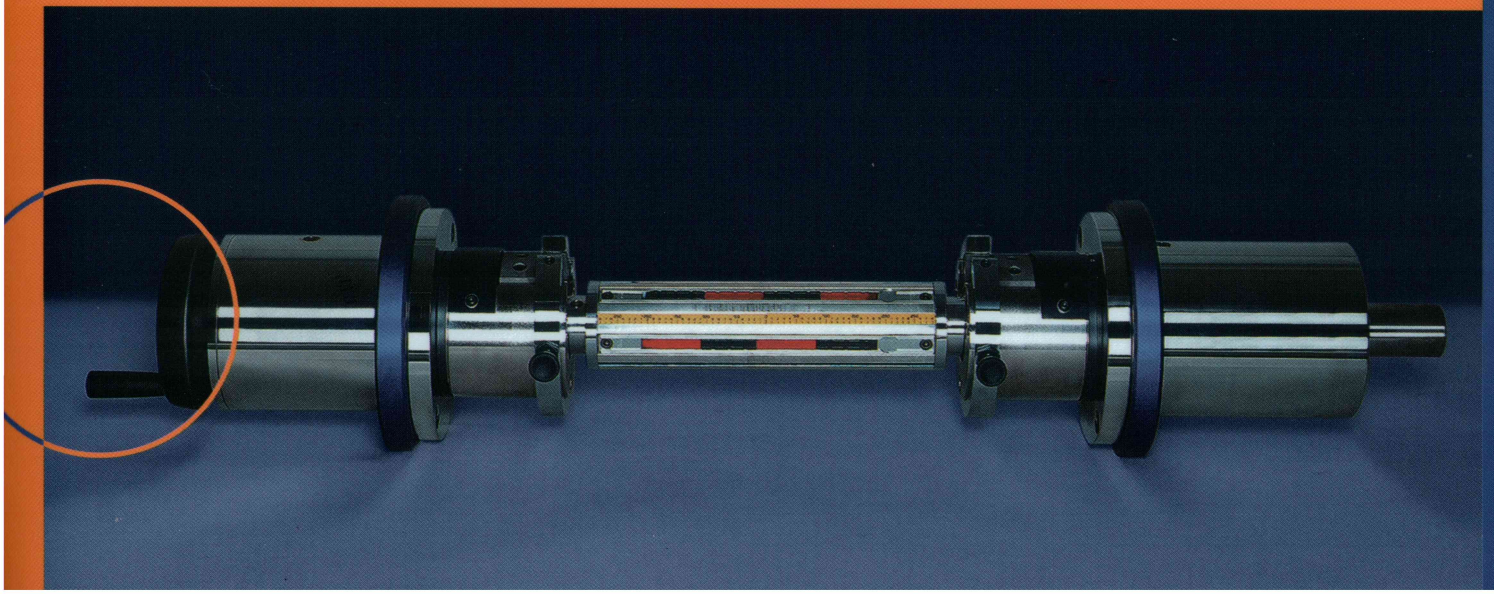
Total safety at high speed:
no play, so no vibration.

Self-locking chucks with axial handwheel adjustment

Drive side Chuck:
Fixed position stub shaft
Chuck jaws movable axially.

C

EXPANDING SHAFT ROTATING



Self-locking Safety Chucks

Patented world wide, the new AVR self locking safety chuck is designed for airshafts in high speed applications.

The design is unmatched in the market today.

The basic difference is that the bearings that support the rotating shaft are located on the journals of the shaft itself. **The outer race of these bearings rests in chuck profiles without any clearance and does not rotate with the shaft. The result is vibration-free shaft rotation.**

Drive and brake torque is delivered by means of special radiused flat journal ends.

When a shaft is rotated from the loading position the chucks automatically close and cannot be opened in any other position owing to a mechanical locking device. Shafts can only be inserted in a vertical or a horizontal plane and this is determined during machine design.

Chucks are opened manually by retracting first a locking knob and then the retaining ring. These functions can be automated by suitably interlocked pneumatics on appropriate applications.

An operator is not exposed to any rotating parts. The AVR chucks provide both vibration-free high speed rotation and maximum operator safety.

The AVR chucks are available as flange and foot-mounted versions in three sizes to suit loads and applications. They are manufactured from high quality materials and heat treated to minimise wear. The overall appearance is aesthetically very pleasing.

SELF LOCKING SLIDING SAFETY CHUCKS FLANGE AND FOOT MOUNTING

± 25 mm axial Adjustement

MODEL			Max. load (N) for each chuck (N)	Max. torque moment (Nm)	Max. rotation Speed (rpm)	Min. Core Inside Dia (mm)
AVR 101	RV	Hand wheel side	7,500	/	1,500	70
	RM	Drive side (sliding end journal)	7,500	1,350	1,500	70
	RMF	Drive side (fixed end journal)	7,500	1,350	1,500	70
AVR 102	RV	Hand wheel side	10,000	/	2,000	70
	RM	Drive side (sliding end journal)	10,000	970	2,000	70
	RMF	Drive side (fixed end journal)	10,000	970	2,000	70
AVR 103	RV	Hand wheel side	13,000	/	2,000	76
	RM	Drive side (sliding end journal)	13,000	1,380	2,000	76
	RMF	Drive side (fixed end journal)	13,000	1,380	2,000	76

- Strictly enforced US and European patents: even small infringements will be prosecuted.

SELF LOCKING SAFETY CHUCKS FLANGE AND FOOT MOUNTING

MODEL	Max. load for each chuck (N)	Max. torque moment (Nm)	Max. rotation speed (rpm)	Min. Core Inside Dia (mm)
AVR-101	7,500	1,350	1,500	70
AVR-102	10,000	970	2,000	70
AVR-103	13,000	1,380	2,000	76

Also from I.E.S:

- Pneumatic self-centring expanding shafts with independently valved multibladder keyrows
  - available in aluminium, reinforced aluminium and steel.
- Pneumatic/mechanical core pre-centring shafts.
- Friction shafts for differential rewinding.
- Expanding chucks.
- Vertical reel lifters.
- Reel lifter/turners.
- Shaft insertion/extraction trucks.

- Outline drawings available.

I.E.S. INTERNATIONAL EXPANDING SHAFTS s.r.l.

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