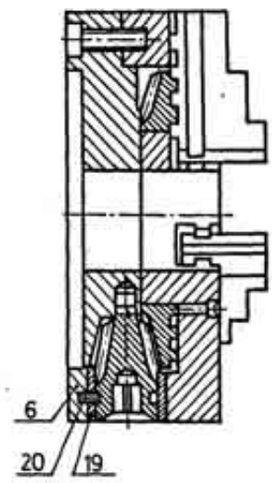
Construction of chucks

3.1 Construction of the scroll chucks

1 - Body
2 - Scroll plate
3 - Pinion
4 - Stud bolt
5 - Cover plate
6 -Back plate
7 - Wrench
8 - Hard inside solid jaw
9 - Hard outside solid jaw
10 - Soft solid jaw
11 - Hard 2 piece jaw
12 - Soft 2 piece jaw
13 -Master jaw
14 -Hard top jaw
15 - Soft top jaw
16 - Grease nipple
17 - Body sleeve
18 - Jaw guide
19 - Locking half ring
20 - Sleeve bearing

3500, 3564, 3565,
3700, 3864, 3865



3100, 3200, 3600

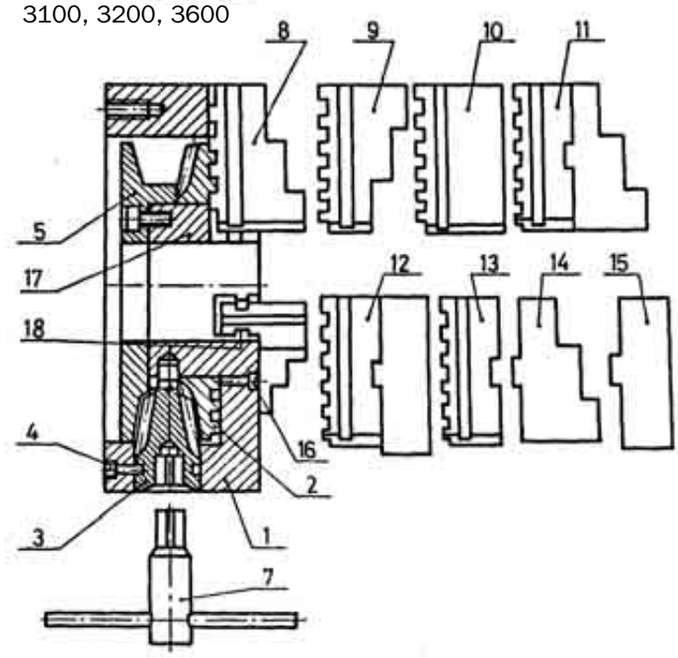
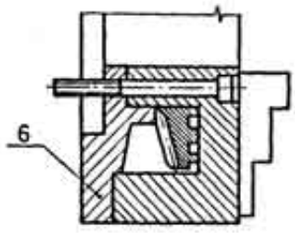


Fig. 1

3100, 3200, 3600



3.2 Construction of 4 jaw independent chuck

1 - Body
2 - Operating screw
3 - Holder
4 - Solid jaw
5 - Master jaw
6 - Hard top jaw
7 - Wrench

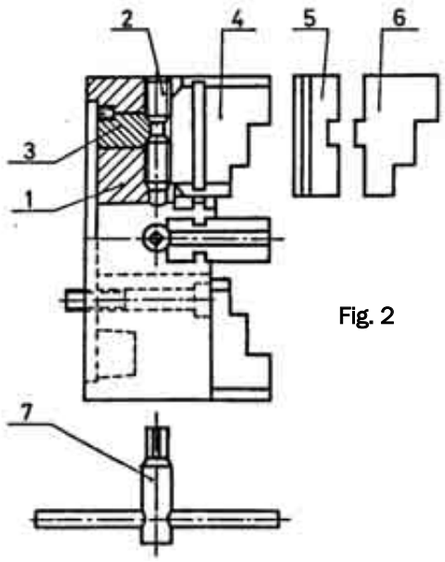


Fig. 2

3.3 Construction of 3 and 4 jaw self -centering and individually adjustable scroll chuck

1 - Body
2 - Operating screw
3 - Pinion
4 - Cover
5 - Scroll plate
6 - Solid jaw
7 - Master jaw
8 - Hub
9 - Wrench

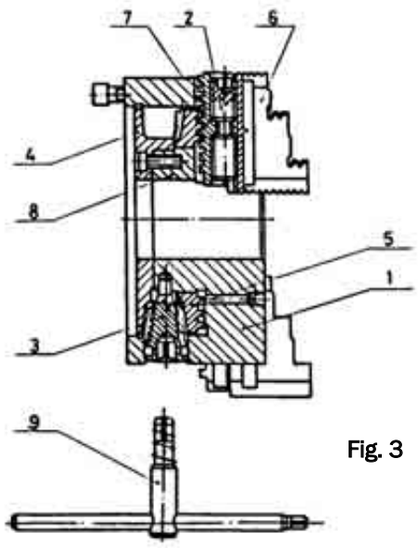


Fig. 3

Important Note!
Screw (2) may only be used for moving the jaws (6) independently to one another.
Rotating the pinion (3) with wrench (9) results in a movement of jaws (6) by the same stroke.

LIST OF SPARE PARTS

5.1 For scroll chucks

Table 16

Part No. Acc. to Fig. 1	Part name	No. of pcs per chuck			
		2-jaw	3-jaw	4-jaw	6-jaw
2	Scroll plate	1	1	1	1
3*	Pinion	2	3	2	3
4*	Stud-bolt	2	3	2	-
7	Wrench	1	1	1	1
8	Hard inside solid jaw	-	3	4	6
9	Hard outside solid jaw	-	3	4	6
10	Soft solid jaw	2	3	4	6
11	Hard 2 piece jaw	-	3	4	6
12	Soft 2 piece jaw	2	3	4	6
13	Master jaw	-	3	4	6
17**	Body Sleeve	-	3	4	6
18**	Jaw Guide	-	3	4	6
19	Locking half ring	-	3	4	6
20	Sleeve bearing	2	3	4	6

* for Æ80 chuck 1 pcs of each only
** for chuck 3500, 3700, 3800 type

5.2 For 4-jaw independent chucks

Table 17

No. of part acc. to Fig. 2	Part name	No. of pcs per chuck
2	Operating screw	4
3	Holder	4
4	Solid jaw	4
5	Master jaw	4
6	Hard top jaw	4
7	Wrench	1

5.3. For 3- and 4-jaw self-centering and individually adjusted scroll chucks, 4500, 4600, 4700 and 4800 type

Table 18

No. of part acc. To Fig. 3	Part Name	No. of pcs per chuck	
		4500, 4700	4600, 4800
2	Operating screw	3	4
5	Scroll plate	1	1
6	Solid jaw	3	4
7	Master jaw	3	4
9	Wrench	1	1

Note! When ordering spares for the chuck being used, be sure to specify:
1) Chuck serial No.
2) Year of manufacture
3) No. of Part
4) Part Name
5) Quantity

WORK SAFETY CONDITIONS

- Each person using the chuck should read this manual prior to attempting to work and follow it strictly.
- In case of abnormal chuck operation or its damage, stop the work immediately and notify the supervising staff.
- Repairs and overhauls of the chuck may only be performed by suitably qualified personnel.
- Modification of wrenches delivered by the manufacturer together with chuck or usage of another wrenches is strictly forbidden.
- Usage of wrenches which are not correctly matching the square seat in the scroll chuck pinion, or screw head in the independent chucks is strictly forbidden.
- Usage of square seat in the pinion of scroll-chuck or the screw head in the independent chuck for removing the chuck from the spindle of the machine tool is strictly forbidden.
- Switching on the machine tool with the wrench engaged in the chuck is strictly forbidden.
- Except above requirements, operator should follow local industrial Health & Safety Regulations.

ADDITIONAL INFORMATION

Radial runout of the control arbors being clamped in the chuck with the set of spare jaws should not exceed values given in Table 19, otherwise these jaws should be reground at site before use.

Table 19

MAXIMUM VALUES OF CONTROL ARBORS RUN-OUT*				
Chuck nominal size		The jaws fitted in bodies		
		of new chucks		of used chucks**
over	up to	of precision type class I	of precision type class II and standard	
-	100	0,045	0,080	0,100
100	160	0,060	0,090	0,100
160	250	0,070	0,100	0,150
250	315	0,090	0,120	0,150
315	400	0,100	0,150	0,200
400	500	0,120	0,180	0,250
500	630	-	0,180	0,250
630	-	-	0,220	0,300
800	-	-	0,280	0,380
1000	-	-	0,350	0,470

*) The presented values should be regarded as approximate.
**) The runout value in used chuck depends on its components wear.
In case the runout values in the chuck being used exceed the ones given in Table 19, any further chuck operation is not recommended.

FINAL REMARKS

Alterations to chuck construction are strictly forbidden.

If master and top jaws not made by the chuck manufacturer are used, it is likely to result in a reduction in the performance of the chuck, which could be dangerous.

Use the lubricants recommended in this manual.

Use only original accessories and spare parts.

Please follow all instructions included in this manual.

Failing to comply to this manual may cause damage to or under performance of the chuck at your own risk.

If you are not 100% sure, do not start the operation.