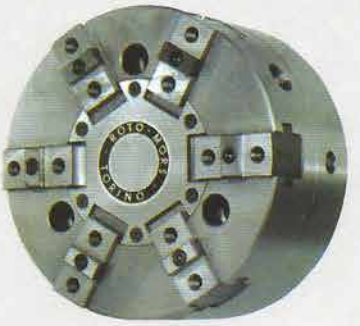
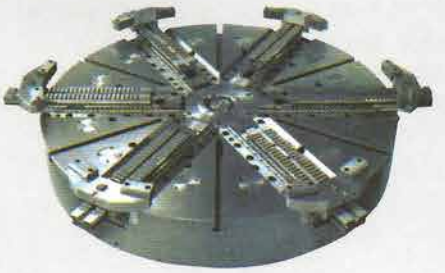
AUTOMATIC SELF-CENTERING CHUCKS WITH 6 FLOATING JAWS BALANCED BY 2+2+2

NR - P6



U - ASA
II - P6

GD - I
2+2+2



AP - 6J - C
2+2+2
PALLET

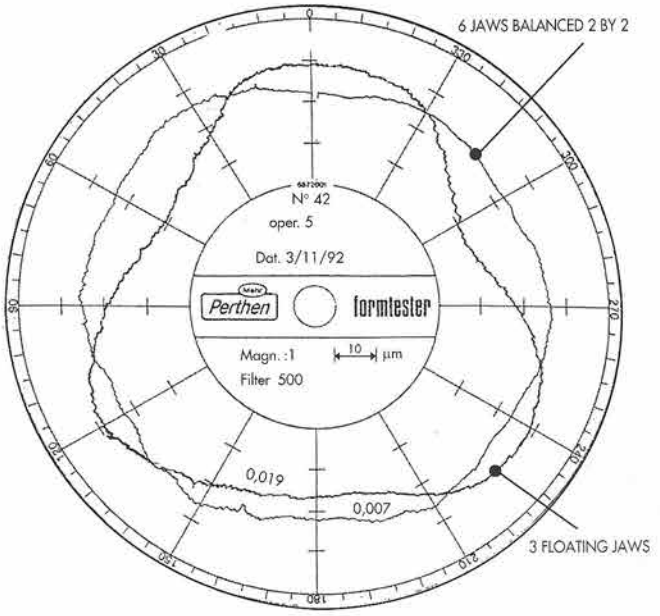
IMPRESA CONCESSIONARIA DEL MARCHIO UCIMU

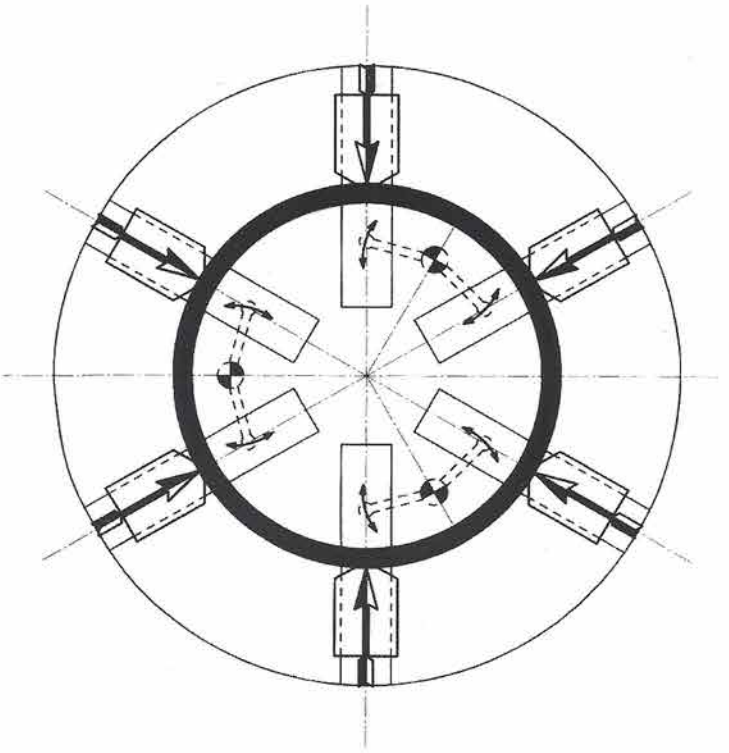
N. 006/2005

OPERATING PRINCIPLE

The operating principle of SELF-CENTERING CHUCKS with 6 BALANCED JAWS is made of 3 pairs, and each pair has an internal link which allows them to balance in sets of two: this operating principle generates 6 FORCES which pull towards the center of the chuck.

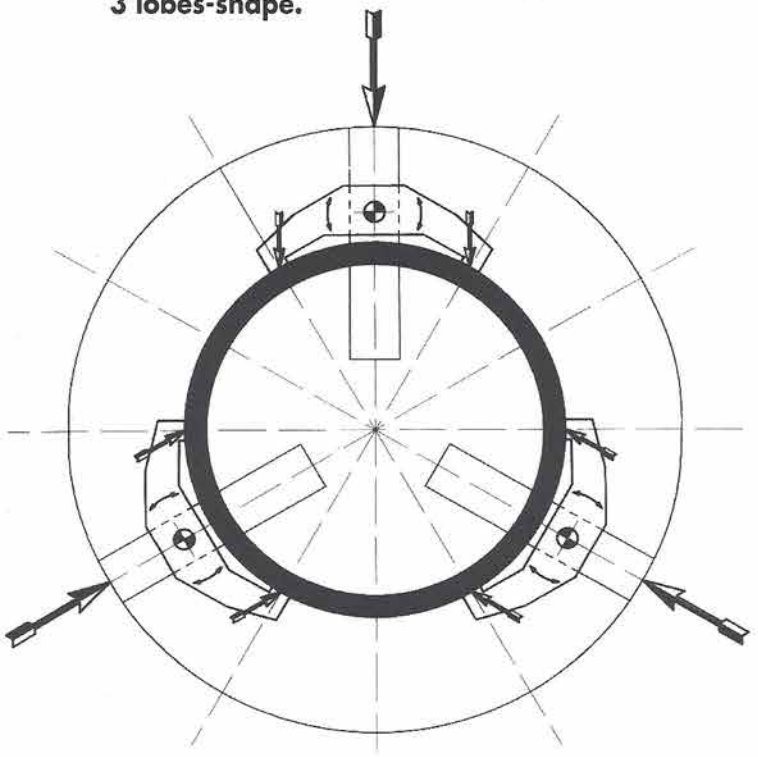
This does not alter the roundness of the component.

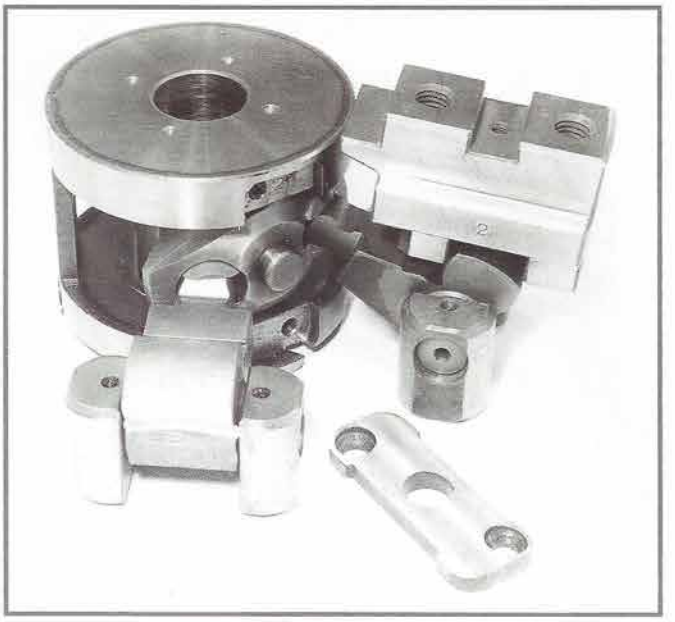


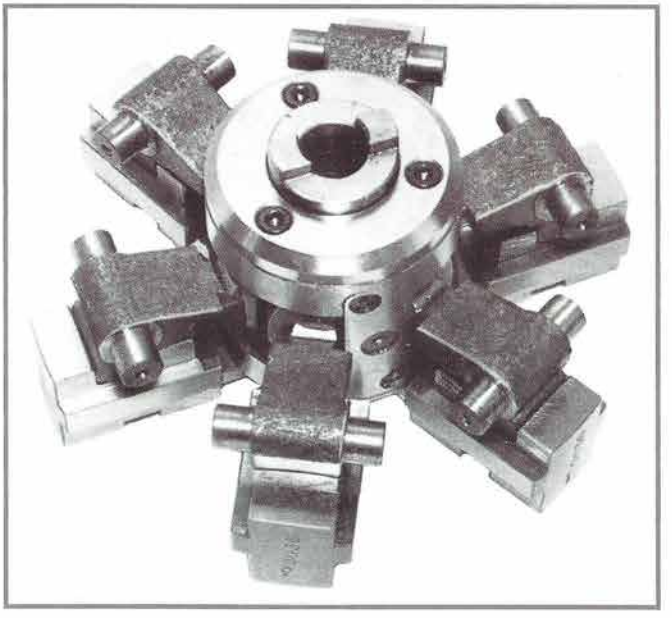


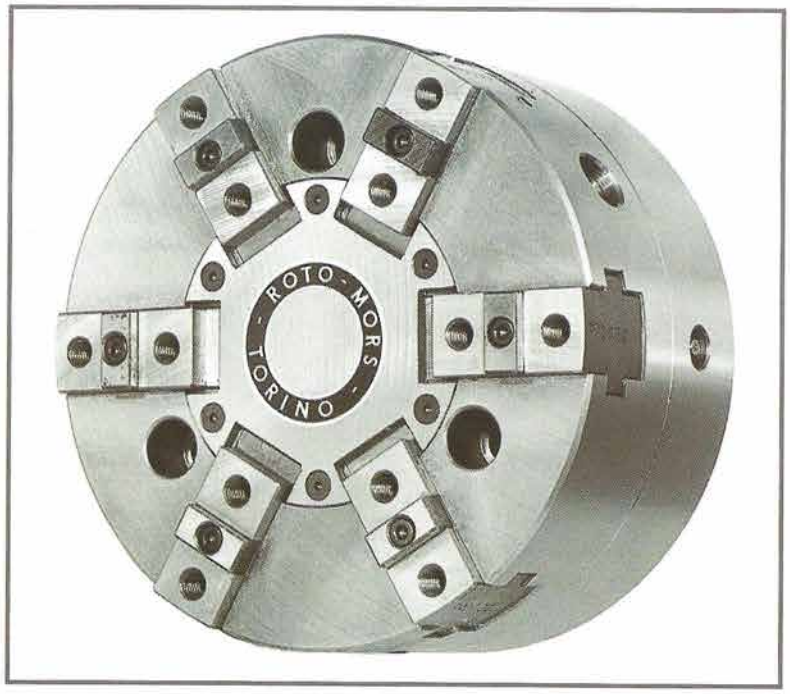
The traditional operating principle of the SELF-CENTERING CHUCK with 3 wrap-around floating jaws generates 3 radial forces which in turn generate 6 PARALLEL FORCES **that do not go through the center of the chuck.**

This method of clamping alters the roundness of the component determining a **3 lobes-shape.**









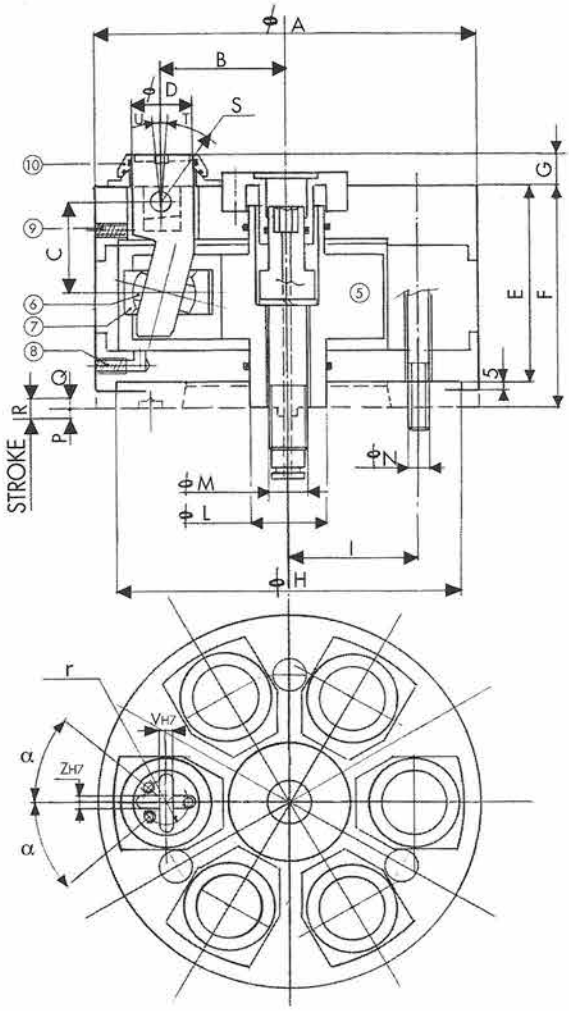
AUTOMATIC SELF-CENTERING CHUCKS TYPE NR-P6 WITH 6 JAWS BALANCED BY 2+2+2

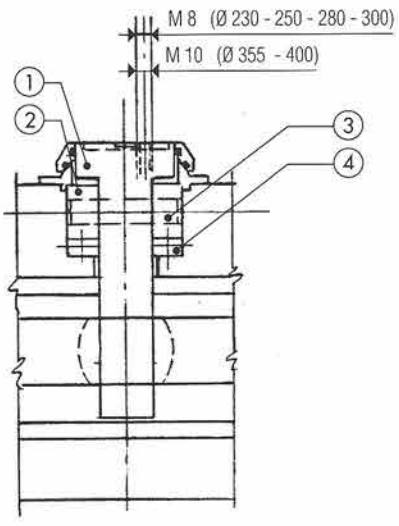
The self-centering chucks is equipped with a central bush which carries the 3 links at 120°; each link controls 2 levers which operate the master jaws. This determines a self-centering compensated clamping on 6 points (2+2+2) with the **radial clamping forces** pulling towards the center of the chuck. The central bush is operated by a draw-bar controlled by a single piston - hydraulic cylinder. Should it be neccessary to stiffen the system during the finishing operation, in order to have a simultaneous 6 jaws self-centering action, there is a way of **removing the floating action of the 3 links:** this can be done manually by means of 3 screws, or automatically.

AUTOMATIC SELF-CENTERING CHUCKS NR-P6 WITH 6 JAWS BALANCED BY 2+2+2 - BODY IN STEEL									
DIAMETER	160	203	250	315	350	400	500	6,00	700
JAWS STROKE mm	6	8	8	10	10	10	15	15	15
SWINGING STROKE mm	1+1	1+1	2+2	2+2	2+2	2+2	2+2	2+2	2+2
MAX. ROUNDS WITH MAX. FORCE	4000	3500	3000	2500	2000	1500	1200	1000	800
PD^2 Kgm	0,18	0,3	0,8	2,6	5,3	9,5	13,5	24,5	28,5
MIN. FORCE ON THE DRAW-BAR Kg	300	300	300	600	600	900	900	900	900
MAX. FORCE ON THE DRAW-BAR Kg	1500	2700	2100	4200	4200	6000	6000	6000	6000
MIN. FORCE PER JAW Kg	100	100	100	200	200	300	300	300	300
MAX. FORCE PER JAW Kg	500	700	700	1400	1400	2000	2000	2000	2000
MOUNTING ASA-DIN-CAM-LOCK	5"	5"-6"	6"-8"	6"-8"	8"-11"	8"-11"	11"-15"	11"-15"	11"-15"
WEIGHT Kg	13	20	28	65	85	120	150	190	250
HYDRAULIC CYLINDERS									
PISTON SURFACE		40 cm^2			100 cm^2			100cm^2	
MAX. PRESSURE		60 BAR			45 BAR			70 BAR	
TYPE		5" STROKE 20			7" STROKE 30			7" STROKE 30	

AUTOMATIC SELF-CENTERING 6 JAWS-CHUCK TYPE U-ASA II-P6 WITH 6 JAWS BALANCED BY 2+2+2 AND WITH PULL-DOWN ACTION: THIS CHUCK IS FULLY SEALED

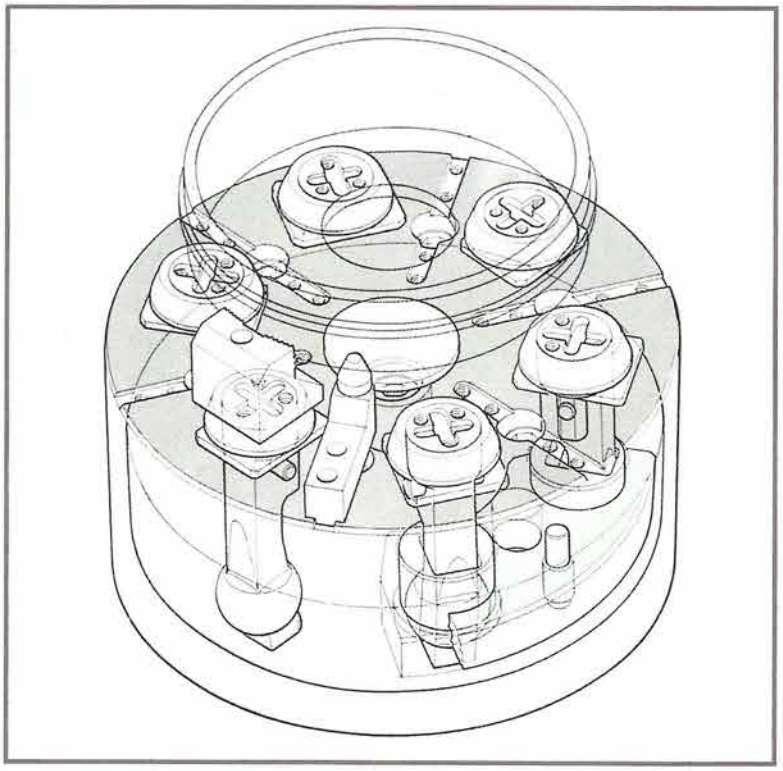
All internal moving parts operate in an oil bath: this system prevents any contamination by foreign matters, such as swarf, dust or coolant; this system ensures **total reliability** and long-life in production environment.

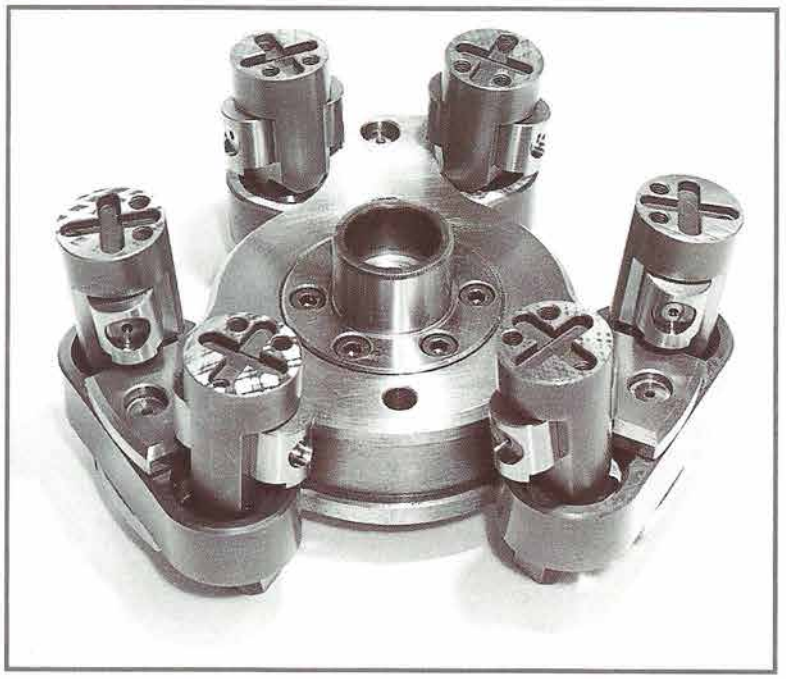




TYPE	230	250	280	300	355	400
A Ø	230	250	280	300	355	400
B	80	80	90	105	110	130
C	60	60	60	60	90	90
D Ø	40	40	40	40	52	52
E	120	130	130	130	150	150
F	150	150	150	150	160	160
G	20	20	20	20	26,5	26,5
H Ø	220	230	250	250	300	300
I	85,7	85,7	85,7	85,7	117,5	117,5
L Ø	50	50	50	50	50	50
M Ø	M24x2	M24x2	M24x2	M24x2	M24x2	M24x2
N Ø	M16	M16	M16	M16	M20	M20
P	8	8	8	8	12	12
Q	10	10	10	10	16	16
R	18	18	18	18	28	28
S	60	60	60	60	90	90
T	3°	3°	3°	3°	4° 30′	4° 30′
U	2°	2°	2°	2°	2° 30′	2° 30′
V	8	8	8	8	12	12
Z	8	8	8	8	12	12
r.	14	14	14	14	19	19
α	38°	38°	38°	38°	40°	40°
Weight	30	45	63	72	98	125
Max. rounds/m'	3000	2800	2500	2200	2000	1800
Pd^2	0,76	1,20	1,8	2,9	5	8
Max. force on the draw-bar	2500	2500	2800	3000	4000	5000
Force per jaw on radius 'S' Kg	1000	1000	1200	1350	1800	2250
UNI - ASA - DIN - ISO	8"	8"	8"	8"	8" 11"	8" 11"

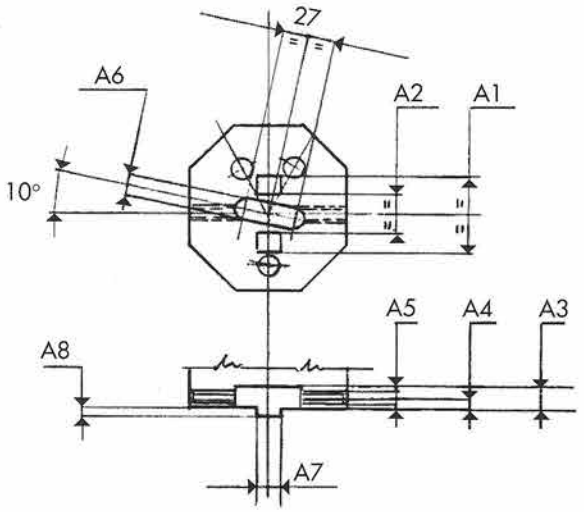
1 - JAW - HOLDER LEVER BLOCK
2 - ROTATION CYLINDRICAL PIN
3 - SUPPORTING BLOCKS
4 - SLANTED INSERT FOR DOWN-CLAMPING ADJUSTMENT
5 - DRAW-DOWN PLATE
6 - BALL BUSH
7 - EQUALIZING ARM
8 - DRAIN PLUG
9 - OIL FILLING PLUG
10 - SEAL RING





SELF-CENTERING CHUCK WITH PULL-DOWN ACTION TYPE U-ASA II - P6 WITH 6 JAWS BALANCED BY 2+2+2

The new clamping system with 6 JAWS BALANCED by 2+2+2 ensures a concentric clamping with a very tight ROUNDNESS TOLERANCE:
- in production environment within 0,02 mm
- in tool - room environment within 0,01 mm



Typical applications of these chucks are: BEARING RINGS, brake drums and disks, clutch disks, flanges, light alloy components, light pulleys.

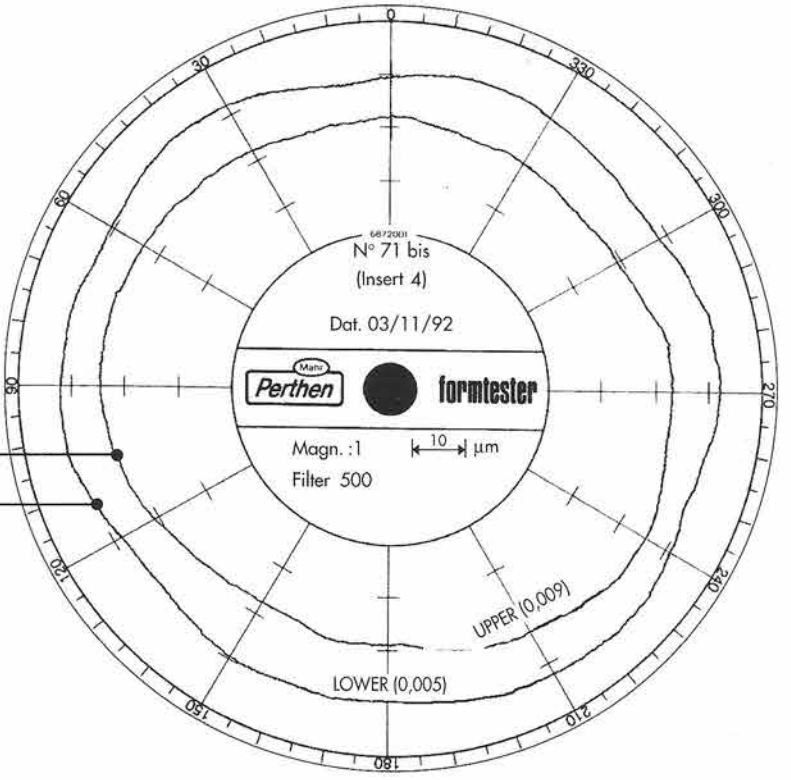
TECHNICAL DETAILS FOR CONSTRUCTION OF JAWS						
A1	25	25	25	25	35	35
A2	12	12	12	12	15	15
A3	7,5	7,5	7,5	7,5	9,5	9,5
A4	4,5	4,5	4,5	4,5	6	6
A5	M5	M5	M5	M5	M6	M6
A6	8	8	8	8	12	12
A7	8	8	8	8	12	12
A8	3	3	3	3	4	4

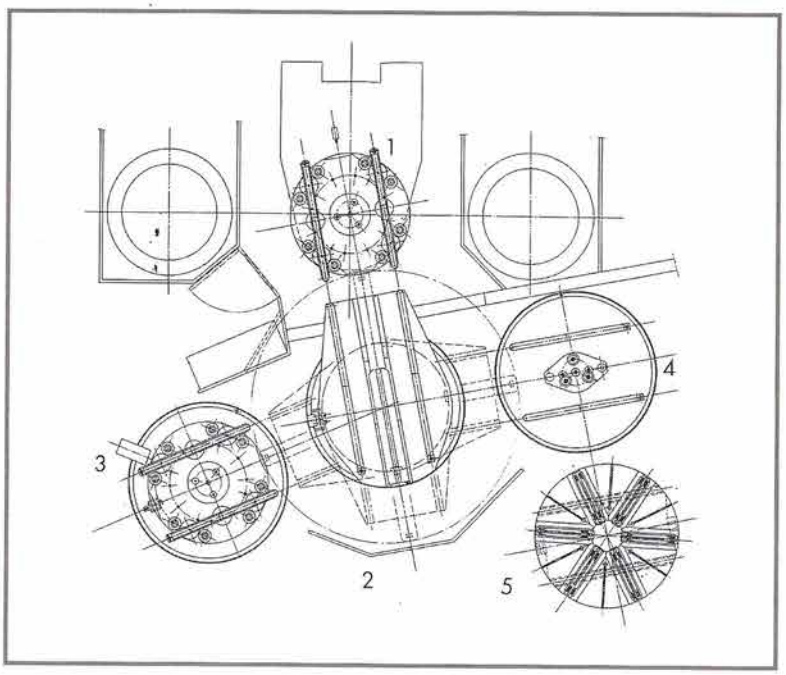
BRAKE DRUMS

TURNING OF INTERNAL BRAKING AREA
with automatic self-centering chucks type
U-ASA II-P6 dia. 300 mm with 6 JAWS
BALANCED by 2+2+2

SHAPE - ROUNDNESS INSPECTION

Upper braking area 0,009 mm
Lower braking area 0,005 mm
The **quality** of the brakes and the efficiency of the braking action depends on the roundness of the braking area.





LARGE DIAMETER AUTOMATIC SELF-CENTERING PALLETS TYPE AP-6J-C DIA. 1800 mm WITH 6 JAWS BALANCED BY 2+2+2

1 - APH automatic pallet-holder in the machine
2 - RTB + TC rotary transfer station
3 - RB + APH rotary control station
3 - FB-S fixed loading-unloading station
5 - AP-6-J automatic self-centering pallets

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