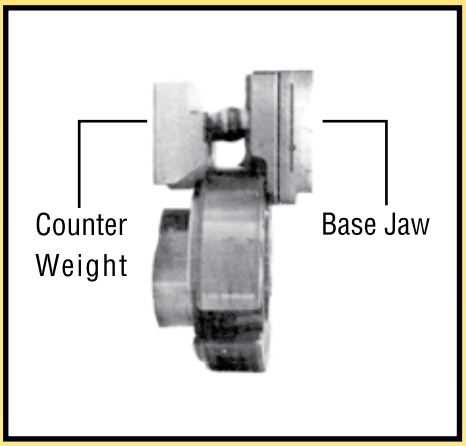
PHCNC

POWER OPERATED THREE JAW CENTRIFUGALLY COMPENSATED CHUCK WITH THROUGH BORE



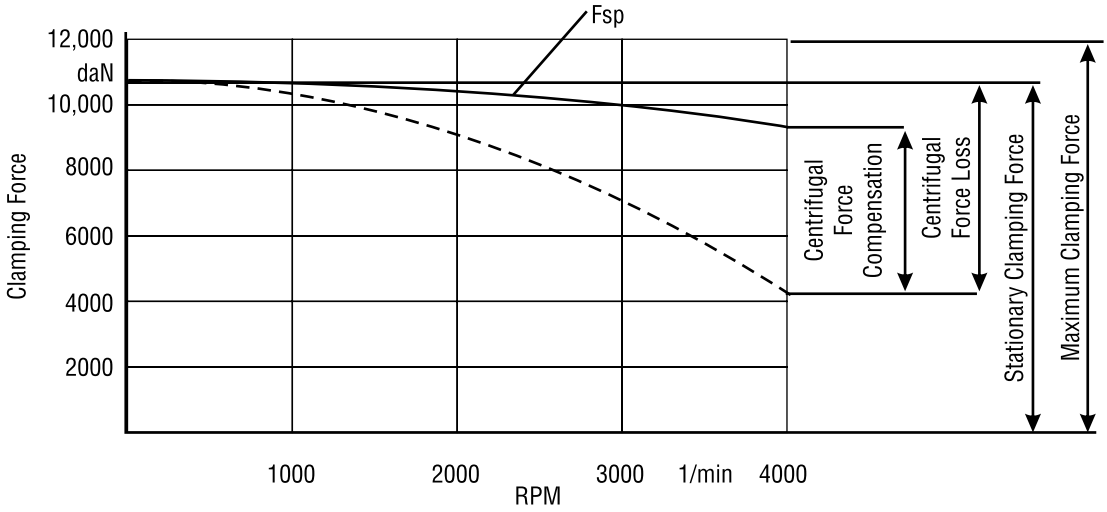
Many CNC machines work at very high speeds. An ordinary, standard power chuck will not work at these speeds because the tremendous centrifugal force generated at these speeds will tend to loosen the job. More importantly, there will be an abrupt and huge loss in the gripping force of the chuck. When there is a loss in gripping power, it will adversely affect the cutting parameters of the lathe.

GMT has come up with a chuck designed to take care of the problems arising out of such heavy centrifugal losses. The design is such that the clamping force is very near to that of static clamping force, even at very high speeds. These centrifugally compensated chucks' share many of the advantageous features of GMT's hollow power chucks.

Besides having the above features, the centrifugally compensated chucks have a mechanism whereby the centrifugal losses arising due to very high speeds is compensated.

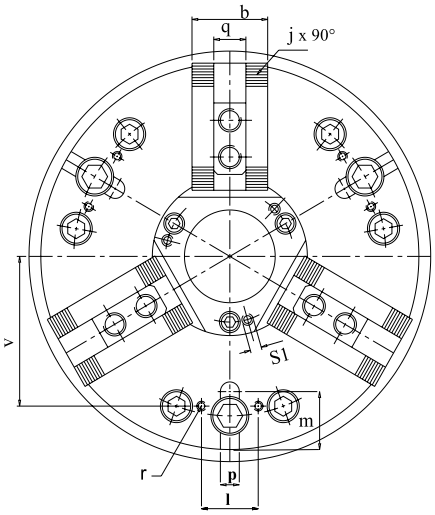
The base jaws are connected to counter weight by means of levers. In result, the centrifugal forces coming on the (a) counter weights, (b) base jaws and hard jaws are compensated or 'nullified' by each other.

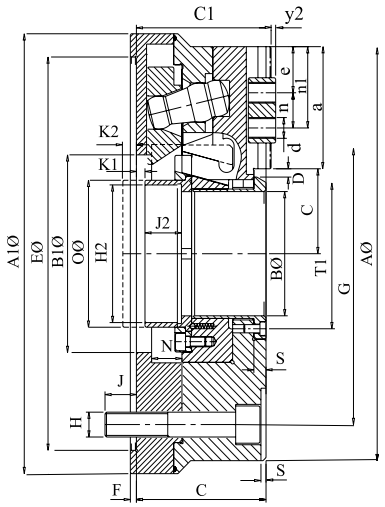
Gripping Force Chart

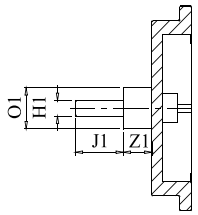


Chuck performance detail

Chuck Size			200	250	315	400	500
Clamping Range	External	Max	200	250	315	400	500
		Min	25	28	42	45	74
	Internal	Max	200	250	315	400	500
		Min	70	76	84	105	138
Max Drawnbar Pull (Kci)			4000	6000	6000	9000	9000
Max gripping force (Kgf)			8000	12000	13000	20000	21000
RPM max.			6300	4500	4000	3000	2500
Weight(without top jaws)Kgs.			21	32	51	105	158
Fly wheel effect GD2 (Kpm^2)			0.38	0.8	2.6	8.4	22.9
Max top jaws weight (per set) Kgs.			gs.	1.7	3.5	4	7.5







Special Execution

PHCNC

HARD JAW CLAMPING RANGE

All Dimensions in mm

Model	04-72	04-73	04-74	04-75	04-76
Size Ø	**200**	**250**	**315**	**400**	**500**
A Ø	200	250	315	400	500
A1 Ø	215	265	330	425	525
B Ø H7	48	65	82	120	160
B1 Ø	102	127	145	191	231
C	90	98	108	128	128
C1	94	102	112.5	130	130.5
D Jaw Stroke	5.3	5.3	5.3	8	8
E Ø H6	170	220	300	380	380
F	6	6	6	6	6
G PCD	133.4	171.4	235	330.2	330.2
H	3 x M12	3 x M16	3 x M20	3 x M24	6 x M24
Hl	M20	M20	M20	M30	M30
H2	M55x 2	M72x 2	M92 x 2	M133x 2	M172x 3
O Øg6	62	78	98	142	182
O 1Ø	35	35	35	46	46
J	18	24	28	31	36
J1	55	55	55	55	55
J2	28	28	28	28	28
K1 Min	4.5	9.5	0.5	13	13
K2 max	15.5	10.5	19.5	17	17
N	20	20	20	30	30
S	8	8	8	12	12
S1	M6	M6	M6	M8	M8
T1 PCD	68	86	104	145	185
Z1	30	30	30	30	30
a	59	76	98	118	149
b	40	45	50	60	60
c min	35.7	43.7	54.2	74	92
c max	41	49	59.5	82	100
d	M12	Ml6	Ml6	M20	M20
e min	8	10	10	15	15
j x 90°	1/16"	1/16"	1/16"	3/32"	3/32"
n	19	25	25	34	34
N1 max	50	60	85	103	130
q H7	17	21	21	25.5	25.5
y2	3.5	3.5	3.5	3.5	3.5
PH12	16	16	20	20	20
r	M8	M10	M10	M12	M12
m	23.5	26.5	56	60	115
L	32	60	60	80	100
v	90.6	105	125	155	170