MANUAL CHUCK
WITH QUICK JAW CHANGE

MODEL - FFT

G MT has been producing hand operated chucks of worm and wormwheel with com design for well over three decades. GMT chucks have met and satisfied the requirements of thousands of customers all over India through sheer quality and reliability. In order to meet the growing needs of present day small and medium batch production, GMT now offers a Manual Chuck also with High concentricity and reliability with Quick Jaw change. This ensures that Repositioning Reversing (or) Changing of the jaws can be done quickly and accurately.

DESIGN FEATURES:

The master jaws are moved radially by operating screw which is fitted in a wedge block. Three wedge blocks are inter-connected by pivot blocks and a transmission ring, effecting the concentric movement of all jaws.

The wedge block is made of nickel chrome steel with case hardened and the rack profile on the wedge block is ground on a CNC creep feed grinding machine to ensure high concentricity and repeatability on jaws.

The jaw has teeth at the bottom which is in mesh with the rack, is made of nickel chrome steel and is case hardened and ground. The teeth profile is ground on a creep feed CNC grinder. The wedge block can be brought out of mesh to enable the top jaws to be taken out by pressing the spring loaded plunger. The chuck body is made of medium carbon steel. The jaw slides are precision ground.

JAW SAFETY DEVICE:

The top jaws can be moved freely and are locked by means of a spring loaded plunger. The top jaws cannot fly out because they are automatically locked by safety lock arrangement. In order to relocate the top jaws, the spring plunger which is located behind the top jaws is to be pressed which releases the safety lock from 200 φ
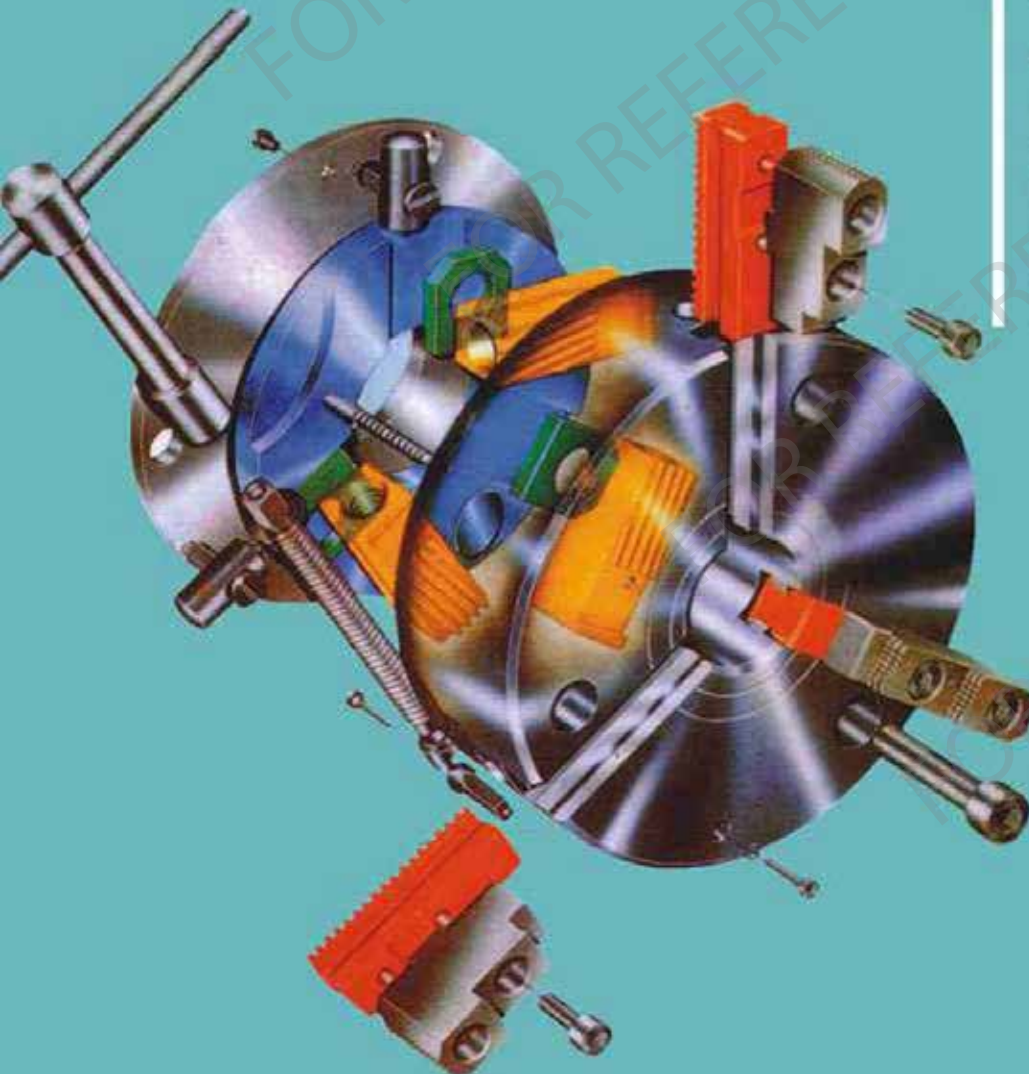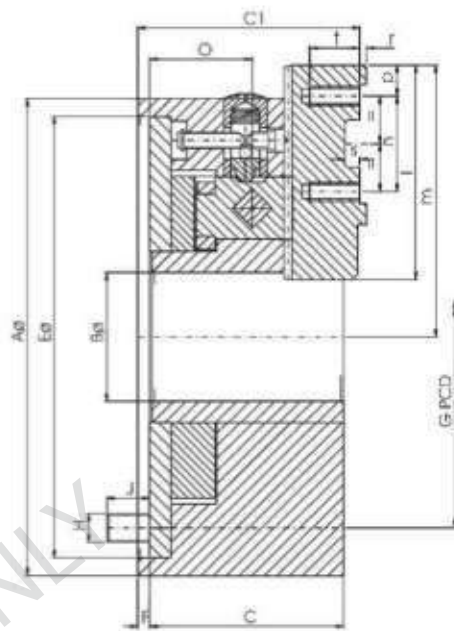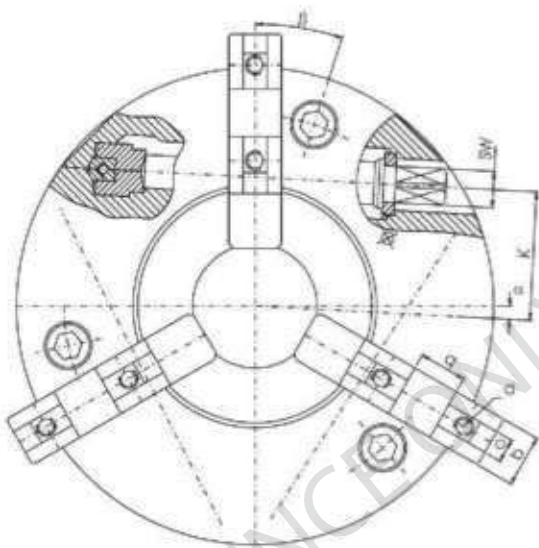
DIMENSIONAL SPECIFICATIONS

All Dimensions in mm.

SIZE		125	160	200	250	315	400	500
A φ		125	161	206	255	318	400	500
B φ		32	42	52	60	85	100	150
C		46.5	63	81	92	111	118	119
C1		53	73	93	105	125	135	136
E φ H5		115	145	185	235	300	380	460
F		4	5	5	6	6	6	6
G PCD		100	125	160	200	250	315	400
H		M8	M10	M12	M16	M20	M24	M24
J		11	13	18	27	33	34	34
K		33	43	54	67	86	111	153.5
O		22.5	31.5	43	47	59	57.5	58.5
Sw		8	10	12	14	17	19	19
b		14	20	22	26	32	45	45
d		M6	M8	M8	M12	M12	M16	M16
I		47	74	90	110	124	160	160
m max.		74	105	132	161	193	253	295
n		20	32	40	40	54	60	60
o g6		-	8	10	12	12	18	18
p		13.5	12	13	16	16	20	20
q H7		-	18	20	20	26	30	30
r		-	2.5	3	3	3	4	4
s		-	5	6	6	7	8	8
t		12	16	21	25	30	35	35
Alpha α		6°36'	6°36'	3°	4°30'	4°30'	4°30'	4°30'
Beta β		21°36'	21°36'	18°	19°30'	16°30'	19°30'	14°30'
Jaw stroke in mm (without relocation)		4.8	6.2	6.8	7.5	9.4	12	12
Weight in Kgs (approx.)		3.7	9.1	17	34	61	108	168
Speed rpm		4000	3600	3000	2500	2000	1600	1000
Moment of Interita GD2 in kpm2		0.03	0.13	0.41	1.14	3.25	8.8	22
Internal	MIN.	27	65	69	90	90	125	155
Clamping	MAX.	128	177	219	251	310	398	483
External	MIN.	3	5	6	8	14	19	50
Clamping	MAX.	126	161	210	252	320	413	497
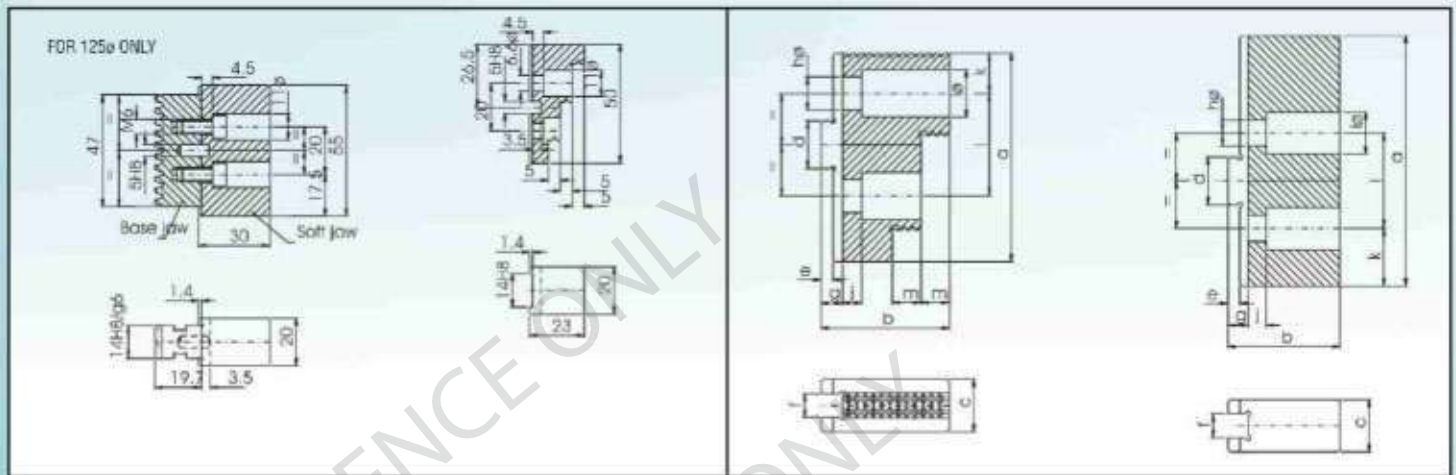
SOFT JAW   **HARD JAW**   **HARD JAW**   **SOFT JAW**

	SIZE	160	200	250	315	400	500
HARD JAW	a	63.3	72.2	90.4	103.3	130.4	130.3
	b	36.5	43	55	62	82 4	82
	c	20	22	32	36	45	45
	d g6	18	20	20	26	30	30
	e	4	5	5	6	7	7
	fH7	8	10	12	12	18	18
	g	7	9	9	10	12	12
	h φ	9	9	14	14	18	18
	i φ	14.5	14.5	20	20	26	26
	j	5	5	8	8	10	10
	k	17	17	20	20	26	26
	l	32	40	40	54	60	60
	m	7.5	10	14	15	20	20

	SIZE	160	200	250	315	400	500
SOFT JAW	a	85	105	125	145	180	180
	b	39.5	47	55	62	82	82
	c	20	22	32	36	45	45
	d g6	18	20	20	26	30	30
	e	4	5	5	6	7	7
	fH11	8	10	12	12	18	18
	g	7	8.5	8.5	9.5	12	12
	h φ	9	9	14	14	18	18
	i φ	14.5	14.5	20	20	26	26
	j	5	7.5	7.5	7.5	10	10
	k	35	41	59	60	85	85
	l	32	40	40	54	60	60