

# VISHAL MACHINE TOOLS

A Complete Range of Clamping Solution



## HYDRAULIC CHUCK WITH LARGE THROUGH HOLE





## **HYDRAULIC CHUCK**

VMT power chuck rotates at high speed, Suitable for modern turning center. These power chuck have a large through bore and are suitable for bar work compact in design and less weight.

#### **Technical Feature**

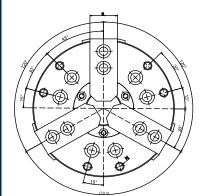
- Gripping force transmission wedge hook.
- Case hardened & body assure long chuck life.
- 2 Jaw Start from dia 100 mm to 315 mm.
- 3 Jaw chuck available in all dia.
- 4 Jaw Chuck start from dia 165 mm.

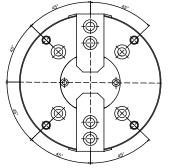
#### **Equipment** are

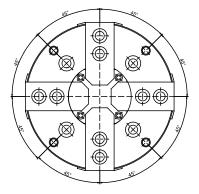
- 2, 3 or 4 Jaw Chuck.
- 1 Set soft Jaws.
- 1 Set T-Nut with bolt. Mounting bolt. Chucknut Handle with dowel and grease gun.

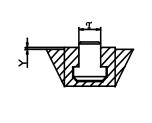
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SIZE	135 MM	165 MM	200 MM	250 MM	300 MM
THROUGH HOLE	34 mm	48 mm	52 mm	70 mm	88 mm
PLUNGER STROKE	10 mm	15 mm	18 mm	20 mm	24 mm
JAWS STROKE	4.5	5.5	7.4	8.8	10.6
GRIPPING RANGE	10-128	32-165	25-200	28-250	42-300
MAX. GRIPPING FORCE (Kgf)	3500	5300	7500	11500	13000
PCD	82.6	104.8	133.4	171.4	171.4
RPM	6000	6000	5000	4000	3400
WEIGHT (kg)	6.5	12	18	27	43

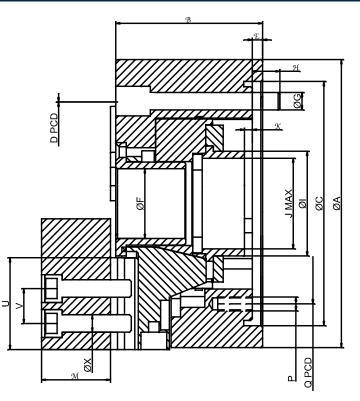












SIZE	135 MM	165 MM	200 MM	250 MM	300 MM
А	135	165	200	250	300
В	60	85	91	100	110
С (Н6)	110	140	170	220	220 300
D PCD	82.6	104.8	133.4	171.4	171.4 235
E	4	6	7	7	7
F	34	42	52	70	88
G	M10 x 3	M10 x 6	M12 x 6	M16 x 6	M16 x 6 M20 x 6
Н	13	15	17	24	30
l	45	58	67	75	104
J	M40 x 1.5	M52 x 2	M60 x 2	M70 x 2	M95 x 2
K1 MAX.	1.5	4	1	1	3.5
K2 MIN.	-8.5	19	20	20	26.5
М	28	40	51	60	61
N	M6	M8	M10	M10	M12
O PCD	108	145	175	220	220
Р	M6	M6	M6	M8	M8
Q PCD	96	116	150	190	190
R	27	32	40	45	52
SERRATION	60° 90°	60° 90°	60° 90°	60° 90°	60° 90°
Т	10	12	14   17	16 21	21
U	41	52	62.5	75	87
V	14	16	25 19	30 25	30
X	M8	M10	M12	M12 M16	M16
Y	2	2	2	2	2





## **COLLET CHUCK**

VMT Collet Chuck is available in three size 25, 42 and 60. These Chuck are interchangeable with power chuck. Collet chuck type has spring collect type collect chuck with great rigidity and infallible. Collect Chuck increase efficiency and productivity always high performance, cost effective and great stability. We also provide customized solution if you need a customized collect chuck.

VMT Collect Chuck applies clamping force all the round the diameter of the part instead of just selected contact area. This result in high concentricity.

#### **STATIONERY CHUCK**

VMT Stationery Chuck for self centering clamping on milling machine, Drilling Machine & Special Machine.

The Compact Construction of these chuck provide maximum working space, these chuck with a in built cylinder can be operated pneumatically or hydraulically with a flexibility of using a vertically positions.

#### **TECHNICAL FEATURES**

Compact in design Case hardened & body assure a long chuck life. Quick and efficient chucking. Concentric gripping of round as well as angular part. Universal through use of different jaws. Suitable for use in automated work cycle. Secure gripping of all types of components. Can be used as alternative of manual chucks.

Sizes are 100mm to 600mm No. of Jaws 2, 3 & 4



## **CUSTOMIZED CHUCK / SPECIAL CHUCK**

VMT Special Chuck are Individual solution that optimize your production process. Special chuck are optimal matched to your Requirement.

- VMT chuck for special Application.
- Vishal Machine Tools Provide a complete Clamping solution for all workholding problems. wheather it is a round job or a special Job due to a year of exprience.
- We are designed a special chuck as per component we have check designed to grid all kind of irregular shape Component.
- The list of application of special chuck range is long email as it.





#### **UBL CHUCK**

VMT Universal Ball Lock Chuck ensure clamping of components & face butting. The UBL Chuck is a locking type power chuck that offers high levels of gripping performance, rigidity and durability to allow secure gripping of cast or forged materials with a draft angle and workpieces with an overhang, which conventional chucks can not grip. Also, they can improve the roundness of thin-walled parts and respond to difficult-to-grip complex-shape workpieces.



#### Features

- Gripping either inner or outer diameter of workpiece is possible with the same chuck.
- The excellent drawing function ensures accurate and stable chucking.
- The equalizing mechanism enables chucking of uneven thickness OD parts.
- Heavy-duty cutting of tapered workpieces is possible with a minimum gripping allowance.
- The circular motion ensures long service life.

#### Availabe Sizes are : 165mm, 170mm, 200mm, 250mm, 315mm

#### No of Jaws are 2 & 3 Jaws



#### **PULLDOWN CHUCK**

These chucks are designed with performance of pulling clamp. Pull-Down type chuck (PA Type) is inside clamping chuck with completely pulling performance by chucking pins.Chucking pins locating at 3 position can reduce bending stress of clamping the work-piece each other. So,

These chucks are designed with high accuracy of concentricity and strong clamping performance. The squareness and parallelism to standard end surface after machining are every good. As the jaw moving capacity is big, it is easy to fix the work-piece. We are able to design the chuck to meet the requirements from customers. The PA type chuck are being used in many quantity as basic chucks of combination chucks for fitting process of factory automation line.

Availabe Sizes are : 165mm, 170mm, 200mm, 250mm, 315mm No of Jaws are 2 & 3 Jaws





#### MANUAL INDEXING CHUCK

These manual indexing chucks with power clamping are suitable for machining jobs at 90, 120, 180 or any other angle in one clamping. Once the job is clamped, the operator only has to pull and push a lever to index for the next operation. The job need not be de-clamped for indexing. The jaw pads are designed to suit the shape of the component. These chucks are ideal for machining automobile transmission cross, hydraulic fittings and valve bodies

Power Operated manual indexing are available with index position

4x90° 3x120° 2x180°

#### FACE CLAMP CHUCK

These chucks have been specially designed for machining of components by clamping them on the face. The large swivel angle facilitates easy loading and unloading of the components.

The swiveling jaws are mounted on compensating spider. The modular design enables the length of the arm and height of the jaws to be altered easily. These features impart a lot of flexibility in work holding and also offer versatility at a low cost. All the sliding parts are provided with lubricating nipples and are guarded against swarf and ingress of dirt to ensure a long trouble free life.

Either a pneumatic or a hydraulic cylinder can activate this chuck. While the chuck mounting details depend on the machine spindle, the weight, clamping and overhand details depend upon the component to be machined.

Availabe Sizes are : 165mm, 170mm, 200mm, 250mm, 315mm

No of Jaws are 2 & 3 Jaws

#### PNEUMATIC ROTARY CHUCK

VMT pneumatic rotary chuck is built in cylinder & compact in design. Suitable for light work compatible to hard & soft jaws.

- Can be installed on rotary table for indexing machining
- Sealed against dust & cutting chips
- Case hardened body to assure long chuck life.

Rotating speed maximum 100RPM Sizes are 100mm to 250mm No. of Jaws 2 & 3





## **COMPENSATION CHUCK**

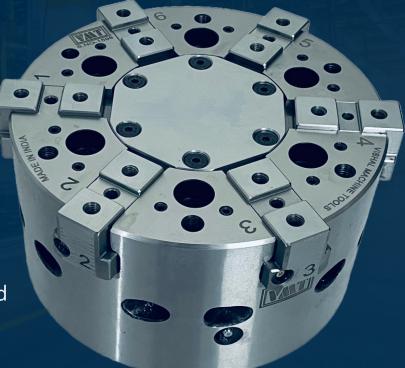
VMT Compensation Chuck has spring loaded center point that locate the part against a chuck mounted part rest & either two or three jaws that are connected as a swivel internal to the chuck so that they can clamp on a surface that is not concentric to the locating center. Compensation chuck is design for machining forging & bar between Center.

These chuck is designed for component which is usually mounted between two center. So you have to mount one side of the components on spring action center on the chuck body & other on tail stock. Mounting on center define the line of center for precision concentricity. The floating wedge is to accommodate & compensate the irregularities in the roundness of the black bar or components.



### **6 JAWS CHUCK**

VMT 6 Jaws chuck offer the ability to hold thin wall parts with minimal distortion. This result in minimal distortion to the machined area. If you are machine an internal diameter it will remain round after it is unclamped. Chuck is rotate at high speed with minimal jaws force loss. Coupled with the ability to use highpressure & low Pressure, Optimal roundness can achieved for thin walled components that are easily deformed with normal 3 jaws style chuck.



Sizes are : 200, 250 & 300



## FOUR JAWS - TWO MOTION CHUCK

VMT Four Jaws - Two motion chuck, where two jaws are self-centering and two jaws are independent. These chuck is suitable for block and non uniform shapes.

#### **TECHNICAL DATA**

- 4 Jaws
- 2 Jaws self center & two jaws independently
- Lever style
- closed center
- Suitable for square bar and non uniform shape work
- 8" to 12"



## LONG JAWS STORKE POWER CHUCK

VMT Long Jaws storke chuck gives you the flexibility of holding a wider verity of parts and reduce the need to move or change the jaws.

#### **TECHNICAL DATA**

- Available in 1, 2 & 3 Jaws
- Size 5" to 12" Diameters
- Lever Type operated and wedge
- Through hole & closed hole option
- case hard body assure a long chuck life.
- high speed chuck

## **Expended Mandrels**

VMT Expending mandral collet chuck is use to the ID of part in which high accuracy and torque transmission due to fixed out mandrel. it is used in turning, milling and granding machine. Axial pull down by axial movement of clamping sleeve during actuation and quick collet change setup. Power operated and very rigid design and used for thin wall port without oveallity genrated and destruction of parts





### **REVOLVING CENTER**

VMT are manufacturing MT-4, MT-5, high Speed Revolving Center. Revolving Center are typically used for supporting long work piece rotating at high speed. They are mounted on the tail stock & prevent the work piece for leaning due to its weight or deflecting due to cutting force action upon its constructed. So that 60° center run in its on bearing & used in a machines non driven or tail stock

#### **TECHNICAL DATA**

- CNC Interchangeable Point
- High Speed Revolving Center
- Essential for shaft turning
- Speedy & effective working
- For lengthy job
- Hardened ground with 60° tip angle.





#### **FACE DRIVER**

VMT are manufacturing face drive to improve productivity & quality have led to the need for faster machining technique. Face drive along with today new high performance equipment led you maximize your production capability for minimal.

In face drive the entire work piece is exposed for machining their for you are able to machine the entire length of the work piece in one operation. The elimination of a setup in the production process result in high accuracy & efficiency.

## TAIL STOCK

VMT are manufacturing tail stock for VMC machine. It is usually used to apply support to the longitudinal rotary axis of a work piece being machined. Tail stock is mounted on machine bed, and inserted against the sides of a hole in the centre of the work piece. A tailstock has a Dead Centre, while headstock has Live Centre. A Tailstock is particularly useful when the work piece is relatively long and slender. Failing to use a tailstock can cause "chatter," where the work piece bends excessively while being cut. We are manufacturing hydraulic, Pneumatic & Manual tail stock as per requirement & customized also





## **RUBBER COLLET**

Rubber grip collet for push type or draw type collet chucks. Full griping area: high rigidity, more gripping force. Gripping smoothly: prevent to damage the work piece. More accurate than standard spring collets. Accuracy: With customized rubber grip collet. Grip Range: ±0.5mm Quick change and easy. Dust-proof and scarf-proof design

## **PRODUCT RANGE**

- Power Chuck
- Collet Chuck
- Stationary Chuck
- Pneumatic Chuck
- Compensation Chuck
- Face Clamp Chuck
- UBL Chuck
- Expended Mandrel
- Long Jaw Storke Power Chuck
- Rotary Pneumatic Chuck

Special Chuck As Per Component

MADE IN INDIA

- Revolving Center
- Twisting Finger Chuck
- Four-Jaws two-Motion Chuck
- Shaft Milling Fixture
- Pull Down Chuck
- Expended Mandrels
- Face drive
- Rubber Collet



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