

# Enhance efficiency and accuracy by 25% precision Work Holding solution

**B**PT is the first standard and custom-build Work Holding devices manufacturer in Asia – Pacific in addition to AT3 class Rotating Tool Holder since more than 3 decades. Erstwhile ‘Birla Kennametal’, Joint Venture with Kennametal, a USD 4 billion company, giving world class Work Holding devices and Tool Holding devices at one third of the cost of which is being supplied globally.

With the help of BPT Work Holding devices there is a reduction in setup time, manpower cost, machine hours as well as rejection percentage; all together around 10 to 25% saving on non value added activity is the additional benefit to the customer.

Whether it's a small or large manufacturing shop, one thing they are constantly seeking is solutions to enhance productivity while keeping constant the quality requirements. After all, more efficiency & productivity with quality guarantees them not only better profit margins but also gives them an edge over the competitor.

The constant need for increased efficiency calls for a special chucking system. One such solution that is designed specifically to meet the twin goals of productivity with quality is Birla Precision's Outer Diameter Clamping Chucks (ODCC). The unique solution has primary application in CNC Turning and CNC Grinding machines, as well as boring, milling, measuring and inspection. BPT's Collets in ODCC are designed and tested to get better gripping actions, higher concentricity and minimum distortion. Special Collets can be designed based on configuration of the customer component and can be customized as per customer requirement.



BPT's ODCC are a perfect fit for clamping OD Round, as well as profile any uneven OD for any secondary operations, including grinding, facing and boring where high degree of concentricity control is required with respect to OD and profile. The solution also helps to save NVA set ups of jaw borings & reduces the internal NVA cost.

BPT's ODCC have simple loading and unloading mechanism and require no indicating or adjusting. They have automatic self-centering capabilities and offer uniform, adjustable holding pressure. To meet the customer requirements, they are designed to support both automatic or manual operation. ODCC are completely sealed from harsh environments.

BPT's ODCC are highly reliable as they come with flexible Collets for extremely long life. They are counterbalanced to operate at high speeds and come with built-in, self-contained air cylinder. Further, they are packed with built-in safety features. They are also easy to maintain as no lubrication is required.

## **BPT's ODCC's CONSTRUCTION**

BPT is a leading provider of precision Work Holding solutions. Its solutions promise accuracy, reliability, repeat-

ability, concentricity and productivity. It guarantees a competitive price for a complete Work Holding solution, which are engineered and manufactured to adhere to the customer's work piece tolerance. BPT standard Work Holding that is OD Collet Chuck models are available as under, according to bore diameter, DA100/ DA 200/ DA 400/ DA600/ DA 800. Standard chucks are adaptable to CNC's various spindle nose sizes i.e. A2-5"//A2-6"// A2-8"// A2-10"// & A2-12.

The specialty of the BPT OD Collet Chuck is they have a built in facility to set the accuracy of the bore to perfect zero run out, to nullify the run out on machine spindle assembly within a fraction of second, it means tremendous reduction in setup time. Special ODCC are available with up to flange outer diameter of 450 mm. Its top tooling is custom designed with special profile collets and back stops.

## **Unique advantages of the Double Angle system are:-**

- A stronger uniform body.
- Uniform DA Collet wall section for even expansion.
- Self releasing Actuating Angles.
- Wear to continuous gauge fit.
- Full 360 degree contact.
- Self releasing for fast load and unload.
- Parallel expansion supports work piece for entire length.
- Accuracy 0.008 mm TIR on nose of master gauge piece, maximum collapse 0.80 mm to 1.6 mm standard based on clamping diameter.

*For more information*

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