



Manufacturer & Exporter of:

Tube Cleaning Equipments such as Flexible Shafts, Brushes, Cutters, Tube Expanders, Construction Equipments Concrete Vibrators, Flexible shaft Grinders & Accessories.

We manufacture & export BHARATFLEX MACHINES ranging from 0.75 to 2.5 H.P. and also with single phase and three-phase range.

Our motors are thoroughly tested for insulation and overloading; incorporated with a high quality windings and bearings. The motors are absolutely trouble free and mounted with an easily accessible rotary switch.

Our flexible shafts are manufactured with superior quality raw material to ensure longer product life. The shafts can be easily fitted or dismantled from the motor at one end and tool holder at the other end.

Our tool holders to suit different applications like mounting of grinding wheels, mounted points sanding discs and right angle attachments. The individual components in the assembly of the tool holder are made with proper heat treatment, dimensional and surface finish, forms, profiles etc.,

The separation of drive unit and the tool itself provides for complete freedom of operation, without fatigue, during long working periods. Additionally, areas difficult to reach with other tools can be worked effectively with flexible shaft machines.

Our programme embraces single-multi and infinitely variable speed machines. Operating speeds based on long, practical experience provides for optimal cutting and surface speed, which guarantees maximum stock removal and also economic tool factor.

Advantages of machines with flexible shafts:

- 1) Wider fields of application with universal combination possibilities.
- 2) Light and handy tools related to specific performance.
- 3) Operation in restricted areas
- 4) Wide speed range
- 5) Constant speed
- 6) High cutting capacity
- 7) Unaffected by constant rough working conditions
- 8) Rugged construction - long working life
- 9) Pollution free - low noise levels



Ten good reasons why you should select 'BHARATFLEX' flexible shaft machines:

- 1) Easy to operate
- 2) Continuous duty rating unlike tools with universal motors
- 3) Available for operation in single phase and 3 phase power supplies
- 4) Sturdy construction and dynamically balanced pressure die-cast rotor
- 5) Wide range of power - output and speeds to suit every application and grinding media
- 6) Optimum cutting speed under varying load conditions due to constant speed characteristics
- 7) Less than 5% RPM drop from no load unlike 40% or more in universal motor tools and pneumatic tools
- 8) High productivity due to continuous rating, constant speed operation, minimum operator fatigue and minimum downtime
- 9) Low maintenance cost due to absence of frequent armature burn out or carbon brush cleaning/replacement problems of universal motor tools and clogging of filters of pneumatic tools.
- 10) Complete freedom of operation, minimum operator fatigue and easy accessibility to remote and restricted areas of job due to the separation of tool from drive machine unlike universal motor tools and pneumatic tools

APPLICATION & SELECTION OF GRINDER MACHINE:

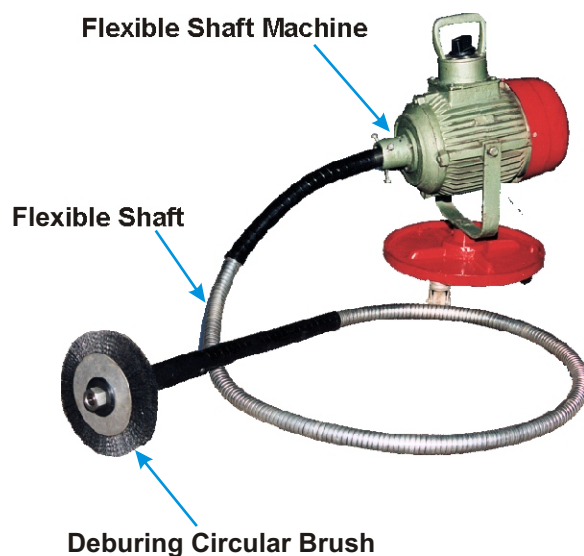
Model	RPM	Shaft size	Tool Holder	Application	Max Wheel Size
BFG-20 BFG-18	12000 8000	10mm	BFH-10	Die Grinding, Deburring, Mould Grinding, Pencil Grinding	Mounted Point Tools
BFG-24 BFG-26	12000 8000	12mm	BFH-10 BWH-10	Grinding, Rust Removing, Buffing, Polishing Sanding, Tyre Rapsing	5" Dia & 5" Width
BFG-13-1 BFG-13-3 BFG-14-3 BFG-14-3A	2800	12mm	BFH-10 BWH-10	Grinding, Rust Removing, Buffing, Polishing Sanding, Tyre Rapsing	5" Dia & 5" Width
BFG-13-1 BFG-13-3 BFG-14-3 BFG-14-3A	2800	15mm	BWH-15 BFH-15	Tyre Retreading Deck Chipping	Chipping Head
BFG-16	5800	15mm	BWH-15 BFH-15	Fettling Fabrication	7" Dia. 9" Dia. 1.1/8 Width.

SINGLE SPEED FLEXIBLE SHAFT GRINDER

Flexible Shaft Grinding machine is widely used in Fabrication Workshops, Foundries and heavy industries. It is very suitable for heavy and or lengthy jobs where it is not possible to lift the job or get the same close to the grinding machine. Each machine is supplied with a Flexible Shaft and Grinding Wheel. The machine can also be used for Buffing purpose by attaching an buffing attachment which can be supplied as an extra equipment. Machine is mounted on Castor Wheels and can be easily moved around close to the job.

Dynamically Balanced rotor minimise vibrations and ensure smooth running.

Construction of the machines are made sturdy and robust o offer vibration free performance. Collet attachment for mounted point grinding wheels can also be supplied at extra cost.



BFG-13

SINGLE SPEED FLEXIBLE SHAFT GRINDER

Following are details of Single Speed 'BHARATFLEX' Flexible Shaft Machine :-

Model	HP	KW	Volts	Phase	RPM	Shaft Length in Meters	Approximate Weight in Kg
BFG-13-1	1.0	0.75	220	1	2800	2	23
BFG-13-3	1.0	0.75	440	3	2800	2	23
BFG-14-3	2.0	1.50	440	3	2800	3	25
BFG-14-3A	2.0	2.50	440	3	2800	3	25
BFG-16	1.5	1.125	440	3	5800	2	26
BFG-18	1.0	0.75	440	3	8000	2	20
BFG-20	1.0	0.75	440	3	12000	2	20

General Tolerance $\pm 0.25\%$

MULTIPLE -SPEED FLEXIBLE SHAFT GRINDER



BFG-32 (SEVEN SPEED MACHINE)

Following are details of Multi-Speed 'BHARATFLEX' Flexible Shaft Machine:-

Model	HP	KW	Volts	Phase	RPM	Shaft Length in Meters	Approximate Weight in Kg
BFG-26	1.0	0.75	440	3	3200 & 5800	2	19
BFG-28	1.0	0.75	440	3	12000, 8000	2	19
BFG-30	1.0	0.75	440	3	12000, 8000 & 5800	2	19
BFG-32	1.0	0.75	440	3	12000, 8000, 5800 3200, 2100, 1600 850	2	19

General Tolerance $\pm 0.25\%$

All units available with various electrical specification:

115v 60 Hz, 115v 50Hz - 9 Amps. 220 v 60 Hz, 220v 50Hz -4.5 Amps. Please specify while ordering.



FLEXIBLE SHAFT:

It consists of a metallic flexible inner core with multiple wound opposite layers. It is made of high tensile spring steel or stainless steel (as per requirement) and passed through heat treatment processes to make it absolutely vibration free.

External sheath made of flexible double interlocked (metallic) or rubberized cover. External sheath is provided with an anti-friction liner to protect it from friction of high speed movement of inner core.



Following are various sizes of 'BHARATFLEX' Flexible Shaft :-

Serial No.	Size of Flexible Shafts				Shaft Length		Model No. Of flexible shaft
	Inner core Diameter in		Outer Casing Diameter in		in		
	Mm	Inch	Mm	Inch	Meters	Feet	
1	10	0.39	22	7/8	1.5	5.0	BFS-102-5
2	10	0.39	22	7/8	2.0	6.5	BFS-102-6
3	12	1/2	25	1	2.0	6.5	BFS-105-6
4	12	1/2	25	1	2.5	8.0	BFS-105-8
5	12	1/2	25	1	3.0	9.0	BFS-105-9
6	15	5/8	29	1.15	2.0	6.5	BFS-106-6
7	15	5/8	29	1.15	2.5	8.0	BFS-106-8
8	15	5/8	29	1.15	3.0	9.0	BFS-106-9

NOTE: Flexible shafts are provided with or without hand piece as per requirement of customer.

FLEXIBLE SHAFT TOOL HOLDERS & ACCESSORIES

'BWH' Series:

This Tool Holder is suitable for grinding wheels, Buffing Cloths and accessories. In addition to this, collet adaptors can be used to hold point mounted tools. Therefore there is no need to use 'BFH' series tool separately.



'BWH' Series tool holders



‘BFH’ Series:

This Tool Holders are suitable for holding spindle mounted tool.



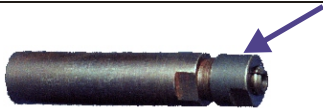
Spindle Mounted Tools for grinding.



‘BFH’ Series tools holders

Serial No.	Inner core Diameter in		Tool Holders For Point Mounted Tools	Tool Holders For Buffing (With male threading)
	Mm	Inch		
1	10	0.39	BFH-10	BWH-10
2	12	1 / 2	BFH-12	BWH-12
3	15	5/8	BFH-15	BWH-15

DIA OF COLLET: 3MM / 6MM / 6.4MM.



‘Collet Adaptors’: Collets adaptors are used with ‘BWH’ series tools in order to hold point mounted tools. Therefore no need to use ‘BFH’ tools separately.

Spare Collet for Point mounted tools : Collets are used in collet adaptors & ‘BFH’ series tools holders to hold spindle mounted tools



Collets For Adaptors Size in MM	Model No.
3.0	BC 30
6.0	BC 32
6.4	BC 34

‘BWH’ SERIES TOOL

COLLET ADAPTOR



‘Buffing Collet’: This Collet is used for holding buffing cloth during buffing. .

‘BRAT’ Series:

This right angle Tool Holders are suitable for grinding wheels.



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