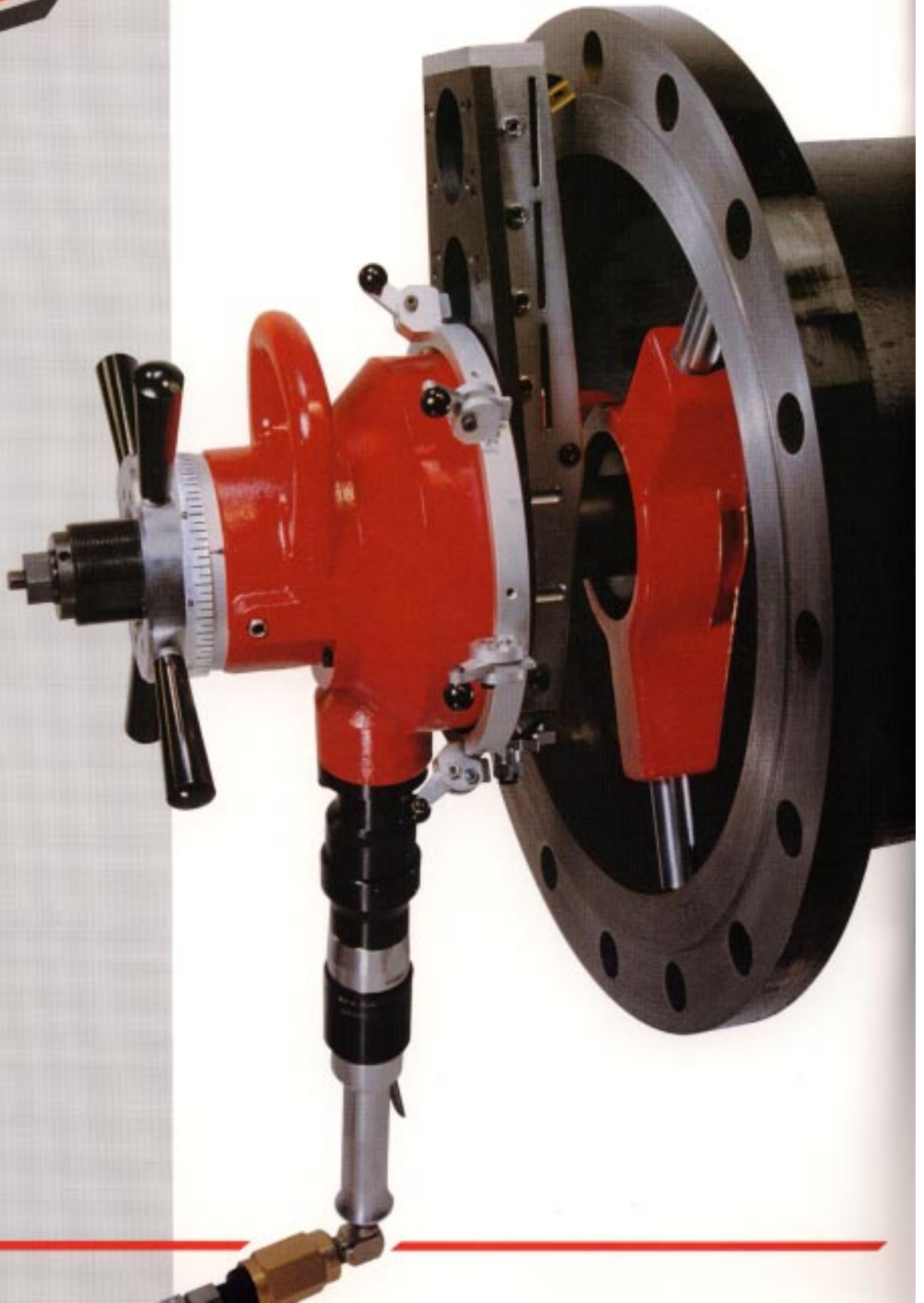




FLANGE FACING SYSTEMS



WACHS MAKES FLANGE FACING FAST — AFFORDABLE — EASY

Now anyone can produce a lathe quality surface finish on flat and raised face flanges in minutes.

- Eliminate Flange Replacement
- Minimize Downtime
- Reclaim Scrap Flanges and Flanged Valves



FAST and EASY SET UP...

Insert the self-centering single action chuck and automatic squaring fixture into the flange I.D. Tighten the expansion nut and precise flange alignment is complete. No other adjustments are required.



SIMPLE OPERATION...

Mount the lightweight Flange Facer onto the mandrel shaft, align tooling, connect the power source and within minutes the Flange Facer is ready to reface your flange. Simply engage the radial feed system to ensure exact surface finish.



SOLID PERFORMANCE...

Wachs' Flange Facing Systems deliver maximum torque and rigidity where it counts — at the tool head — to recut groove (500 RMS) raised face flanges or apply a smooth 63 RMS surface finish to flat face flanges.



BUILT IN VERSATILITY...

The simple "Quick Change Option" transforms the Wachs' Flange Facer into a powerful pipe beveler capable of facing, beveling and counterboring pipe, tube, elbows and bends.



WACHS FLANGE FACING SYSTEMS...

Each machine is packaged in a rugged "job site ready" storage case with all necessary operating components to make on-site flange repairs.



Three New Models to Choose From!

Machine 2" I.D. through 24" Flange O.D.

All Lightweight, Compact Wachs Flange Facing Systems Offer these Design Features...

- Only one operator required to set up and operate.
- Modular design...Converts from a flange facer to a pipe beveling machine in minutes.
- Mounting legs require less than a 3/4" straight run for rigid machine mounting.
- Cast Aluminum housing makes it tough yet lightweight.
- Large bearing load diameters and tapered roller bearings for smooth operation and long life.
- Rigid tool post design and exacting tool geometry for precise machining finish.
- I.D. mounted, 3 leg, single action chuck, provides fast set up in any position.
- "Slip-on" alignment fixture automatically squares machine to flange face.
- "Quick Change" mandrel system packaged for fast selection and installation.

Wachs...providing cost effective solutions for your machining problems!

Machinery...Complete line of portable machine tools.

On-site Demonstrations...scheduled at your convenience, at your job site, on your application.

On-site Training...Technical training seminars may be conducted at our facilities or at your designated field location.

On-site Service...Wachs certified technicians, coupled with Wachs equipment, offer complete on-site field machining, and/or supervision.

Equipment Rental and Lease/Purchase Options...

A selection of cost-effective financial options tailored to your specific needs, ranging from short term rental to lease/purchase programs.

Contact the Wachs Company...find out what WACHS can do for you!



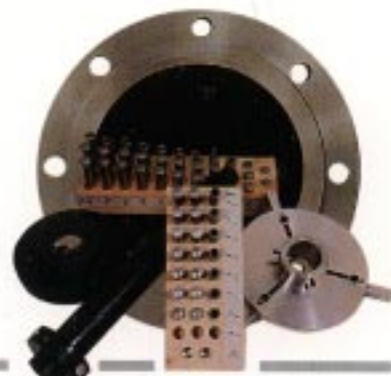
MODEL FF 206

Flange Facing Machine for facing raised and flat face flanges from 2.0" I.D. to 6.0" O.D. (50.8mm to 152.4mm)



MODEL FF 313

Flange Facing Machine for facing raised and flat face flanges from 3" I.D. to 13" O.D. (76.2mm to 330.2mm)



MODEL FF 424

Flange Facing Machine for facing raised and flat face flanges from 4" I.D. to 24" O.D. (101.6mm to 609.6mm)



	FF 206	FF 313	FF 424
Standard Package	Flange Facing systems include machine, high torque air motor, "quick set-up" mandrel, legs, alignment fixture, single point tool slide, tooling package, high strength steel storage case, operating tools and manual.		
Machining Functions	Machine flat face and raised face flanges, record groove (500 RMS), 250 RMS, 125 RMS and 63 RMS surface finishes. Manual facing and beveling. Optional beveling attachment allows for simultaneous face, bevel and counterbore operations for pipe and tube.		
Machining Capacity	Machine 2" (50.8mm) I.D. through 6" (152mm) O.D. flanges. Using optional beveling attachment, machine 7/8" (22.2mm) I.D. through 4.5" (114.3mm) O.D. pipe.	Machine 3" (76.2mm) I.D. through 13" (330.2mm) O.D. flanges. Using optional beveling attachment, machine 1.81" (48mm) I.D. through 6.46" (164mm) O.D. pipe.	Machine 3.75" (95.2mm) I.D. through 24" (609.6mm) O.D. flanges. Using optional beveling attachment, machine 3.78" (96mm) I.D. through 12" (274.8mm) O.D. pipe.
Mandrel	Self-centering, I.D. mounted, single action 3 leg system, adjustable expansion nut, 7 leg sets with one adjustable leg per set. 1.95" (49.5mm) I.D. to 4.11" (104.4mm) I.D. chucking range.	Self-centering, I.D. mounted, single action 3 leg system, adjustable expansion nut, 18 leg sets with one adjustable leg per set. 3.00" (76.2mm) I.D. to 10.08" (256mm) I.D. chucking range.	Self-centering, I.D. mounted, single action 3 leg system, adjustable expansion nut, 23 leg sets with one adjustable leg per set. 3.75" (95.2mm) I.D. to 20" (508mm) I.D. chucking range.
Alignment System	Flange alignment fixture.	Flange alignment fixture with integral jacking screw for "Z" axis adjustment.	Flange alignment fixture with integral jacking screw for "Z" axis adjustment.
Feed System	Starwheel feed with 6 individual retractable trip levers to select the desired RMS finish, .0052" (0.132mm) radial feed per trip. Total feed per revolution with 6 trips engaged .031" (.794mm).		
Tool Post Travel	2.5" (63.5mm) maximum	2.5" (63.5mm) maximum	6" (152.4mm) maximum
Axial Feed Rate	.062" (1.58mm) per revolution	.083" (2.10mm) per revolution	.083" (2.10mm) per revolution
Maximum Axial Travel	2.5" (63.5mm)	2.5" (63.5mm)	2.5" (63.5mm) with adaptor 3" (76.2mm) without adaptor
Controls	Manual tool in-feed with index gauge for precise axial adjustment. ON/OFF fail-safe motor lever. Adjustable speed control valve.		
Tooling	Carbide insert and holder	High speed steel insert and holder	High speed steel insert and holder
Drive	Pneumatic	Pneumatic	Pneumatic
Air Requirements	35 CFM @ 90 PSI (1.0 cu.m @ 6.3 BAR)	55 CFM @ 90 PSI (1.6 cu.m @ 6.3 BAR)	55 CFM @ 90 PSI (1.6 cu.m @ 6.3 BAR)
Finish	Black Oxide, Cad Plating and Polyurethane paint.		
Machine Weight	20 lbs. (9.5 kg)	45 lbs. (20.5 kg)	75 lbs. (34.0 kg)
Mandrel Weight	4 lbs. (2.0 kg)	7 lbs. (3.5 kg)	16 lbs. (7.5 kg)
Dimensions			
Length:	19-11/16" (500mm)	26-5/16" (668mm)	30-1/4" (768mm)
Mandrel Length:	14-5/16" (364mm)	14-1/2" (368mm)	17-3/8" (441mm)
Tool Post Swing from Center:	6-5/8" (168mm)	8-1/16" (205mm)	12-1/8" (308mm)
Set up Time	5 min.	10 min.	15 min.
Optional Accessories	Beveling Machine Conversion Kit, (ATM) Air Treatment Module, Custom Ground HSS Tooling		



63" O.D. Mounted "Split Frame" re-establishing a record groove on a 48" pipe line flange.

Other Wachs Portable Flange Facing Machines

E.H. Wachs manufactures a variety of I.D. and O.D. mounted machinery for on-site flange facing from 1" (25.4mm) to 74" (1879.6mm) O.D. In addition to our standard product line, Wachs "Special Products Group" offers the development of portable machine tools for unique or difficult machining applications. Let our machine tool experts work for you.

I.D. mounted EP-3 End Prep Lathe re-facing a 36" O.D. Main Steam Stop Valve.



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