

FF Flange Facer



Lathe quality surface finish



Based on powerful SDB end prep platform



Convertible to SDB series end prep

Fast, Easy Setup - Self-Centering Design

Now anyone can produce a lathe quality surface finish on flat, raised or recessed face flanges in minutes. Based on the powerful Wachs SDB series ID mount end prep machines, the Wachs FF series flange facers offer a rugged yet lightweight and compact design that allows them to fit into tight quarters.

With the addition of the SDB conversion kit, the FF models can be converted into SDB series machines, allowing them to face, bevel, compound bevel and counterbore. Field proven industry workhorses, they are easy to setup with self-centering mandrels and easy to operate.



FF Flange Facer

Wachs FF series flange facers are based on the powerful and versatile SDB series of bevelers. Simple to operate, they mount to the pipe ID and are self-centering. Specify the SDB conversion kit to add bevel, facing and counterbore capabilities.

- Fast, easy setup – self-centering design
- Simple operation, light-weight and compact
- Record groove, RMS 500, 250, 125
- Converts to SDB beveler series with optional SDB conversion kit

Model FF 206

Flange facing machine for facing flat, raised or recessed face flanges from ID 2in (50.8 mm) through OD 6in (152.4 mm) up to a 2in (DN50) 150# flange.

Model FF 313

Flange facing machine for facing flat, raised or recessed face flanges from ID 3in (76.2 mm) through OD 13in (320.2 mm) up to a 6in (DN150) 400# flange.

Model FF 424

Flange facing machine for facing flat, raised or recessed face flanges from ID 4in (101.6 mm) through OD 24in (609.6 mm) up to a 16in (DN400) flange.



FF Flange Facer 206



FF Flange Facer 313



FF Flange Facer 424

SPECIFICATIONS	FF 206	FF 313	FF 424
Machine capacity (Pipe ID to OD)	2-6in (50.8-152.4 mm)	3-13in (76.2-330.2 mm)	4-24in (101.6-609.6 mm)
Standard equipment	<ul style="list-style-type: none"> • Heavy duty drive (air or electric) • 3-jaw independent "short perch" mandrel ID 1.95in - 4.11in (49.5-104.4 mm) • 7 sets of leg extensions • Single point flange facing tool slide • Tooling package • Watertight storage case • Operating hand tools • Manual 	<ul style="list-style-type: none"> • Heavy duty drive (air, electric or hydraulic) • 3-jaw independent "short perch" mandrel ID 3in - 10.08in (76.2-256 mm) • 18 sets of leg extensions • Single point flange facing tool slide • Tooling package • Watertight storage case • Operating hand tools • Manual 	<ul style="list-style-type: none"> • Heavy duty drive (air, electric or hydraulic) • 3-jaw independent "short perch" mandrel ID 3.78in - 20in (96-508 mm) • 23 sets of leg extensions • Single point flange facing tool slide • Tooling package • Watertight storage case • Operating hand tools • Manual
Shipping weight (est.)	47 lb (21.3 kg)	180.8 lb (82 kg)	
Shipping dimensions (est., without accessories)	25 x 22 x 9in (635 x 559 x 229 mm)	12 x 32 x 12in (305 x 813 x 305 mm)	

MODEL	DRIVETYPE	PIPE ID TO OD	CODE	PART #
FF 206	Pneumatic	2-6in (50.8-152.4 mm)	916 000 330	16-000-FF
FF 206	Electric 110 V, 50 Hz	2-6in (50.8-152.4 mm)	ON REQUEST	ON REQUEST
FF 206	Electric 220 V, 50 Hz	2-6in (50.8-152.4 mm)	ON REQUEST	ON REQUEST
FF 313	Pneumatic	3-13in (76.2-330.2 mm)	956 000 330	56-000-FF
FF 313	Electric 110 V, 50 Hz	3-13in (76.2-330.2 mm)	ON REQUEST	ON REQUEST
FF 313	Electric 220 V, 50 Hz	3-13in (76.2-330.2 mm)	ON REQUEST	ON REQUEST
FF 313	Hydraulic	3-13in (76.2-330.2 mm)	ON REQUEST	ON REQUEST
FF 424	Pneumatic	4-24in (101.6-609.6 mm)	966 000 330	66-000-FF
FF 424	Electric 110 V, 50 Hz	4-24in (101.6-609.6 mm)	ON REQUEST	ON REQUEST
FF 424	Electric 220 V, 50 Hz	4-24in (101.6-609.6 mm)	ON REQUEST	ON REQUEST
FF 424	Hydraulic	4-24in (101.6-609.6 mm)	966 000 340	66-000-FH
FF 424	SDB 412/2 + FF 424 (Set)	4-24in (101.6-609.6 mm)	966 000 040	66-000-04

Mandrels & Accessories for SDB 103

DESCRIPTION	CODE	PART #
Standard mandrel. For ID 1.16in - 4.18in (29.5-106 mm). Without leg extension sets.	916 303 000	16-303-00
Standard mandrel. For ID 1.16in - 4.18in (29.5-106 mm). Includes: 7 sets of leg extensions.	916 409 000	16-409-00
3-jaw independent "short perch" mandrel. For ID 1.95in - 4.11in (49.5-104 mm). Includes: 7 sets of leg extensions. Minimum .75in straight run required. To rigid mount on fittings, flanges, elbows and valves.	916 414 000	16-414-00
Small ID accessory mandrel. For ID 0.875in - 1.25in (22-31.75 mm). Includes: <ul style="list-style-type: none"> • 1 rotating head 3.13in (79.5 mm). • 1/4in (4 x 6.35 mm) shank style tool slots. 2 sets of leg extensions for ID mounting ranges: 0.875-1.125in (22-28.6 mm) and 1- 1.25in (25.4-31.75 mm) • 1 mandrel • 1 draw bar nut • 1 drawbar • Fasteners 	916 401 000	16-401-00



SDB 103 / FF 206
Mandrel Kit

Mandrels & Accessories for SDB 206

DESCRIPTION	CODE	PART #
Standard mandrel "new style 2009" For ID 2.27- 2.92in (58-74 mm). Without leg extension sets.	956 430 010	56-430-01
Standard mandrel "new style 2009" For ID 2.27in - 6.77in (58-172 mm) Includes: 7 sets of leg extensions.	956 430 000	56-430-00
Standard range leg extension kit For standard mandrel "new style 2009". For ID 2.75in - 6.77in (70-172 mm).	956 430 020	56-430-02
Upgrade for obsoleted mandrel 956 401 010. Requires return of the 956 401 010 mandrel and the following items to be in good reusable condition to complete the upgrade: 956 188 000 956 035 000 956 036 000 956 024 020 956 025 000 Estimate for repair will be given for any items not acceptable to complete the conversion.	956 310 000	56-310-00
Small ID accessory mandrel. For ID 1.91in - 2.46in (48.5-62.5 mm).	956 402 010	56-402-01
Extender kit "new style 2009" for mandrel 956 430 000. Includes: <ul style="list-style-type: none"> • 4 sets of leg extensions for ID 6.71in - 9.04in (170-229.6 mm) • 1 rotating head (8in). 	956 407 020	56-407-02
Small 3-jaw independent "short perch" mandrel. For ID 2in - 3.25in (50.8-82.5 mm). Includes 3 sets of leg extensions. To rigid mount on fittings, flanges, elbows and valves.	956 416 010	56-416-01
3-jaw independent "short perch" mandrel. For ID 3in - 6.08in (76.2-154 mm). Includes 8 sets of leg extensions. Minimum .75in (19.05 mm) straight run required. To rigid mount on fittings, flanges, elbows and valves.	956 414 010	56-414-01
Extension adapter hub. For ID 6in - 10.1in (152.4-256.5 mm). Includes 10 sets of leg extensions. For 3-jaw independent "short perch" mandrel 956 414 010.	956 415 000	56-415-00
Single point flange facing tool slide. For flanges with ID 3in (76.2 mm) to OD 13in (330 mm).	956 404 000	56-404-00



SDB 206 / FF 313
Mandrel Kit

Mandrels & Accessories for SDB 412

DESCRIPTION	CODE	PART #
Standard mandrel. For ID 3.80-12.02in (96.5-305 mm). Excludes leg extension sets.	966 301 010	66-301-01
Standard mandrel. For ID 3.80-12.02in (96.5-305 mm). Includes 8 sets of leg extensions.	966 407 010	66-407-01
3-jaw independent "short perch" mandrel. For ID 3.75-12.80in (95-325 mm). Includes 13 sets of leg extensions. Minimum .75in straight run required. To rigid mount on fittings, flanges, elbows and valves.	966 414 010	66-414-01
Extension adapter hub. For ID 12.72-20in (323-508 mm). Includes 10 sets of leg extensions. For 3-jaw independent "short perch" mandrel 966 414 010.	966 415 000	66-415-00
Leg set replacement Includes: • 3 chuck legs (66-084-00) • 1 complete set of extension leg assemblies from 0.5-4in (12.7-101.6 mm)	966 411 000	66-411-00



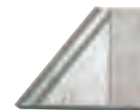
SDB 412 / FF 424 Mandrel Kit

Facing/Beveling/Counterboring Tools for SDB 103

DESCRIPTION	CODE	PART #
FF Flange facing tool insert holder.	956 714 010	56-714-01
FF Flange facing tool insert for holder (56-714-01). Carbide.	960 702 000	60-702-00
Facing tool (non-wedgelock) for ID 1.16-3in (29.5-76.2 mm).	926 410 020	26-410-02
Facing tool (non-wedgelock) for ID 2.3-4.18in (58.4-106 mm).	926 410 030	26-410-03
Facing tool (non-wedgelock) Carbide tipped. Max. wall 0.75in (19.05 mm).	926 410 040	26-410-04
Custom HSS facing tool bit (non-wedgelock) Ground to customer specification.	ON REQUEST	26-SPT-01
Bevel tool 37.5° (non-wedgelock). For ID 1.16-3in (29.5-76.2 mm).	926 411 010	26-411-01
Bevel tool 37.5° (non-wedgelock). For ID 2.3-4.18in (58.4-106 mm).	926 411 020	26-411-02
Bevel tool 37.5° (non-wedgelock). For ID 2.14-2.7in (54.4-68.6 mm).	926 411 030	26-411-03
Bevel tool carbide 37.5° (non-wedgelock).	926 411 040	26-411-04
Bevel tool bit 20° "J" 3/32 radius (non-wedgelock). For ID 1.35-4in (34.3-101.6 mm). Use with facing tool 926 410 020 for 0.03in (0.76 mm) land extension.	926 713 000	26-713-00
Custom HSS single angle bevel tool bit (non-wedgelock). Ground to customer specification.	ON REQUEST	26-SPT-02
Custom HSS "J-Prep" bevel tool bit (non-wedgelock). Ground to customer specification.	ON REQUEST	26-SPT-06
Universal beveling and facing tool 37.5° (non-wedgelock). For ID 1.5-3in (38.1-76.2 mm).	926 413 010	26-413-01
Universal beveling and facing tool 37.5° (non-wedgelock). For ID 2.2-3.8in (55.9-96.5 mm).	926 413 020	26-413-02
Custom HSS combination facing and beveling tool bit (non-wedgelock). Ground to customer specification.	ON REQUEST	26-SPT-04
Small ID deburring tool (non-wedgelock). 0.186in (4.7 mm) required between mandrel and ID.	926 412 010	26-412-01
Medium ID deburring tool (non-wedgelock). 0.43in (10.9 mm) required between mandrel and ID.	926 412 020	26-412-02
Large ID deburring tool (non-wedgelock). 0.68in (17.3 mm) required between mandrel and ID.	926 412 030	26-412-03
Combo 30° taper counterbore and facing tool (non-wedgelock) 0.326in (8.3 mm) required between mandrel and ID.	926 426 000	26-426-00
Custom HSS ID deburring tool (non-wedgelock). Ground to customer specification.	ON REQUEST	26-SPT-03
Custom HSS counterboring tool bit (non-wedgelock). Ground to customer specification.	ON REQUEST	26-SPT-05



Medium ID deburring tool (non-wedgelock)



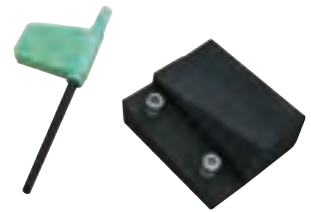
Bevel tool 37.5° (non-wedgelock)



3/32 radius 2-sided "J-Prep" bevel tooling insert (Premium)

Facing and Beveling Tools for SDB 206 & SDB 412

DESCRIPTION	CODE	PART #
Facing tool insert holder (low range) includes: <ul style="list-style-type: none"> • 1 holder (56-198-01) • 2 insert screws (56-190-00) • 1 wrench (56-191-00) 	956 708 010	56-708-01
Facing tool insert holder (high range) includes: <ul style="list-style-type: none"> • 1 holder (56-198-02) • 2 insert screws (56-190-00) • 1 wrench (56-191-00) 	956 708 020	56-708-02
Premium grade HSS insert (2 sided). For facing and beveling. For use with SDB 206, SDB 412 and EP 424 insert holders.	956 711 010	56-711-01
Carbide 2 sided insert. For facing and beveling. For use with SDB 206 and SDB 412 insert holders.	956 712 010	56-712-01
Insert holder kit includes: <ul style="list-style-type: none"> • 1 low range facing insert holder (56-708-01) • 1 high range facing insert holder (56-708-02) • 1 bevel insert holder 37.5° (56-709-03) For use with all SDB 206, SDB 412 and EP 424.	956 710 010	56-710-01
Custom HSS facing tool bit (form tool). Ground to customer specification.	ON REQUEST	56-SPT-02
Custom facing insert holder. Ground to customer specification.	ON REQUEST	56-SPT-09
30° bevel tool insert holder kit includes: <ul style="list-style-type: none"> • 1 holder (56-199-02) • 2 insert screws (56-190-00) • 1 wrench (56-191-00) 	956 709 020	56-709-02
Bevel tool insert holder kit 37.5° includes: <ul style="list-style-type: none"> • 1 holder (56-199-03) • 2 insert screws (56-190-00) • 1 wrench (56-191-00) 	956 709 030	56-709-03
"J" bevel tool insert holder kit 20° (low range) includes: <ul style="list-style-type: none"> • 1 holder (56-199-01) • 2 insert screws (56-190-00) • 1 wrench (56-191-00) Use with facing insert holder 56-708-01 for .04in (1 mm) land extension	956 709 010	56-709-01
"J" bevel tool insert holder kit 20° (high range) includes: <ul style="list-style-type: none"> • 1 holder (56-199-05) • 2 insert screws (56-190-00) • 1 wrench (56-191-00) Use with facing insert holder 56-708-10 for .04in (1 mm) land extension	956 709 050	56-709-05
Premium grade HSS insert (2 sided). For facing and beveling. For use with SDB 206, SDB 412 and EP 424 insert holders.	956 711 010	56-711-01
Premium grade HSS insert (2 sided) 3/32 radius "J" bevel insert. For use with 56-709-01 and 56-709-05 holders.	956 711 020	56-711-02
Carbide insert (2 sided). For facing and beveling. For use with SDB 206 and SDB 412 insert holders.	956 712 010	56-712-01
Carbide insert (2 sided) 3/32 radius "J" bevel. For use with 56-709-01 and 56-709-05 insert holders.	956 712 020	56-712-02
Compound bevel form tool 10° x 37.5°.	956 707 000	56-707-00
Insert holder kit includes: <ul style="list-style-type: none"> • 1 low range facing insert holder (56-708-01) • 1 high range facing insert holder (56-708-02) • 1 bevel insert holder 37.5° (56-709-03) For use with SDB 206, SDB 412 and EP 424.	956 710 010	56-710-01
Legacy single point beveling tool holder. For EP 424, FF 313 and FF 424, low range. EP 424 for OD 4.25in - 23.62in (108-600 mm).	956 424 000	56-424-00
DuoEdge single point tooling	-	-



Facing tool insert holder (high range)



Bevel tool insert holder kit 37.5°



Premium grade HSS insert (2 sided)



Insert Holder Kit 56-710-01

Beveling and Counterboring Tools for SDB 206 & SDB 412

DESCRIPTION	CODE	PART #
Legacy single point beveling tool holder. For EP 424, FF 313 and FF 424, high range. EP 424 for OD 7.25in - 24in (184-609.6 mm)	956 424 010	56-424-01
Custom HSS single angle bevel tool bit (form tool). Ground to customer specification	ON REQUEST	56-SPT-01
Custom HSS compound angle bevel tool bit (form tool). Ground to customer specification	ON REQUEST	56-SPT-03
Custom single angle "J" bevel tool bit (form tool). Ground to customer specification	ON REQUEST	56-SPT-04
Custom HSS compound angle "J" bevel tool bit (form tool). Ground to customer specification	ON REQUEST	56-SPT-05
Custom bevel angle insert holder. Ground to customer specification	ON REQUEST	56-SPT-08
10° ID deburring tool. 0.15in (3.8 mm) required between mandrel and ID	956 702 010	56-702-01
10° ID deburring tool. 0.449in (11.4 mm) required between mandrel and ID	956 702 020	56-702-02
10° ID deburring tool. 0.762in (19.4 mm) required between mandrel and ID	956 702 030	56-702-03
4:1 Taper counterbore tool. 0.315in (8 mm) required between mandrel and ID	956 705 010	56-705-01
4:1 taper counterbore tool. 0.875in (22.2 mm) required between mandrel and ID	956 705 020	56-705-02
4:1 taper counterbore tool. 1.375in (35 mm) required between mandrel and ID	956 705 030	56-705-03
Custom HSS ID deburring tool bit. Ground to customer specification	ON REQUEST	56-SPT-06
Custom HSS counterbore tool bit. Ground to customer specification	ON REQUEST	56-SPT-07



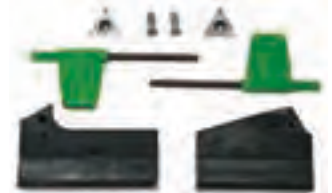
Legacy single point beveling tool holder



Legacy standard HSS tool bit
9.5 x 9.5 mm

Flange Facing Tools for FF 206

DESCRIPTION	CODE	PART #
Carbide insert. For beveling and flange facing For use with insert holder 956 714 010	960 702 000	60-702-00
Carbide insert tool holder kit For single point beveling and flange facing includes: <ul style="list-style-type: none"> • 1 holder (16-042-00) • 1 flag wrench (56-191-00) • 2 retaining screws (60-231-01) • 5 inserts (60-702-00) 	916 701 000	16-701-00



Flange facing tool kit

Flange Facing Tools for FF 313 & FF 412

DESCRIPTION	CODE	PART #
Flange facing tool kit includes: <ul style="list-style-type: none"> • 1 low range insert tool holder (56-195-00) • 1 high range insert tool holder (56-194-00) • 2 tool inserts (56-710-00) • 2 insert retaining screws (56-190-00) • 1 screw wrench (56-191-00) 	956 418 010	56-418-01
Tool insert for flange facing (high and low range)	956 710 000	56-710-00
Custom form tool or single point insert holder. Ground to customer specification	ON REQUEST	56-SPT-10



Flange facing tool insert

Hydraulic Power Units

For available Hydraulic Power Unit options, see page 76.

Air Control Module

Air Control Module "ACM", see page 74.