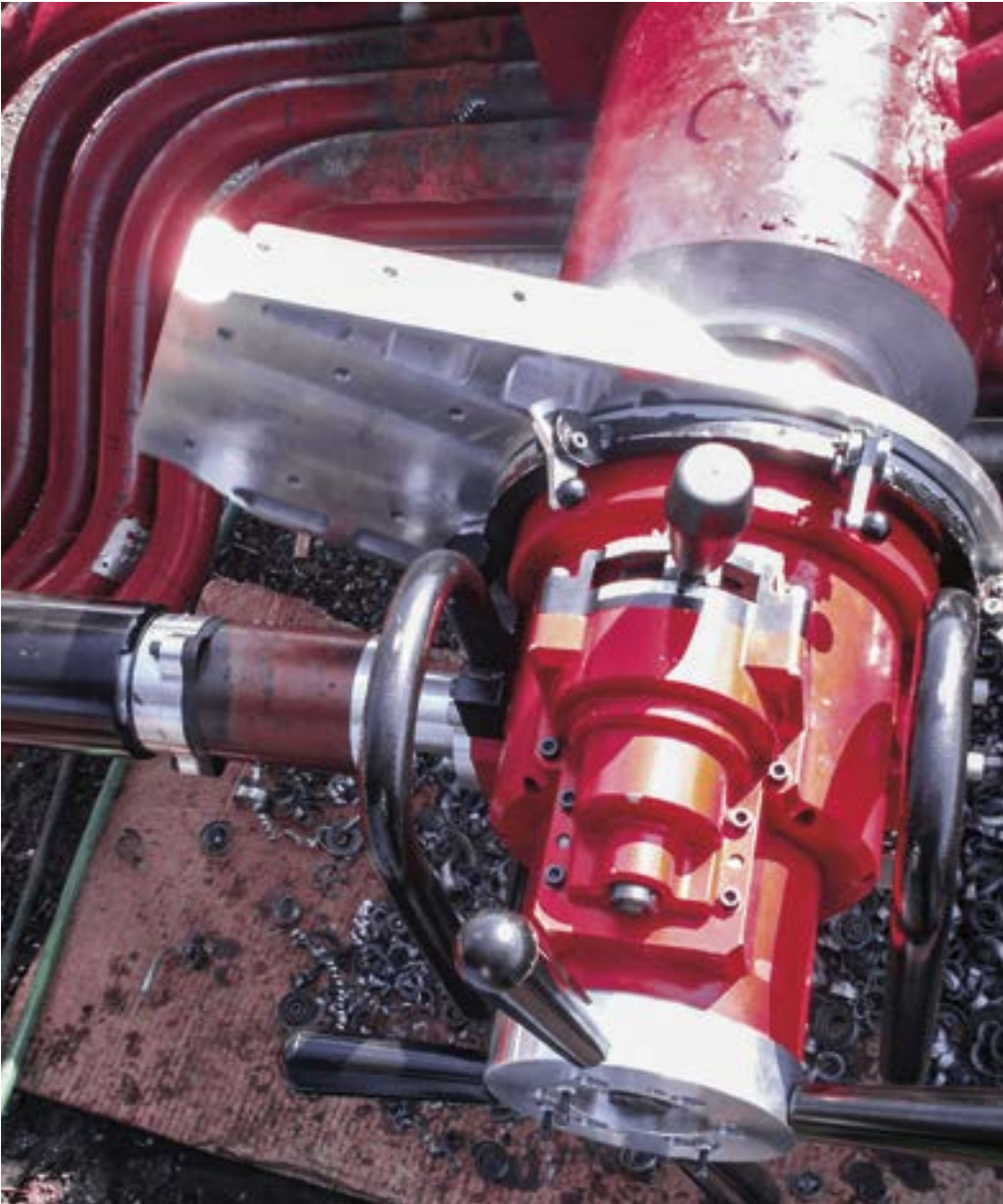


EP 424 End Prep



EP 424 is ideal for heavy wall



SpeedPrep™ AutoFeed mechanism



Hydraulic (shown), Electric & Pneumatic drive options

Innovative SpeedPrep™ AutoFeed

The Wachs EP 424 with the SpeedPrep™ AutoFeed system is a precision ID mount end prep machine tool designed to bevel, compound bevel, J prep, face and counterbore pipe, fittings and valves. The EP 424 machines any bevel or compound bevel without templates, incline tool slides or work stoppage.

It's powerful enough to form tool from 4-14in (DN 100-350) and single point from 8-24in (DN200 - 600) up to a 6.5in (165mm) wall thickness. The EP 424 can single point and face flanges up to 36in utilizing its optional tool slide. The SpeedPrep™ AutoFeed system makes the EP 424 the most advanced end prep machine in the industry.



EP 424 End Prep

Prior to the EP 424, most end prep machines required a mechanical template or incline tool slide to reproduce the specific and complex preps called for by today's processes. With Wachs AutoFeed system, it's now possible to dial in the exact prep needed for your application. Select the bevel angle and the land that works best for your application, without work stoppages or additional components. More versatile and powerful than any other machine of its kind, the Wachs EP 424 sets the standard in user friendly large diameter end prep.

Features

- Safe cold cutting process, eliminates heat affected zone
- Lathe machining delivers precise compound bevels and consistent lands
- EP 424 eliminates the need for accessory templates or external tool slides
- Fast setup and prep with standard self-centering mandrel legs
- Corrosion resistant finishes on all components for extreme environments
- Fully enclosed bearings and drive gears for safety and durability

Specifications

System function:

ID mount end prep machine tool designed to bevel, compound bevel, J-prep, face and counterbore pipe, fittings and valves

Capacity OD:

4-24in (DN 100-600)

Up to 36in (DN 900) with optional slide

Drive options:

Hydraulic, pneumatic or electric

Pneumatic requirements:

95cfm at 90 psi

(2.7m³/min at 6.2 BAR)

Hydraulic requirements:

8gal/min at 1500 psi

(30l/min at 103 BAR)

Feed method: AutoFeed system with dial control or fully manual

Feed rate:

Variable feed rate, user adjustable

Feed stroke (axial): 2.8in (71.1mm)

Machine rotating speed:

0-14rpm (variable)

- Low friction bearing system provides maximum stability, eliminating chatter

Design Capabilities

- Machine perfect preps from OD 4in - 24in (DN100 - 600)
- Form tool pipe from OD 4in - 14in (DN 100-350)
- Single point machining from OD 8in - 24in (DN 100-600)
- Single point Up to 36in (DN 900) with optional slide
- Fully modular construction for one man setup and operation

Construction:

Lightweight aluminum housing, oversize hardened alloy steel fully enclosed gear sets, high capacity bearings, rigid mandrel legs, captivated hardware

Finish: Multistage bright red enamel finish plus black oxide and clear coated components

Tooling: Accepts standard Wachs single point beveling and form tools, high speed steel or carbide tooling

Tool slots: Form tooling or single point tooling (varies by model)

Packaging: Heavy duty storage case

Length:

Without Mandrel 12.35in (314mm)

With Mandrel 26.75in (680mm)

Weight: Full modular construction with each module under 31.75kg (70lb), total weight with storage case 71.67kg (158lb)



EP 424 Flange Facing with single point machine slide



Cross section of EP 424 mounted for single pointing

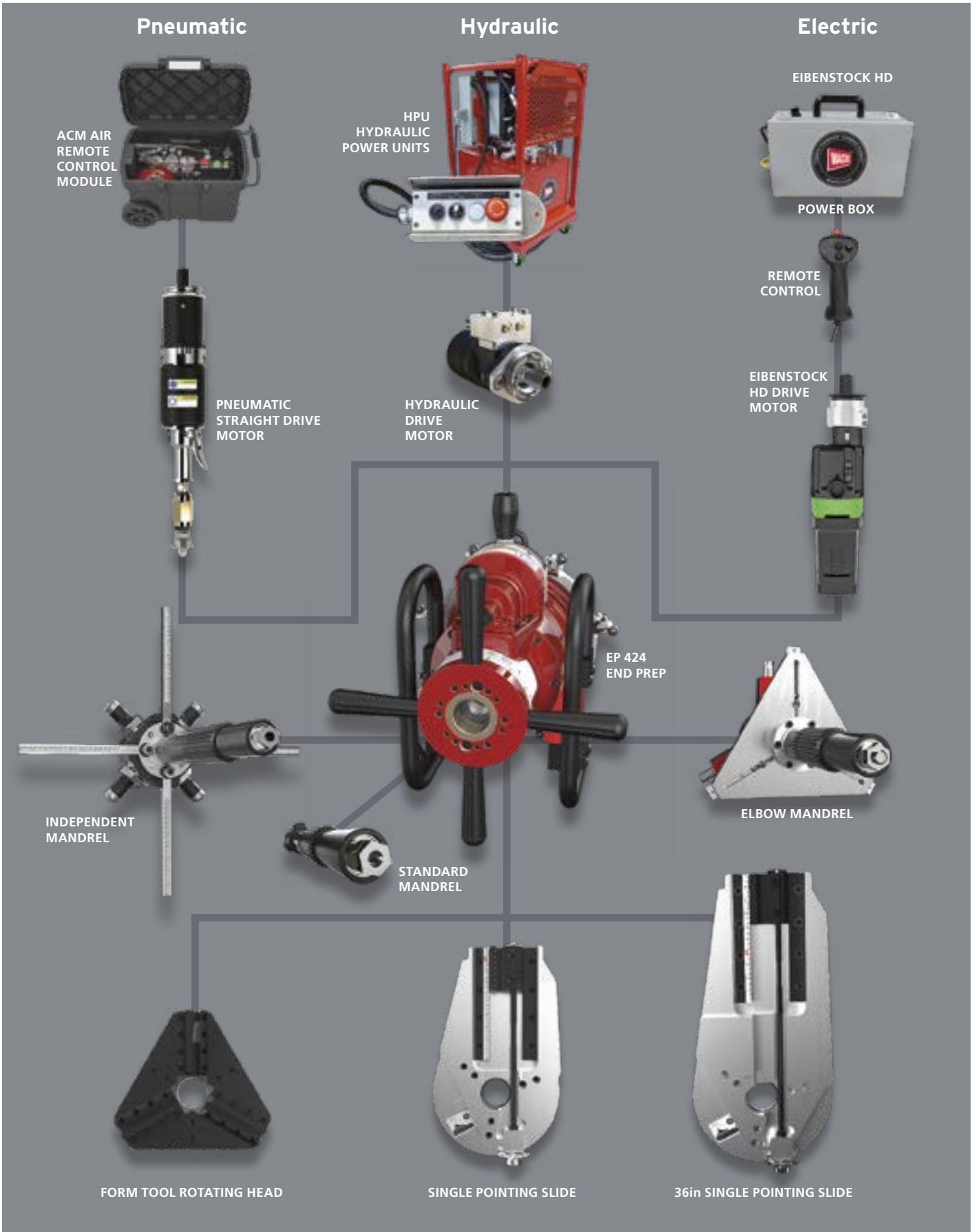


EP 424 Single Point Deluxe with form tooling rotating head



Faces flanges up to 36in (914mm) with optional slide

EP 424 End Prep



EP 424 End Prep

EP 424 Kits

Part #	EP 424 Form Tool Basic			EP 424 SpeedPrep™ Deluxe			EP 424 SpeedPrep™ Premium		
	PNEUMATIC DRIVE	HYDRAULIC DRIVE	ELECTRIC DRIVE ADAPTER	PNEUMATIC DRIVE	HYDRAULIC DRIVE	ELECTRIC DRIVE ADAPTER	PNEUMATIC DRIVE	HYDRAULIC DRIVE	ELECTRIC DRIVE ADAPTER
				Form Tooling Rotating Head Assembly 4-16in OD (102-406mm)					
							Single Point Slide ID 4.24-24in OD (108-610mm)		
				Standard Self-Centering Mandrel ID 3.27-15.96in (83-405mm)					
							Standard Self-Centering Mandrel ID 14.87-23.64in (378-600mm)		
								Independent Mandrel ID 8.5-22.6in (215.9-574mm)	
							SpeedPrep™ AutoFeed		
	81-000-01	81-000-02	81-000-07	81-000-05	81-000-06	81-000-09	81-000-03	81-000-04	81-000-08

*ELECTRIC MODELS INCLUDE ELECTRIC DRIVE MOTOR ADAPTER ONLY. EIBENSTOCK HD DRIVES SOLD SEPARATELY

Standard Equipment

- Tool slide or rotating head (varies by kit)
- Heavy duty storage case
- Standard mandrel
- Extension leg kit
- Self squaring mounting system
- Operating hand tools
- Operation manual

Optional Equipment

- Independent mandrel for miters or elbows
- Elbow Mandrel
- Electric drive motor remote control options
- ACM Remote Control Module and ATM Air Treatment Module for pneumatic drive
- Interchangeable tool slides
- 36in Single Point Slide
- Genuine Wachs tooling
- SpeedPrep™ AutoFeed Upgrade kit for Form Tool Basic Model

Mandrels

DESCRIPTION	APPLICATIONS	PART #
Standard Mandrel	Flange Facing, Single Pointing, & Form Tooling	81-303-00
Independent Mandrel	Flange Facing, Single Pointing, Form Tooling, & Miter Beveling for straight pipe	81-305-00
Elbow Mandrel	Flange Facing, Single Pointing, Form Tooling, & Miter Beveling for mounting to curved sections of pipe and junctions	81-315-00



EP 424 SpeedPrep™ deluxe beveling with form tool rotating head



EP 424 SpeedPrep™ deluxe prepping heavy wall pipe



Self-centering standard mandrel



Independent Mandrel

EP 424 Tooling

EP 424 SpeedPrep™ AutoFeed Upgrade

Converts form tool model to SpeedPrep™ model.

Includes

- Single point radial tool slide for ID 4.25in (108mm) to OD 24in (609.6mm)
- 6.5in (165mm) slide travel
- AutoFeed axial feed gear box for bevel generation up to 45°
- Chuck leg extensions for ID range 14.87in - 23.64in (377.7-600mm)
- Self squaring mounting system and extensions for ID range 7.6-22.6in (193-574mm)
- Dial indicator system
- Operating hand tools
- Storage case
- Manual



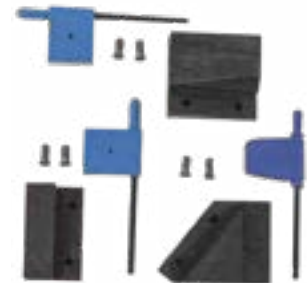
Facing tool insert holder (high range)

EP 424 Form Tooling - Facing Holders & Inserts

DESCRIPTION	INCLUDES	PART #
Facing tool insert holders, axial		
Facing tool insert holder (low range)	<ul style="list-style-type: none"> • 1 tool holder (56-198-01) • 2 insert screws (56-190-00) • 1 wrench (56-191-00) 	56-708-01
Facing tool insert holder (high range)	<ul style="list-style-type: none"> • 1 tool holder (56-198-02) • 2 insert screws (56-190-00) • 1 wrench (56-191-00) 	56-708-02
Tool inserts for facing and beveling		
Premium grade HSS insert (2 sided). For facing and beveling. For use with SDB 206, 412 and EP 424 insert holders.		56-711-01
Carbide 2 sided insert. For facing and beveling. For use with SDB 206 and 412 insert holders.		56-712-01
Facing insert holder kit for axial facing and beveling 37.5°		
Insert holder kit for axial facing and beveling 37.5°	<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 SDB, SDB 412 AND EP 424.	56-710-01
Screw and wrench		
Screw, insert		56-190-00
Insert screw torx wrench		56-191-00
Customized tools ground to customer specification (specific Code to be assigned upon receipt of order)		
Custom HSS facing tool bit (form tool)		56-SPT-02
Custom form tool or single point insert holder		56-SPT-10



Premium grade HSS insert (2 sided)



Insert holder kit for axial facing and beveling 37.5°

EP 424 Form Tooling - Bevel Holders & Inserts

DESCRIPTION	INCLUDES	PART #
Bevel tool insert holder kit 30°	<ul style="list-style-type: none"> • 1 holder (56-199-02) • 2 insert screws (56-190-00) • 1 wrench (56-191-00) 	56-709-02
Bevel tool insert holder kit 37.5°	<ul style="list-style-type: none"> • 1 holder (56-199-03) • 2 insert screws (56-190-00) • 1 wrench (56-191-00) 	56-709-03
"J-Prep" bevel tool insert holder kit* 20° (low range)	<ul style="list-style-type: none"> • 1 holder (56-199-01) • 2 insert screws (56-190-00) • 1 wrench (56-191-00) 	56-709-01



Form Tool Insert Holder

*USE WITH 56-708-010 FACING INSERT HOLDER FOR 0.040IN (1MM) LAND EXTENSION.

EP 424 Form Tooling - Bevel Holders & Inserts

DESCRIPTION	PART #
"J-Prep" 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) <i>Use with 56-708-01 facing insert holder for 0.040in (1mm) land extension.</i>	56-709-05
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) <i>For SDB 206, SDB 412 and EP 424.</i>	56-710-01
Compound bevel form tool 10° x 37.5°	56-707-00
Inserts for facing and beveling	
Premium grade HSS insert (2 sided). <i>For use with SDB 206, 412 and EP 424 insert holders.</i>	56-711-01
Carbide 2 sided insert. <i>For use with SDB 206 and 412 insert holders.</i>	56-712-01
Premium grade HSS 2 sided 32 radius "J" bevel insert. <i>For use with 56-709-01 and 56-709-05 insert holders.</i>	56-711-02
Carbide 2 sided 32 radius "J" bevel insert. <i>For use with 56-709-01 and 56-709-05 insert holders.</i>	56-712-02
Screw and wrench	
Screw, insert	56-190-00
Insert screw torx wrench	56-191-00
Customized tools ground to customer specification	
Custom HSS bevel tool bit single angle (form tool).	56-SPT-01
Custom HSS bevel tool bit compound angle (form tool).	56-SPT-03
Custom HSS bevel tool bit single angle "J" (form tool).	56-SPT-04
Custom HSS bevel tool bit compound angle "J" (form tool).	56-SPT-05



Premium grade HSS insert (2 sided)



Counterbore tool taper 4:1

EP 424 Counterbore & ID Tooling

DESCRIPTION	PART #
ID deburring tools	
ID deburring tool 10° 0.150in (3.81mm) required between mandrel and ID.	56-702-01
ID deburring tool 10° 0.449in (11.4mm) required between mandrel and ID.	56-702-02
ID deburring tool 10° 0.762in (19.4mm) required between mandrel and ID.	56-702-03
Counterbore tools	
Counterbore tool taper 4:1 0.315in (8mm) required between mandrel and ID.	56-705-01
Counterbore tool taper 4:1 0.875in (22.2mm) required between mandrel and ID.	56-705-02
Counterbore tool taper 4:1 1.375in (35mm) required between mandrel and ID.	56-705-03
Counterbore tool taper 4:1 3/8 x 3/8in (9.5 x 9.5mm) Use with single point beveling tool holder.	56-713-00
Counterbore tool taper 4:1 For MDSF 204-SF1420	60-700-04
Tool Holder kit counterbore	56-715-00
Customized tools ground to customer specification	
Custom HSS tool bit ID deburring	56-SPT-06
Custom HSS tool bit counterboring	56-SPT-07



Counterbore tool taper 4:1



Tool Holder kit counterbore

DuoEdge Insert Tooling

E.H. Wachs DuoEdge Insert Tooling is a system of portable machine tool holders and inserts designed to replace larger, more expensive traditional tooling.

It offers considerable cost savings over traditional tooling without sacrificing the longevity of the cutting edge or the quality of the finished prep.

- Multiple cutting edges for minimal work interruption
- Each cutting edge costs on average one third the cost of a traditional bit
- No need to sharpen tooling, saving time, labor and shipping
- Small size of inserts makes them easy to store or carry in your pocket
- Tool Holders are reusable, inserts are interchangeable between holders
- End prep holder is reversible to a high and low range position
- Precision ground, super smooth surface finish
- Reduced friction for longer life
- Chip curl edge designed to clear swarf
- Eliminates expensive and time consuming conventional tool resharping
- Unlike conventional tooling DuoEdge has two cutting edges per insert
- On average costs 1 the price of conventional tooling per edge
- Optimal mix of sharpness and durability
- Supplied with 0.5in tool radius for stronger edges and a better finish
- Superior to competitors off the shelf repurposed CNC tooling

DESCRIPTION	APPLICATION	MATERIAL	PART #
DuoEdge Single Point Holder	Single pointing	Heat treated steel	81-702-00
DuoEdge Insert Single Pack	Carbon steel	HSS	81-701-01
DuoEdge Insert 10-Pack	Carbon steel	HSS	81-701-10
DuoEdge Premium Single Pack	Stainless steel	HSS Premium	81-701-00P
DuoEdge Premium 10-Pack	Stainless steel	HSS Premium	81-701-10P
DuoEdge Insert Single Pack	High-temp alloys	Carbide	81-703-01
DuoEdge Insert 10-Pack	High-temp alloys	Carbide	81-703-10
DuoEdge Insert Single Pack	R 2.4mm/.094in J-Prep	HSS	81-704-01
DuoEdge Insert Single Pack	R 3.2mm/.125in J-Prep	HSS	81-705-01
DuoEdge Insert Single Pack	R 4.8mm/.188in J-Prep	HSS	81-706-01
DuoEdge Insert Single Pack	R 6mm/.236in J-Prep	HSS	81-707-01

EP 424 Single Point Tooling

DESCRIPTION	PART #
Legacy Tool holders	
Single point beveling tool holder, low range. For OD 4.25-23.62in (108-600mm) for EP 424. For EP 424, FF313 and FF424.	56-424-00
Single point beveling tool holder, high range. For OD 7.25-24in (184-609.6mm) for EP 424. For EP 424, FF313 and FF424.	56-424-01
Legacy Tool bit	
Standard HSS tool bit 3/8 x 3/8in (9.5 x 9.5mm). For single point facing, beveling and flange facing. For use with EP 424, LCSF, FF, SWR and SDSF machines.	52-701-01



DuoEdge Tooling Single Point Insert



DuoEdge inserts, 10 pack



DuoEdge Single Point Holder



Legacy single point beveling tool holder



Legacy standard HSS tool bit 9.5 x 9.5mm

SDB Small Diameter Beveler



Box header beveling with SDB



SDB pipe end preparation



SDB end prepping pressure vessel

Fast, Easy Setup - Self-Centering Design

E.H. Wachs SDB line of small diameter bevelers have been engineered for fast, precise onsite facing, beveling, compound beveling and counterboring of light and heavy wall pipe, tube or casing. Proven workhorses, they set up quickly with a self-centering mandrel and chuck assembly mounting to the pipe ID.

Using high strength heat treated steel on the mandrel with aluminum components to save weight without sacrificing strength, one person can setup, operate and create a perfect weld prep in minutes. With optional conversion kits the SDB can be reconfigured to an FF series flange facer.



SDB 103 End Prep

Pipe End Preparation Machines

- Compact, lightweight design for one person set up and operation
- Self-centering ID mandrel assures perfect end preps
- Face, bevel, counterbore
- Convertible to FF series with optional flange facing kit

SDB 103

The SDB 103 end prep handheld beveling machine delivers maximum power and performance for fast, accurate weld preps on pipe and tube from ID 0.875in (22.2mm) to OD 4.5in (114.3mm). Face, bevel and counterbore simultaneously on carbon, stainless and high alloy steels.

Extremely versatile, the SDB 103 allows you to prep boiler tubes, heavy wall pipe, thick wall tubing, and elbows. With optional FF kit face flanges ID 2in (50.8mm) to OD 6in (152.4mm).



SDB 103

SPECIFICATIONS	SDB 103
Machine capacity	0.875in - 4.500in (22.2-114.0mm)
Standard equipment	<ul style="list-style-type: none"> • Heavy duty drive (air or electric) • Standard mandrel ID 1.16-4.18in (29.5-106mm) • 7 sets of leg extensions • Operating hand tools • Watertight storage case • Manual
Shipping weight (est.)	40lb (18kg)
Shipping dimensions (est., without accessories)	25 x 22 x 9in (635 x 558.8 x 228.6mm)

SDB 103 Beveler Kits

DESCRIPTION	DRIVE TYPE	PIPE ID TO OD	PART #
SDB 103	Pneumatic	0.88-4.5in (22-114mm)	16-000-01
SDB 103	Electric 110 V, 50 Hz	0.88-4.5in (22-114mm)	16-000-02
SDB 103	Electric 220 V, 50 Hz	0.88-4.5in (22-114mm)	16-000-03

SDB/FF Flange Facer Conversion Kits for SDB 103

DESCRIPTION	PART #
BEVELER CONVERSION KIT Converts FF 206 to SDB 103 end prep machine to face, bevel, compound bevel and counterbore pipes with Ø 1- 4in (25.4-101.6mm). Includes: <ul style="list-style-type: none"> • 1 standard rotating head • 1 standard mandrel ID 1.16in - 4.18in (29.5-106mm) • 7 sets of leg extensions • 1 felt wiper • Fasteners 	16-420-00
FLANGE FACER CONVERSION KIT Converts SDB 103 to FF 206 flange facing machine for flanges ID 2in (50.8mm) to OD 6in (152.4mm). Includes: <ul style="list-style-type: none"> • 1 single point flange facing tool slide • 1 independent "short perch" mandrel • 7 sets of leg extensions ID 1.95in - 4.11in (49.5-104.4mm) 	16-421-00



SDB to FF Conversion Kit: head, mandrel, legs, & fasteners

SDB 206 End Prep

SDB 206

The SDB 206 makes fast work of end preps on pipe and tube from ID 1.91in (48.5mm) to OD 6.625in (168.3mm). Compact and lightweight, its design requires only 2.25in (57mm) of radial clearance – making it the ideal tool for use in tight places.

No other machine of this type can perform as many different jobs: face, bevel, counterbore (simultaneously if desired), compound bevel and (with optional FF kit) faces flanges from ID 3in (76.2mm) to OD 13in (330.2mm).

SPECIFICATIONS	SDB 206
Machine capacity	1.910in - 6.625in (48.5-168.0mm)
Standard equipment	<ul style="list-style-type: none"> • Heavy duty drive (air, electric or hydraulic) • Standard mandrel ID 2.27-6.58in (57.7-167mm) • 10 sets of leg extensions • Operating hand tools • Watertight storage case • Manual
Shipping weight (est.)	115lb (52kg)
Shipping dimensions (est., without accessories)	12 x 32 x 21in (305 x 813 x 533mm)

SDB 206 Beveler Kits

DESCRIPTION	DRIVETYPE	PIPE ID TO OD	PART #
SDB 206/2	Pneumatic	1.91-6.63in (49-168mm)	56-000-01
SDB 206/2	Electric 110 V, 50 Hz	1.91-6.63in (49-168mm)	56-000-02
SDB 206/2	Electric 220 V, 50 Hz	1.91-6.63in (49-168mm)	56-000-04
SDB 206/2	Hydraulic	1.91-6.63in (49-168mm)	56-000-03

SDB/FF Flange Facer Conversion Kits for SDB 206

DESCRIPTION	PART #
BEVELER CONVERSION KIT Conversion kit FF 313 to SDB 206/6 end prep machine. Includes: <ul style="list-style-type: none"> • 1 standard rotating head • SDB 206 mandrel • 7 sets of leg extensions • 1 felt wiper • Fasteners 	56-420-00
FLANGE FACER CONVERSION KIT Converts model SDB 206/2 to FF 313 flange facing machine. For flanges with ID 3in (76.2mm) to OD 13in (330mm). Includes: <ul style="list-style-type: none"> • 1 single point flange facing tool slide • 3-jaw independent "short perch" mandrel • 18 sets of leg extensions ID 3.00in - 10.08in (76.2-256mm) 	56-421-00



SDB 206



Form tooling to single pointing conversion kit

SDB 412 End Prep

SDB 412

The SDB 412 is a portable pipe end prep machine designed to face, bevel, counterbore (simultaneously) and compound bevel ID 3.80in (96.5mm) to OD 12.75in (323.9mm) pipe, up to 1.125in (29mm) wall thickness.

Face flanges with optional FF kit ID 4in (101.6mm) to OD 24in (609.6mm). The heavy duty yet compact design of the SDB 412 requires minimal operating clearances. The SDB 412 is designed for one person handling, setup and operation.

SPECIFICATIONS	SDB 412
Machine capacity	3.800in - 12.750in (96.5-323.9mm)
Standard equipment	<ul style="list-style-type: none"> • Heavy duty drive (air, electric or hydraulic) • Standard mandrel ID 3.80-12.02in (96.5-305mm) • 8 sets of leg extensions • Operating hand tools • Watertight storage case • Manual
Shipping weight (est.)	308lb (140kg)
Shipping dimensions (est., without accessories)	25 x 47 x 18in (635 x 1.194 x 457mm)

SDB 412 Beveler Kits

DESCRIPTION	DRIVETYPE	PIPE ID TO OD	PART #
SDB 412/2	Pneumatic	3.8-12.75in (97-324mm)	66-000-01
SDB 412/2	Hydraulic	3.8-12.75in (97-324mm)	66-000-03
SDB 412/2	Electric 220 V, 50 Hz	3.8-12.75in (97-324mm)	66-000-02

SDB/FF Flange Facer Conversion Kits for SDB 412

DESCRIPTION	PART #
BEVELER CONVERSION KIT Converts FF 424 to SDB 412/2 portable pipe and tube prepping machine to face, bevel, compound bevel and counterbore pipes with Ø 4in - 12in (102-305mm) Includes: <ul style="list-style-type: none"> • 1 standard rotating head • 1 standard mandrel ID 3.8in - 12.02in (96.5-305mm) • 8 sets of leg extensions • 1 felt wiper • fasteners 	66-420-00
FLANGE FACER CONVERSION KIT Converts SDB 412/2 to FF 424 flange facing machine. For flanges with ID 4in (101.6mm) to OD 24in (609.6mm). Includes: <ul style="list-style-type: none"> • 1 single point flange facing tool slide • 3-jaw independent "short perch" mandrel • 23 sets of leg extensions ID 3.78in - 20in (96-508mm) 	66-421-00

Hydraulic Power Units

For available Hydraulic Power Unit options, see page 74.

Air Control Module

Air Control Module "ACM", see page 72.

Cutting Lubrication

Cutting lubrication "KSS-TOP", see page 51.



SDB 412



Diesel Powered HPU-20



Air Control Module ACM provides remote control for pneumatic operation