



**Wachs Smallest Split Frame Line**



**RENTAL**  
AVAILABILITY

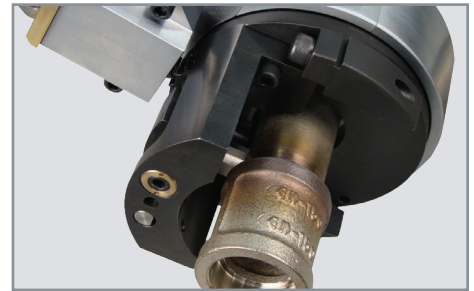
**DESCRIPTION**

E.H. Wachs Small Diameter Split Frame (SDSF) is an O.D. mounted machine tool for cutting, beveling, and counterboring pipe from .5" to 6" (ND12.5-150). It's the smallest member of the Wachs split frame family, and "splits" in half at the frame for positioning over inline pipe. Designed for simultaneous cutting and beveling, the SDSF also serves as the rotating platform for tools slides that perform axial and radial socket weld removal, counterboring and FME chipless wheel cutting.

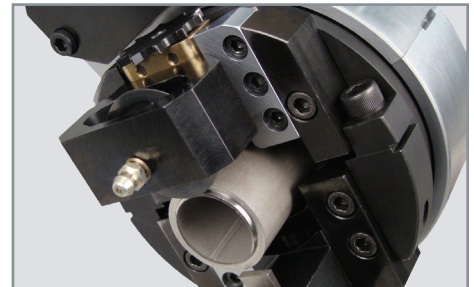
Lightweight and flexible, the SDSF is optimized for low clearance environments. Its self-squaring clamping system offers fast setup and operation, delivering precision results. The SDSF is designed to operate on air or electric (110V or 220V) power, using standard Wachs motors and adapters. As part of a complete machining system, the SDSF and its accessories make this the most versatile machine of its kind. Individually hand assembled and tested, the SDSF features E.H. Wachs legendary quality and durability, and is built for years of reliable service.

**FEATURES**

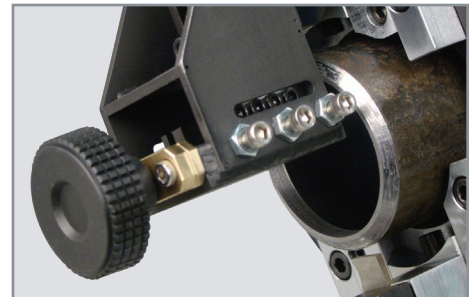
- Ideal for socket weld removal and chipless wheel cutting
- Feed system offers low clearance operation with precise feed control
- Low friction bearing system provides maximum stability and extended machine life
- Fully enclosed bearing and drive gear mechanism for operational safety
- Improved lever type trip actuation for safety
- Improved radial trip geometry for crash resistance and durability
- Improved bearing adjustment design
- New durable pinion gear bearing arrangement
- Easier assembly and disassembly of frame halves
- Improved clamping collet design for ease of setup
- Captive fasteners used throughout, including accessories
- Reduced fastener count, requires only 3 wrenches to operate



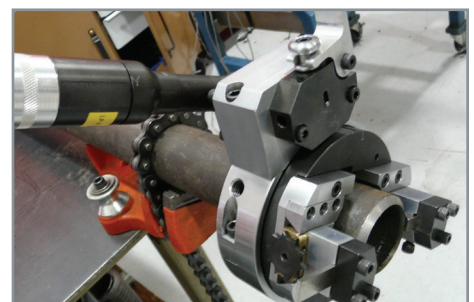
Wachs SDSF is highly versatile, serving as the platform for optional socket weld removal tool slides that do not damage the base material.



FME Foreign Material Exclusion optional wheel cutting tool slide prevents chip debris from entering the workpiece.



The SDSF Universal Counterbore Slide fits all models and mounts quickly and easily to the tool slide. It features a manual feed wheel for precise control



Like all Wachs split frames the SDSF simultaneously cuts and bevels, delivering a weld-ready prep.



**SPECIFICATIONS**

**System Function:**

Cut, bevel and counterbore pipe & tube; radial and axial socket weld removal; chipless wheel cutting

**System Capacity:**

Machines tube and pipe from .84" to 6.625" O.D. (21.3-168.3mm). Nominal size pipe capacity of .5"-6" (ND12.5-150), with .062" to .4375" (1.6 mm-11.1 mm) wall thickness

**Cutting Tool Surface Speed:**

30 surface feet per minute (sf/m) on 2" (ND50) pipe, 40 sf/m on 4" (ND100) pipe

**Drive Options:**

Pneumatic or electric 110V and 220V

**Power Requirements:**

Air requirements 35 cubic feet per minute @ 90 PSI (1.0 cubic meter per minute @ 6.2 Bar)

Electrical requirements 110 Volt - 10amp or 220 Volt - 5amp based on drive motor

**Feed Method:**

Positive mechanical star wheel

**Feed Rate:** Fixed @ .0031" per trip

**Construction:** Alloysteel with hardened components

**Tool Slides:**

Optional Parting, Beveling, Radial Socket Weld Removal, Axial Socket Weld Removal, Universal Counterbore, and Foreign Material Exclusion (FME) Module

**Tool Stroke:** .468" (11.9 mm)

**Finish:**

Hard chrome coating / black oxide

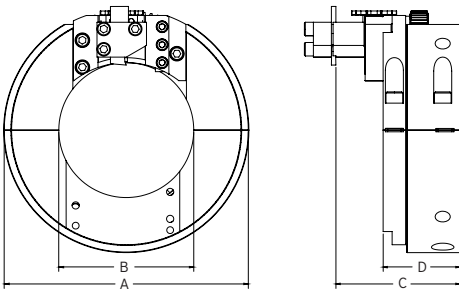
**Tooling:**

Axial or Radial Socket Weld Removal tooling, Part/Bevel tooling, high speed steel or carbide

**Packaging:**

Heavy duty carrying case

**RADIAL & AXIAL CLEARANCE CHART**



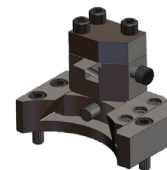
**OPTIONAL EQUIPMENT**

- Pneumatic Drive Motor
- Electric 110V Drive Motor
- Electric 220V Drive Motor
- Screw Down Bench Mount
- Front Drive Pinion Housing
- Aluminum Collet Sets
- Clamp Foot Sets
- Genuine Wachs Tooling

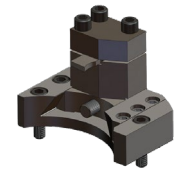
**STANDARD FEATURES**

- Standard pinion housing
- Heavy duty storage case
- Operating hand tools
- Operating manuals

SIZE & PART NUMBER	PIPE DIA. RANGES	DIM A MACHINE O.D.	DIM B MACHINE I.D.	DIM C PARTING LINE	DIM D MACHINE THICKNESS
1" 80-4000-10	0.5" - 1" (12.7-25.4 mm)	5.00" (12.7 mm)	1.562" (39.7 mm)	3.468" (88.1 mm)	2.530" (64.3 mm)
1.5" 80-4000-15	1" - 1.5" (25.4-38.1 mm)	5.75" (146.1 mm)	2.125" (54 mm)	3.468" (88.1 mm)	2.155" (54.7 mm)
2" 80-4000-20	1.25" - 2" (31.25-50.8 mm)	5.688" (144.5 mm)	2.626" (66.7 mm)	3.468" (88.1 mm)	2.155" (54.7 mm)
2.5" 80-4000-25	1.5" - 2.5" (38.1-63.5 mm)	6.188" (157.2 mm)	3.125" (79.4 mm)	3.468" (88.1 mm)	2.155" (54.7 mm)
3" 80-4000-30	2" - 3" (50.8-76.2 mm)	6.871" (174.5 mm)	3.750" (95.3 mm)	3.468" (88.1 mm)	2.155" (54.7 mm)
3.5" 80-4000-35	2.5"-3.5" (63.5-88.9 mm)	7.312" (185.7 mm)	4.25" (108 mm)	3.468" (88.1 mm)	2.155" (54.7 mm)
4" 80-4000-40	3"-4" (76.2-101.6 mm)	7.812" (198.4 mm)	4.750" (120.7 mm)	3.468" (88.1 mm)	2.155" (54.7 mm)
5" 80-4000-50	4.5"-5" (101.6-127 mm)	8.938" (227 mm)	5.875" (149.3 mm)	3.468" (88.1 mm)	2.155" (54.7 mm)
6" 80-4000-60	5"-6" (127-152.4 mm)	9.938" (252.4 mm)	6.875" (174.7 mm)	3.468" (88.1 mm)	2.155" (54.7 mm)



Beveling Tool Slide



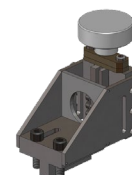
Parting Tool Slide



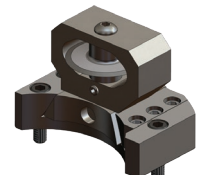
Radial Socket Weld Slide



Axial Tool Slide



Universal Counterbore Tool Slide



FME Chipless Wheel Cutting