E.H. WACHS®
A Division of ITW
Superior Equipment. Complete Support.™

Large Diameter Split Frame

LDSF

DESCRIPTION

E. H. Wachs LDSF Large Diameter Split Frame is designed for cold cutting, beveling, facing and counterboring on large diameter pipes, vessels and flanges. It's been engineered to incorporate multiple advancements designed to make it stronger, faster to set up, faster to operate and even more versatile than our class leading HDSF models. Picking up where our midsize split frames leave off, four standard LDSF sizes will cover a range from 60" to 120" O.D. (DN1500-DN3000). Each machine covers a 15" (381mm) diameter range and will simultaneously cut and bevel most wall thicknesses and materials.

The internal, full bearing construction contributes to the LDSF's smooth operation and long service life. Spring loaded O.D. tracking slides for irregularly shaped or out-of-round pipe and vessels are standard, and allow the tooling to maintain continuous contact, producing precision weld preps with consistent lands. A new patent pending CRBM Counterboring and Reverse Bevel module counterbores in vertical orientation, and reverse bevels in angled orientation. The LDSF takes corrosion protection to a new level with virtually every surface treated. Its attractive red powder coated finish proudly reflects E.H. Wachs famous red and black corporate colors.

LDSF DESIGN CAPABILITIES

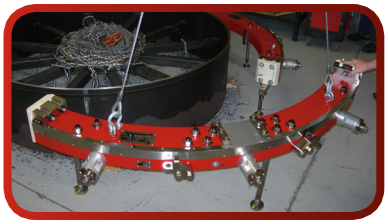
- All new design for large and very large diameter pipes and vessels
- Four standard LDSF sizes cover a 60" to 120" O.D. range (DN1500-3000)
- 15" (381mm) diameter range between the four standard LDSF models
- Splits into quadrants for easier storage, transport and set-up
- All steel construction for durability & rigidity
- Common size, fully captivated fasteners used throughout
- Quick release, adjustable height setup legs, 3 per quadrant
- Self squaring mounting system features axially adjustable clamping legs with micro adjustment
- Rigging blocks with multi-axial lifting eyes allow horizontal or vertical lifting
- Available remote control trip actuation

LARGE DIAMETER SPLIT FRAME FEATURES

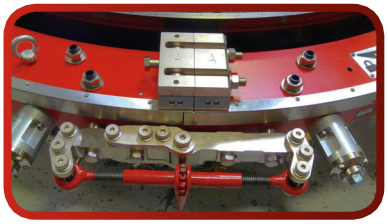
- Reinforcing stiffener blocks at the split lines offer increased rigidity
- Hinged open/close mechanism to simplify machine mounting
- Frame fastening swing bolts holds ring frames in place during assembly
- Dual hydraulic drive motors require less clearance than one large motor
- Drive motors utilize Wachs new universal quick mount drive assembly
- Fully adjustable mounting legs replace traditional bolt on spacer feet
- Legs offer both I.D. and O.D. clamping options
- Optional Counterboring module for perpendicular and angled counterbores
- Designed to use a minimum number of hand tools
- New trip design with breakaway trip mount helps prevent crashes

NEW
PIPE & VESSEL
CUTTING & BEVELING

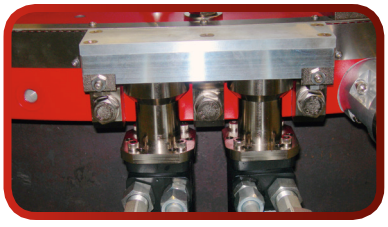
Four standard LDSF sizes cover a range of 60" to 120" (DN1500-3000) O.D. with a 15" (381mm) capacity between sizes



LDSF splits into quadrants for ease of transport, setup and storage.



Designed to split into quadrants without sacrificing rigidity, swing bolts and a ratcheting hinge mechanism speeds assembly and mounting



LDSF is standard with dual hydraulic drive motors and dual pinion housings to ensure long life and smooth power for big jobs

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SPECIFICATIONS

System Function: Split Frame machine tool designed to part, bevel and counterbore large diameter pipe & vessels

System Capacity: Machines large diameter pipe and vessels from 60" to 120" O.D. (DN1500-3000), varies by model number.

Drive Options: Hydraulic

Cutting Tool Surface Speed:
Adjustable, 60 surface feet per minute (18.28 meters per Minute)

Hydraulic Power Requirements:
14 GPM @ 1800 PSI (53 LPM @ 124 BAR)

Feed Method: Positive mechanical starwheel

Feed Rate: Fixed trip rate .0030" (.0762mm) per trip

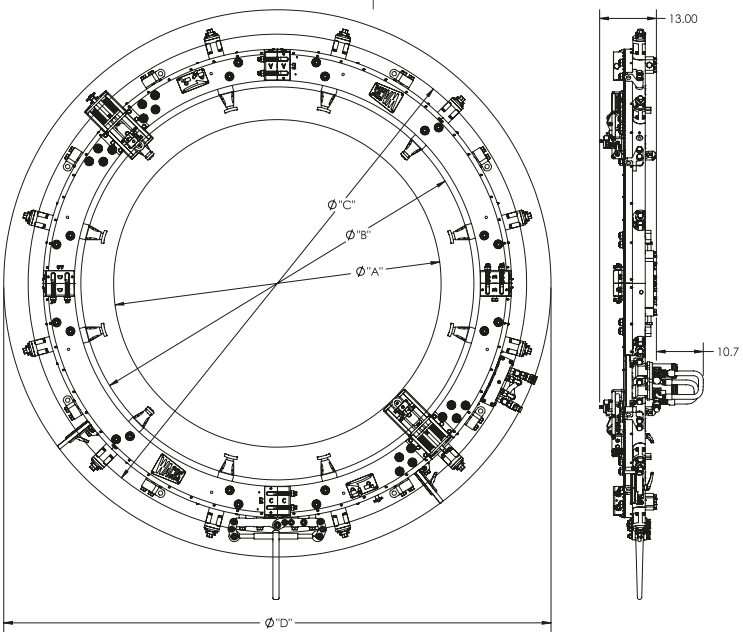
Construction:
- Alloy steel stationary and rotating rings
- Alloy mounting legs
- High capacity bearings
- Dual heavy duty pinion housings
- Ratcheting hinge mechanism
- Powder coated corrosion resistant finish

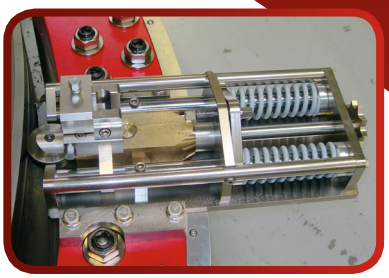
STANDARD EQUIPMENT

- Dual Hydraulic Drive Motors
- Heavy Duty O.D. Tracking Tool Slides
- Breakaway Single Trip Assembly
- Lifting Hooks for Vertical or Horizontal Mounting
- Ratcheting Mechanism for Hinging Assembled Machine Open and Closed
- Self Squaring Mounting System with Axially Adjustable Clamping Legs
- Sealed Dual Pinion Housings
- Custom Wood Storage Case and Quadrant End Protectors
- Operating Hand Tools and Manual

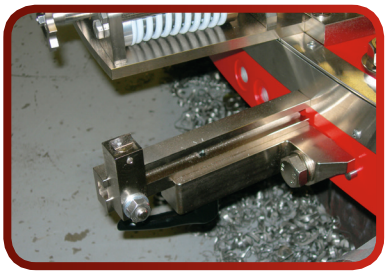
OPTIONAL EQUIPMENT

- Counterbore and Reverse Bevel Module
- Cantilever Tool Slide
- Remote Control Kit
- Genuine Wachs Tooling

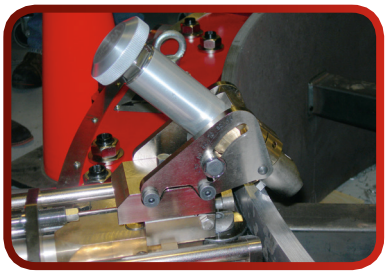




The LDSF includes heavy duty O.D. tracking slides to compensate for out of round pipe and vessels and setup



All new trip design features a breakaway mount to prevent frame damage. Remote control feed trip is optional



Optional patent pending counterbore and reverse beveling module bolts to tracking slides to deliver perfect preps

MODEL NUMBER	LDSF 75	LDSF 90	LDSF 105	LDSF 120
Machine Capacity Range Dimension "A - B" (Nominal Pipe Size)	60" - 75" (DN1500-DN1875)	75" - 90" (DN1875-DN2250)	90" - 105" (DN2250-DN2625)	105" - 120" (DN2625-DN3000)
Dimension "C" Pinion Clearance [mm]	87.25" [2216.2]	102.25" [2597.2]	117.25" [2978.2]	135.25" [3535.35]
Dimension "D" Slide Clearance [mm]	92.75" [2355.9]	107.75" [2736.9]	122.75" [3117.9]	137.75" [3498.9]
Machine Height [mm]	13" [330.2] †			
Hydraulic Motor Height [mm]	10.7" [271.8]‡			

†Reduction of available envelope is possible by removing stiffening blocks. ‡Standard drive motor configuration. Reduced clearance options available.

All dimensions shown for pipe diameters are US nominal diameters in inches, plus metric nominal diameters (DN) in parenthesis. Tubing and solid diameters if shown are actual US inches plus metric millimeter equivalents.

CONTACT YOUR LOCAL E.H. WACHS REPRESENTATIVE FOR A PRODUCT DEMONSTRATION OR QUOTATION

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