



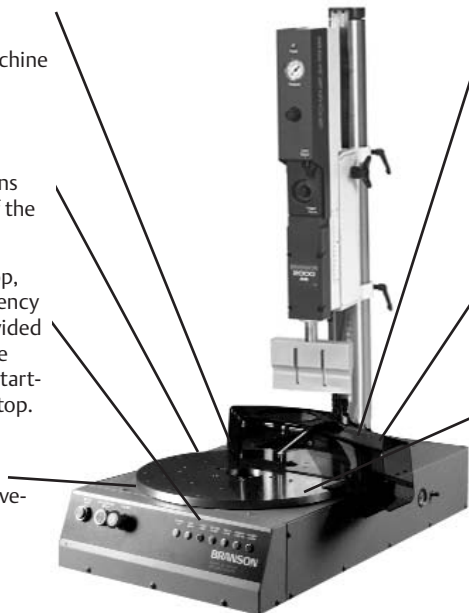
Series 30 Rotary Ultrasonic Welding Systems

DC motor provides variable indexing speed control – up to 40 cpm depending on the application– to maximize machine productivity.

Dedicated system control monitors all machine functions and controls the operation of the system.

Separate controls for cycle stop, cycle start/setup, and emergency stop. Indicator lights are provided for power on, run mode, table home, welder ready, welder started, welder alarm, and cycle stop.

Camco 601 RDM Indexer provides smooth, precise movement, and reliable operation.



Safety guarding allows visibility of the weld area while providing operator protection; a safety switch disables the weld cycle if improper entry is detected or the safety guard is not in place.

Air eject automatically discharges completed parts into a chute. An optional reject station may be provided to automatically eject into a separate chute any assemblies that do not meet preset quality limits.

20-inch dial plate can accommodate up to twelve fixtures.

General Description

Branson's Series 30 Rotary Ultrasonic Welding Systems are durable, semi-automatic assembly systems featuring a Camco precision indexer with 20-inch diameter aluminum dial plate, pneumatic controls, operator interface, system controller, and adjustable welder mounting hub, all self-contained in a fabricated steel housing. The space-saving system measures 39.25 inches deep (997 mm) by 22 inches wide (560 mm). Series 30 systems provide economy and efficiency in plastics assembly operations as well as increased production rates. Automatic cycling and air eject keep the operator's hands free for loading.

The Series 30 systems are compatible with 2000 Series actuators and 20, 30, or 40 kHz Models t, ea, d, and f power supplies, as well as 2000 IW and IW+ integrated welders.

The 2000 Series systems allow the choice of controls: time, energy and amplitude, distance, or force. Any of these in combination with the precision action of the Camco indexer allows for the welding of delicate assemblies, and tracking of assemblies for statistical process control. The 2000 IW/IW+ integrated welders provide digital controls for welding in the conventional time mode, with selectable afterburst delay and duration. Using the IW+ integrated welders also enables welding by distance (collapse or absolute distance).

The Series 30 Rotary Ultrasonic Welding System may be used for welding, staking, inserting, swaging, or spot welding thermoplastic parts.

Warranty

The Branson Series 30 Rotary Ultrasonic Welding System carries a one-year warranty on all table and indexer components, and a three-year warranty on the 2000 Series power supply and actuator or integrated welder for any defects in materials or workmanship. *Note:* This warranty applies to equipment purchased and operated in the United States. For warranty information on units purchased and/or operated outside the U.S. contact your local representative.

Electrical Specifications

Power requirements:

Rotary indexer:	117V AC, 60 Hz
Power supplies, 20 kHz:	
1100 Watt models:	117V AC, 50/60 Hz, 14 amps
2200 Watt models:	200-240V AC, 50/60Hz, 14 amps
3300 Watt models:	200-240V AC, 50/60 Hz, 17 amps
Power supply, 30 kHz:	
1500 Watt model:	117V AC, 50/60 Hz, 20 amps
Power supplies, 40 kHz:	
400 Watt models:	117V AC, 50/60 Hz, 6 amps
800 Watt models:	117V AC, 50/60 Hz, 12 amps
Actuators:	Satisfied by power supply

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Power requirements, continued:

Integrated welders, 20 kHz:
 2000 IW/IW+, 1100 Watts: 100-120V AC, 50/60 Hz, 13 amps
 2000 IW/IW+, 2200 Watts: 200-240V AC, 50/60 Hz, 14 amps

Mechanical Specifications

Pneumatic requirements:

Clean (5 micron, filtered), dry, non-lubricated air, 2.5 cfm at 60 to 100 psi maximum (415 to 690 kPa)

Base dimensions:

Height: 6.5" (165 mm)
 Width: 22" (560 mm)
 Depth: 39.25" (997 mm)

Column dimensions:

Integrated welders: 3.5" O.D. x 40" (89 mm x 1016 mm)
 2000 Series welders: 4" O.D. x 40" (102 mm x 1016 mm)

Dial diameter: 20" (508 mm)

Actuator/welder dimensions:

Model	Height	Width	Depth
IW/IW+	38.25" (972 mm)	9.312" (237 mm)	24.69" (627 mm)
ae Actuator	29.14" (740 mm)	4.05" (103)	9.80" (249)
aed Actuator	29.14" (740 mm)	4.79" (122)	9.80" (249)
aef Actuator	33.26" (845 mm)	4.52" (115)	8.63" (219)

Fully extended height above dial plate, welder in mounting hub:

IW/IW+ 52.75" (1340 mm)
 ae Actuator 55.3" (1405 mm)
 aed Actuator 55.3" (1405 mm)
 aef Actuator 59.4" (1509 mm)

Centerline of column to centerline of horn:

12.37" (314 mm), all models

Table deflection: 0.005" (0.127 mm)*

*Optional precision dial stabilization kit reduces deflection to 0.001".

Note: Dimensions are approximate. All specifications subject to change without notice.

For complete information and specifications on the ultrasonic welding systems, refer to the individual data sheets.

Ordering Information

Note: All sales shall be subject to the Supplier's terms and conditions of sale as described in Branson's quotations and sales contracts.

The Series 30 Rotary Indexer may be ordered separately to accept the user's existing 2000 Series or IW/IW+ equipment, or as a complete system with 2000 Series or IW/IW+ welder.

Series 30 Rotary Index System

Includes Camco electromechanical indexer, cast base assembly with controls, mounting hub, weld area

guard kit, air eject kit, and connecting cables. See indexer options below.

Branson EDP No.

Indexer Assembly Options (Does not include welder, tooling, or dial plate.)

8-Station Series 30 Indexer Assembly	201-143-080
6-Station Series 30 Indexer Assembly	201-143-081
4-Station Series 30 Indexer Assembly	201-143-082
12-Station Series 30 Indexer Assembly	201-143-085

Dial Plate Options (20" diameter, 3/4" thick ground aluminum)

Drilled and tapped for 8 standard fixtures (3.226" square bolt hole pattern)	100-079-247
Drilled and tapped for 6 standard fixtures**	100-079-273
Drilled and tapped for 4 standard fixtures**	100-079-274
Drilled and tapped for 12 standard fixtures**	100-079-275
Undrilled or tapped for fixtures (blank)	100-079-246

**Customer must specify desired bolt-down dimensions for fixtures.

Series 30 Rotary Indexers with Welding Systems

Series 30 Rotary Index Systems may be configured with most 2000 Series 20, 30, or 40 kHz component combinations, including Models t, ea, d, and f power supplies. These include converter, and actuator, actuator support, column, and 2000 Series connecting cables (RF, control, start, alarm). An aluminum booster is included. Tooling is not included. Series 30 Rotary Systems may also be configured with IW and IW+ integrated welders. Contact Branson, Danbury, to order.

Options

Branson EDP No.

Reject station (activated by alarm from 2000 power supply). Available only for 8- and 12-station indexers. 100-246-716

Frame and leg assembly for Series 30 Rotary Index System, with ground steel top, and shelf for remote power supply. 109-111-304

Precision dial stabilization kit. Includes hardware and installation. Provides reduction of table deflection from 0.005" to 0.001". Recommended for use with IW+ systems, as well as with critical applications. 101-063-521

Note: Series 30 Rotary Index Systems are designed for use with Branson 2000 Series systems and 2000 IW/IW+ integrated welders only.

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 Revised and Reprinted in U.S.A. 1/06