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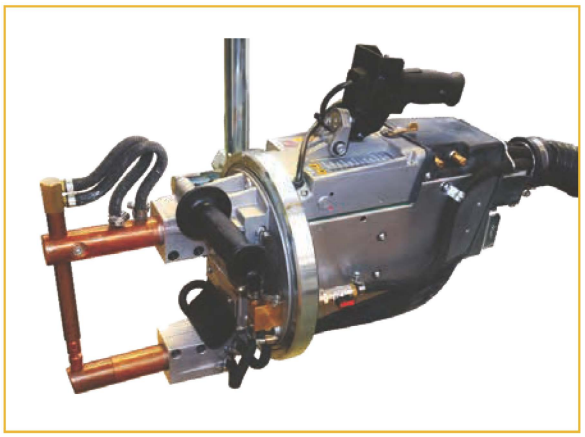
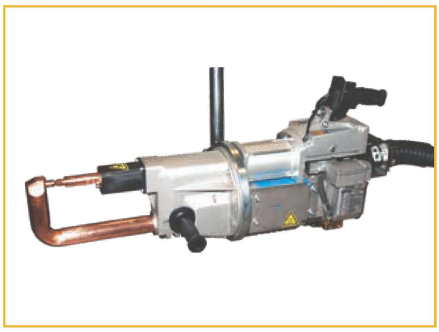
Industrial Resistance Welders and Tool Balancers

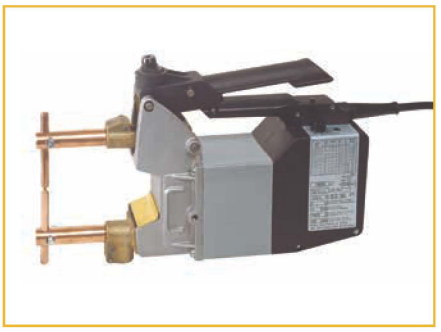
AC WELD GUNS

2.5-75 kVA · PORTABLE AC SPOT WELDING GUNS

Scissor-Type (X-Type) and C-Type | Light, Medium and Heavy-Duty







WSI WELD SYSTEMS INTEGRATORS, INC.

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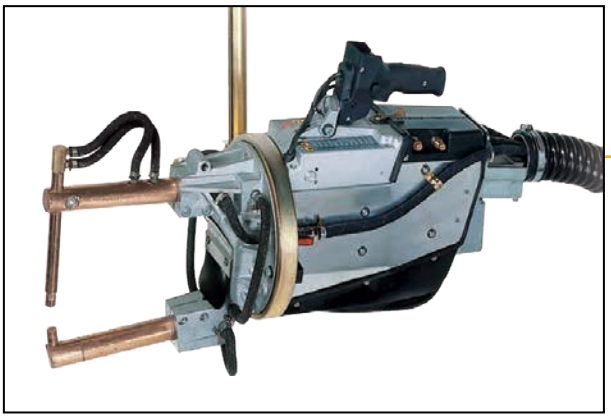
TECNA Pedestal Welders, Portable Spot Welding Guns, Bench Welders, Tool Balancers, Accessories, Spare Parts, Service and Support!



MEDIUM-DUTY SUSPENDED SPOT WELDING GUNS

- Pneumatically-operated suspended gun with integrated TE300, TE470 or TE480 microprocessor-based welding controls.
- Intelligent Design, Small Size, and High Welding Capacity deliver Maximum Productivity.
- High electrical efficiency.
- Totally-enclosed unit includes integrated rubber bumpers, for safe and easy operation.
- Accurate maneuverability at any angle is guaranteed by gyro suspension mounted on sealed bearings, coupled with a TECNA Balancer.
- Rotation lock allows locking of multiple axes of motion.
- Accepts a broad range of standard and special arms to accommodate special applications. "C" type gun assists in accessing tight welds.
- Long, adjustable Welding Stroke enables welding in difficult-to-reach areas, including welding reinforcements and ribs.
- Retraction Stroke allows reaching into tough spots.
- Water-cooled transformer, with epoxy resin-coated windings for long life.
- Water-cooled arms, electrode holders and electrodes for best performance and maximum use.
- SCR (Silicon-Controlled Rectifier) is insulated from the cooling circuit, and includes a thermal cutoff switch for overheat protection.
- Lube-free chromium plated cylinder and shaft offer a long service life in a production environment.
- Lube-free pneumatic circuit eliminates oil mist in shop environments.
- Trigger Handle Safety prevents accidental initiation.
- Trigger Handle Controls enable selection between 2 or 4 welding programs, as well as Stage 1 'weld / no-weld' function.
- New for 2017: Power Supply Cable is replaceable without opening up the welder!

WSI-Advantage Standard Specifications:

- WSI-SPEC offers reduced installation cost.
- WTG3321-24: TE300 Weld Control
- WTG3327-28: TE470 Weld Control with 2 program selector.
- Filter / Regulator Assembly (items 70503 / 70504)
- Integrated Earth Leakage Detection and Circuit Breaker / GFCI. Must specify voltage and frequency at time of order.
- 50' (15 meter) umbilical (Air/Water/Power Hoses/Cable) reduces installation cost and simplifies maintenance. Access to the Air Regulator and GFCI is easy, typically at operator shoulder height once the gun is properly-festooned and installed on a bridge rail or jib crane.
- Emergency-stop (E-STOP) button to immediately stop machine operation.
- Balancers: Rotating Insulated Mounting Hook connects to weld gun stick hanger, for easy repositioning of the weld gun within a work cell. Includes locking device accessible from the floor.

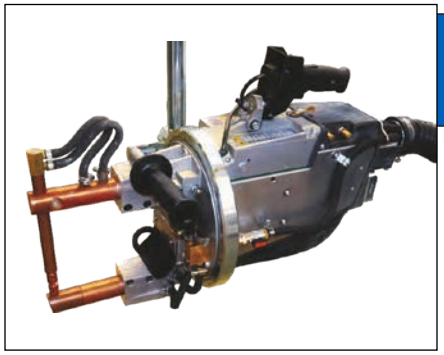
EURO-Specifications:

WSI-Spec Standard Equipment EXCEPT:

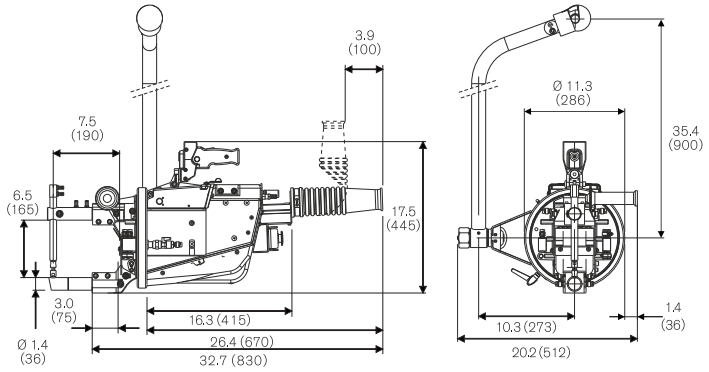
- Basic TE300 control on all welders, regardless of size and arm length specified.
- 21' (6.5 meter) umbilical (Air/Water/Power Hoses/Cable) offers lower initial cost, but requires running additional cable and hose in customer plant. GFCI and Air Regulator will be mounted near the ceiling with the gun installed and properly-festooned on a bridge rail or jib crane, complicating weld parameter adjustment and maintenance.
- Balancers: Rotate around top hook only (where balancer connects to the jib crane or bridge rail. This makes it much more difficult to reposition the weld gun and within the workspace. Requires rotation of the full weight of the balancer each time the gun is moved.

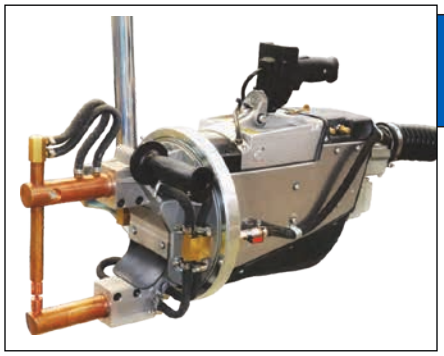
Options and Accessories:

- Ask WSI about custom arms! In addition to the arms listed in this catalog, an almost infinite variety of configurations is available to suit customer welding requirements. WSI is an expert at engineering and manufacturing custom weld gun arms.
- WSI-exclusive 30° arms available.
- Shielded supply cable for even longer life in heavy manufacturing environments.
- Various lengths of umbilical are available for special order. These include 21.3' (6.5M), 32.8' (10M), 42.6' (13M), 49.2' (15M). Note: WSI-Spec guns always include 15M cables.
- Water Flow Switch prevents the weld gun from passing weld current if cooling water is not flowing.
- Keyed Programming Lockout Switch for TE300 (Option 3311) and Legacy TE450 (Option 3312) Controls (see page 12). Note: TE470 / 480 controls have a programmable passcode lock.
- A wide variety of handle configurations are available for easy maneuverability and activation (see page 15).

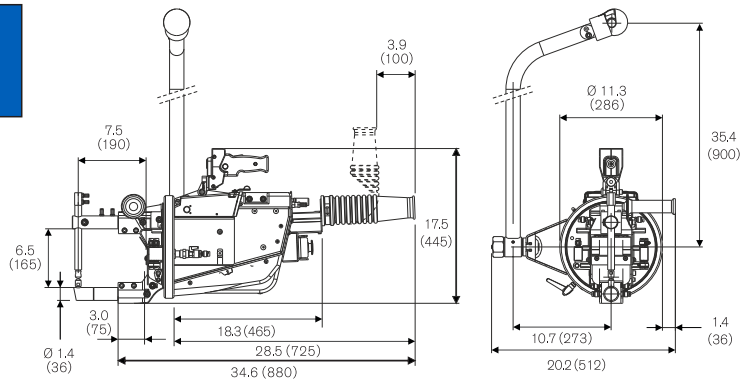


WTG-3321
16kVA



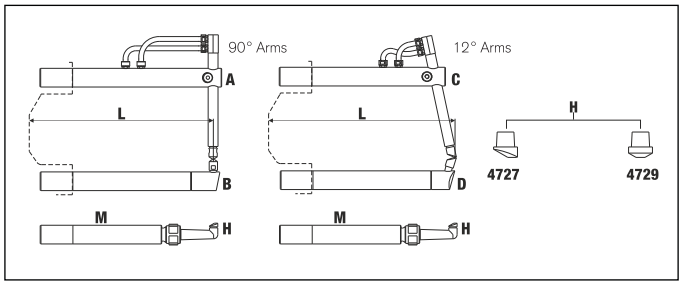


WTG-3322
23kVA



* See additional trigger handle options on page 15

STANDARD ARMS FOR WTG-3321, WTG-3322



* 30° Arms available exclusively from WSI *

L	in (mm)	7.5 (190)	9.8 (250)	13.8 (350)	20 (508)	25.6 (650)	31.5 (800)
A	Part #	4850	4854	4858	4862	4866	4870
B	Part #	4852	4856	4860	4864	4868	4872
C	Part #	4851	4855	4859	4863	4867	4871
D	Part #	4853	4857	4861	4865	4869	4873
M	Part #	--	4890	4891	4892	4893	--

Arms available in **/1MT** (4RW Taper) and **/2MT** (5RW Taper).
/1MT is standard for these arms.

WTG-3321 - STANDARD ARMS

L	F*	Set weight (approx.)	Short stroke		Long Stroke	
in (mm)	lbs (daN)	lbs (kg)	min in (mm)	max in (mm)	min in (mm)	max in (mm)
7.5 (190)	629 (286)	7.3 (3.3)	0.2 (6)	1.0 (25)	1.2 (30)	1.9 (48)
9.8 (250)	499 (227)	9.5 (4.3)	0.3 (7)	1.2 (30)	1.5 (38)	2.4 (60)
13.8 (350)	397 (168)	12.8 (5.8)	0.4 (10)	1.6 (41)	2.0 (50)	3.1 (80)
20 (508)	264 (120)	18.7 (8.5)	0.5 (13)	2.2 (56)	2.8 (70)	4.4 (112)
25.6 (650)	209 (95)	23.3 (10.6)	0.7 (18)	2.8 (72)	3.5 (90)	5.5 (140)

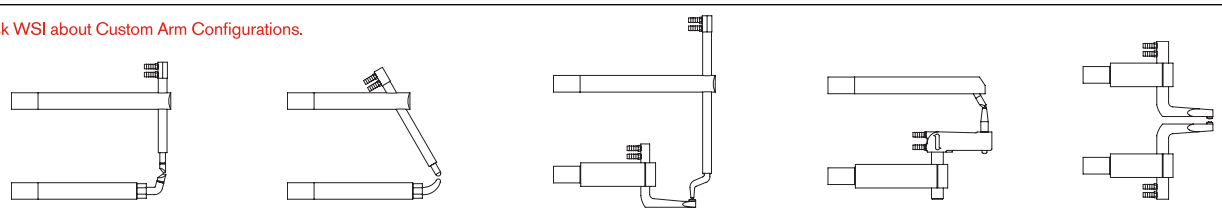
* Electrode force at 87 psi (6 bar)

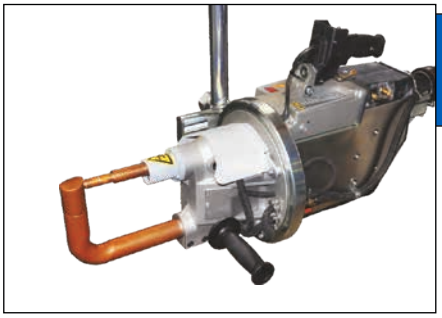
WTG-3322 - STANDARD ARMS

L	F*	Set weight (approx.)	Short stroke		Long Stroke	
in (mm)	lbs (daN)	lbs (kg)	min in (mm)	max in (mm)	min in (mm)	max in (mm)
7.5 (190)	744 (338)	7.3 (3.3)	0.2 (5)	0.8 (20)	1.1 (28)	1.6 (40)
9.8 (250)	590 (268)	9.5 (4.3)	0.2 (6)	1.0 (25)	1.4 (35)	2.0 (50)
13.8 (350)	438 (199)	12.8 (5.8)	0.3 (8)	1.3 (34)	1.9 (47)	2.8 (70)
20 (508)	264 (120)	18.7 (8.5)	0.5 (13)	2.2 (56)	2.8 (70)	4.4 (112)
25.6 (650)	249 (113)	23.3 (10.6)	0.6 (15)	2.4 (60)	3.3 (84)	4.7 (120)
31.5 (800)	205 (93)	28.6 (13)	0.7 (18)	2.9 (73)	4.0 (102)	5.7 (146)

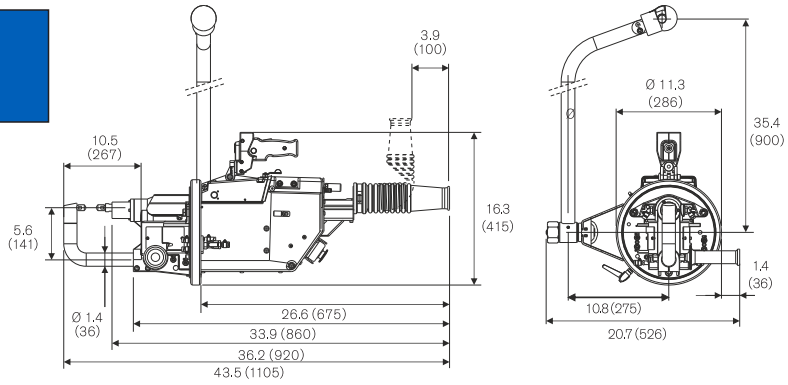
* Electrode force at 87 psi (6 bar)

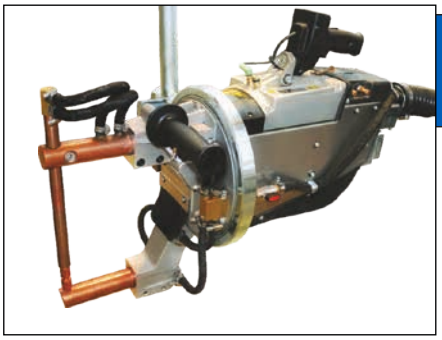
Ask WSI about Custom Arm Configurations.



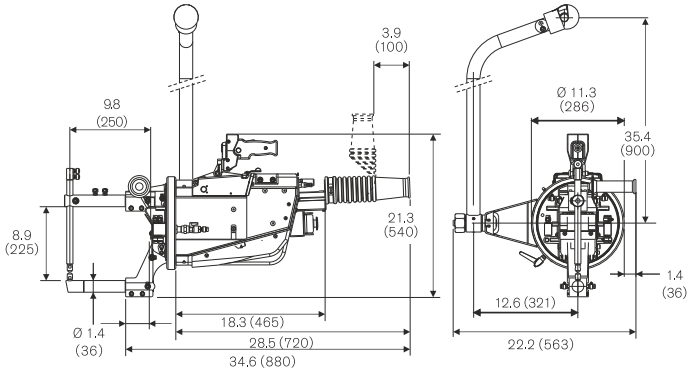


WTG-3323
23kVA



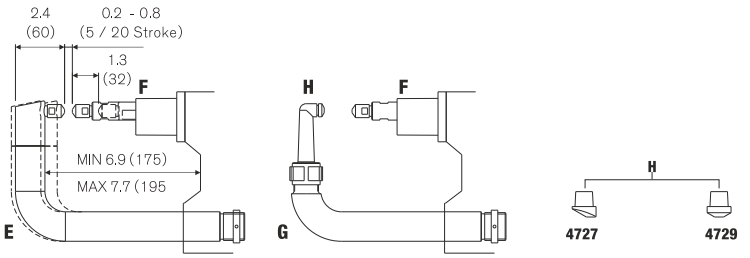


WTG-3324
23kVA



* See additional trigger handle options on page 15

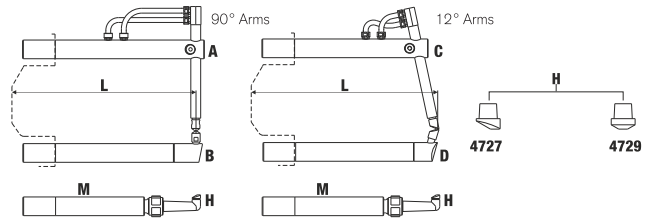
STANDARD ARMS FOR WTG-3323



E - **4883**
F - **4882**

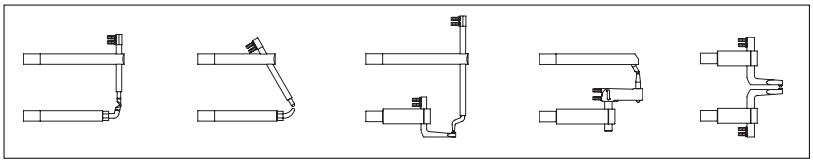
G - **4884**
F - **4882**

STANDARD ARMS FOR WTG-3324



* 30° Arms available exclusively from WSI

CUSTOM ARM CONFIGURATIONS AVAILABLE.



Ask WSI about Custom Arm Configurations.

L	in (mm)	9.8 (250)	13.8 (350)	20 (508)	25.6 (650)	31.5 (800)
A	Part #	**4874**	**4876**	**4878**	**4880**	**4894**
B	Part #	**4856**	**4860**	**4864**	**4868**	**4872**
C	Part #	**4875**	**4877**	**4879**	**4881**	--
D	Part #	**4857**	**4861**	**4865**	**4869**	--
M	Part #	**4890**	**4891**	**4892**	**4893**	--

Arms available in **/1MT** (4RW Taper) and **/2MT** (5RW Taper).
/1MT is standard for these arms.

WTG-3323 - STANDARD ARMS

L	F*	Set weight (approx.)	Short stroke		Long Stroke	
part #	lbs (daN)	lbs (kg)	min in (mm)	max in (mm)	min in (mm)	max in (mm)
4882 4883	660 (300)	7.1 (3.2)	0.2 (5)	0.8 (20)	1.4 (35)	2.0 (50)
4882 4884	660 (300)	8.6 (3.9)	0.2 (5)	0.8 (20)	1.4 (35)	2.0 (50)

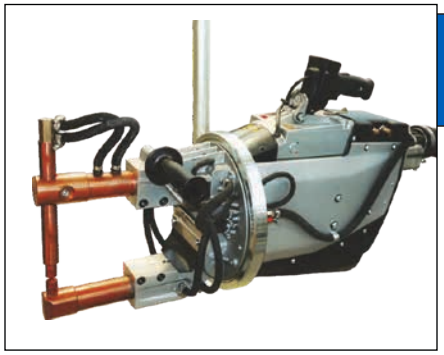
* Electrode force at 87 psi (6 bar)

Arms available in **/1MT** (4RW Taper) and **/2MT** (5RW Taper).
/1MT is standard for these arms.

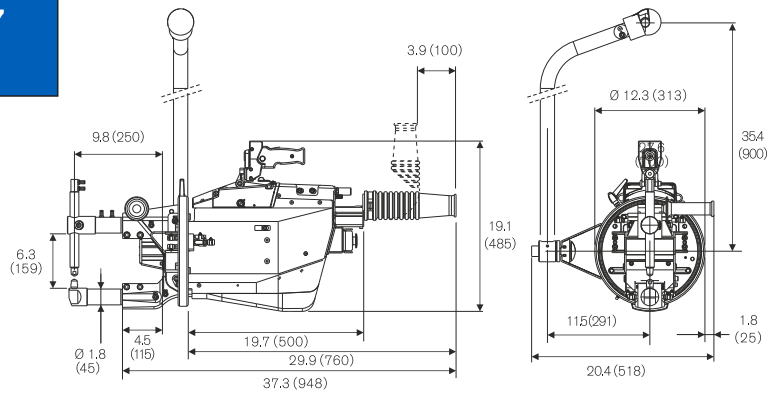
WTG-3324 - STANDARD ARMS

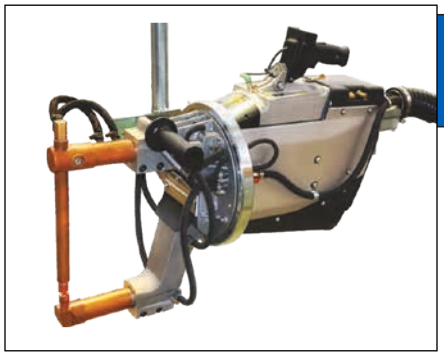
L	F*	Set weight (approx.)	Short stroke		Long Stroke	
in (mm)	lbs (daN)	lbs (kg)	min in (mm)	max in (mm)	min in (mm)	max in (mm)
9.8 (250)	590 (268)	9.9 (4.5)	0.2 (6)	1.0 (25)	1.4 (35)	2.0 (50)
13.8 (350)	438 (199)	13.2 (6)	0.3 (8)	1.3 (34)	1.9 (47)	2.8 (70)
20 (508)	308 (140)	19.2 (8.7)	0.5 (12)	1.9 (48)	2.6 (65)	3.8 (97)
25.6 (650)	249 (113)	23.8 (10.8)	0.6 (15)	2.4 (60)	3.3 (84)	4.7 (120)

* Electrode force at 87 psi (6 bar)

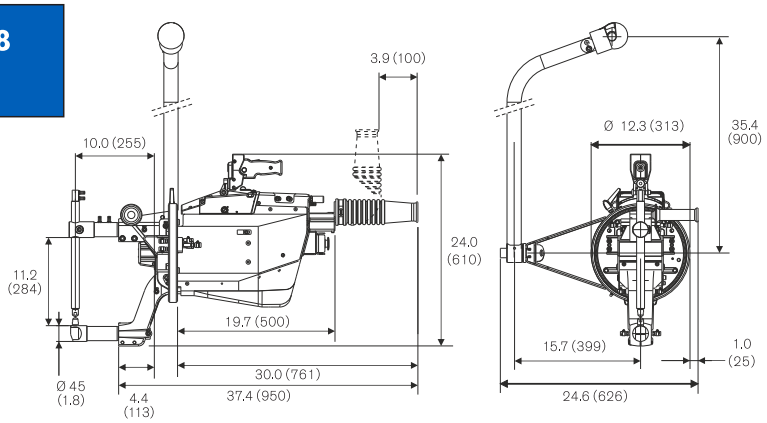


WTG-3327
38kVA



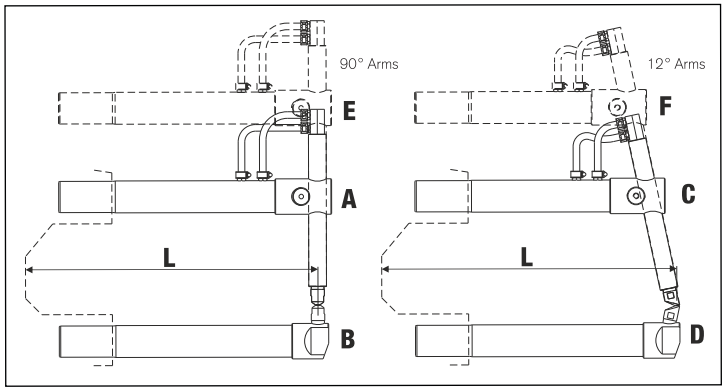


WTG-3328
38kVA



* See additional trigger handle options on page 15

STANDARD ARMS FOR WTG-3327, WTG-3328



Ask WSI about Custom Arm Configurations

L	in (mm)	10.0 (255)	16.1 (408)	24.0 (610)	32.3 (820)	40.6 (1030)
A	Part #	**4750**	**4756**	**4762**	**4768**	**4774**
B	Part #	**4752**	**4758**	**4764**	**4770**	**4776**
C	Part #	**4751**	**4757**	**4763**	**4769**	**4775**
D	Part #	**4753**	**4759**	**4765**	**4771**	**4777**
E	Part #	**4754**	**4760**	**4766**	**4772**	–
F	Part #	–	**4761**	**4767**	**4773**	–

Arms available in **/1MT** (4RW Taper) and **/2MT** (5RW Taper).
/2MT is standard for these arms.

WTG-3327 - STANDARD ARMS

L	F*	Set weight (approx.)	Short stroke		Long Stroke	
in (mm)	lbs (daN)	lbs (kg)	min in (mm)	max in (mm)	min in (mm)	max in (mm)
10.0 (255)	1529 (695)	14.3 (6.5)	0.4 (10)	1.0 (26)	1.8 (45)	2.4 (60)
16.1 (408)	849 (386)	20.9 (9.5)	0.5 (12)	1.4 (35)	2.6 (65)	3.0 (75)
24.0 (610)	581 (264)	29.7 (13.5)	0.9 (22)	2.4 (60)	3.9 (100)	5.4 (136)
32.3 (820)	431 (196)	39.6 (18)	1.2 (30)	3.0 (75)	5.1 (130)	6.9 (175)
40.6 (1030)	343 (156)	48.4 (22)	1.6 (40)	3.9 (100)	6.5 (165)	8.9 (225)

* Electrode force at 87 psi (6 bar)

WTG-3328 - STANDARD ARMS

L	F*	Set weight (approx.)	Short stroke		Long Stroke	
in (mm)	lbs (daN)	lbs (kg)	min in (mm)	max in (mm)	min in (mm)	max in (mm)
10.0 (255)	1529 (695)	15.4 (7)	0.4 (10)	1.0 (26)	1.8 (45)	2.4 (60)
16.1 (408)	849 (386)	22.0 (10)	0.5 (12)	1.4 (35)	2.6 (65)	3.0 (75)
24.0 (610)	581 (264)	30.8 (14)	0.9 (22)	2.4 (60)	3.9 (100)	5.4 (136)
32.3 (820)	431 (196)	40.8 (18.5)	1.2 (30)	3.0 (75)	5.1 (130)	6.9 (175)

* Electrode force at 87 psi (6 bar)

SPECIFICATION	UNITS	MODEL					
		WTG-3321	WTG-3322	WTG-3323	WTG-3324	WTG-3327	WTG-3328
Gun Type		Scissor (L)	Scissor (L)	C	Scissor (L)	Scissor (L)	Scissor (L)
Power @ 50% Duty Cycle	kVA	16	23	23	23	38	38
Max Power	kVA	37	65	63	52	110	92
Short Circuit Current	A	16,000	21,000	21,000	16,500	27,000	22,500
Thermal Current @ 100%	kA	4	4.25	4.25	4.25	5.4	5.4
Secondary Voltage	V	2.8	3.8	3.8	3.8	5	5
* Supply Voltage (@60Hz)	V	440	440	440	440	440	440
Primary Cables Ø (up to 30m)	mm	10	16	16	16	25	25
Delayed Fuses @ 440VAC	A	32	40	40	40	80	80
Arm Spacing	in (mm)	6.5 (165)	6.5 (165)	4.7 (120)	8.9 (225)	6.1 (155)	11.0 (280)
Arm Minimum Length	in (mm)	7.5 (190)	7.5 (190)	-	9.8 (250)	9.8 (250)	9.8 (250)
Max Electrode Force @ 116 psi (8 bar)	lbs. (daN)	629 (286)	744 (338)	660 (300)	590 (268)	1529 (695)	1529 (695)
Working Stroke	in (mm)	0.2-1.0 (6-25)	0.2-0.8 (5-20)	0.2-0.8 (5-20)	0.2-1.0 (6-25)	0.4-1.0 (10-26)	0.4-1.0 (10-26)
Maximum Stroke	in (mm)	1.2-1.9 (30-48)	1.1-1.6 (28-40)	1.4-2.0 (35-50)	1.2-1.9 (30-48)	1.8-2.4 (45-60)	1.8-2.4 (45-60)
Arm Maximum Length	in (mm)	25.6 (650)	31.5 (800)	-	25.6 (650)	40.6 (1030)	32.3 (820)
Max Electrode Force @ 116 psi (8 bar)	lbs. (daN)	209 (95)	205 (93)	-	249 (113)	343 (156)	431 (196)
Working Stroke	in (mm)	0.7-2.8 (18-72)	0.7-2.9 (18-73)	-	0.6-2.4 (15-60)	1.6-3.9 (40-100)	1.2-3.0 (30-75)
Maximum Stroke	in (mm)	3.5-5.5 (90-140)	4.0-5.7 (102-146)	-	3.3-4.7 (84-120)	6.5-8.9 (165-225)	5.1-6.9 (130-175)
Compressed Air Supply	psi (bar)	94 (6.5)	94 (6.5)	94 (6.5)	94 (6.5)	94 (6.5)	94 (6.5)
Air per 1000 Spots @ 72.5 psi (500kP / 5 bar)	SCF (Nm)	141 (4)	141 (4)	141 (4)	141 (4)	265 (7.5)	265 (7.5)
Hose Inside Ø	in (mm)	0.4 (10)	0.4 (10)	0.4 (10)	0.4 (10)	0.4 (10)	0.4 (10)
Water Cooling @ 36 psi (250 kP / 2.5 bar)	gpm (lpm)	1.85 (7)	1.85 (7)	1.85 (7)	1.85 (7)	2.11 (8)	2.11 (8)
Max Thickness Mild Sheet Steel							
w/90° Arms @ Min. Length	in (mm)	0.12x0.12 (3x3)	0.16x0.16 (4x4)	0.16x0.16 (4x4)	0.14x0.14 (3.5x3.5)	0.20x0.20 (5x5)	0.20x0.20 (5x5)
w/90° Arms @ 20" (508mm)	in (mm)	0.07x0.07 (1.8x1.8)	0.12x0.12 (3x3)	-	0.12x0.12 (3x3)	0.14x0.14 (3.5x3.5)	0.14x0.14 (3.5x3.5)
w/90° Arms @ Max. Length	in (mm)	0.05x0.05 (1.2x1.2)	0.08x0.08 (2x2)	-	0.08x0.08 (2x2)	0.08x0.08 (2x2)	0.10x0.10 (2.5x2.5)
w/90° Arms, Cross Wire Max Ø	in (mm)	0.39x0.39 (10x10)	0.55x0.55 (14x14)	0.55x0.55 (14x14)	0.47x0.47(12x12)	0.63x0.63 (16x16)	0.63x0.63 (16x16)
Welding Rate per Minute							
0.040x0.040" (1x1mm) Class A		66	80	80	80	100	100
0.060x0.060" (1.5x1.5mm) Class A		-	32	32	32	44	44
0.080x0.080" (2x2mm) Class A		14	16	16	16	20	20
0.098x0.098" (2.5x2.5mm) Class A		-	-	-	-	14	14
0.118x0.118" (3x3mm) Class B		-	-	-	-	8	8
Net Weight (w/cables, hoses, suspension & shortest arms)	lbs (kg)	101 (46)	114 (52)	117 (53)	121 (55)	167 (76)	172 (78)
Packing Box Dimensions	in (mm)	12x33.5x21.7 (300x850x550)	12x33.5x21.7 (300x850x550)	13x44.1x24.8 (330x1120x630)	13x44.1x24.8 (330x1120x630)	29.9x41.3x19.7 (760x1050x500)	29.9x41.3x19.7 (760x1050x500)
**** Spring Balancer**							
Short Arms Capacity Required	lbs (kg)	99-121 (45-55)	121-143 (55-65)	121-143 (55-65)	121-143 (55-65)	165-198 (75-90)	165-198 (75-90)
Short Arms Balancer Required	Model #	9367BR	9368BR	9368BR	9368BR	9370BR	9370BR
Long Arms Capacity Required	lbs (kg)	121-143 (55-65)	143-165 (65-75)	-	143-165 (65-75)	198-231 (90-105)	198-231 (90-105)
Long Arms Balancer Required	Model #	9368BR	9369BR	-	9369BR	9371BR	9371BR

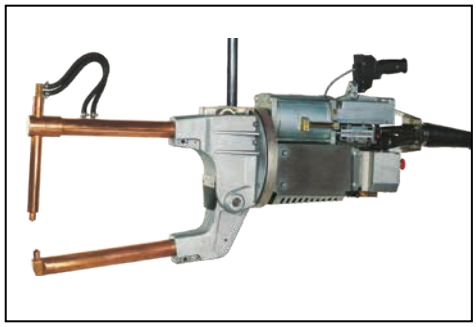
* May be supplied capable of operating on other voltages / frequencies. Please ask for details.

** See page 14 for Balancer specifications

HEAVY-DUTY SUSPENDED AIR OPERATED WELDING GUNS

Suspended Air-Operated Heavy Duty Scissor Guns – Items 3154Q-3169Q – 53-75 KVA

Suspended Air-Operated Heavy Duty C Guns – Items 3024Q-3041Q – 36-60 KVA



WSI-Advantage Standard Specifications:

- WSI-SPEC offers reduced installation cost.
- TE470 Weld Control with 2 program selector
- Filter / Regulator Assembly (item 70504)
- Integrated Earth Leakage Detection and Circuit Breaker / GFCI. Must specify voltage and frequency at time of order.
- 50' (15 meter) umbilical (Air/Water/Power Hoses/Cable) reduces installation cost and simplifies maintenance. Access to the Air Regulator and GFCI is easy, as they are typically at operator shoulder height once the gun is properly-festooned and installed on a bridge rail or jib crane.
- Emergency-stop (E-STOP) button to immediately stop machine operation.
- Balancers: Rotating Insulated Mounting Hook connects to weld gun stick hanger, for easy repositioning of the weld gun within a work cell. Includes locking device accessible from the floor.

- Pneumatically-operated suspended gun with integrated TE470 or TE480 or external TE560 microprocessor-based welding controls.
- Intelligent Design, Small Size, and High Welding Capacity for Maximum Productivity.
- High Electrode Force with Reduced Dimensions and Safe Components.
- Standard ISO 5826 transformers.
- Accurate maneuverability at any angle is guaranteed by gyro suspension mounted on sealed bearings, coupled with a TECNA Balancer.
- Rotation lock allows locking of multiple axes of motion.
- Accepts a broad range of standard and special arms to accommodate special applications. "C" type gun assists in accessing tight welds.
- Long, Adjustable Welding Stroke enables welding in difficult-to-reach areas, including welding reinforcements and ribs.
- Retraction Stroke allows reaching into tough spots.
- Lube-free chromium plated cylinder and shaft offer a long service life in a production environment.
- Lube-free pneumatic circuit eliminates oil mist in your shop environment.
- Water-cooled transformer, with epoxy resin-coated windings for long life.
- Water-cooled arms, electrode holders and electrodes for best performance and long life.
- Water-flow valves on the cooling circuit simplify electrode changeover.
- Trigger Handle Safety prevents accidental initiation.
- Trigger Handle Controls enable selection between 2 or 4 welding programs, as well as Stage 1 'weld / no-weld' function.
- Selection of Welding Controls to suit different production requirements.

EURO-Specifications:

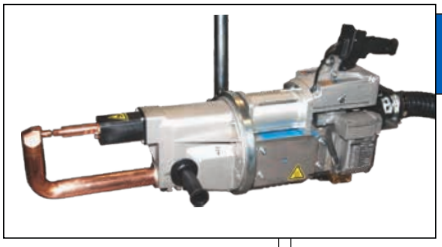
WSI-Spec Standard Equipment EXCEPT:

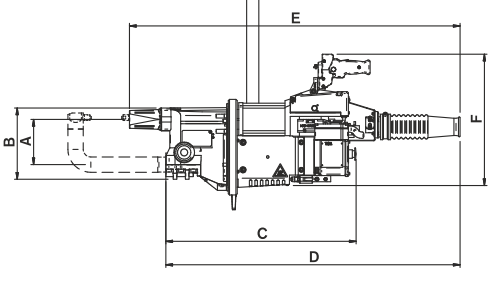
- 21' (6.5 meter) umbilical (Air/Water/Power Hoses/Cable) offers lower initial cost, but requires running additional cable and hose in customer plant. GFCI and Air Regulator will be mounted near the ceiling with the gun installed and properly-festooned on a bridge rail or jib crane, complicating weld parameter adjustment and maintenance.
- Balancers: Rotate around top hook only (where balancer connects to the jib crane or bridge rail. This makes it much more difficult to reposition the weld gun and within the workspace. Requires rotation of the full weight of the balancer each time the gun is moved.

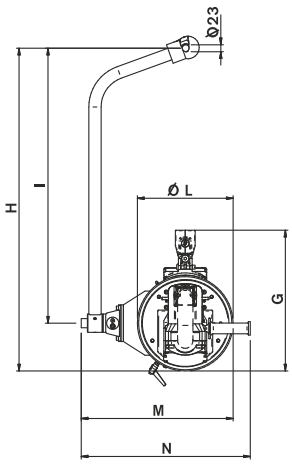
Options and Accessories:

- Ask WSI about custom arms! In addition to the arms listed in this catalog, an almost infinite variety of configurations is available to suit customer welding requirements. WSI is an expert at engineering and manufacturing custom weld gun arms.
- Shielded supply cable for even longer life in heavy manufacturing environments.
- Various lengths of umbilical are available for special order. These include 21.3' (6.5M), 32.8' (10M), 42.6' (13M), 49.2' (15M). Note: WSI-Spec guns always include 15M cables.
- Water Flow Switch prevents the weld gun from passing weld current if cooling water is not flowing.
- Note: TE470 / 480 controls have a programmable passcode lock. TE560 has a keyed program lockout (see page 12-13).
- A wide variety of handle configurations are available for easy maneuverability and activation (see page 15).

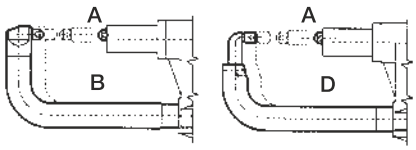
WTG-3024 / 25Q (C) • WTG-3032 / 33 / 40 / 41Q (CG)







WTG	3024/25Q in (mm)	3032/33Q in (mm)	3040/41Q in (mm)
A	5.5 (140)	5.8 (148)	5.8 (148)
B	8.7 (220)	9.1 (230)	9.1 (230)
C	24.8 (630)	25.2 (640)	25.2 (640)
D	34.6 (880)	35.8 (910)	35.8 (910)
E	39.0 (990)	40.4 (1025)	40.4 (1025)
F	15.9 (405)	17.3 (440)	17.3 (440)
G	16.3 (415)	18.5 (470)	18.5 (470)
H	38.2 (970)	39.2 (995)	39.2 (995)
I	33.4 (848)	33.4 (848)	33.4 (848)
Ø L	9.6 (244)	11.6 (294)	11.6 (294)
M	16.1 (410)	19.3 (490)	19.3 (490)
N	19.7 (500)	21.9 (555)	21.9 (555)



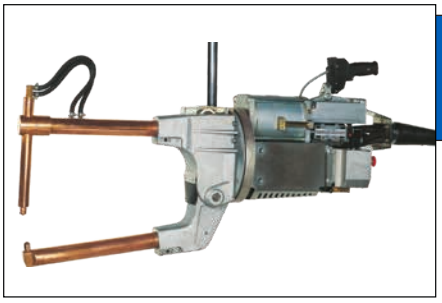
Custom arm configurations available from WSI

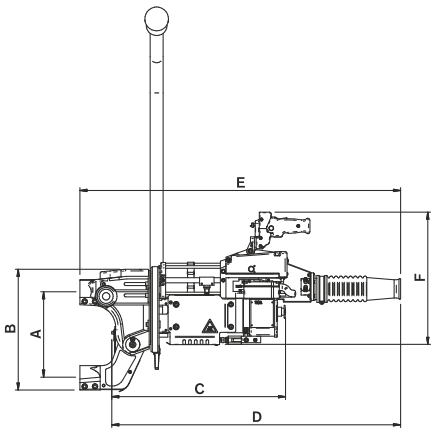
Ø 1.8" (45mm) Fits 3024Q - 3025Q	A	B	D
Part #	4401/2MT	4402/2MT	4403/2MT
lbs (kg)	1.0 (0.47)	11.5 (5.2)	13.2 (6)

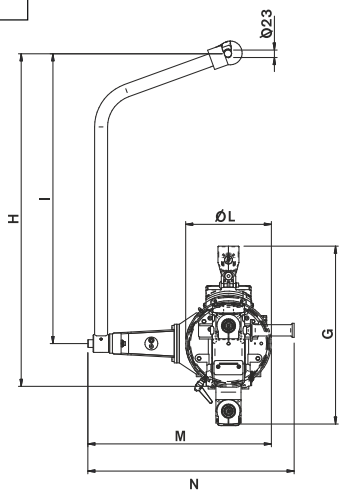
Ø 2.0" (50mm) Fits 3032Q - 3033Q - 3040Q - 3041Q	A	B	D
Part #	4410/2MT	4411/2MT	4412/2MT
lbs (kg)	9.9 (4.5)	33 (15)	34.8 (15.8)

Arms available in **/1MT** (4RW Taper) and **/2MT** (5RW Taper). **/2MT** is standard for these arms. Applies to 3024Q, 3025Q, 3032Q, 3033Q 3040Q, 3041Q.

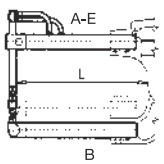
WTG-3154 / 55 / 60 / 61 / 66 / 67 (LG)
WTG-3156 / 57 / 62 / 63 / 68 / 69 (LLG)

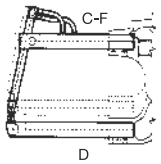






WTG	3154/55Q in (mm)	3160/61Q in (mm)	3166/67Q in (mm)	3156/57Q in (mm)	3162/63Q in (mm)	3168/69Q in (mm)
A	8.7 (220)	8.7 (220)	8.7 (220)	12.4 (315)	12.4 (315)	12.4 (315)
B	13.4 (340)	13.4 (340)	13.4 (340)	17.1 (435)	17.1 (435)	17.1 (435)
C	21.7 (552)	22.4 (570)	24.5 (622)	21.7 (552)	22.4 (570)	24.5 (622)
D	34.3 (870)	34.3 (870)	34.8 (885)	34.3 (870)	34.3 (870)	34.8 (885)
E	38.2 (970)	38.2 (970)	38.8 (985)	38.2 (970)	38.2 (970)	38.8 (985)
F	16.9 (430)	16.9 (430)	16.9 (430)	16.9 (430)	16.9 (430)	16.9 (430)
G	19.7 (500)	19.7 (500)	19.7 (500)	23.4 (595)	23.4 (595)	23.4 (595)
H	39.2 (995)	39.2 (995)	39.2 (995)	39.2 (995)	39.2 (995)	39.2 (995)
I	33.4 (848)	33.4 (848)	33.4 (848)	33.4 (848)	33.4 (848)	33.4 (848)
Ø L	11.6 (294)	11.6 (294)	11.6 (294)	11.6 (294)	11.6 (294)	11.6 (294)
M	19.3 (490)	19.3 (490)	19.3 (490)	23.0 (585)	23.0 (585)	23.0 (585)
N	21.7 (550)	21.7 (550)	21.7 (550)	27.6 (700)	27.6 (700)	27.6 (700)





* See additional trigger handle options on page 15

	L - in (mm)	Ø 2.0" (50mm) A	B	C	D	E	F	F @ 87 psi (6 bar) lbs (daN)	F @ 116 psi (8 bar) lbs (daN)	Set Weight lbs (kg)
Part #	10.0 (255)	4420	4424	N / A	N / A	4422	N / A	1419 (645)	1881 (855)	~ 19.8 (9)
Part #	16.1 (408)	4426	4430	4427	4431	4428	4429	946 (430)	1265 (575)	~ 28.6 (13)
Part #	24.0 (610)	4432	4436	4433	4437	4434	4435	660 (300)	880 (400)	~ 37.4 (17)
Part #	32.3 (820)	4438	4442	4439	4443	4440	4441	506 (230)	671 (305)	~ 48.4 (22)
Part #	40.6 (1030)	4444	4448	N / A	N / A	4446	N / A	407 (185)	539 (245)	~ 61.6 (28)

* **LG Guns** use ARMS A, B, C and D. **LLG Guns** use ARMS C, D, E F.

Arms available in **/1MT** (4RW Taper) and **/2MT** (5RW Taper). **/2MT** is standard for these arms.

Custom arm configurations available from WSI

SPECIFICATIONS	UNITS	C	CG	CG
Built-In Weld Control TE470 (or optional TE480)	Model #	WTG-3024Q	WTG-3032Q	WTG-3040Q
External Weld Control Model 1253 (C) 1254 (CG)	Model #	WTG-3025Q	WTG-3033Q	WTG-3041Q
Power @ 50% Duty Cycle	kVA	36	53	60
Max Power	kVA	115	150	192
Short Circuit Current	A	22,800	26,500	30,000
Thermal Current @ 100%	kA	4	5.3	5.3
Secondary Voltage	V	6.3	7.1	8
* Supply Voltage (@60Hz)	V	440	440	440
Primary Cables Ø (up to 30m)	mm	16	25	25
Delayed Fuses @ 440VAC	A	63	100	125
Arm Centerline Distance	in (mm)	5.5 (140)	5.8 (148)	5.8 (148)
Insulated Arms Connection Ø	in (mm)	1.65 (42)	1.85 (47)	1.85 (47)
Non-Insulated Arms Connection Ø	in (mm)	1.73 (44)	1.93 (49)	1.93 (49)
Ø Gyro Suspension	in (mm)	9.6 (244)	11.6 (294)	11.6 (294)
Arm Minimum Length	in (mm)	-	-	-
Max Electrode Force @ 116 psi (8 bar)	lbs. (daN)	1100 (500)	1364 (620)	1364 (620)
Working Stroke	in (mm)	0.2-1.2 (5-30)	0.2-1.2 (5-30)	0.2-1.2 (5-30)
Maximum Stroke	in (mm)	3.0-3.9 (75-100)	3.0-3.9 (75-100)	3.0-3.9 (75-100)
Arm Maximum Length	in (mm)	-	-	-
Max Electrode Force @ 116 psi (8 bar)	lbs. (daN)	-	-	-
Working Stroke	in (mm)	-	-	-
Maximum Stroke	in (mm)	-	-	-
Compressed Air Supply	psi (bar)	116 (8)	116 (8)	116 (8)
Air per 1000 Spots @ 116 psi (800kP / 8 bar)				
Short Stroke	SCF (N/m)	141 (4)	177 (5)	177 (5)
Long Stroke	SCF (N/m)	424 (12)	530 (15)	530 (15)
Hose Inside Ø	in (mm)	0.4 (10)	0.4 (10)	0.4 (10)
Water Cooling @ 36 psi (250 kP / 2.5 bar)	gpm (lpm)	1.7 (6)	1.7 (6)	1.7 (6)
Max Thickness Mild Sheet Steel				
w/90° Arms @ Min. Length	in (mm) / Class	0.12x0.12 (3x3) / B	0.16x0.16 (4x4) / B	0.16x0.16 (4x4) / B
w/90° Arms @ 20" (508mm)	in (mm) / Class	-	-	-
w/90° Arms @ Max. Length	in (mm) / Class	-	-	-
w/90° Arms, Cross Wire Max Ø	in (mm)	0.55x0.55 (14x14)	0.63x0.63 (16x16)	0.71x0.71 (18x18)
Welding Rate per Minute/Class				
0.040x0.040" (1x1mm)	#/Class	70 / A	125 / A	125 / A
0.060x0.060" (1.5x1.5mm)	#/Class	30 / A	50 / A	50 / A
0.080x0.080" (2x2mm)	#/Class	15 / B	25 / B	25 / B
0.098x0.098" (2.5x2.5mm)	#/Class	10 / B	17 / B	17 / B
0.118x0.118" (3x3mm)	#/Class	6 / B	10 / B	10 / B
Net Weight (w/cables, hoses, suspension, no arms)	lbs (kg)	117 (53)	157 (71)	165 (75)
**** Spring Balancer**				
Short Arms Capacity Required	lbs (kg)	121-143 (55-65)	198-231 (90-105)	198-231 (90-105)
Short Arms Balancer Required	Model #	9368BR	9371BR	9371BR
Long Arms Capacity Required	lbs (kg)	-	-	-
Long Arms Balancer Required	Model #	-	-	-

* May be supplied capable of operating on other voltages/frequencies. Please ask for details.

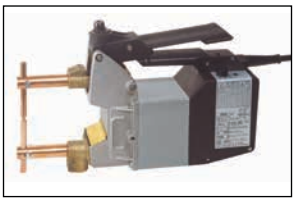
** See page 14 for Balancer specifications

SPECIFICATIONS	UNITS	LG	LG	LG	LLG	LLG	LLG
Built-In Weld Control TE470 (or optional TE 480)	Model #	WTG-3154	WTG-3160	WTG-3166	WTG-3156	WTG-3162	WTG-3168
External Weld Control Model 1254	Model #	WTG-3155	WTG-3161	WTG-3167	WTG-3157	WTG-3163	WTG-3169
Power @ 50% Duty Cycle	kVA	53	60	75	53	60	75
Max Power	kVA	147	192	260	147	192	256
Short Circuit Current	A	26,000	30,000	32,500	26,000	30,000	32,000
Thermal Current @ 100%	kA	5.3	5.3	5.3	5.3	5.3	5.3
Secondary Voltage	V	7.1	8	10	7.1	8	10
* Supply Voltage (@60Hz)	V	440	440	440	440	440	440
Primary Cables Ø (up to 30m)	mm	25	25	35	25	25	35
Delayed Fuses @ 440VAC	A	100	100	125	100	100	125
Arm Centerline Distance	in (mm)	8.6 (219)	8.6 (219)	8.6 (219)	12.3 (312)	12.3 (312)	12.3 (312)
Insulated Arms Connection Ø	in (mm)	1.85 (47)	1.85 (47)	1.85 (47)	1.85 (47)	1.85 (47)	1.85 (47)
Non-Insulated Arms Connection Ø	in (mm)	1.93 (49)	1.93 (49)	1.93 (49)	1.93 (49)	1.93 (49)	1.93 (49)
Ø Gyro Suspension	in (mm)	11.6 (294)	11.6 (294)	11.6 (294)	11.6 (294)	11.6 (294)	11.6 (294)
Arm Minimum Length	in (mm)	10.0 (255)	10.0 (255)	10.0 (255)	10.0 (255)	10.0 (255)	10.0 (255)
Max Electrode Force @ 116 psi (8 bar)	lbs. (daN)	1881 (855)	1881 (855)	1881 (855)	1881 (855)	1881 (855)	1881 (855)
Working Stroke	in (mm)	0.2-0.8 (5-20)	0.2-0.8 (5-20)	0.2-0.8 (5-20)	0.2-0.8 (5-20)	0.2-0.8 (5-20)	0.2-0.8 (5-20)
Maximum Stroke	in (mm)	2.0-2.8 (50-70)	2.0-2.8 (50-70)	2.0-2.8 (50-70)	2.0-2.8 (50-70)	2.0-2.8 (50-70)	2.0-2.8 (50-70)
Arm Maximum Length	in (mm)	40.6 (1030)	40.6 (1030)	40.6 (1030)	40.6 (1030)	40.6 (1030)	40.6 (1030)
Max Electrode Force @ 116 psi (8 bar)	lbs. (daN)	539 (245)	539 (245)	539 (245)	539 (245)	539 (245)	539 (245)
Working Stroke	in (mm)	0.2-2.4 (5-60)	0.2-2.4 (5-60)	0.2-2.4 (5-60)	0.2-2.4 (5-60)	0.2-2.4 (5-60)	0.2-2.4 (5-60)
Maximum Stroke	in (mm)	7.1-9.8 (180-250)	7.1-9.8 (180-250)	7.1-9.8 (180-250)	7.1-9.8 (180-250)	7.1-9.8 (180-250)	7.1-9.8 180-250)
Compressed Air Supply	psi (bar)	116 (8)	116 (8)	116 (8)	116 (8)	116 (8)	116 (8)
Air per 1000 Spots @ 116 psi (800kP / 8 bar)							
Short Stroke	SCF (N/m)	177 (5)	177 (5)	177 (5)	177 (5)	177 (5)	177 (5)
Long Stroke	SCF (N/m)	388 (11)	388 (11)	388 (11)	388 (11)	388 (11)	388 (11)
Hose Inside Ø	in (mm)	0.5 (13)	0.5 (13)	0.5 (13)	0.5 (13)	0.5 (13)	0.5 (13)
Water Cooling @ 36 psi (250 kP / 2.5 bar)	gpm (lpm)	2.2 (8)	2.2 (8)	2.2 (8)	2.2 (8)	2.2 (8)	2.2 (8)
Max Thickness Mild Sheet Steel							
w/90° Arms @ Min. Length	in (mm)/Class	0.16 x 0.16 (4 x 4) / B	0.18 x 0.18 (4.5 x 4.5) / B	0.18 x 0.18 (4.5 x 4.5) / B	0.16 x 0.16 (4 x 4) / B	0.18 x 0.18 (4.5 x 4.5) / B	0.18 x 0.18 (4.5 x 4.5) / B
w/90° Arms @ 20" (508mm)	in (mm)/Class	0.11 x 0.11 (2.8 x 2.8) / B	0.11 x 0.11 (2.8 x 2.8) / B	0.11 x 0.11 (2.8 x 2.8) / B	0.11 x 0.11 (2.8 x 2.8) / B	0.11 x 0.11 (2.8 x 2.8) / B	0.11 x 0.11 (2.8 x 2.8) / B
w/90° Arms @ Max. Length	in (mm)/Class	0.12 x 0.12 (3 x 3) / C	0.12 x 0.12 (3 x 3) / C	0.12 x 0.12 (3 x 3) / C	0.12 x 0.12 (3 x 3) / C	0.12 x 0.12 (3 x 3) / C	0.12 x 0.12 (3 x 3) / C
w/90° Arms, Cross Wire Max Ø	in (mm)	0.71 x 0.71 (18 x 18)	0.79 x 0.79 (20 x 20)	0.79 x 0.79 (20 x 20)	0.71 x 0.71 (18 x 18)	0.79 x 0.79 (20 x 20)	0.87 x 0.87 (22 x 22)
Welding Rate per Minute / Class							
0.040x0.040" (1x1mm)	#/Class	125/A	125/A	125/A	125/A	125/A	125/A
0.060x0.060" (1.5x1.5mm)	#/Class	50/A	50/A	50/A	50/A	50/A	50/A
0.080x0.080" (2x2mm)	#/Class	25/A	25/A	25/A	25/A	25/A	25/A
0.098x0.098" (2.5x2.5mm)	#/Class	17/A	17/A	17/A	17/A	17/A	17/A
0.118x0.118" (3x3mm)	#/Class	10/A	10/A	10/A	10/A	10/A	10/A
Net Weight (w/cables, hoses, suspension, no arms)	lbs (kg)	172 (78)	181 (82)	192 (87)	174 (79)	183 (83)	194 (88)
**** Spring Balancer**							
Short Arms Capacity Required	lbs (kg)	165-198 (75-90)	198-231 (90-105)	198-231 (90-105)	165-198 (75-90)	198-231 (90-105)	198-231 (90-105)
Short Arms Balancer Required	Model #	9370BR	9371BR	9371BR	9370BR	9371BR	9371BR
Long Arms Capacity Required	lbs (kg)	220-253 (100-120)	220-253 (100-120)	220-253 (100-120)	220-253 (100-120)	220-253 (100-120)	220-253 (100-120)
Long Arms Balancer Required	Model #	9422BR	9422BR	9422BR	9422BR	9422BR	9422BR

* May be supplied capable of operating on other voltages/frequencies. Please ask for details.

** See page 14 for Balancer specifications

HAND OPERATED AIR-COOLED SPOT WELDING GUNS

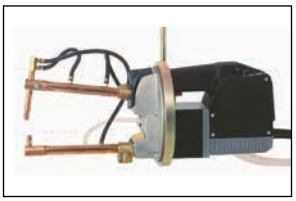


WTG-7902

Hand Operated, Air-Cooled Gun – 2.5 kVA

- Versatile portable spot weld gun for auto body repair shops, plant maintenance, and rework.
- Build in electronic timer with SCR. Weld time setting from 2-65 cycles.
- Compensation circuit starts the timer only when the current is properly passing through the material, enabling better performance on oxidized sheets, as well as surfaces with paint residues or scale.
- Current control with phase shift adjustment for making more difficult welds on thin material, small diameter rod/bar stock, stainless steel and more.
- Manual force adjustment with scale in daN (dekanewtons). 1 daN = 2.2 lbs.
- Additional arm couplings included with some arm sets provide larger gap between arms.
- Air-cooled Transformer coated with F-class insulation, tested to 4000 volts.
- Supplied complete with 125mm Arms (Item TE7401).
- Large choice of standard arms and electrodes, as well as custom arms.
- Weld control with pulsation available, ask about the WTG-7902P.

AIR OPERATED WATER-COOLED SPOT WELDING GUNS



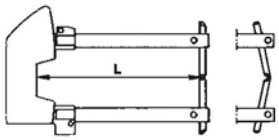
WTG-7913

Air Operated, Water-Cooled Gun w/Gyro Ring – 6 kVA

SPECIFICATION	UNITS	MODEL	
		WTG-7902	WTG-7913
Gun Type		Scissor	Scissor
Manual/Pneumatic		Manual	Pneumatic
Power @ 50% Duty Cycle	kVA	2.5	6
Secondary Voltage	V	2.5	2.5
* Supply Voltage (@60Hz)	V	440	440
Delayed Fuses @ 440VAC	A	12	12
Primary Cables Ø (up to 10m)	mm	2.5	2.5
Short Circuit Current	A	8,200	8,200
Max Welding Current	A	6,550	6,550
Duty Cycle w/Max Welding Current	%	1.1	6.7
Arm Minimum/Maximum Length	in (mm)	4.9-19.7 (125-500)	4.9-19.7 (125-500)
Arm Spacing (Gap)	in (mm)	3.7 (94)	3.7 (94)
Arm Ø	in (mm)	0.87 (22)	0.87 (22)
Electrode Holder Ø	in (mm)	-	0.55 (14)
Electrode Diameter	in (mm)	0.47 (12)	-
Electrode Taper	MT/RW	-	1MT/4RW
Working Stroke	in (mm)	2.2-7.3 (55-185)	1.4-3.5 (35-90)
Max Electrode Force w/ 4.9" (125mm) Arms	lbs. (daN)	264 (120)	264 (120)
Max Electrode Force w/19.7" (500mm) Arms	lbs. (daN)	84 (38)	84 (38)
Pneumatic Hose Inside Ø	in (mm)	-	0.24 (6)
Compressed Air Supply	psi (bar)	-	87 (6)
Air per 1000 Spots @ 72.5 psi (500kP / 5 bar)	SCF (Nm)	-	35 (1)
Water Hose Inside Ø	in (mm)	-	0.24 (6)
Water Cooling @ 36 psi (250 kP / 2.5 bar)	gpm (lpm)	-	0.66 (2.5)
Dimensions (LxWxH)	in (mm)	3.5 x 14.6 x 9.0 (90 x 370 x 230)	4.3 x 18.7 x 8.0 (108 x 475 x 203)
Net Weight	lbs (kg)	24.2 (11)	35.2 (16)
Packing Box Dimensions	in (mm)	6.7 x 18.1 x 13.8 (17 x 46 x 35)	11.0 x 24.0 x 14.2 (28 x 61 x 36)
Gross Shipping Weight	lbs (kg)	28.6 (13)	44 (20)
Capacity Mild Steel Sheet	in (mm)	0.10x0.10 (2.5x2.5)	0.08x0.08 (2x2)
Capacity Mild Steel Rod	in (mm)	0.32 x 0.32 (8 x 8)	0.24 x 0.24 (6 x 6)
** Spring Balancer			
Working Load Required	lbs (kg)	22-33 (10-15)	33-44 (15-20)
Short Arms Balancer Required	Model #	9361BR	9362BR
*May be supplied capable of operating on other voltages/frequencies. Please ask for details.			
** See page 14 for Balancer specifications			

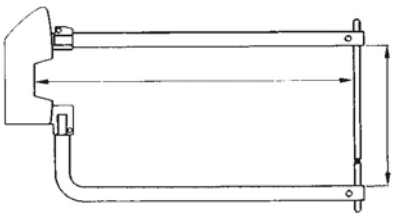
- Light and proven spot welding gun for auto body repair shops, plant maintenance, and rework.
- Build in electronic timer with SCR. Weld time setting from 2-65 cycles.
- Compensation circuit starts the timer only when the current is properly passing through the material, enabling better performance on oxidized sheets, as well as surfaces with paint residues or scale.
- Current control with phase shift adjustment for making more difficult welds on thin material, small diameter rod/bar stock, stainless steel and more.
- Built-in pressure switch operates the timer when the electrode force is correct.
- Additional arm couplings included with some arm sets provide larger gap between arms.
- Water-cooled Transformer coated with F-class insulation, tested to 4000 volts.
- Does not include arms. A large choice of standard arms and electrodes is available, as well as custom arms.
- Weld control with pulsation available, ask about the WTG-7913P.

LIGHT-DUTY WELD GUN ARM CONFIGURATIONS ELECTRODES and ACCESSORIES

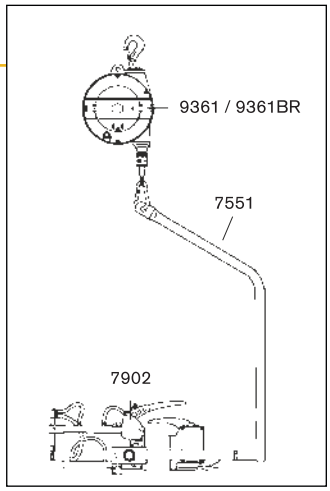


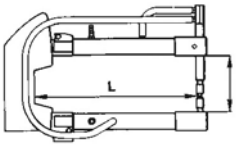
Item 7401: L = 4.9" (125mm)
Weight = 1.8 lbs (0.82 kg)
Item 7402: L = 9.8" (250mm)
Weight = 3.7 lbs (1.69 kg)
Item 7403: L = 13.8" (350mm)
Weight = 5.2 lbs (2.36 kg)
Item 7404: L = 19.7" (500mm)
Weight = 7.4 lbs (3.35 kg)
Item 7451: ▲ Ø 12mm

Item 7452: ▲ Ø 12mm



Item 7406: L = 13.8" (350mm)
Weight = 5.2 lbs (2.36 kg)
Item 7407: L = 19.7" (500mm)
Weight = 7.4 lbs (3.35 kg)
Item 7453: ▲ Ø 12mm (lower electrode)
Item 7454: ▲ Ø 12mm (upper electrode)





Item 7412: L = 5.9" (150mm)
Weight = 2.3 lbs (1.04 kg)
Item 7413: L = 9.8" (250mm)
Weight = 3.4 lbs (1.55 kg)
Item 7414: L = 13.8" (350mm)
Weight = 4.6 lbs (2.10 kg)
Item 7415: L = 19.7" (500mm)
Weight = 6.6 lbs (3.00 kg)

Ask WSI about Custom Arm Configurations

▲ = Supplied as 1 pair of electrodes

CONTROL UNIT TE300

BUILT-IN CONTROL UNITS

CONTROL UNIT TE300

Available on: Gun Models 3321-3328

- 2 Welding Programs, selectable via toggle switch
- Programming in % Current (Pulse Width)
- Optional Keyed Programming Lockout (OPTION 3311)

CONTROL UNIT TE470

Available On: Gun Models 3321-3328, 3020-3040, 3154-3168

- 63 Welding Programs, with two different selection options:
  - > 2 Selectable via toggle switch: OPTION 3310
  - > 4 Selectable via selector knob: OPTION 3305
- Programming in Constant Current (kA)
- Display of Weld Current in kA and Conduction Angle
- Half-Cycle weld time adjustment
- Stepper function with programmable curve
- Weld Counter
- Password Function for Programming Lockout

CONTROL UNIT TE470

CONTROL UNIT TE480

CONTROL UNIT TE480

Available On: Gun Models 3321-3328, 3020-3040, 3154-3168

- 63 Welding Programs, with 2 selectable via toggle switch
- Programming in Constant Energy (J)
- Display of Weld Current in kA and Conduction Angle
- Half-Cycle weld time adjustment
- Stepper function with programmable curve
- Weld Counter

EXTERNAL CONTROL UNIT
CONTROL UNIT TE560 mounted in Enclosure with Filter / Regulator, SCR

Firing Board (Model 1253/1254)

Available On: Gun Models 3021-3041, 3155-3169

- 250 Welding Programs, with 2 selectable via toggle switch
- Programming in Constant Current (kA)
- Display of Weld Current in kA and Conduction Angle
- Half-Cycle weld time adjustment
- Stepper function with programmable curve
- Weld Counter
- Keyed Program/Run Lockout Switch
- Serial communication via insulated RS-232 Interface or USB. (OPTIONAL, ask WSI for details)
- Constant Energy Working Mode available (OPTIONAL, ask WSI for details)

CONTROL UNIT 1253/1254
(TE560 Control)

Parameter Name	As-Displayed	Units	Range by Control			
			TE300	TE450	TE470	TE480
First Squeeze Time	SQUEEZE 1	Cycles (Hz)	00-99	00-99	00-99	00-99
Squeeze Time	SQUEEZE	Cycles (Hz)	01-99	01-99	01-99	01-99
Pre-Weld Time	PRE-WELD	Cycles (Hz)	00-60	00.0-99.0	00.0-99.0	00.0-99.0
Pre-Weld Current	PRE-POWER	% Current	01-99	05-99	05-99	05-99
Cold Time 1	COLD 1	Cycles (Hz)	00-50	00-50	00-50	00-50
Upslope Time	SLOPE UP	Cycles (Hz)	00-29	00-25	00-25	00-25
Weld Time	WELD 1	Cycles (Hz)	01-60	00.5-99.5	00.5-99.5	00.5-99.5
Weld Current	POWER/CURRENT	% / kA	01-99	05-99 / 2.0-30.0	05-99 / 2.0-30.0	05-99 / 2.0-30.0
Number of Impulses	N. IMPULSE	#	01-09	01-09	01-09	01-09
Cold Time 2	COLD 2	Cycles (Hz)	-	00-50	00-50	00-50
Downslope Time	SLOPE DOWN	Cycles (Hz)	-	00-25	00-25	00-25
Cold Time 3	COLD 3	Cycles (Hz)	-	00-50	00-50	00-50
Post-Weld Time	POST-WELD	Cycles (Hz)	-	00.0-99.0	00.0-99.0	00.0-99.0
Post-Weld Current	POST-POWER	%	-	05-99	05-99	05-99
Hold Time	HOLD TIME	Cycles (Hz)	01-99	01-99	01-99	01-99
Off Time	OFF TIME	Cycles (Hz)	00-99	00-99	00-99	00-99
Current Minimum Limit	CURR. MIN.	kA	-	1.0-36.0	1.0-36.0	1.0-36.0
Angle Minimum Limit	ANGLE MIN.	Degrees(°)	-	005-180	005-180	005-180
Currrent Maximum Limit	CURR. MAX.	kA	-	1.0-36.0	1.0-36.0	1.0-36.0
Angle Maximum Limit	ANGLE MAX	Degrees(°)	-	005-180	005-180	005-180
Pressure Proportional Valve	PRESSURE	bar	-	-	0.5-10.0	0.5-10.0
Minimum Welding Time	WELD MIN.	Cycles (Hz)	-	-	-	00.5-99.5
Maximum Welding Time	WELD MAX.	Cycles (Hz)	-	-	-	00.5-99.5
Energy	ENERGY	J (Joules)	-	-	-	60,000

SPRING BALANCERS

Recommended Balancers for Weld Guns in this catalog.

Check our **www.TECNADirect.com** for the complete line of Spring Balancers.

Part #	load range lbs (kg)	stroke length in (mm)	weight lbs (kg)	packaging lbs (kg)	shipping dimensions in (mm)
9361BR	22 - 33 (10 - 15)	78.74 (2000)	20 (9.2)	26 (11.8)	17.9 x 10.6 x 11 (455 x 270 x 280)
9362BR	33 - 44 (15 - 20)	78.74 (2000)	21 (9.5)	27 (12.1)	17.9 x 10.6 x 11 (455 x 270 x 280)
9367BR	99 - 21 (45 - 55)	78.74 (2000)	28 (12.5)	32 (14.5)	17.9 x 10.6 x 11 (455 x 270 x 280)
9368BR	121 - 143 (55 - 65)	78.74 (2000)	30 (13.6)	34 (15.6)	17.9 x 10.6 x 11 (455 x 270 x 280)
9369BR	143 - 165 (65 - 75)	78.74 (2000)	32 (14.5)	36 (16.5)	17.9 x 10.6 x 11 (455 x 270 x 280)
9370BR	165 - 198 (75 - 90)	78.74 (2000)	38 (17.3)	42 (19)	17.9 x 10.6 x 11 (455 x 270 x 280)
9371BR	198 - 232 (90 - 105)	78.74 (2000)	40 (18)	44 (20)	17.9 x 10.6 x 11 (455 x 270 x 280)
9422BR	220 -265 (100 - 120)	98.4 (2500)	85 (38.7)	94 (42.5)	23.6 x 12.6 x 13 (600 x 320 x 330)

Option "R": Insulated swiveling load hook. | Option "B": load lock accessible from floor level.

TECNA Weld Gun Arms / Balancer Matchup Charts

X-GUN / SCISSOR GUN

Gun Model	Arm Length					
	7 (190)	10 (255)	14 (350)	20 (500)	26 (650)	32 (800)
3321	9367BR					*
3322	9367BR			93688BR		
3324	*	93688BR				*

Gun Model	10 (255)	16 (408)	24 (610)	32 (820)	41 (1030)
3327	9370BR				9371BR
3328	9370BR			9371BR	*

Gun Model	10 (255)	16 (408)	24 (610)	32 (820)	41 (1030)
3154	9370BR	9371BR			9422BR
3155	9370BR	9371BR			9422BR
3160	9371BR				9422BR
3161	9371BR				9422BR
3166	9371BR			9422BR	
3167	9371BR			9422BR	
3156	9370BR	9371BR			9422BR
3157	9370BR	9371BR			9422BR
3162	9371BR			9422BR	
3163	9371BR			9422BR	
3168	9371BR		9422BR		
3169	9371BR		9422BR		

* = not available

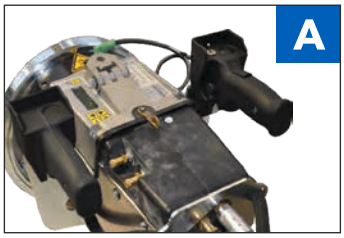
C-GUN

Gun Model	Standard Arms
3323	9368BR
3024 / 3025	9368BR
3032 / 3033	9371BR
3040 / 3041	9371BR

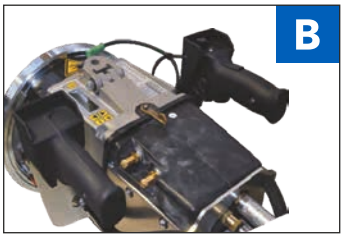
LIGHT-DUTY X-GUN / SCISSOR-GUN

Gun Model	Standard Arms
7902	9361BR
7913	9362BR

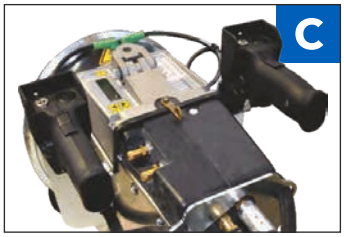
TRIGGER (CONTROL) HANDLES



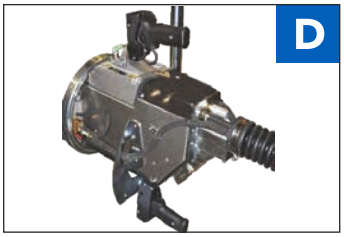
Holder to Mount the standard 2-Program Trigger Handle on Spot Gun Side, including additional 'dummy' handle without control. Additional Dummy Handle allows for best ergonomics.



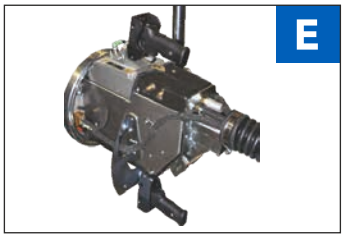
Holder to Mount the standard 2-Program Trigger Handle on Spot Gun Side, including additional 2-Program Trigger Handle. Allows selection between 4 spot welding programs (2 per handle).



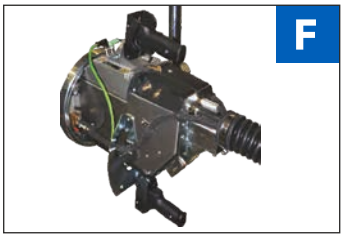
Holder to Mount a 4-Program Trigger Handle (included) on Spot Gun Side, including additional 'dummy' handle without control. Additional Dummy Handle allows for best ergonomics.



Holder to Mount the standard 2-Program Trigger Handle on Underside of Spot Gun, including additional 'dummy' handle without control. Additional Dummy Handle allows for best ergonomics.



Holder to Mount the standard 2-Program Trigger Handle on Underside of Spot Gun, including additional 2-Program Trigger Handle. Allows selection between 4 spot welding programs (2 per handle).



Holder to Mount a 4-Program Trigger Handle (included) on Underside of Spot Gun, including additional 'dummy' handle without control. Additional Dummy Handle allows for best ergonomics.

Trigger Handle Options

	OPTION #					
	A	B	C	D	E	F
3321/2/3/4 with TE300/450/470*/480 Control	3315	·	·	3313	·	·
3327/8 with TE300/450/470*/480 Control	3315	·	·	3314	·	·
3321/2/3/4 only with TE470* Control	·	3317	·	·	3319	·
3327/8 only with TE470* Control	·	3317	·	·	3320	·
3321/2/3/4 only with TE470** Control	·	·	3315	·	·	3313
3327/8 only with TE470** Control	·	·	3315	·	·	3314
302X C-Guns with TE470*/480 & 1253/54(560) Controls	3103	3193	·	3101	3191	·
303X-304X C-Guns with TE470*/480 & 1253/54(560) Controls	3104	3194	·	3102	3192	·
312X Scissor Guns with TE470*/480 & 1253/54(560) Controls	3103	3193	·	3101	3191	·
315X-316X Scissor Guns with TE470*/480 & 1253/54(560) Controls	3104	3194	·	3102	3192	·

* = TE470 Option 3310, 2-Program Selector Handles

** = TE470 Option 3305, Single 4-Position Selector

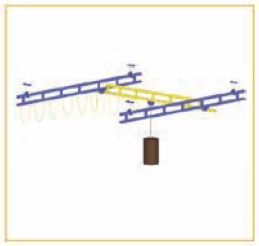
· = n/a not applicable

ACCESSORIES (available for Heavy-Duty, Medium-Duty and Light-Duty Spot Welding Guns)

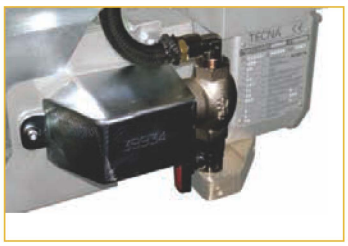
Check out **www.TECNADirect.com** for the complete line of Accessories.

Option 3180:
Proportional Valve

Special Arms for Welding Steel Wire
and Reinforcing Bar (ReBar)



Welding Gun
Suspension and Cranes



Optional Water Flow Switch

Air Filter / Regulator

Option 3180: Proportional Valve: Allows programming of weld force from within each weld program, and allows monitoring of weld force within the weld control.

Options 4836 / 4837 / 4838 / 4839 / 4847 / 4848 / 4849: Special Arms for Welding Steel Wire and Reinforcing Bar (ReBar).

Welding Gun Suspension and Cranes: Ceiling-Mounted Monorails and Bridge Rails, Floor-Mounted Bridge Rails and Jib Cranes, and Beam Mounted Jib Cranes

Optional Water Flow Switch: Water flow switch prevents the weld gun from welding if cooling waterflow is not detected.

Air Filter / Regulator (one is included with each weld gun).

TECNA DIRECT.COM

Industrial Resistance Welders and Tool Balancers

4943 Driscoll Road · Warrensville Heights, OH 44146 USA

Spot | Projection | Seam | Butt | Capacitor Discharge
Resistance / MIG / TIG / Plasma Automation & Robotics
Consumables | Accessories | Engineering | Service

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WEMCO An Association of Welding Manufacturers

20001-E-03-18-10