Fab Auto
Schnelldorfer

SCHNELLDORFER MASCHINENBAU

Schnelldorfer LinearWeld

Quick Start Guide

Includes how to:

Start Up/Shut Down

Set Up Jobs

Solve Problems

Store Data

Perfect Welds Together

Fab Auto
Schnelldorfer

SCHNELLDORFER MASCHINENBAU

Schnelldorfer LinearWeld

Table of Contents

Fab Auto
Schnelldorfer

SCHNELLDORFER MASCHINENBAU

LinearWeld Power Up Procedure

- Open gas supply 1 revolution, all bottles *(Picture 1)*
- Open compressed air valve (pg. 33 sec. 7.2) *(Picture 2)*
- Turn electric on at panel, wait for control to boot up (pg. 35 sec. 8.1.2) *(Picture 3)*
- Press Plant On button (pg. 37 sec. 8.2.1) *(Picture 4)*
- Press the Next button on the display screen (pg. 41 sec. 8.4.4) *(Picture 5)*
- Press the Home Position Travel button on display screen (pg. 41 sec. 8.4.5 step 1) *(Picture 6)*
- Press the Start button on the display screen (pg. 42 sec. 8.4.5 step 2) *(Picture 7)*
- Press the Home Icon button on the display screen (pg. 42 sec. 8.4.5 step 3) *(Picture 7)*
- Press the Gas Test button on the display screen (pgs. 44 & 45 sec. 8.4.2.1) *(Picture 8)*

Fab Auto
Schnelldorfer

LinearWeld Power Up Procedures

Picture 1

Picture 2

Picture 3

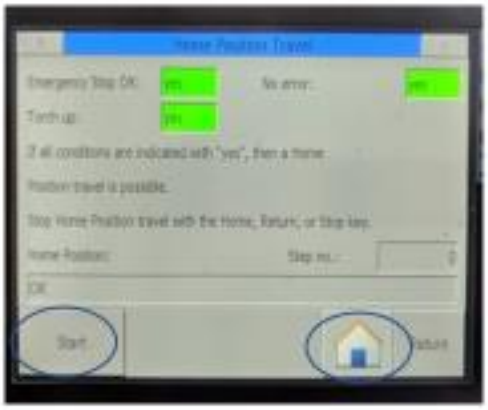
Picture 4

Fab Auto
Schnelldorfer

LinearWeld Power Up Procedures

Picture 5

Picture 6



Picture 7

Picture 8

Perfect Welds Together

Fab Auto
Schnelldorfer

SCHNELLDORFER MASCHINENBAU

LinearWeld Power Down Procedure

- Save any changes made to existing program (pg. 66 sec. 8.4.2.11.2)
- Press Plant Off button (pg. 37 sec. 8.2.2) *(Picture 1)*
- Clean welding blocks and clamping fingers *(Picture 2)*
- Close gas supply, all bottles *(Picture 3)*
- Close compressed air valve (pg. 33 sec. 7.2)
- Turn electric Off at panel (pg. 35 sec. 8.1.2) *(Picture 4)*

Fab Auto
Schnelldorfer

LinearWeld Power Down Procedures

Picture 1

Picture 2

Picture 3

Picture 4

Fab Auto
Schnelldorfer

SCHNELLDORFER MASCHINENBAU

Maintenance Checklist
LinearWeld

POST ON THE MACHINE CONTROL PANEL FOR DAILY VIEWING

DAILY MAINTENANCE:

Visual Inspection:

1. Nozzle
   - *Remove,* inspect for cracks, clean off burn marks
   - *Replace*, if cracked
2. Tungsten stick
   - *Check* height
   - *Grind* in tungsten grinder, if necessary
   - *Replace*, if necessary
3. Diffuser
   - *Clean* any residue
   - *Look* for clean path for welding gas
   - *Replace* if cleaning does not clear the debris
4. Gas bottles
   - *Check* gas volume remaining in each bottle
   - *Check* Liter pressure to the NimbleSafe – match set-up instructions?
   - Gas test – getting good gas pressure at all 4 locations?
5. Check air filter of compressed air input for excessive dirt or moisture
6. Copper
   - *Pul*l copper, check gas holes to insure gas flow
   - If badly stained*, clean* copper with rag & acetone
     - use scotch brite gently if necessary
   - *Inspect* for good condition, replace as necessary

WEEKLY MAINTENANCE:

Daily Maintenance, plus **Clean** these devices at least once per week

1. Copper
2. Diffuser
3. Air Filter in air line
4. Filter on Chiller (some chillers do not have a filter)

MONTHLY MAINTENANCE:

Daily & Weekly Maintenance, plus

1. *Check* the air & gas lines for leaks
2. *Replace* the Air Filter for the incoming compressed air
3. *Inspect* the sliding surfaces of the torch axis
   - *Clean & Spray* with a Teflon grease, if necessary

Perfect Welds Together

Fab Auto
Schnelldorfer

SCHNELLDORFER MASCHINENBAU

Image 1 – Incorrectly ground tungsten in holder

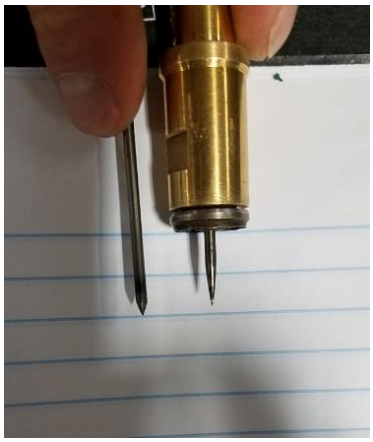
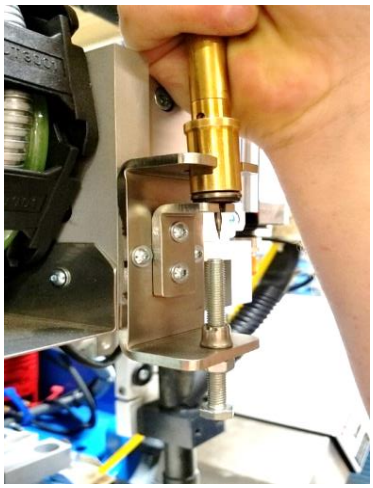


Image 2 – Diffuser not cleaned regularly

Image 3 – Tungsten height not properly set



Perfect Welds Together

Fab Auto
Schnelldorfer

SCHNELLDORFER MASCHINENBAU

LinearWeld Job Set-Up Procedure

After Power Up procedure

- Press the Gas Test button on the display screen *(Picture 1)*
- Press Open Lock button (pgs. 171-173 sec. 8.4.5) *(Picture 2)*
- Press Center Stop Down button (pgs. 171-173 sec. 8.4.5) *(Pictures 3a and 3b)*
- Load the part (pgs. 171-173 sec. 8.4.5) *(Picture 4)*
- Press Lock Down button (pgs. 171-173 sec. 8.4.5) *(Picture 5)*
- Hold part against end stop (pgs. 171-173 sec. 8.4.5)
- Hold the back side of part against center stop (pgs. 171-173 sec. 8.4.5)
- Clamp back fingers *(Picture 6)* (pgs. 171-173 sec. 8.4.5)
- Push front side of part against center stop (pgs. 171-173 sec. 8.4.5)
- Clamp front fingers once (this is the soft clamp and the center stop will move out of position – *(Picture 7)* (pgs. 171-173 sec. 8.4.5)
- Push front side of part to close gap between front side and back side of the part *(Pictures 8a and 8b)* (pgs. 171-173 sec. 8.4.5)
- Press front fingers again to hard clamp *(Picture 9)* (pgs. 171-173 sec. 8.4.5)
- Manually raise the torch further, at least 2 revolutions using knurled knob *(Picture 10)*
- Remove the torch nozzle *(Picture 11)*
    - If the tip is dirty (see examples – *Pictures 12, 13, 14*)
        - Remove electrode assembly
        - Grind the tip in a tungsten grinder
        - Set the length in the fixture
        - Re-install into the torch assembly
- Remove back shielding nozzle for better sight of the torch tip *(Picture 15)*
- Set electrode height to part (pg. 120 sec. 7.5.7.1) *(Picture 16)*
- Press the Manual Torch Travel button on the display screen (pg. 120 sec. 7.5.7.1) *(Picture 17)*
    - Set Torch Travel distance to Max Travel (pg. 120 sec. 7.5.7.1) *(Picture 18)*
- Position electrode over part *(Picture 19)*
- Press Torch Down button on display screen *(Picture 20)*

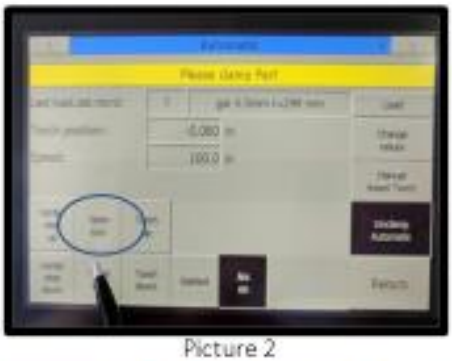
Perfect Welds Together

- Set electrode needle over the part manually to proper height (approx. 1mm above part) by using a feeler gauge *(Picture 21)*
  - See manual (pgs. 166-167 sec. 8.3.2.1)
- Press the Torch Up button *(Picture 22)*
- Reassemble the torch nozzle & ground *(Picture 23)*
- Press the Torch Down button *(Picture 24)*
- Manually lock the shield gas housing just above the part *(Picture 25)*
- Press the Torch Up button *(Picture 26)*
- Press Return to auto screen *(Picture 27)*
- Load a program - material type & thickness (Possibly part number for special programs or tooling)
  - Press the Load button on the display screen *(Picture 28)*
  - Enter user name (Training level dependent) *(Picture 29)*
  - Enter password (Training level dependent) *(Picture 29)*
  - Press OK button on the display screen *(Picture 30)*
  - Press the Load button on the display screen *(Picture 31)*
  - Choose the correct program *(Picture 32)*
  - Press the Load button on the display screen *(Picture 33)*
  - Press the Yes button on the display screen *(Picture 34)*
- Press the Home Icon button *(Picture 35)*
- Push flashing Start button to start the weld *(Picture 36)*

Fab Auto
Schnelldorfer

Job Set-Up Procedures

Picture 1



Picture 2

Picture 3a

Picture 3b

Picture 4

Picture 5

Fab Auto
Schnelldorfer

Job Set-Up Procedures (cont.)

Picture 6

Picture 7

Picture 8a

Picture 8b

Picture 9

Picture 10

Fab Auto
Schnelldorfer

Job Set-Up Procedures (cont.)

Picture 11

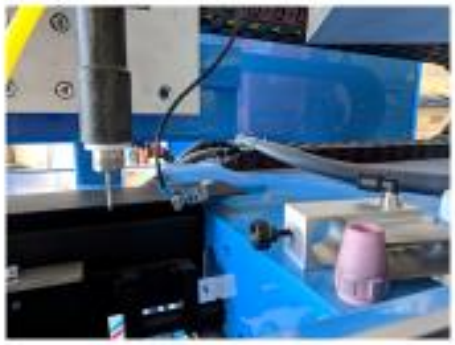
Picture 12

Picture 13

Picture 14

Fab Auto
Schnelldorfer

Job Set-Up Procedures (cont.)



Picture 15

Picture 16

Picture 17

Picture 18

Picture 19

Picture 20

Fab Auto
Schnelldorfer

Job Set-Up Procedures (cont.)

Picture 21

Picture 22

Picture 23

Picture 24

Fab Auto
Schnelldorfer

Job Set-Up Procedures (cont.)

Picture 25

Picture 26

Picture 27

Picture 28

Fab Auto
Schnelldorfer

Job Set-Up Procedures (cont.)

Picture 29

Picture 30

Picture 31

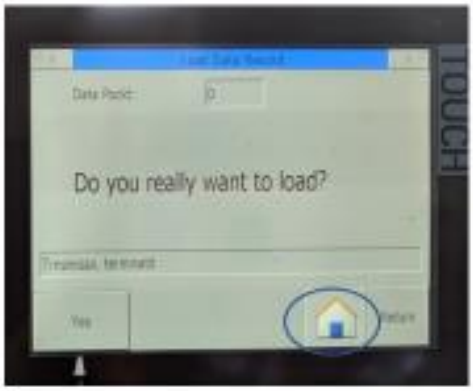
Picture 32

Fab Auto
Schnelldorfer

Job Set-Up Procedures (cont.)

Picture 33

Picture 34



Picture 35

Picture 36

Fab Auto
Schnelldorfer

SCHNELLDORFER MASCHINENBAU

Set-Up Data Page for Each Program
Elena LinearWeld

PLEASE KEEP THE SET-UP PAGE IN A BINDER NEAR THE MACHINE SO THE OPERATOR CAN USE THIS TO CORRECTLY SET UP & POSITION THE TOOLING FOR EACH PROGRAM BEING USED

PROGRAM NUMBER: _____

Material Type: _____

Material Thickness: _____

Needle Type: _____

Needle Diameter: _____

Backing Block material: _____

Backing Block Size: _____
(special tool or segment sizes, Back to Front)

Clamp Finger material: _____

Clamp Finger Size: _____

Clamp Finger Distance to Weld Bead: _____ {position copper after 1st test weld}

Weld Gas setting: _____

Trail Gas setting: _____

Backing Gas setting: _____

Clamping Gas setting: _____

Perfect Welds Together

Fab Auto
Schnelldorfer

SCHNELLDORFER MASCHINENBAU

Problems and Solutions at Welding with the SeamWeld Machine

Problem: **Coloration**
Solution:
- Switch gas on (flowmeter, machine parameter, valve)
- Adjust Carrie gas nozzle (direction, after torch)
- Gas flow times before and after
- Adjust gas pressure
- Clean material in front of welding

Problem: **Penetration too low**
Solution:
- More current I-O
- Lower speed
- Less wire-filler

Problem: **Penetration too high**
Solution:
- Less current
- Higher speed
- More wire-filler

Problem: **Hole on the Start Point**
Solution:
- Less start current I-O
- Less pre-weld time
- Higher upslope
- Adjust start point more in material

Problem: **Hole in Welding End**
Solution:
- Less end current I-E
- Less post-weld time
- Lower downslope
- Higher downslope length
- Adjust welding-end more in material

Problem: **Holes during welding**
Solution:
- Clamping without gap

Perfect Welds Together

- Adjust tungsten in the middle
- Clean material

Problem: **No Arc**
Solution:
- Turn direction (Start point should be lower than welding end)
- Adjust the Tungsten high (Same distance as material thickness)
- Switch Arc on (Automatic menu)

Problem: **Pores and bad welding**
Solution:
- Switch gas on
- Take care on Airflow (Fans, open windows and doors)
- Choose the right operation (DC- or AC for Aluminum)
- Change Tungsten (DC- = Blue 30°) (AC = green, point)

Problem: **Wire fixed on the welding end**
Solution:
- Higher cold-wire hold-time
- Lower cold-wire lead-time
- Higher cold-wire downslope length

Problem: **Welding overlap on one side**
Solution:
- Adjust Tungsten in the middle
- Adjust Copper-Clamping-Finger parallel
- Check if bending is between 60-80% overlapping

Problem: **Holes During the Welding**
Solution:
- Clamping without gap
- Adjust tungsten in the middle
- Clean material

Problem: **Gap will not close**
Solution:
- Try to minimize the gap manually and weld with Filler-wire
- Higher cold-wire speed

Seam Welder Data Storage

Data storage begins on automatic screen *(Picture 1)*

- **Save changes made to an existing program name**
  - Press Return button *(Picture 1)*
  - Press Data Storage *(Picture 2)*
  - Press Store Data Record (*Picture 3)*
  - Enter ID number *(Picture 4)*
  - Press Store *(Picture 4)*
  - Press Yes *(Picture 5)*
  - Question – Do you want to override existing ID Number? *(Picture 6)*
  - Press Yes *(Picture 6)*
  - Press Home Icon button *(Picture 6)*

Fab Auto
Schnelldorfer

SCHNELLDORFER MASCHINENBAU

Save changes to an existing program name

Picture 1

Picture 2

Picture 3

Picture 4

Picture 5

Picture 6

- **Copy a program under a new name**
  - Press Return *(Picture 1)*
  - Press Data Storage *(Picture 2)*
  - Press Data Record Management *(Picture 3)*
  - Select program using blue up or down arrow *(Picture 4)*
  - Press Disc Icon *(Picture 5)*
  - Save As pop up, Change ID number and name *(Picture 6)*
  - Save As pop up, Press OK - New name will appear on the program menu
  - Press Home Icon *(Picture 7)*

Fab Auto
Schnelldorfer

Copy a program under a new name

Picture 1

Picture 2

Picture 3

Picture 4

Picture 5

Picture 6

Picture 7

- **Change a program name**
  - Press Return *(Picture 1)*
  - Press Data Storage *(Picture 2)*
  - Press Data Record Management *(Picture 3)*
  - Select program to be changed using the blue up or down arrow *(Picture 4)*
  - Press the B – A Icon *(Picture 5)*
  - Rename pop up, Change the ID number and name *(Picture 6)*
  - Rename pop up, Press OK *(Picture 6)*
  - Press the Home Icon *(Picture 7)*

Fab Auto
Schnelldorfer

Change a program name

Picture 1

Picture 2

Picture 3

Picture 4

Picture 5

Picture 6

Picture 7

- **Load programs to and from a Flash Drive**
  - Press Return *(Picture 1)*
  - Press Data Storage *(Picture 2)*
  - Press Data Record Management *(Picture 3)*
  - Press Flash Drive icon – Blue for data from flash drive or Green for data to the flash drive (Password pop up Production management ID number and Password is required) *(Picture 5)*
    - **Use a dedicated Flash Drive for NimbleSafe programs only**
    - **The NimbleSafe will only transfer entire content of Welder on Flash Drive**
  - Press the Home Icon *(Picture 6)*

Fab Auto
Schnelldorfer

Load programs to and from a flash drive

Picture 1

Picture 2

Picture 3

Picture 4

Picture 5

Picture 6

Perfect Welds Together

Fab Auto Schnelldorfer

SCHNELLDORFER MASCHINENBAU

Welding Parameter Stainless Steel

Parameter Name		316L 1.2mm Pulse	316L 1,2mm Re to Fr	316L 1,2 PUL Fr>Re	316L 1,5mm Argon	316L 1,5mm Re to fr	316L 2,0mm Pulse	316L 0,3mm	316L 0,5mm	316L 1,0mm	316L 1,5mm	316L 2,0 mm	316L 2,5mm	316L 3,0mm
Parameter Number		**12**	**13**	**14**	**15**	**16**	**20**	**103**	**105**	**110**	**115**	**120**	**125**	**130**
Welding Parameter	**Unit**													
No. of Segments	**Segments**	1	1	1	1	1	1	1	1	1	1	1	1	1
Start point 1	mm	25.7706	440	13.67929	8.785492	440	122.8486	5	356.5	439.3382	1	1	0	18
Welding length 1	mm	501.5795	506.4842	441.7457	74	506.4842	421.0594	295	502	506.4842	200	200	200	185
Welding Speed	cm/min	70	70	70	65	65	50	150	100	70	60	50	40	25
Gas pre-flowtime	sec	2	2	2	2	2	2	1	2	2	2	2	2	2
Gas after-flowtime	sec	2	2	2	2	2	2	2	2	2	4	4	4	4
Parkposition	mm	300	300	300	300	300	300	0	300	300	0	0	0	0
Gas pre-flowtime torch	sec	2	2	2	2	2	2	2	2	2	2	2	2	2
pre-weldtime	sec	0.1	0.1	0.1	0.1	0.1	0.1	0	0.1	0.1	0.2	0.2	0.2	0.2
Startcurrent I-S	A	40	40	40	40	40	85	8	20	40	90	100	120	170
Upslope	sec	0.2	0.2	0.2	0.2	0.2	0.2	0.4	0.2	0.2	0.4	0.4	0.4	0.4
Maincurrent I-O	A	100	95	100	100	100	120	25	65	85	105	130	170	240
No. Of Switch length		0	0	0	0	0	0	0	0	0	0	0	1	0
Downslope length	mm	2.5	2.5	2.5	2.5	2.5	2.5	3	3	3	5	5	5	5
Downslope	sec	0.3	0.3	0.3	0.3	0.3	0.3	0.2	0.3	0.3	0.5	0.5	0.2	0.2
End Current I-E	A	25	25	25	25	25	46	6	12	20	80	100	140	140
post-weldtime	sec	0.3	0.3	0.3	0.3	0.3	0.1	0	0.1	0.1	0.1	0.1	0.1	0.1
Gas after-flowtime torch	sec	8	8	8	8	8	8	2	8	8	2	2	2	2
Welding Machine Parameter														
Type of Operation	DC- / AC	DC-	DC-	DC-	DC-	DC-	DC-	DC-	DC-	DC-	DC-	DC-	DC-	DC-
Second Current	%	70	70	70	70	70	70	0	70	70	90	90	90	90
Frequency	Hz	65	65	65	65	65	65	0.2	65	65	90	90	90	90
DC-Balance	%	20	20	20	20	20	20	10	10	20	10	10	10	20
AC-Balance	%	0	0	0	0	0	0	0	0	0	0	0	0	0
Pulse	on / off	on	off	on	off	off	off	off	on	on	off	off	on	on
Coldwire Parameter														
Coldwire	on / off	off	off	off	off	off	on	off	off	off	off	off	off	off
Coldwire delay time	sec	0.1	0.1	0.1	0.1	0.1	0.1	0	0.1	0.1	0	0	0	0
Speed Wirefiller	cm/min	50	50	50	50	50	50	1	50	50	1	1	1	1
No. Of switch length	No.	0	0	0	0	0	0	0	0	0	0	0	0	0
Downslope length	mm	0	0	0	0	0	0	0	0	0	0	0	0	0
Wire Holdtime	sec	0.2	0.2	0.2	0.2	0.2	0.3	0	0.2	0.2	0	0	0	0
Wire Leadtime	sec	0	0	0	0	0	0	0	0	0	0	0	0	0
Tack Parameter														
Tack	on / off	off	off	off	off	off	off	off	off	off	off	off	off	off
No. Of Tacks	No.	5	5	5	5	5	1	1	5	5	1	1	1	1
Tack position 1	mm	400	10	400	10	10	79.8	0	10	10	198	0	0	0
Tack position 2	mm	375	11	375	11	11	0	0	11	11	0	0	0	0
Tack position 3	mm	350	12	350	12	12	0	0	12	12	0	0	0	0
Tack position 4	mm	325	13	325	13	13	0	0	13	13	0	0	0	0
Tack position 5	mm	40	15	40	15	15	0	0	15	15	0	0	0	0
Tack Time	sec	1	1	1	1	1	2	0	1	1	2	0	0	0
Tack Current	A	40	80	40	80	80	80	3	80	80	80	3	3	3
Gas after Flowtime	sec	1	0	1	0	0	0	0	0	0	2	0	0	0
Coldwire	on / off	off	off	off	off	off	off	off	off	off	off	off	off	off
Coldwire Delaytime	sec	0	0	0	0	0	0	0	0	0	0	0	0	0
Coldwire Speed	cm/min	1	1	1	1	1	1	1	1	1	1	1	1	1
Machine Parameter														
Parkposition	on / off	on	on	on	on	on	on	off	on	on	off	off	off	off
Partstop position	mm	0	0	90	90	0	0	190	0	0	190	190	190	90
Back sheelding gas	on / off	on	on	on	on	on	on	on	on	on	on	on	on	on
Carrie gas (sheelding nozzle)	on / off	on	on	on	on	on	on	on	on	on	on	on	on	on
Direction	fr>re / re>fr	re>fr	re>fr	fr>re	fr>re	re>fr	fr>re	fr>re	re>fr	re>fr	fr>re	fr>re	fr>re	fr>re

Perfect Welds Together

Fab Auto Schnelldorfer

SCHNELLDORFER MASCHINENBAU

Welding Parameters - Carbon Steel

Parameter Name		MS 1,0mm	MS 1,2mm	MS 1,5mm	MS 2,0mm	MS 2,0 mm	MS 2,0 + Wire	MS 2,5mm	MS 3,0mm
Parameter Number		**210**	**212**	**215**	**220**	**221**	**223**	**225**	**230**
Welding Parameter	**Unit**								
No. of Segments	**Segments**	1	1	1	1	1	1	1	1
Start point 1	mm	2	13.2135	1	1	13.2135	13.2135	1	1
Welding length 1	mm	201	317.451	201	201	317.451	277.7179	200	200
Welding Speed	cm/min	60	45	60	50	38	38	40	30
Gas pre-flowtime	sec	0	0	0	0	0	0	0	0
Gas after-flowtime	sec	0	0	0	0	0	0	0	0
Parkposition	mm	0	0	0	0	0	0	0	0
Gas pre-flowtime torch	sec	2	2	2	2	2	2	2	2
pre-weldtime	sec	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3
Startcurrent I-S	A	60	75	75	95	85	85	115	115
Upslope	sec	0.4	0.4	0.4	0.4	0.4	0.4	0.5	0.5
Maincurrent I-O	A	83	123	120	165	160	130	235	235
No. Of Switch length		0	0	0	0	0	0	0	0
Downslope length	mm	3	3	3	2	3	3	2	4
Downslope	sec	0.2	0.3	0.3	0.2	0.3	0.3	0.2	0.6
End Current I-E	A	30	50	50	60	65	65	60	100
post-weldtime	sec	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0
Gas after-flowtime torch	sec	2	2	2	2	2	2	2	5
Welding Machine Parameter									
Type of Operation	DC- / AC	DC-	DC-	DC-	DC-	DC-	DC-	DC-	DC-
Second Current	%	90	90	90	90	90	90	90	90
Frequency	Hz	90	90	90	90	90	90	90	90
DC-Balance	%	10	10	10	10	10	10	10	10
AC-Balance	%	0	0	0	0	0	0	0	0
Pulse	on / off	off	off	off	off	off	off	off	off
Coldwire Parameter									
Coldwire	on / off	off	off	off	off	off	on	off	off
Coldwire delay time	sec	0	0	0	0	0	0.2	0	0
Speed Wirefiller	cm/min	1	1	1	1	1	60	1	1
No. Of switch length	No.	0	0	0	0	0	0	0	0
Downslope length	mm	0	0	0	0	0	3	0	0
Wire Holdtime	sec	0	0	0	0	0	0.3	0	0
Wire Leadtime	sec	0	0	0	0	0	0	0	0
Tack Parameter									
Tack	on / off	off	off	off	off	off	off	off	off
No. Of Tacks	No.	1	1	1	1	1	1	1	1
Tack position 1	mm	0	0	0	0	0	0	0	200
Tack position 2	mm	0	0	0	0	0	0	0	0
Tack position 3	mm	0	0	0	0	0	0	0	0
Tack position 4	mm	0	0	0	0	0	0	0	0
Tack position 5	mm	0	0	0	0	0	0	0	0
Tack Time	sec	0	0	0	0	0	0	0	3
Tack Current	A	3	3	3	3	3	3	3	150
Gas after Flowtime	sec	0	0	0	0	0	0	0	0
Coldwire	on / off	off	off	off	off	off	off	off	off
Coldwire Delaytime	sec	0	0	0	0	0	0	0	0
Coldwire Speed	cm/min	1	1	1	1	1	1	1	1
Machine Parameter									
Parkposition	on / off	off	off	off	off	off	off	off	off
Partstop position	mm	190	90	190	190	90	90	190	190
Back sheelding gas	on / off	off	off	off	off	off	off	off	off
Carrie gas (sheelding nozzle)	on / off	off	off	off	off	off	off	off	off
Direction	fr>re / re>fr	fr>re	fr>re	fr>re	fr>re	fr>re	fr>re	fr>re	fr>re

Perfect Welds Together

Fab Auto Schnelldorfer

SCHNELLDORFER MASCHINENBAU

Welding Parameters - Aluminum · Brass

Parameter Name		ALMG3_1,0	ALMG3_1,5	ALMG3_2,0	ALMG_2,5	ALMG3_3,0	AL 1.2	BR 2,0mm
Parameter Number		**310**	**315**	**320**	**325**	**330**	**512**	**720**
Welding Parameter	**Unit**							
No. of Segments	**Segments**	1	1	1	1	1	1	1
Start point 1	mm	2	5	2	5	4	15	13.2135
Welding length 1	mm	295	295	295	295	510	280	182.6117
Welding Speed	cm/min	60	60	60	60	40	45	20
Gas pre-flowtime	sec	0	0	0	0	0	2	0
Gas after-flowtime	sec	0	0	0	0	0	2	0
Parkposition	mm	0	0	0	0	0	300	0
Gas pre-flowtime torch	sec	2	2	2	2	2	2	2
pre-weldtime	sec	0.3	0	0.5	1	1	0.1	0.2
Startcurrent I-S	A	40	40	60	40	180	65	75
Upslope	sec	0.2	0.4	0.4	0.4	2	0.2	0.4
Maincurrent I-O	A	100	150	220	200	250	115	170
No. Of Switch length		0	0	0	0	0	0	0
Downslope length	mm	5	5	5	5	10	2.5	3
Downslope	sec	0.5	1	1	1	1	0.3	0.3
End Current I-E	A	20	40	40	40	150	40	55
post-weldtime	sec	0	0	0	0	0.1	0.3	0.1
Gas after-flowtime torch	sec	2	2	2	2	8	8	2
Welding Machine Parameter								
Type of Operation	DC- / AC	AC	AC	AC	AC	AC	AC	DC-
Second Current	%	0	0	0	0	0	70	90
Frequency	Hz	0.2	0.2	0.2	0.2	0.2	65	90
DC-Balance	%	10	10	10	10	10	20	10
AC-Balance	%	2	2	2	2	-1	2	0
Pulse	on / off	off	off	off	off	off	off	off
Coldwire Parameter								
Coldwire	on / off	off	off	off	off	off	off	off
Coldwire delay time	sec	0	0	0	0	0	0.1	0
Speed Wirefiller	cm/min	1	1	1	1	1	50	1
No. Of switch length	No.	0	0	0	0	0	0	0
Downslope length	mm	0	0	0	0	0	0	0
Wire Holdtime	sec	0	0	0	0	0	0.2	0
Wire Leadtime	sec	0	0	0	0	0	0	0
Tack Parameter								
Tack	on / off	off	off	off	off	off	off	off
No. Of Tacks	No.	1	1	1	1	2	5	1
Tack position 1	mm	290	290	290	290	500	280	0
Tack position 2	mm	0	0	0	0	250	250	0
Tack position 3	mm	0	0	0	0	0	200	0
Tack position 4	mm	0	0	0	0	0	150	0
Tack position 5	mm	0	0	0	0	0	100	0
Tack Time	sec	2	2	2	2	3	2	0
Tack Current	A	70	70	70	70	200	60	3
Gas after Flowtime	sec	3	3	3	3	0	1	0
Coldwire	on / off	off	off	off	off	off	off	off
Coldwire Delaytime	sec	0	0	0	0	0	0	0
Coldwire Speed	cm/min	1	1	1	1	1	1	1
Machine Parameter								
Parkposition	on / off	off	off	off	off	off	on	off
Partstop position	mm	190	190	190	190	192	90	90
Back sheelding gas	on / off	off	off	off	off	off	off	off
Carrie gas (sheelding nozzle)	on / off	off	off	off	off	off	off	off
Direction	fr>re / re>fr	fr>re	fr>re	fr>re	fr>re	fr>re	fr>re	fr>re

Perfect Welds Together