

ONE-Series

The most economical way to weld

Product catalog 2022

Corner seam welding machines

CORNER **ONE**

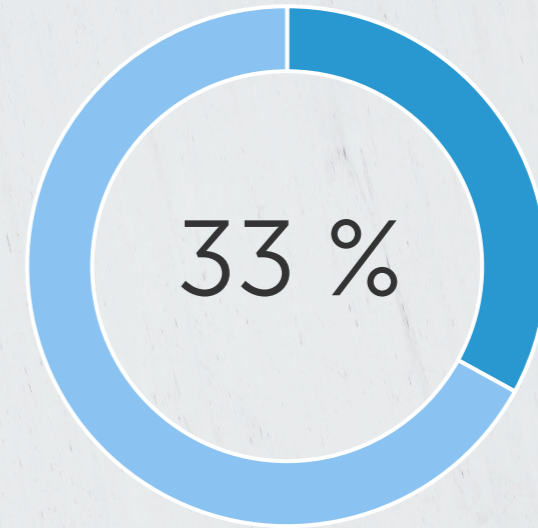


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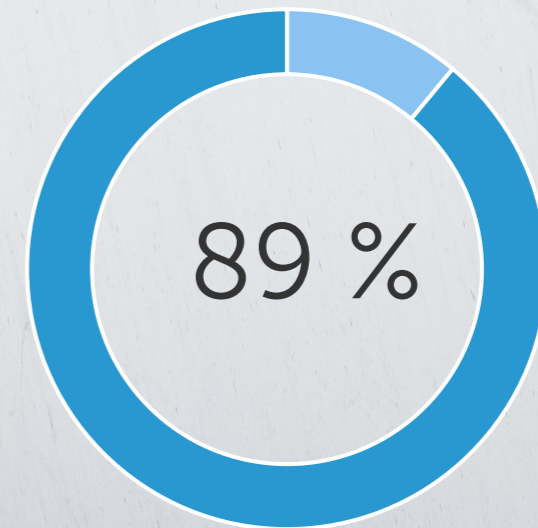
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The fascination of corner seam welding incredible increase in efficiency

during the welding process



of the overall process











CORNER ONE 160

Food technology and kitchen makers,
 Tank and Equipment manufacturing,
 Job Shop
 HAVC industry
 Construction of machines and housings

CORNER ONE 320

Food technology and kitchen makers,
 Tank and Equipment manufacturing,
 Job Shop
 HAVC industry
 Construction of machines and housings
 Electric cabinet & boxes producers

	TIG
	00,50 mm - 02,00 mm
	10,00 mm - 160,00 mm
	70,00 mm - 1000,00 mm

	TIG
	00,50 mm - 02,00 mm
	10,00 mm - 320,00 mm
	70,00 mm - 1000,00 mm

Robotic Torch with trailing gas nozzle and 2D cross support

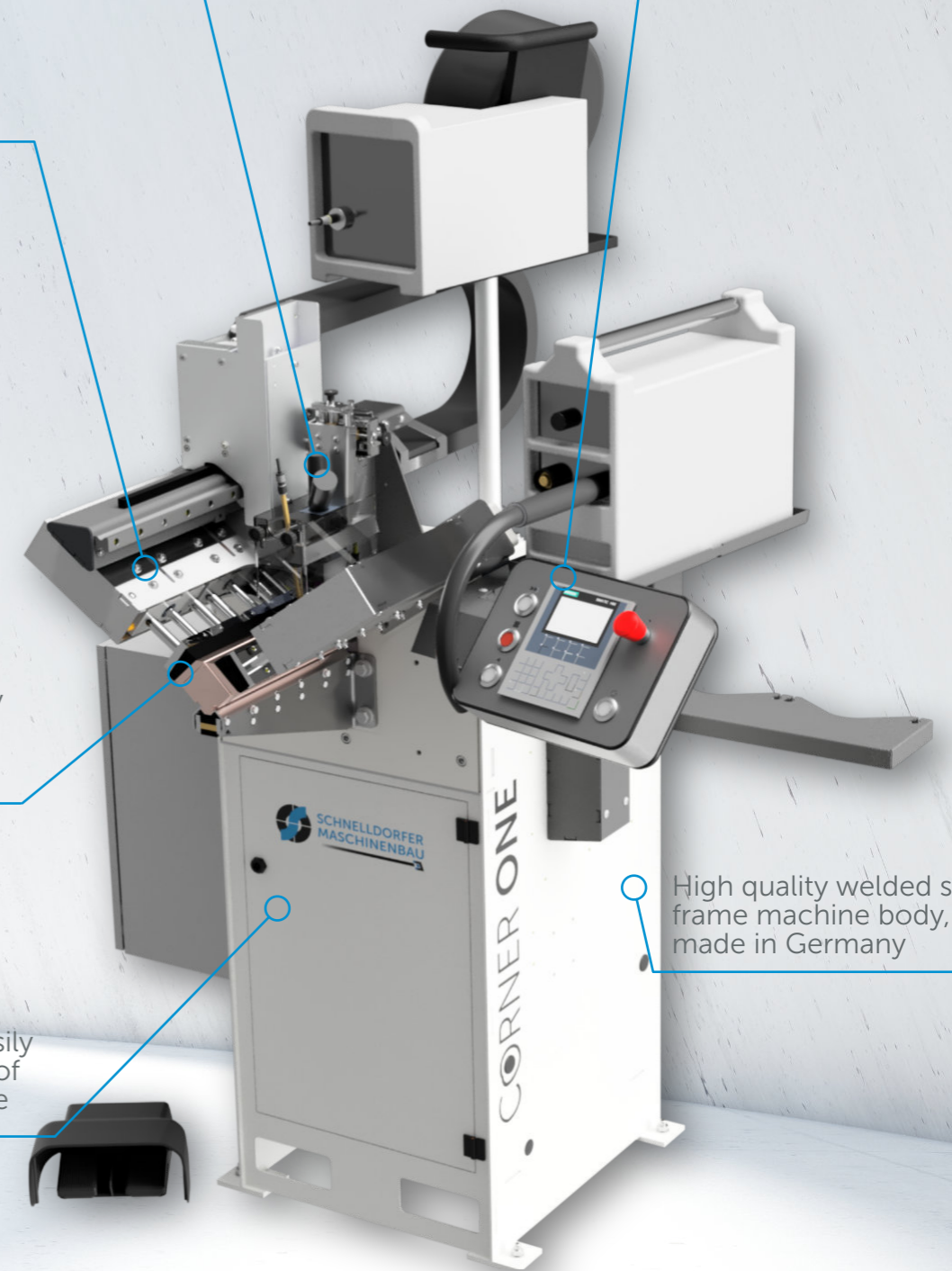
HMI-guided machine operation, through clear text display

Highly precise, quick and safe clamping of the workpieces

Setup time optimization by segmented clamping tool clamping

Machine technology easily accessible, for all types of setting and maintenance

High quality welded steel frame machine body, made in Germany



CORNER ONE revolutionizes corner welding

Now, there is a machine type which replaces manual corner seam welding

The **CORNER ONE** is part of our corner seam welding machines made in Germany, Welding of simple and rear lipped corner seam profiles on various parts is conducted impressively fast and more precise than ever – without reworking!



Manual welding



Manual welding and reworking

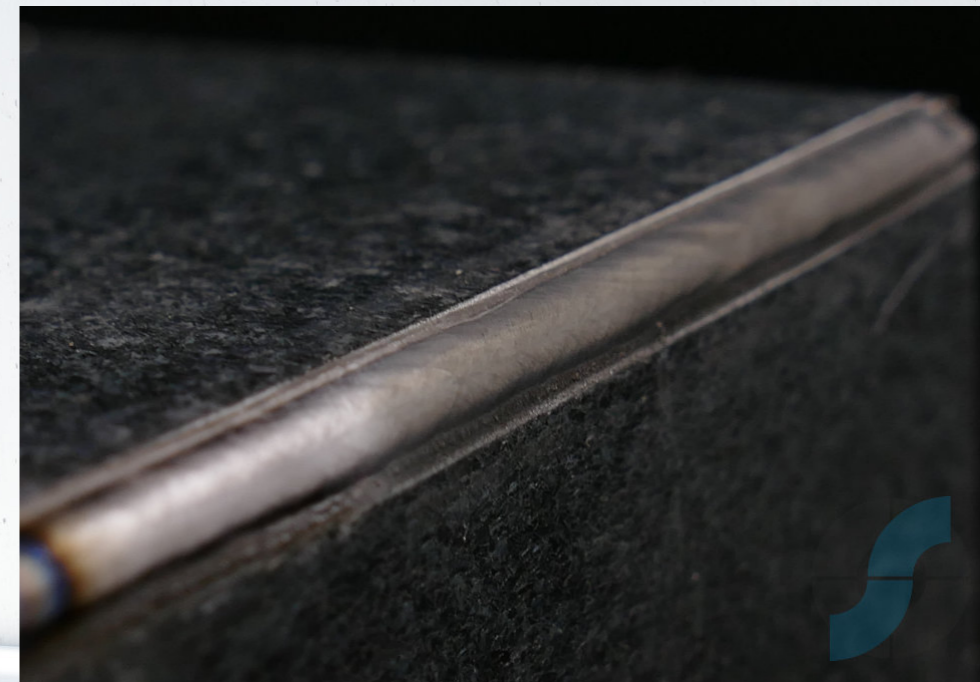


CORNERWELD machines

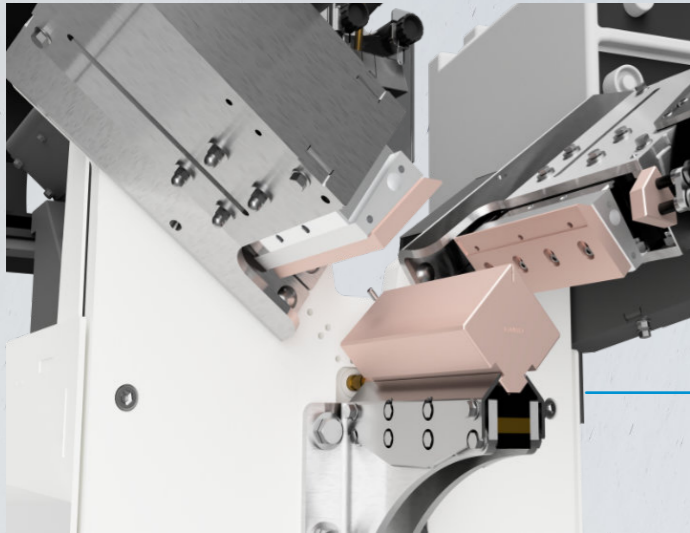
PERFECT WELDS

from the first part

This helps improving the quality of your products as well, particularly if you are interested in a professional design.
The increased quality level of your products strengthens your image, justifies higher prices and thus improves your chances on the market.



Upgrade your prospects!



The machine achieves **perfect welding seams** within a significantly shorter period of time.

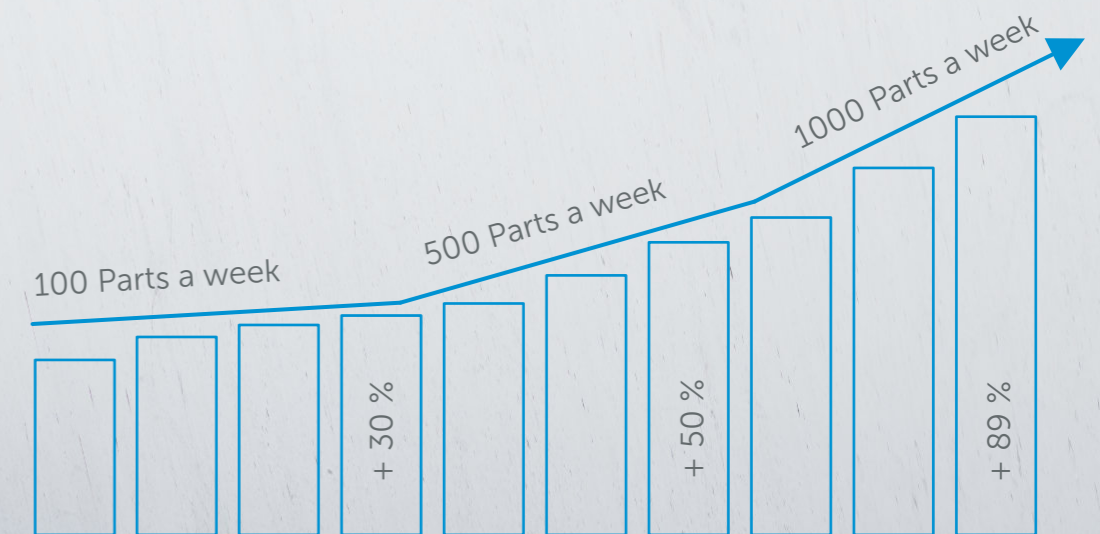
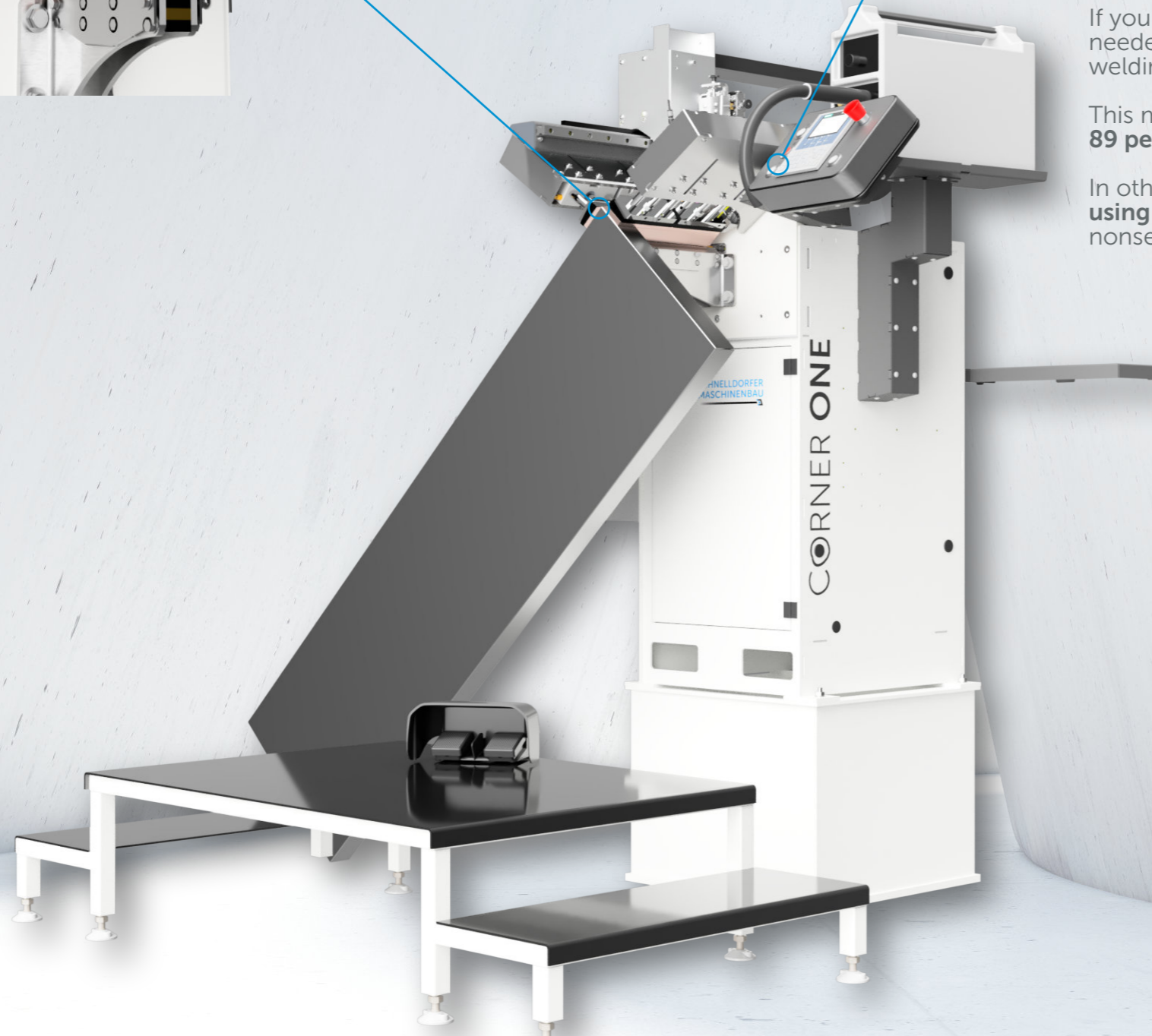
The average time saving just only **during the welding process** is amazing with **33 percent!**



If you want to argue honestly in favour of **CORNER ONE** you have to consider the time needed for reworking with manual welding as well. With CORNER ONE no reworking of welding seams is necessary any more.

This means that the **average time saving during the overall process is sensational with 89 percent!** Therefore, you simply need to use 11 percent of the usual time for the part.

In other words: **If you choose manual welding with corresponding reworking instead of using our CORNER ONE than you need 900 percent more time.** This is certainly total nonsense from an entrepreneurial point of view.



Corner seam welding is teamwork

The team of human and machines is crucial for success in corner seam welding.
If the operator is fit, the machine can call up its performance.
That's reason why a corner seam welding machine from **SCHNELLDORFER**
does everything it can to make the operator's job easier.

Let's have a **test**

Just send us some sample parts and we prove the perfection of our CORNERWELD machines!

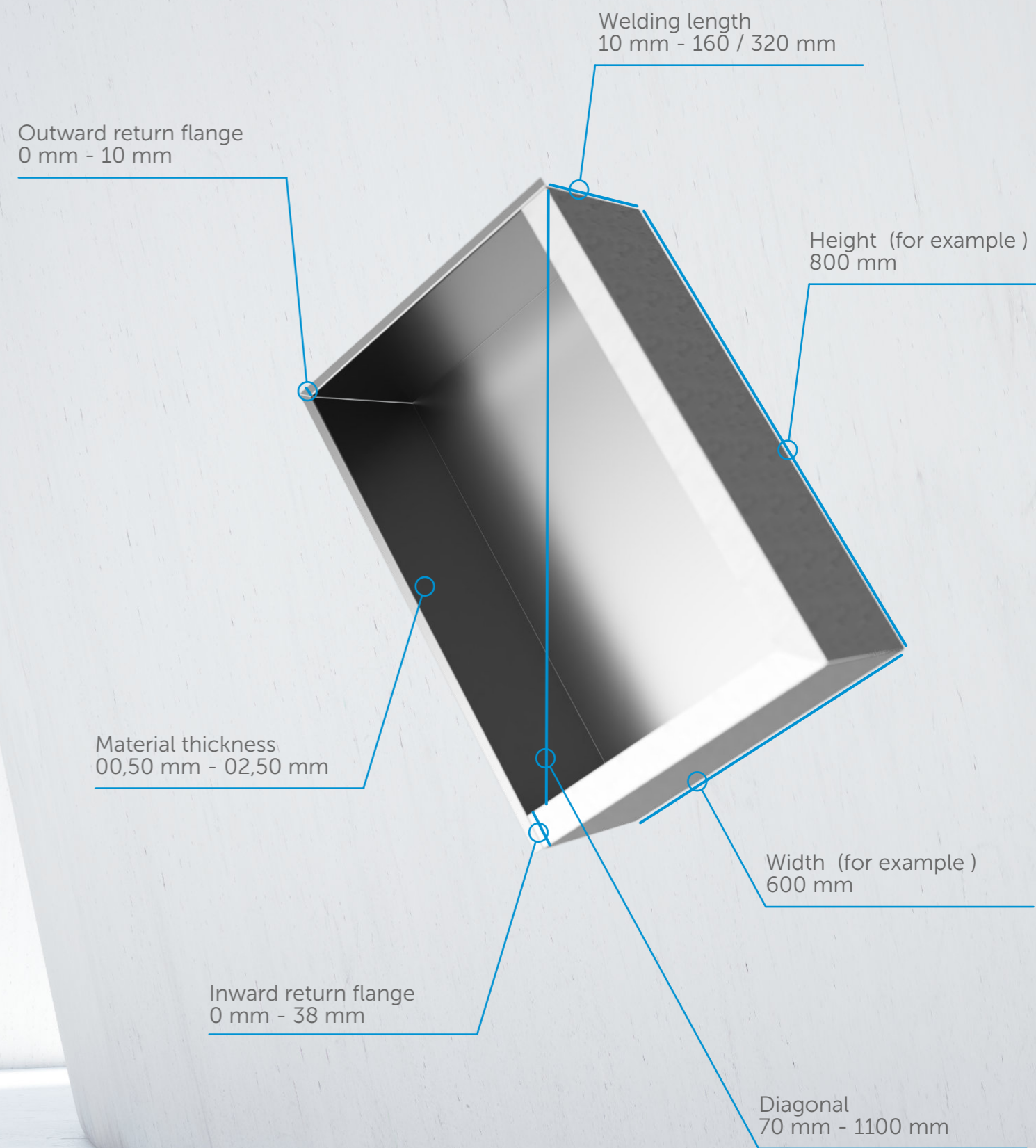
CORNER ONE 160



CORNER ONE 320



CORNER ONE	160	320
Max. welding length	160 mm	320 mm
Material type	Stainless Steel, Mild Steel, Galvanized Steel, Aluminium	
Material thickness	00,50 mm - 02,50 mm	
Inward return flange max.	38 mm	
Outward return flange max.	10 mm	
Internal clamping tool	Hard wearing cooper (CuCrZr)	
Clamping system	Pneumatic, Pre-clamp feature	
Arc Length	Constant (over whole welding length)	
Welding process	TIG	
Welding direction	free selectable	
Gas	Torch Gas, Backing Gas, Trailing Gas	
Cooling Circuit	Mandrel (Internal clamping tool), Torch	
Control	Siemens S7-1200	
Operator Panel	Siemens Panel KP 400, 4", colour display	
Motor	Schneider Electric LEXIUM (stepper motor)	
Welding Interface	2/4 stroke interface	
Standard	CE-Mark	
Electric Supply	400/230 Volt / 3 / N / PE; 50/60 Hz; TN-grid	
Air Supply	6 bar, dry, filtered	
Ambient Temperature	+ 10°C to + 35°C	
Weight	550 Kg	600 Kg



MACHINES



CORNER ONE

Item No.	Item	Info
21.0160.0000	CORNER ONE 160	160 mm welding length
21.0320.0000	CORNER ONE 320	320 mm welding length

COLOR

Item No.	Item	Info
21.0015.0001	Standard	White
21.0015.0002	Body color customized	Additional Grey
21.0015.0003	Complete customized	higher deliverytime

FUNCTION ITEMS



CLAMPING FINGER (PAIR)

Item No.	Item	Info
21.0011.0011	160 mm UNI	CU
21.0011.0012	160 mm GAS	CU
21.0011.0013	160 mm SOFT	Stainless Steel

BACKING BAR

Item No.	Item	Info
21.0160.0011	CU - Backing Block 160	CU
21.0160.0012	CU - Backing Segment set 160	CU
21.0160.0013	SS - Backing Block 160	Stainless Steel
21.0160.0014	SS - Backing Segment set 160	Stainless Steel
21.0320.0011	CU - Backing Block 320	CU
21.0320.0012	CU - Backing Segment set 320	CU
21.0320.0013	SS - Backing Block 320	Stainless Steel
21.0320.0014	SS - Backing Segment set 320	Stainless Steel
21.0320.0099	Special Segment Block 160	Customized
21.0320.0099	Special Segment Block 320	Customized

HARDWARE OPTIONS



HIGHTENING ELEMENTS

Item No.	Item	Info
21.0014.0250	250 mm	Incl. operator platform
21.0014.0500	500 mm	Incl. operator platform
21.0014.0501	Operator platform	470 mm

TRAILING GAS NOZZLE

Item No.	Item	Info
21.0016.0001	3 zone nozzle 90°	ABITIG MT 300 W
21.0016.0002	5 zone nozzle	ABITIG MT 300 W
21.0016.0009	Double 3 zone nozzle	ABITIG MT 300 W

GAS SETTING

Item No.	Item	Info
21.0020.0001	Rotameter L/min - ARGON	DE, AT, CH, CZ, BG, RU, RO, BE, LVA, TR, LT, BIH. PL, SI
21.0020.0002	Rotameter L/min - ARGON	GB, IN, VNM, SA, IRL
21.0020.0003	Rotameter L/min - ARGON	FIN
21.0020.0004	Rotameter L/min - ARGON	USA, BR
21.0020.0005	Rotameter L/min - ARGON	FR, ES, PT, GR
21.0020.0006	Rotameter L/min - ARGON	SWE, NL
21.0020.0007	Rotameter L/min - ARGON	KR
21.0020.0008	Rotameter L/min - ARGON / H2	DE, AT, CH, CZ, BG, RU, RO, BE, LVA, TR, LT, BIH. PL, SI

Item No.	Item	Info
21.0020.0001	Rotameter L/min - ARGON / H2	GB, IN, VNM, SA, IRL
21.0020.0002	Rotameter L/min - ARGON / H2	FIN
21.0020.0003	Rotameter L/min - ARGON / H2	USA, BR
21.0020.0004	Rotameter L/min - ARGON / H2	FR, ES, PT, GR
21.0020.0005	Rotameter L/min - ARGON / H2	SWE, NL
21.0020.0006	Rotameter L/min - ARGON / H2	KR

WELDING OPTIONS

Item No.	Item	Info
21.5000.6001	Integration welding power source	Start / Stop
21.5000.6002	Welding torch ABITIG MT 300	Euro zentral
21.5000.6003	Welding torch ABITIG MT 300	Fronius zentral
21.5000.6004	Integration wire feed unit	Start / Stop

SOFTWARE OPTIONS



LANGUAGE PACK

Item No.	Item	Info
21.7000.3000	Language Pack 1	DE, EN, ES, PT
21.7000.4000	Language Pack 2	DE, EN, CZ, RU

ADDITIONAL OPTIONS



WATER CHILLER UNIT

Item No.	Item	Info
21.4000.0001	HYFRA eChilly 1 CE	max. 250A
21.4000.0006	HYFRA LWK 17	max. 250 A

WELD FUME EXTRACTION

Item No.	Item	Info
21.4100.0001	TEKA Handycart	movable
21.4100.0003	Preperation Pack	movable

ADDITIONAL KITS

Item No.	Item	Info
21.4700.0001	Welding Starter Kit TIG	ABITIG MT 300 W
21.4700.0016	ToolKit	Start Up / Set Up
21.4700.0017	Torch tungsten distance gauge	ABITIG MT 300 W

WELDING OPTIONS



TIG DC

Item No.	Item	Info
21.5000.0006	FRONIUS TT2200	Max. 220 A
21.5000.0046	LORCH T180 DC	Max. 180 A
21.5000.0050	LORCH T220 DC	Max. 220 A

TIG AC/DC

Item No.	Item	Info
21.5000.0102	FRONIUS MW2200	Max. 220 A
21.5000.0138	LORCH T180 AC/DC	Max. 180 A
21.5000.0142	LORCH T220 AC/DC	Max. 220 A

TORCH COOLING

Item No.	Item	Info
21.5000.5001	FRONIUS FK2200	TT/MW 2200

WIRE FEEDER

Item No.	Item	Info
21.5000.5201	FRONIUS KD4000 D11	TT/MW 2200
21.5000.5202	Wire preparation pack	KD 4000-D11

SERVICE



PACKAGING

Item No.	Item	Info
21.8000.0001	Wooden pallett	Truck transport only
21.8000.0007	Wooden Box Sea	for Seafare
21.8000.0013	Wooden Box Air	for Land and Airfare

TRAINING

Item No.	Item	Info
21.8100.0001	StartUp & Training Package up to 400 Km	2 D on side 1 D Travel
21.8100.0002	StartUp & Training Package 400 - 2000 Km	2 D on side 1,5 D Travel
21.8100.0003	StartUp & Training Package from 2000 Km	2 D on side 2 D Travel
21.8100.0004	Endacceptance Package up to 400 Km	3 D on side 1 D travel
21.8100.0005	Endacceptance Package 400 - 2000 Km	3 D on side 1,5 D Travel
21.8100.0006	Endacceptance Package from 2000 Km	3 D on side 2 D Travel

TRANSPORT

Item No.	Item	Info
21.8200.0001	FCA (as per Incoterms® 2020)	Schnelldorf
21.8200.0002	FCA (as per Incoterms® 2020)	DE
21.8200.0005	DAP (as per Incoterms® 2020)	DE
21.8200.0006	DAP (as per Incoterms® 2020)	EU

CARE

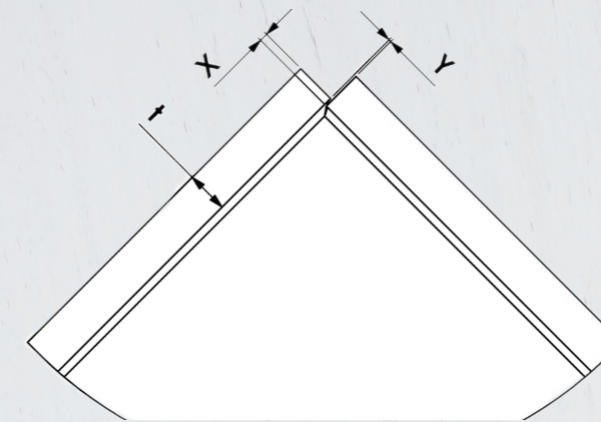


CARE

Item No.	Item	Info
21.8300.0001	Sparepart package small	Pneumatics, Sensors
21.8300.0009	Warrenty Extention 24 Month	EU

RECOMMENDED COMPONENT PREPARATION FOR STAINLESS STEEL (LIKE 304, 316 L AND SIMILAR)

Material Thickness t [mm]	Edge overlap X [mm]	Max. Gap Y [mm]	Max. Opening bending eye [mm]
0.5 – 0.6	0.6 – 0.7	0.05	0.1
0.7 – 0.8	0.6 – 0.7	0.06	0.2
1.0 – 1.3	0.6 – 0.8	0.1	0.3
1.5 – 2.0	0.6 – 0.8	0.2	0.3
2.2 – 3.0	0.6 – 0.8	0.2	0.5



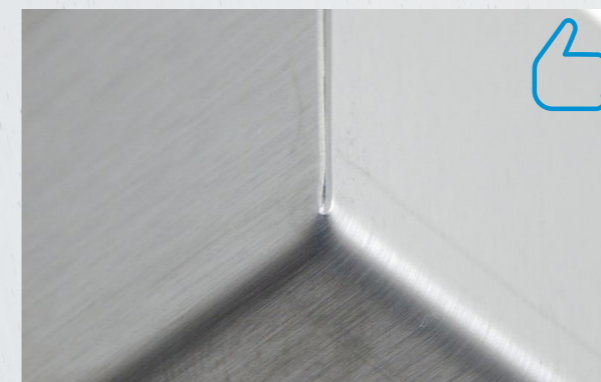
Edge overlap and maximum gap

RECOMMENDED COMPONENT PREPARATION FOR MILD STEEL, GALVANISED STEEL

Material Thickness t [mm]	Edge overlap X [mm]	Max. Gap Y [mm]	Max. Opening bending eye [mm]
0.5 – 0.6	0.6 – 0.7	0.05	0.1
0.7 – 0.8	0.6 – 0.7	0.06	0.2
1.0 – 1.3	0.6 – 0.8	0.1	0.3
1.5 – 2.0	0.6 – 0.8	0.2	0.3
2.2 – 3.0	0.6 – 0.8	0.2	0.5

RECOMMENDED COMPONENT PREPARATION FOR MILD STEEL, GALVANISED STEEL

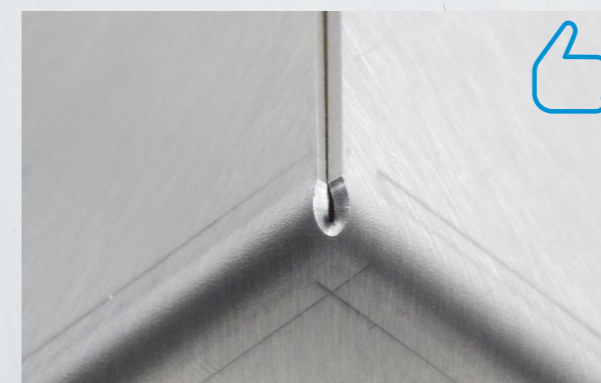
Material Thickness t [mm]	Edge overlap X [mm]	Max. Gap Y [mm]	Max. Opening bending eye [mm]
0.5 – 0.6	0.7 - 0.8	0.06	0.2
0.7 – 0.8	0.8 - 1.0	0.1	0.3
1.0 – 1.3	1.2 - 1.5	0.2	0.3
1.5 – 2.0	1.5 - 1.8	0.3	0.5
2.2 – 3.0	0.6 – 0.8	0.2	0.5



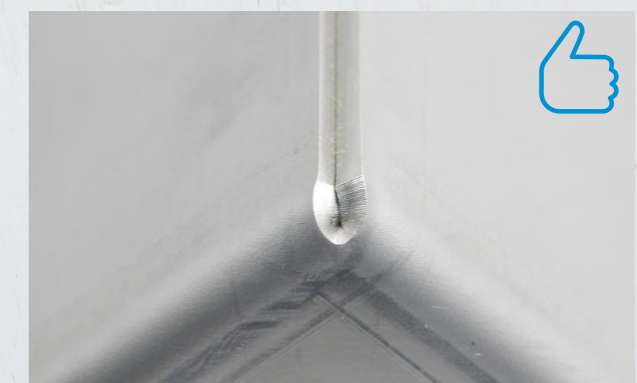
Bending eye, stainless steel t = 1.0 mm



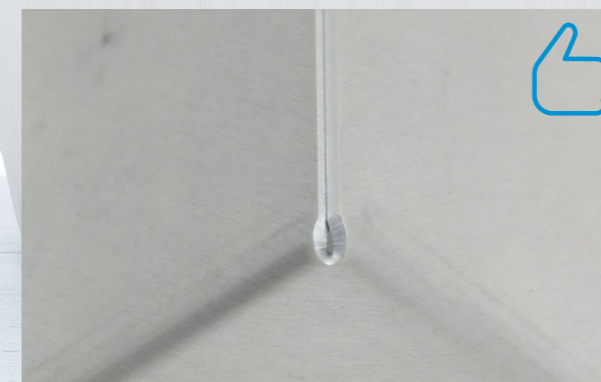
Bending eye, stainless steel t = 1.0 mm



Bending eye, stainless steel t = 1.5 mm



Bending eye, stainless steel t = 2.5 mm



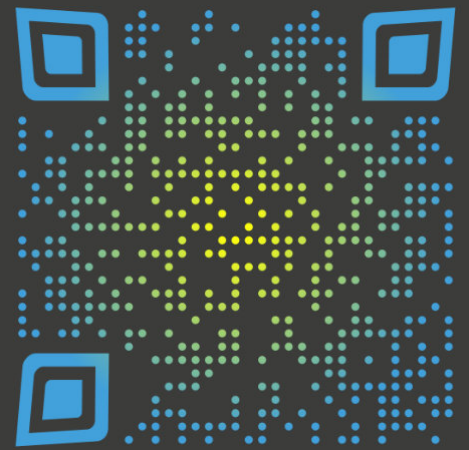
Bending eye, Aluminium t = 1.5 mm



Bending eye, Aluminium t = 2.5 mm



**SCHNELLDORFER
MASCHINENBAU**



#part of perfect weld technology

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