

ONE
SERIES

CORNER

PRODUCT CATALOGUE



SCHNELLDORFER
MASCHINENBAU



INHALT

ONE SERIE

- Inhalt 1 - 2
- Vorteile 3 - 4
- One-Serie Bedieneinheit 5 - 6

CORNER ONE

- CORNER ONE 7 - 8
- Overview 9 - 14
- Weldings 15 - 18
- Items 19 - 24
- Preperation of components 25 - 26
- Your process advantage 27
- Notes 28

ONE SERIES

The most economical way to weld

**“Maximize efficiency, minimize costs:
Welding more intelligently with Generation ONE.”**

If you really want to make a convincing case for the benefits of our CORNER ONE, you need to consider the time required for rework when welding by hand.

With the CORNER ONE, there is no need for any reworking of the weld seams. This means that the average time saving during the entire process is a sensational 89 percent! This means you only need 11 percent of the usual time for the component.

In other words: If you opt for manual welding with subsequent post-processing instead of using our CORNER ONE, you will need 900 percent more time.

Discover the future with our Generation ONE



Cost efficiency

+ 47%

Best performance and results with significantly lower investment costs



Time Saving

+89%

More efficient use of production time thanks to easy handling



Visualization

+ 50%

Simple operation through visualization of the elementary operating options



Availability

+97%

Reduction of non-productive and downtime due to high-quality processing of the machines



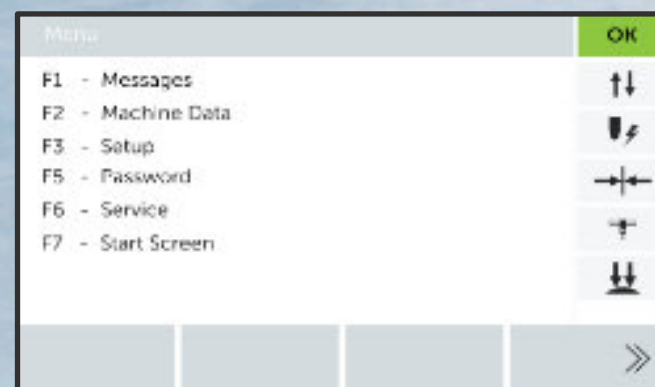
Delivery time

-40%

Shorter delivery time through consistent implementation of standardization process

CONTROL UNIT

ONE SERIES



Start menu

- Easy to understand navigation
- Quick access to all functions
- Efficient operation without a long training period



SetUp of the welding parameters

- User-friendly functions
- Clear and understandable structure
- Simple operation



Tracking the welding process

- Detailed tracking of the welding process on the screen
- Simple and clear monitoring
- Clear display of welding data

CORNER ONE

ONE SERIES - CORNER



OVERVIEW

ONE SERIES - CORNER

CORNER ONE

revolutionizes
corner seam
welding

The **CORNER ONE** is part of our corner seam welding machines manufactured in Germany. Welding single and back corner seam profiles on various parts is impressively fast and more precise than ever before - without rework!



Manual welding



Manual welding
with correction



CORNER Machines

OVERVIEW

ONE SERIES - CORNER



CORNER ONE 160

- Food technology and kitchen manufacturers
- Tank and equipment manufacturing
- Sheet metal supply industry
- Heating, air conditioning, ventilation technology
- Machine and housing construction



TIG



00,50 mm - 02,00 mm



10,00 mm - 160,00 mm



70,00 mm - 1000,00 mm



CORNER ONE 320

- Food technology and kitchen manufacturers
- Tank and equipment manufacturing
- Sheet metal supply industry
- Heating, air conditioning, ventilation technology
- Machine and housing construction
- Manufacturer of switch cabinets



TIG



00,50 mm - 02,00 mm



10,00 mm - 320,00 mm

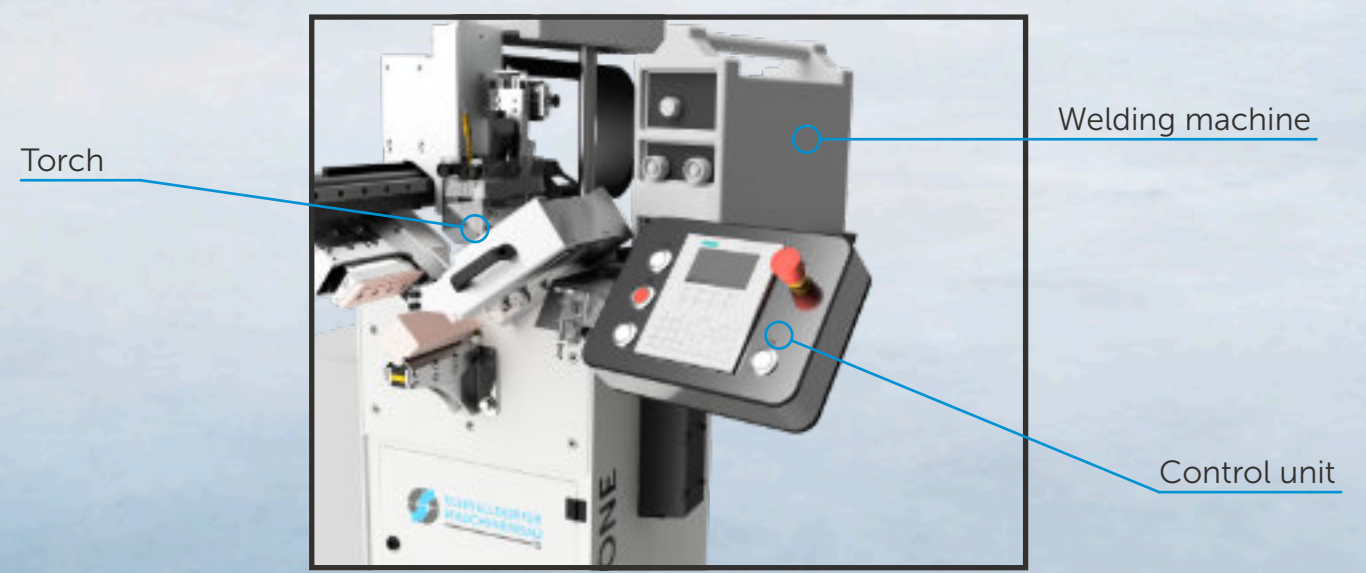
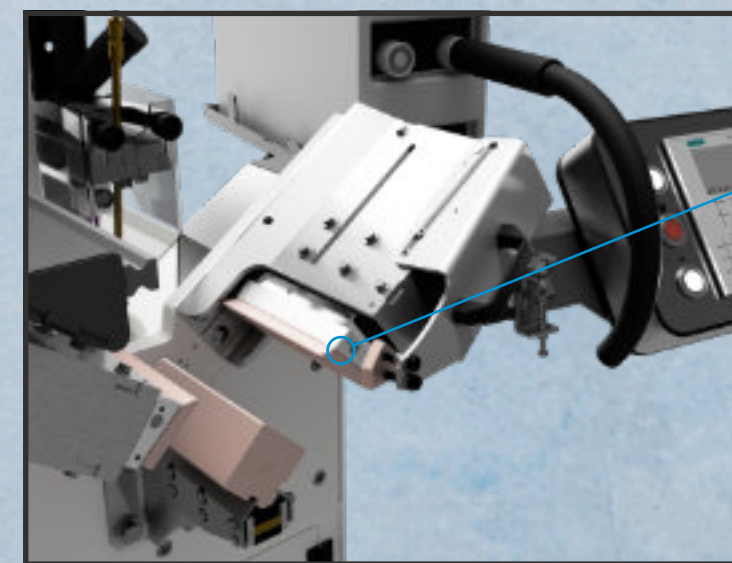
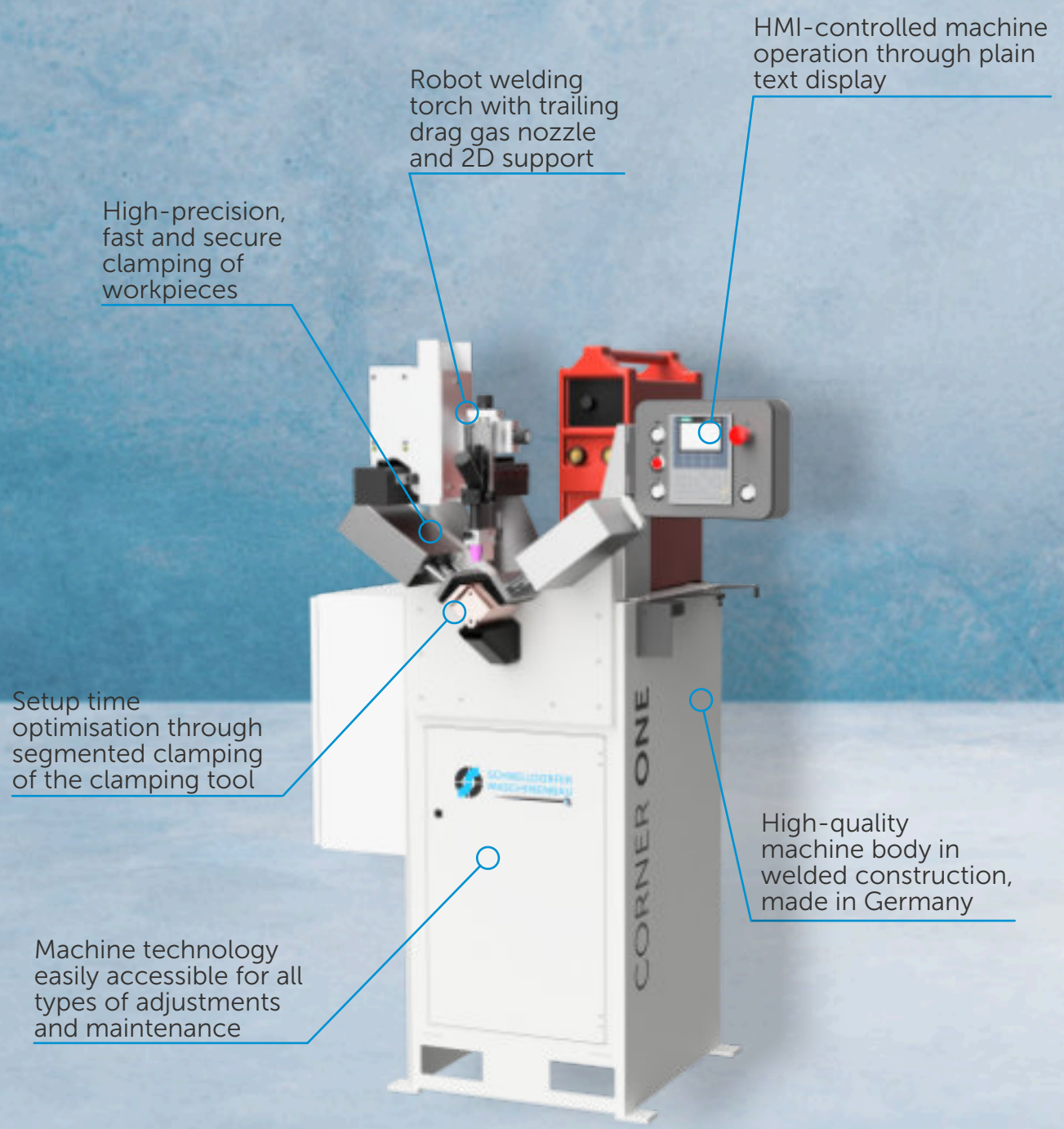


70,00 mm - 1000,00 mm

CORNER ONE	160	320
Max. Welding length	160 mm	320 mm
Material	Stainless Steel, Steel, Galvanized Steel, Aluminium	
Material thickness	00,50 mm - 02,50 mm	
Folding max.	38 mm	
Upstand max.	10 mm	
Internal clamping tool	Wear-resistant copper alloy (CuCrZr)	
Clamping system	Pneumatic with pretensioning step	
Arc length	Consistent over the entire weld length	
Welding process	TIG	
Welding direction	Freely selectable	
Gas	Welding gas, root protection gas, trailing gas, backing gas (optional)	
Cooling circuit	Mandrel, Torch	
Control system	Siemens S7-1200	
Control unit	Siemens Panel KP 400, 4", Colour display	
Engine	Schneider Electric LEXIUM (Stepper motor)	
Welding current interface	2/4 cycle interface	
Electrical connected load	400/230 Volt / 3 / N / PE; 50/60 Hz; TN grid	
Compressed air connected load	6 bar, dry, filtered	
Ambient temperature range	+ 10°C bis + 35°C	

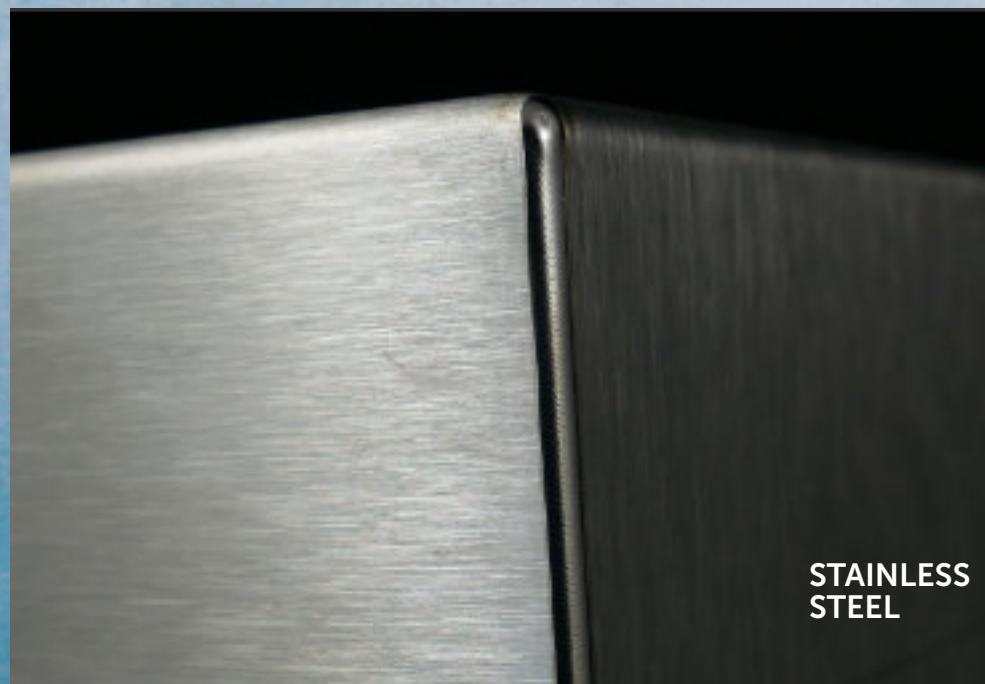
CORNER ONE SERIES

ONE SERIES - CORNER



WELDINGS

PERFECT WELD SEAM



STAINLESS
STEEL



STAINLESS
STEEL

ONE SERIES - CORNER



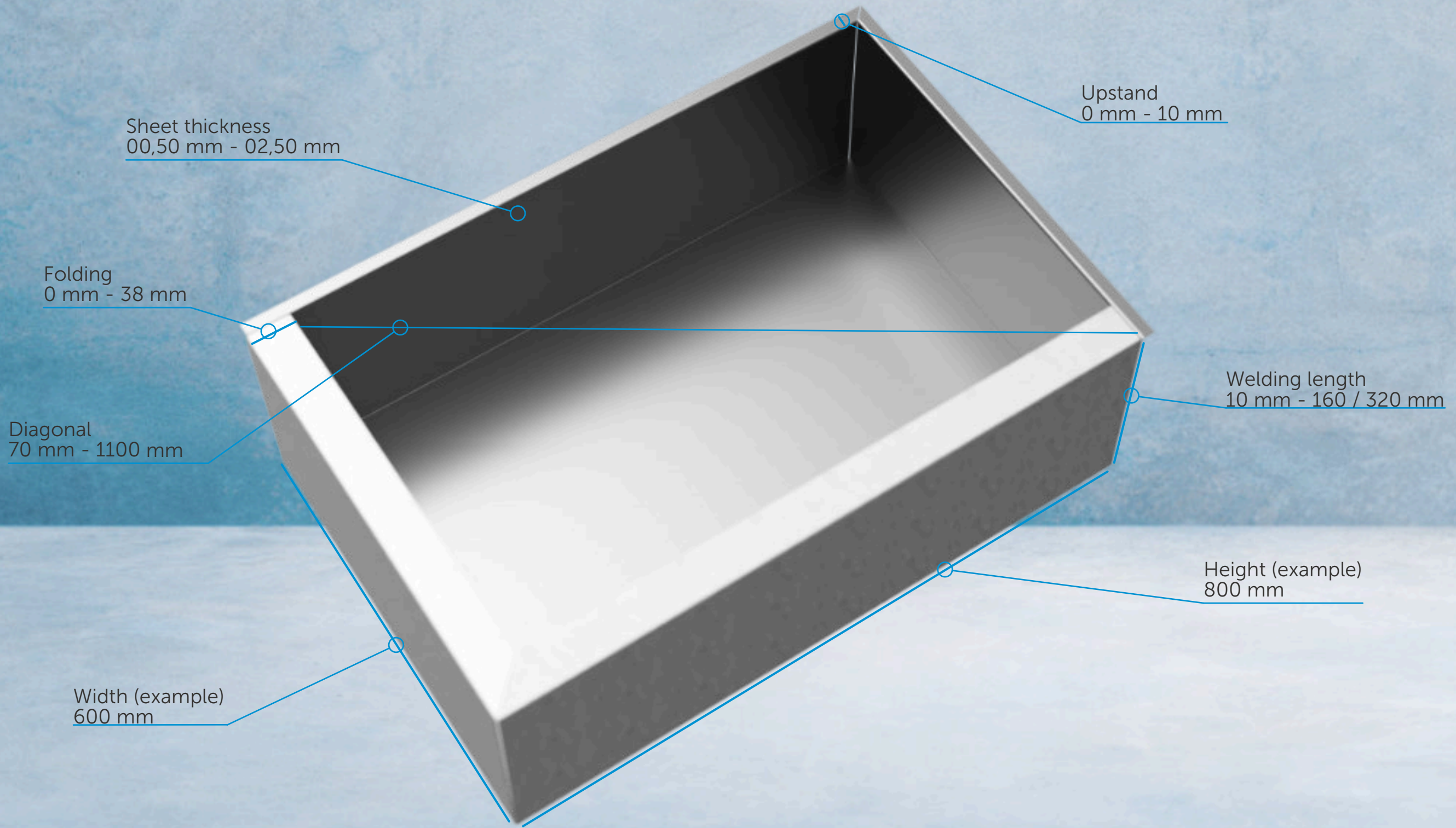
STAINLESS
STEEL



GALVANISED
STEEL

WELDINGS

ONE SERIES - CORNER



ITEMS

ONE SERIES - CORNER

MACHINES



CORNER ONE

Item number	Type	Info
21.0160.0000	CORNER ONE 160	160 mm Weld length
21.0320.0000	CORNER ONE 320	320 mm Weld length

FUNCTIONAL ITEMS



INNER CLAMPING SEGMENT

Item number	Type	Info
21.0160.0011	CU - Inner clamping segment SOLID 160	CU
21.0160.0012	CU - Internal clamping tool kit 160	CU
21.0160.0013	SS - Inner clamping segment SOLID 160	VA
21.0160.0014	SS - Internal clamping tool kit 160	VA
21.0320.0011	CU - Inner clamping segment SOLID 320	CU
21.0320.0012	CU - Internal clamping tool kit 320	CU
21.0320.0013	SS - Inner clamping segment SOLID 320	VA
21.0320.0014	SS - Internal clamping tool kit 320	VA
21.0320.0099	Special segment 160	Customer-specific
21.0320.0099	Special segment 320	Customer-specific

CLAMPING FINGERS (PAIR)

Item number	Type	Info
21.0011.0011	160 mm UNI	CU
21.0011.0012	160 mm GAS	CU
21.0011.0013	160 mm SOFT	VA

HARDWARE OPTIONS



HEIGHT ELEMENT

Item number	Type	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 SHIELD

Item number	Type	Info
21.0016.0001	3 chambers Nozzle 90°	ABITIG MT 300 W
21.0016.0002	5 chambers Nozzle 90°	ABITIG MT 300 W
21.0016.0009	3-chamber nozzle 90° on both sides	ABITIG MT 300 W

ITEMS

ONE SERIES - CORNER

GAS SETTINGS

Item number	Type	Info
21.0020.0001	Gas pressure regulator L/min - ARGON	DE, AT, CH, CZ, BG, RU, RO, BE, LVA, TR, LV, LT, BIH, PL, SI
21.0020.0002	Gas pressure regulator L/min - ARGON	GB, IN, VNM, SA, IRL
21.0020.0003	Gas pressure regulator L/min - ARGON	FIN
21.0020.0004	Gas pressure regulator L/min - ARGON	USA, BR
21.0020.0005	Gas pressure regulator L/min - ARGON	FR, ES, PT, GR
21.0020.0006	Gas pressure regulator L/min - ARGON	SWE, NL
21.0020.0007	Gas pressure regulator L/min - ARGON	KR
21.0020.0008	Gas pressure regulator L/min - ARGON / H2	DE, AT, CH, CZ, BG, RU, RO, BE, LVA, TR, LV, LT, BIH, PL, SI
21.0020.0001	Gas pressure regulator L/min - ARGON / H2	GB, IN, VNM, SA, IRL
21.0020.0002	Gas pressure regulator L/min - ARGON / H2	FIN
21.0020.0003	Gas pressure regulator L/min - ARGON / H2	USA, BR
21.0020.0004	Gas pressure regulator L/min - ARGON / H2	FR, ES, PT, GR
21.0020.0005	Gas pressure regulator L/min - ARGON / H2	SWE, NL
21.0020.0006	Gas pressure regulator L/min - ARGON / H2	KR

TIG AC/DC

Item number	Type	Info
21.5000.0102	FRONIUS MW 2200	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 number	Type	Info
21.5000.5001	FRONIUS FK 2200	TT/MW 2200

WIRE FEEDER UNIT

Item number	Type	Info
21.5000.5201	FRONIUS KD 4000-D11	TT/MW 2200
21.5000.5202	Wire preparation	KD 4000-D11

ADDITIONAL OPTIONS

Item number	Type	Info
21.5000.6001	Integration of welding technology to be provided	Start / Stop
21.5000.6002	Torch ABITIG MT 300 W	Euro central
21.5000.6003	Torch ABITIG MT 300 W	FRONIUS central
21.5000.6004	Integration of a supplied Fronius wire feeder unit	Start / Stop

WELDING OPTIONS



TIG DC

Item number	Type	Info
21.5000.0006	FRONIUS TT 2200	Max. 220 A
21.5000.0046	LORCH T180 DC	Max. 180 A
21.5000.0050	LORCH T220 DC	Max. 220 A

SOFTWARE OPTIONS



SOFTWARE EXTENSIONS

Item number	Type	Info
21.7000.3000	Language pack 1	DE, EN, ES, PT
21.7000.4000	Language pack 2	DE, EN, CZ, RU

ITEMS

ONE SERIES - CORNER

ADDITIONAL OPTIONS

COOLING UNIT

Item number	Type	Info
21.4000.0001	HYFRA eChilly 1	Max. 250 A
21.4000.0006	HYFRA LWK 17	Max. 250 A

WELDING FUME EXTRACTION

Item number	Type	Info
21.4000.0001	TEKA Handycart	mitfahrend
21.4000.0003	Extraction preparation	mitfahrend

ZUSATZ-KITS

Item number	Type	Info
21.4700.0001	Torch wear parts starter kit TIG	ABITIG MT 300 W
21.4700.0016	Tool kit	Start up / Set up
21.4700.0017	Electrode distance gauge	ABITIG MT 300 W

PACKAGING

PACKAGING

Item number	Type	Info
21.8000.0001	Wooden pallet	For CORNER ONE
21.8000.0007	Wooden crate sea transport	For CORNER ONE
21.8000.0013	Wooden crate air transport	For CORNER ONE

DELIVERY CONDITIONS

DELIVERY

Item number	Type	Info
21.8200.0001	Delivery FCA (Incoterms 2020)	Schnelldorf
21.8200.0005	Delivery DAP (Incoterms 2020)	DE
21.8200.0006	Delivery DAP (Incoterms 2020)	Europe

SERVICE

TRAINING

Item number	Type	Info
21.8100.0001	StartUp & Training package up to 400 km	2 Days on site 1 Day travelling time
21.8100.0002	StartUp & Training package up to 2000 km	2 Days on site 1,5 Days travelling time
21.8100.0003	StartUp & Training package from 2000 km	2 Days on site 2 Days travelling time
21.8100.0004	Final acceptance package up to 400 km	3 Days on site 1 Day travelling time
21.8100.0005	Final acceptance package up to 2000 km	3 Days on site 1,5 Days travelling time
21.8100.0006	Final acceptance package from 2000 km	3 Days on site 2 Days travelling time

PRECAUTION

Item number	Type	Info
21.8300.0009	Warranty extension by 12 months	Europe

SPARE PARTS

Item number	Type	Info
21.8300.0001	Spare parts package, small	Pneumatics, sensors

COMPONENTS PREPARATION

RECOMMENDED COMPONENT PREPARATION FOR STAINLESS STEEL

Material thickness t [mm]	Edge overlap X [mm]	Max. Gap Y [mm]	Max. gap 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

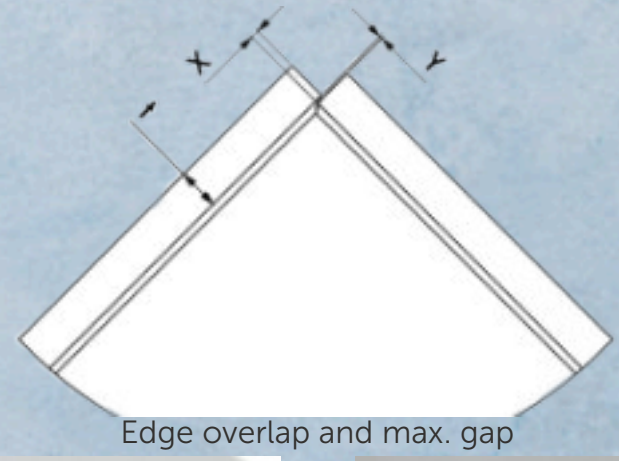
RECOMMENDED COMPONENT PREPARATION FOR STEEL AND GALVANISED STEEL

Material thickness t [mm]	Edge overlap X [mm]	Max. Gap Y [mm]	Max. gap 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

EMPFOHLENE BAUTEILVORBEREITUNG FÜR ALUMINIUM

Material thickness t [mm]	Edge overlap X [mm]	Max. Gap Y [mm]	Max. gap 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

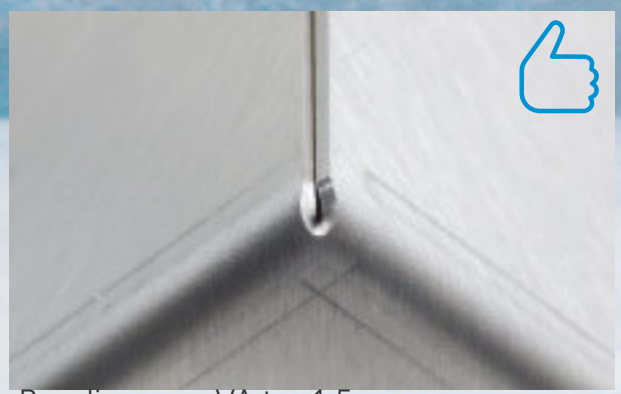
ONE SERIES - CORNER



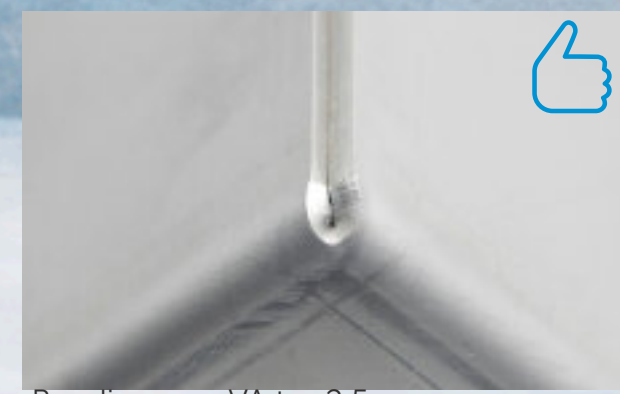
Bending eye, VA t = 1.0 mm



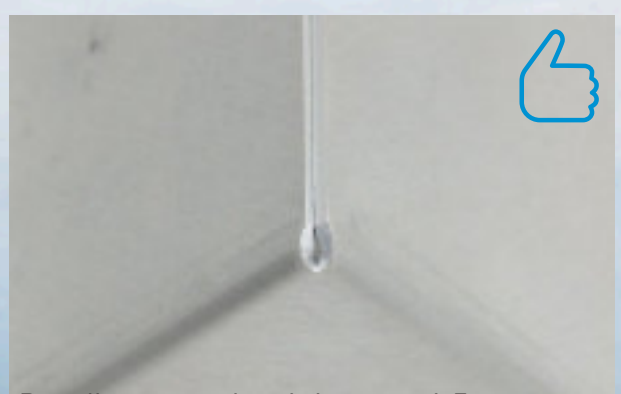
Bending eye, VA t = 1.0 mm



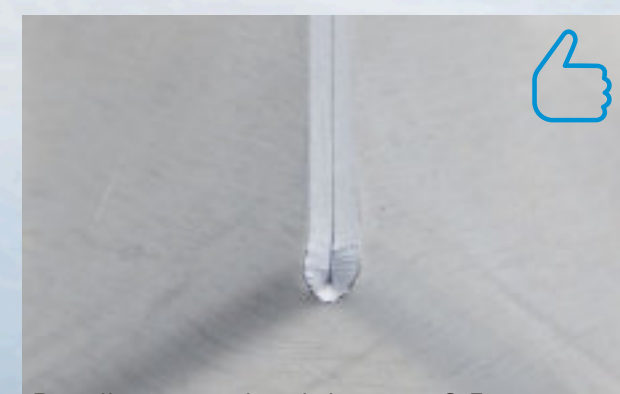
Bending eye, VA t = 1.5 mm



Bending eye, VA t = 2.5 mm



Bending eye, aluminium t = 1.5 mm



Bending eye, aluminium t = 2.5 mm

Schnelldorfer Maschinenbau GmbH
Kappelweg 6 | 91625 Schnelldorf | Deutschland
info@schnelldorfer-maschinenbau.de | +49 (0) 7950 9889 - 0



CORNER ONE

Copyright:

© Schnelldorfer Maschinenbau GmbH
This brochure and its contents, including text, images, and graphics, are the property of Schnelldorfer Maschinenbau GmbH and are protected by copyright laws. Unauthorized reproduction, distribution, or modification of any material contained herein is strictly prohibited without prior written permission.

Imprint

Information according to § 5 DDG
Schnelldorfer Maschinenbau GmbH | Kappelweg 6 | 91625 Schnelldorf
Commercial register: HRB 681 | Register court: Ansbach

Represented by: Martin Feuchter, Klaus Schüle