

# COMPACT CLADDING CELL

/ TIG hotwire  
/ SpeedClad Twin

**/ COMPACT CLADDING SOLUTION**

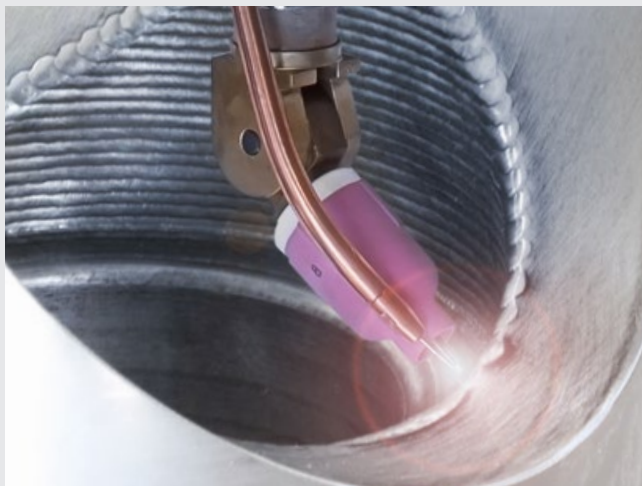


/ The Compact Cladding Cell is designed for maximum cost-effective overlay welding on components up to a diameter of 1 m (3.94 in) and a maximum weight of 2500 kg (5511 lb).

Despite its compact design, the Compact Cladding Cell is an extremely powerful cladding system that provides simple operation, precise movements and extensive data logging capabilities.

## FEATURES

- / Compact design
- / Quick setup: All components are pre-installed and test-welded
- / Only one power supply cable necessary for the entire welding system
- / Fully digital communication between the system controller and power source provides maximum process stability
- / Wide range of Fronius mechanized GTAW torches
- / Precise torch positioning with servo-controlled axes
- / Same innovative software features found in our top-of-the-line systems (e.g. ETR-S or the conventional cladding system)
- / LED light for ideal torch positioning in bores
- / Remote maintenance via network or internet connection



# HIGH-PERFORMANCE CLADDING – COMPACT AS IT CAN BE

/ With a footprint of just 4.5 m<sup>2</sup> (48.43 sq ft), this system is the most compact solution in the field of high-end cladding.

## COLUMN & BOOM

/ High-precision torch positioning through the use of servo-controlled motors – also usable for horizontal torch oscillation.

## WIRE FEEDER

/ Wire feeder with 4-wheel-drive for precise and smooth transport of the filler metal from the wire coil to the workpiece.

## INSIDE CLADDING TORCHES

/ Wide range of TIG hotwire torches. Also available with Twin-Wire configuration for maximum throughput.

## SPEEDCLAD TWIN TORCH-SYSTEM

/ TWIN-Wire SpeedClad torch provides maximum cladding performance.

## EXTERNAL / RING GROOVE CLADDING TORCH

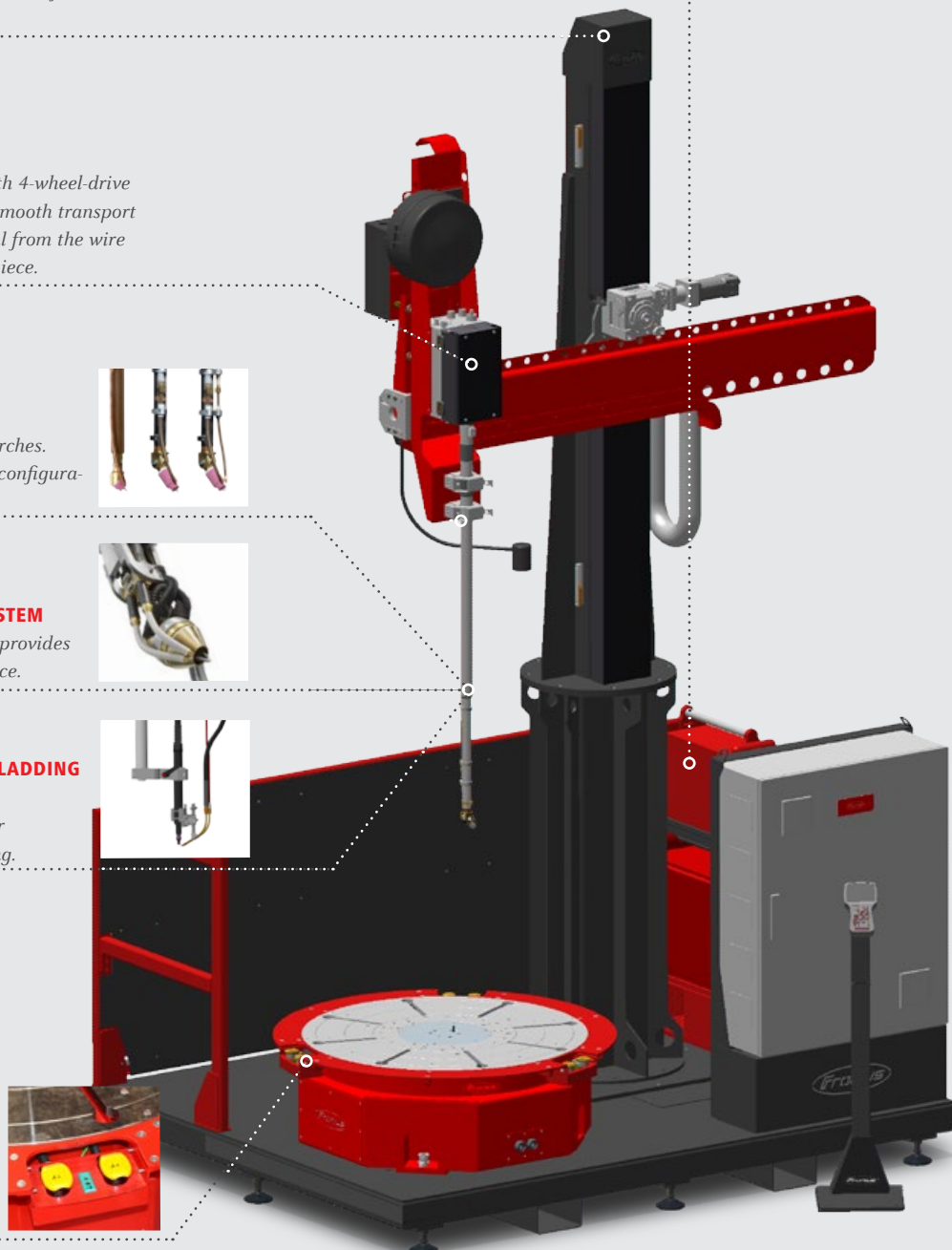
/ TTW torch with extension for external or ring groove cladding.

## ROTATION TABLE

/ Horizontal rotation table with precision gear box, key slots and alignment lines for accurate positioning. Optional available slip-rings for electrical preheating and temperature control.

## DIGITAL POWER SOURCE SET

/ The power-team: TransTig 5000 Job with high-performance cooling unit FK 4000 R and TransTig 2200 Job – fully digital for the best welding quality with TIG hotwire.

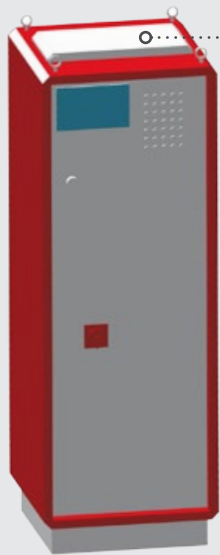


# HIGH-END FUNCTIONALITY FOR UNCOMPROMISING QUALITY WELDING

/ Fronius system controllers – advanced technology producing the best quality.

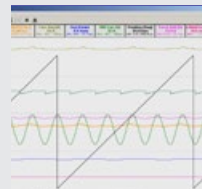
## SYSTEM CONTROLLER HMI-T10CC / FPA 9000CC

/ Depending on the application, two system controllers are available for the Compact Cladding Cell: The **HMI-T10CC**, which is the latest member of our cladding system controllers, and the **FPA 9000CC**, which has already been used in our high-end cladding systems and provides extended functionality. Both systems deliver innovative software features, maximum process productivity and highest reliability in continuous operation.



### FPA 9000CC

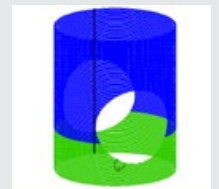
- / Touch & retract
- / Speed adjust
- / AVC - Arc length correction
- / AMS - Automatic Multi Sequence (option)
- / Actual values
- / Remote maintenance
- / Welding data recording
- / 3D process-visualization
- / Advanced Bore-to-bore
- / Corner AVC
- / DataLogger (option)



/ Software-option:  
DataLogger



/ Actual values



/ 3D process-visualization



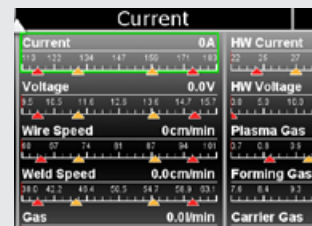
### REMOTE CONTROL HMI-RC

- / Usable with FPA 9000CC and HMI-T10CC
- / Control, program, visualize
- / High-resolution color display
- / 23 buttons with LED lighting
- / Light and robust housing



### HMI-T10CC

- / Touch & retract
- / Speed adjust
- / AVC - Arc length correction
- / AMS - Automatic Multi Sequence (option)
- / Actual values
- / Remote maintenance
- / Bore-to-bore
- / Corner AVC



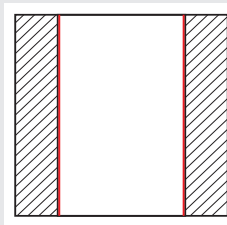
/ Actual values



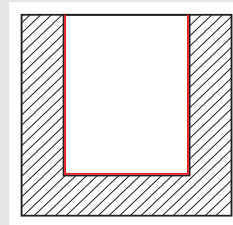
/ Graphically supported parameter input

# VERSATILE AND INNOVATIVE

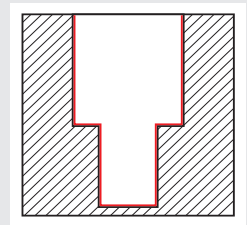
## APPLICATION EXAMPLES



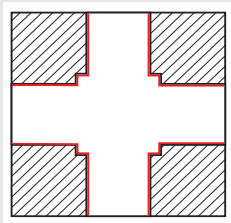
/ Straight bore (cylindrical)



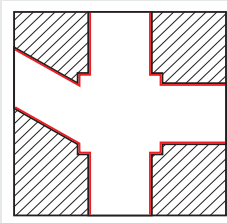
/ Straight bore with bottom face



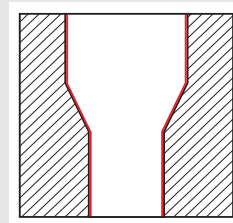
/ Straight bore with diameter variation



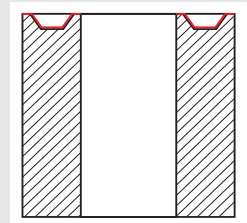
/ Bore-to-bore (HMI-T10/FPA 9000CC)



/ Advanced Bore-to-bore (FPA 9000CC only)



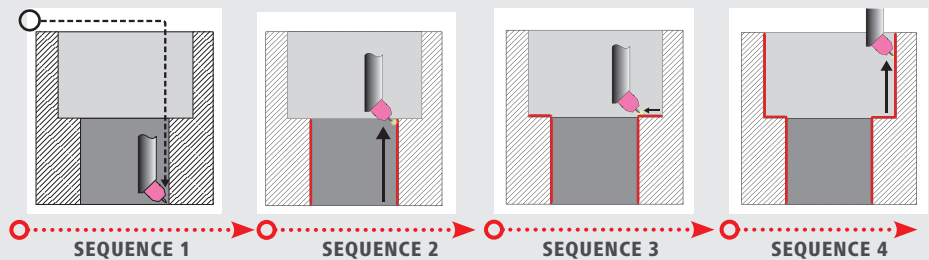
/ Straight and conical bore



/ Ring groove

## AMS - AUTOMATIC MULTI SEQUENCE

/ The new AMS feature allows the merging of multiple welding, position and motor parameters into sequences that can be automatically processed one by one.



## 4 VERSIONS - PERFECTLY EQUIPPED FOR YOUR APPLICATION:



### Compact Cladding Cell with system controller FPA 9000CC

- / Left and right version available
- / Face plate diameter: 1 m (39.4 in)
- / Parts weight: max. 2500 kg (5511 lb)



### Compact Cladding Cell with system controller HMI-T10CC

- / Left and right version available
- / Face plate diameter: 1 m (39.4 in)
- / Parts weight: max. 2500 kg (5511 lb)



# BASIC CONFIGURATION AND OPTIONS

## BASIC CONFIGURATION

System ready mounted and test welded:

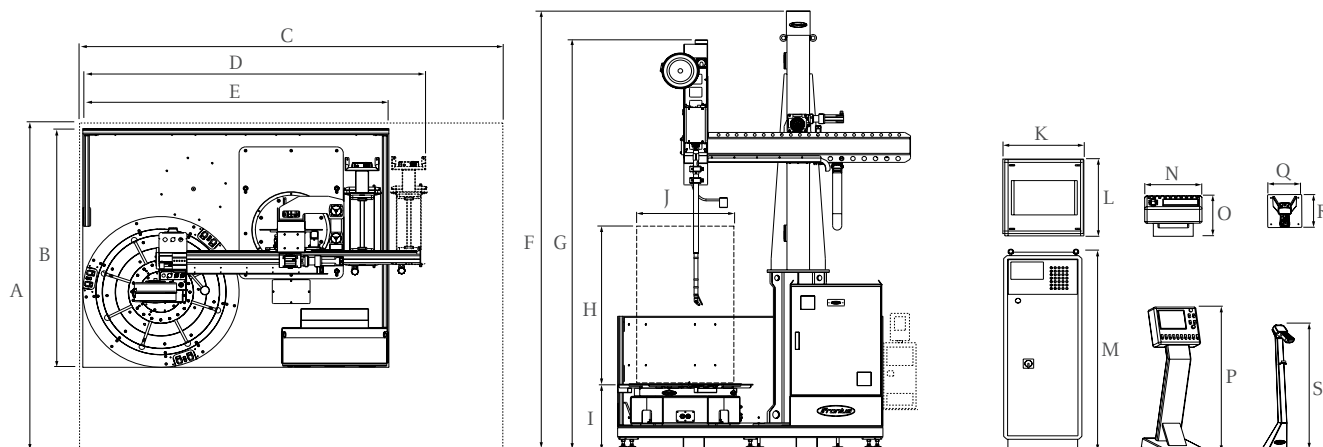
- / System controller incl. remote control HMI-RC
- / FRT 2500 horizontal rotation table
- / Column & boom FCB
- / TransTig 5000 Job with cooling unit FK 4000 Rob
- / TransTig 2200 Job
- / KD 1500 D-11 wire feeder
- / TTHW3000M Ø45 F++ torch with 1 m (39.4 in) working length

## ACCESSORIES / OPTIONS

- / Twin-Wire add-on
- / Slip ring assembly for the FRT 2500
- / TTHW torches from Ø25 mm (1 in) bore diameter
- / SpeedClad add-ons incl. torch TTHW6000M Ø150 (5.9 in)
- / Software AMS – Automatic Multi Sequence
- / Software DataLogger (only FPA 9000CC)
- / Welding curtains (complete enclosure)



## TECHNICAL DATA



### COMPACT CLADDING CELL L/R

Mains voltage (50 Hz)	400V/N/PE	L (FPA 9000CC)	600 mm (23.62 in)
A	2600 mm (102.36 in)	M (FPA 9000CC)	1720 mm (67.72 in)
B	1900 mm (74.8 in)	N (HMI-T10CC)	585 mm (23.03 in)
C	3250 mm (127.95 in)	O (HMI-T10CC)	500 mm (19.7 in)
D (SpeedClad option)	2665 mm (104.92 in)	P (HMI-T10CC)	1490 mm (58.66 in)
E	2350 mm (92.52 in)	Q (HMI-RC)	300 mm (11.8 in)
F	4020 mm (158.26 in)	R (HMI-RC)	300 mm (11.8 in)
G	3755 - 4600 mm (147.84 - 181.1 in)	S (HMI-RC)	1130 mm (44.50 in)
H (Max. workpiece height)	1400 mm (55.12 in)	Max. workpiece weight	2500 kg (5511.56 lb)
I	596 mm (23.47 in)	Weight (HMI-T10CC)	38,2 kg (84.22 lb)
J (Max. workpiece diameter)	1000 mm (39.37 in)	Weight (FPA 9000CC)	75 kg (165.35 lb)
K (FPA 9000CC)	600 mm (23.62 in)	Main weight (CCC)	2500 kg (5511.56 lb)

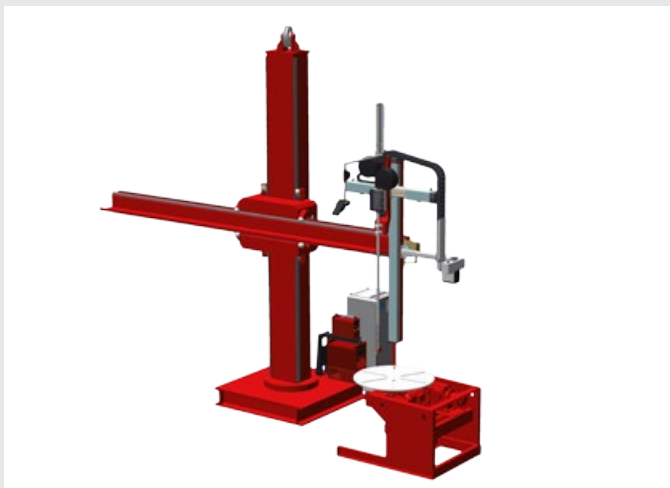
# FRONIUS CLADDING SOLUTIONS



/ Customized Cladding System



/ ETR-S Endless Torch Rotation System



/ Conventional Cladding System



/ Pipe Cladding System

/ Perfect Welding / Solar Energy / Perfect Charging

## WE HAVE THREE DIVISIONS AND ONE PASSION: SHIFTING THE LIMITS OF POSSIBILITY.

/ Whether welding technology, photovoltaics or battery charging technology – our goal is clearly defined: to be the innovation leader. With around 3,300 employees worldwide, we shift the limits of what's possible - our record of over 900 granted patents is testimony to this. While others progress step by step, we innovate in leaps and bounds. Just as we've always done. The responsible use of our resources forms the basis of our corporate policy.

Further information about all Fronius products and our global sales partners and representatives can be found at [www.fronius.com](http://www.fronius.com)

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