



# SOLUTION

## **FLW** ENSIS

EXPANSION OF WELDING CAPABILITIES  
AND REDUCED LOAD/UNLOAD TIMES

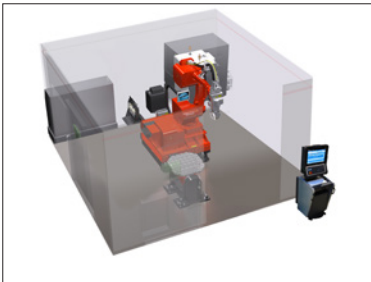


## EXPANSION OF WELDING CAPABILITIES AND REDUCED LOAD/UNLOAD TIMES

The FLW-ENSIS takes laser welding to a higher level of quality with a reduction of the total lead time. In addition, our new solution is equipped with an ENSIS oscillator, which is being applied in the welding field for the first time, along with the new Push-Pull filler wire function, which is used to ensure high quality, long welding applications. All these features increase the possibilities for your production.

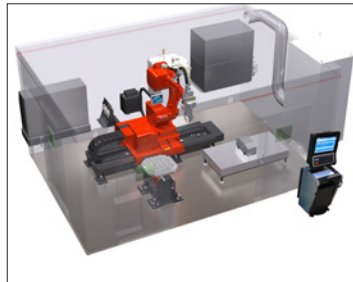
**M2**

**Fixed robot, fixed positioner table**



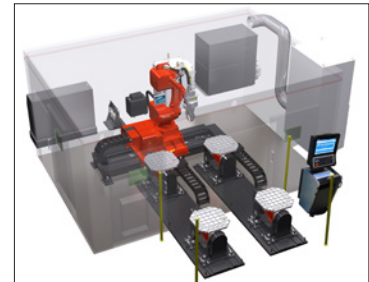
**M3**

**Robot carriage, fixed positioner table**



**M5**

**Robot carriage, 2 exchange tables**



### MAIN FEATURES

- ENSIS technology (variable beam control)
- Various positioning table variants
- Push-Pull filler wire function
- Z indicator
- 6-axis robot depending on the model with linear track
- TAS - Teach Assist System

### BENEFITS

- Variable bead welding and depth of penetration with ENSIS technology
- Stable welding with Push-Pull filler wire management and control
- Easy teaching operation by Z indicator
- Less influence to the welding point during lap welding
- High speed lap welding up to 25 m/min
- Manufacturing and positioning tolerances corrected quickly and precisely by TAS

### MACHINE SPECIFICATIONS

FLW-3000ENSIS			M2	M3	M5
Numerical control			AMNC		
Operator protection			Full cover partition		
Carriage	Travel stroke	m	-	3	4
	Maximum travel speed	m/min	-	60	
	Repeatable positioning accuracy	mm	-	± 0.1	
Positioner table	Maximum payload capacity	kg	500		
	Rotating axis		±720°	±720°	±200°
	Tilting axis		±90°		
	Maximum travel speed	m/min	-	-	30
Cabin dimension	L x W x H	mm	4500 x 5000 x 3700	7500 x 5000 x 3700	8500 x 4500 x 3700

### OSCILLATOR SPECIFICATIONS

		ENSIS-3000	ENSIS-6000
Beam generation		Laser diode excitation, fibre laser	
Maximum power	W	3000	6000
Processing head		AMADA	

### ROBOT

MC2000		
Robot		Vertical articulated 6-axis robot
Robot controller		DX100

Specifications, appearance and equipment are subject to change without notice by reason of improvement.  
Hazard prevention measures are removed in the photos used in this sheet.

#### AMADA UK LTD.

Spennells Valley Road,  
Kidderminster,  
Worcestershire DY10 1XS  
United Kingdom  
Tel: +44 (0)1562 749500  
Fax: +44 (0)1562 749510  
www.amada.co.uk

#### AMADA SA

Paris Nord II  
96, avenue de la Pyramide  
93290 Tremblay en France  
France  
Tél: +33 (0)1 49 90 30 00  
Fax: +33 (0)1 49 90 31 99  
www.amada.fr

#### AMADA GmbH

Amada Allee 1  
42781 Haan  
Germany  
Tel: +49 (0)2104 2126-0  
Fax: +49 (0)2104 2126-999  
www.amada.de

#### AMADA ITALIA S.r.l.

Via Amada I., 1/3  
29010 Pontenure  
(PC)  
Italia  
Tel: +39 (0)523-872111  
Fax: +39 (0)523-872101  
www.amada.it

